REMEDIATION PROPOSAL

JENNINGS FED. COM. WELL #1

NMOCD REF. #1RP1093 EPI REF: #306001

UL-F (SE¼ of the NW¼) of Section 15, T19S, R32E
~14 Miles South of Maljamar, NM
Lea County, New Mexico

LATITUDE: N 32° 39' 43.98" LONGITUDE: W 103° 45' 22.36"

DECEMBER 2007

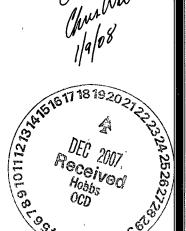
PREPARED BY:

ENVIRONMENTAL PLUS, INC. 2100 AVENUE O EUNICE, NEW MEXICO 88231

PREPARED FOR:

Raya Energy Corporation
P.O. Box 200685

Austin, Texas 78720





21 December 2007

Mr. Larry Johnson Environmental Engineer Specialist New Mexico Oil Conservation Division 1625 North French Drive Hobbs, New Mexico 88240

Re: Remediation Proposal

Raya Energy Corporation
Jennings Federal Com. Well #1
UL-F (SE ¼ of the NW ¼), Section 15, T 19 S, R 32 E
Latitude: 32° 39' 43.98"; Longitude: 103° 45' 22.36"
NMOCD Ref. 1RP#1093; EPI Ref. #306001
API #30-025-24836

Dear Mr. Johnson:

On October 15, 2006 a release of petroleum and/or production fluids occurred as a result of a tank battery overflow at the above referenced site. Raya Energy initially retained Environmental Plus, Inc. (EPI) in October, 2006 for emergency response activities and later to delineate the extent of impacted soil at the release area. On behalf of Raya Energy, EPI submitted an Initial NMOCD Form C-141 on October 17, 2006. This letter report documents the results of delineation activities and recommends remediation procedures for the release area.

Site Background

The Site is located in UL-F (SE ¼ of the NW ¼), of Section 15, T19S, R32E at an elevation of approximately 3,635 feet above mean sea level (amsl). The property is owned by the Department of the Interior and managed by the Bureau of Land Management (BLM). A search for water wells was completed utilizing the *New Mexico Office of the State Engineers* website and a database maintained by the United States Geological Survey (USGS). No domestic water wells or surface water exist within a 1,000 feet radius of the Site (reference *Figure 2*). Groundwater data indicates average water depth is approximately 380 feet below ground surface (bgs). Based on available information, it was determined the distance between impacted soil and groundwater is approximately 360 feet bgs. Utilizing this information, the New Mexico Oil Conservation Division (NMOCD) Remedial Goals for this Site were determined as follows:

Parameter	Remedial Goal
Benzene	10 parts per million
BTEX	50 parts per million
TPH	5,000 parts per million

^{*} Chloride residuals may not be capable of impacting local groundwater above NMWQCC of 250 mg/L



Field Work

On October 15, 2006 a release of approximately 400 barrels of petroleum and/or production fluids occurred, of which approximately 260 barrels were recovered, as a result of a tank battery overflow. Immediate remedial activities outside the bermed tank battery area included excavation and on-site stockpiling of impacted soils on plastic sheets.

On October 16, 2006 EPI conducted a site assessment consisting of a GPS survey of and photographing the release area. On November 6, 2006 EPI delineated the release area outside the bermed tank battery confines by advancing three (3) soil borings to vertical depths ranging from twenty (20) feet below ground surface (bgs) to thirty (30) feet bgs (reference *Figure 4*). Soil samples were collected from the soil borings at varying depths to delineate vertical extent of contamination. Soil samples were transported to an independent laboratory for quantification of total petroleum hydrocarbons (TPH); benzene, toluene, ethyl-benzene and total xylenes (BTEX Constituents), chloride and sulfate concentrations. Laboratory analysis indicated TPH and BTEX constituent concentrations were non-detectable (ND) at or above laboratory analytical method detection limits (MDL). Chloride concentrations ranged from 16 mg/Kg (SB-2@ 20') to 496 mg/Kg (SB-1 @ 5') with the latter value above remedial threshold goals of 250 mg/Kg. Sulfate concentrations ranged from 49 mg/KG (SB-1@ 15') to 394 mg/Kg (SB-1 @ 5') below NMOCD remedial threshold goal of 600 mg/Kg (reference *Table 2* and *Figure 4*).

Based on laboratory analytical data gathered from Site Delineation activities, EPI recommends the following remediation actions be undertaken to achieve conformance with NMOCD and BLM standards:

Proposed Remediation Plan

Although the release area within the confines of the tank battery was not analyzed for TPH, BTEX, chloride and sulfate concentrations, impacted caliche poses no threat to the environment or contamination of groundwater. This judgment is based on contaminant concentrations in the pooling areas where soil borings were advanced. Remediation of this section can be addressed whenever the tank battery is decommissioned and location reclaimed. Remediation efforts will be confined to the release area located outside the tank battery confines.

As relatively low chloride concentration should not impair growth of indigenous flora or planted grass (reference *Photographs No.6-No.8*), EPI proposes remedial activities to an approximate 10,400 square foot release area outside the tank battery bermed area. Excavate contaminated soil around the vicinity of SB-1 to a depth of ten (10)-ft bgs. However, both depth and width of excavation will be preliminary determined by field analyses of chloride concentrations with final verification by laboratory analyses. During emergency response efforts, contaminated soil in the release area was excavated to an approximate depth one (1)-ft bgs and stockpiled on plastic liners. The area of concern starts southwest of SB-1 and extends to the terminus of the release area as noted on *Figure 5*. The area will require some minor remedial efforts with contaminated soil stockpiled on plastic sheets. After completion of this effort, the entire area is to be disk tilled a minimum depth of one (1) foot bgs. Tilling activities will allow blending of soil to help disperse and lower chloride concentration. Once soil has been tilled, the disturbed area is to be saturated with a six-percent (6%) solution of Micro-Blaze. Volumetric application of Micro-Blaze solution will be sufficient to ensure minimum



penetration depth of two (2) to three (3) inches. After Micro-Blaze solution has penetrated the loose soil (± 48 hours), the area is to be disk tilled again a minimum depth of one (1) foot bgs and re-saturated with a six-percent (6%) solution of Micro-Blaze. This will allow Micro-Blaze solution to advance deeper into the soil while contouring it to a fairly smooth surface. While Micro-Blaze is chemically designed to attenuate petroleum hydrocarbons concentrations, the solution will also fertilize and condition soil. Upon completion of this operation, clean topsoil will be imported from an off-site source to backfill the excavated area around SB-1 and bring the entire release area to original ground surface. The latter activity will require approximately one (1) to two (2) vertical feet of top soil extending the width of the release area. Approximately four-hundred (400)-ft of existing fence will be replaced in the vicinity of SB-3 where the release traversed from one side of the fence to the other (reference Figure 4). Impacted soil remaining on-site will be transported to a State approved disposal facility:

Prior to planting grass, three (3) hand auger soil borings will be advanced to an approximate depth of six (6) feet bgs in the same locales as original soil borings (reference Figure 4). Soil samples will be collected at two (2) and six (6) feet bgs for analyses of TPH, BTEX and chloride concentrations by an independent laboratory. Dependent on laboratory analytical results, the release area may either require additional remediation activity as previously described or immediate seeding with a blend preferred by the BLM. EPI would prefer seeding the release area in late spring of 2008 when moisture levels are high and survival of newly emerged grass is greater, but is receptive to seeding the area with a cover crop (i.e., winter rye or wheat).

Upon completion of the remediation and seeding activities, the release area will be kept under surveillance until vegetation growth becomes visible. Should no growth appear within a time frame as determined between Raya Energy, NMOCD and BLM, the release area will be deep tilled with a disc to a minimum of one (1) foot bgs, saturated with Micro-Blaze and re-seeded. However, past success with similar projects have proven the recommended remedial activities will accomplish NMOCD and BLM requirements.

Should the above described remediation activities meet with the NMOCD and BLM approval, EPI will initiate remedial efforts immediately.

Please address questions, concerns and/or need for technical information to me at (505) 394-3481 or via e-mail at dduncan@envplus.net. Official correspondence should be addressed to Mr. Ray Reaves, Raya Energy Corporation, at P.O. Box 200685, Austin, Texas, 78720.

Sincerely,

David P. Duncan Civil Engineer



Cc: Ray Reaves, Raya Energy Corporation

Paul Evans, BLM-Carlsbad

Cody Miller, General Manager, EPI

Roger Boone, Operations Superintendent, EPI Jason Stegemoller, Environmental Scientist, EPI

Encl: Figure 1 – Area Map

Figure 2 – Site Location Map

Figure 3 – Site Map

Figure 4 – Soil Boring Map

Figure 5 – Proposed Excavated and Disk Tilled Areas

Table 1 – Summary of Soil Boring Field Analyses and Laboratory Analytical Results

Attachment I – Site Photographs

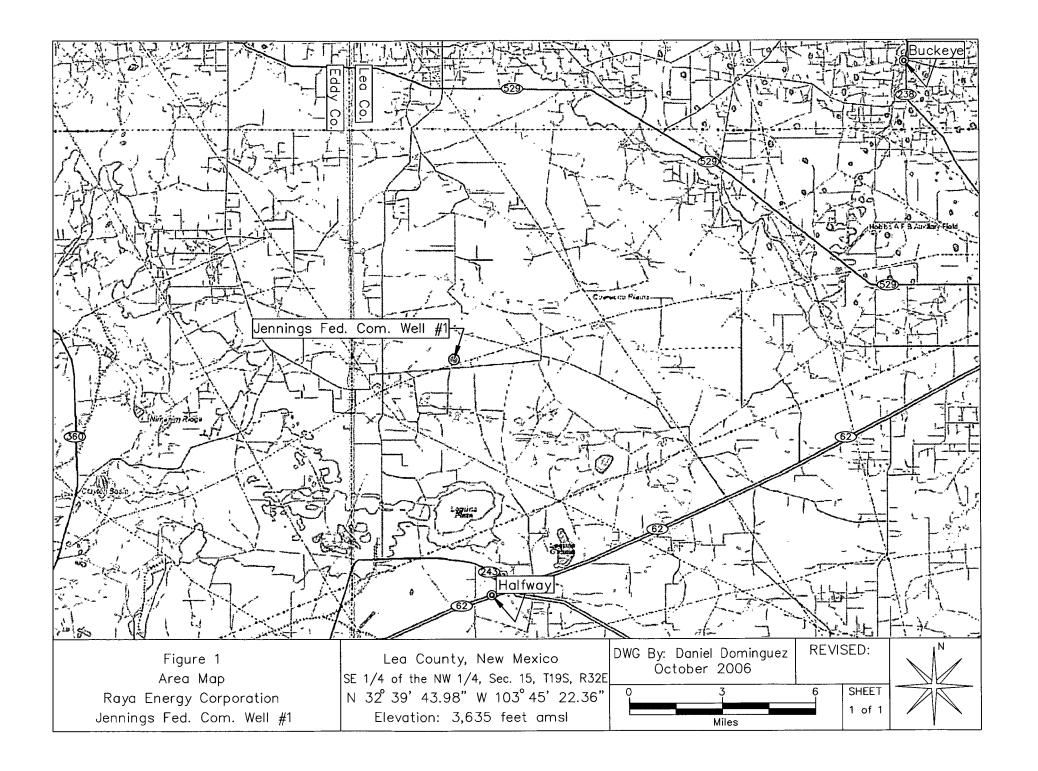
Attachment II - Laboratory Analytical Results and Chain-of-Custody Form

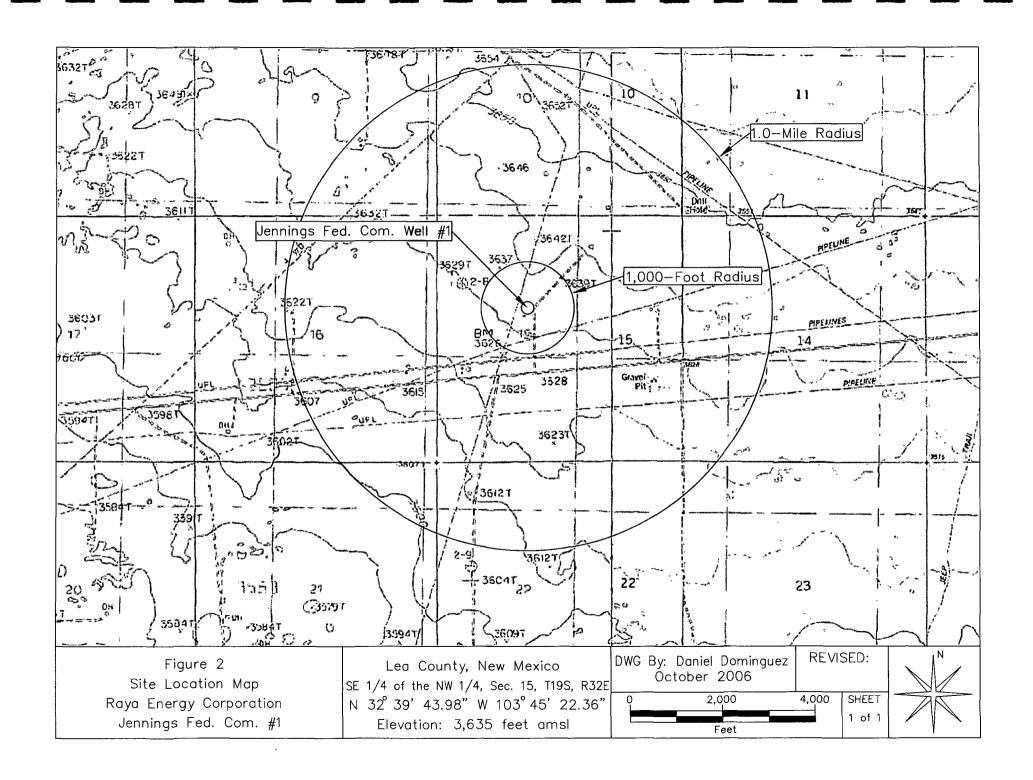
Attachment III – Soil Boring Logs

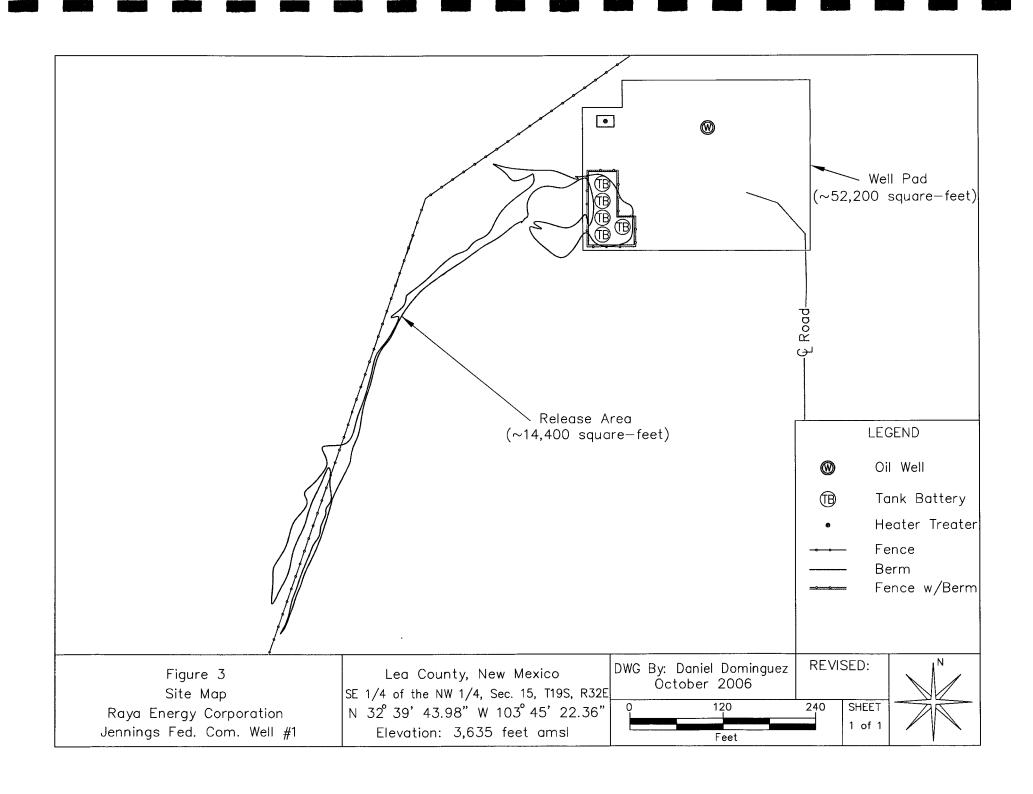
Attachment IV – Information and Metrics

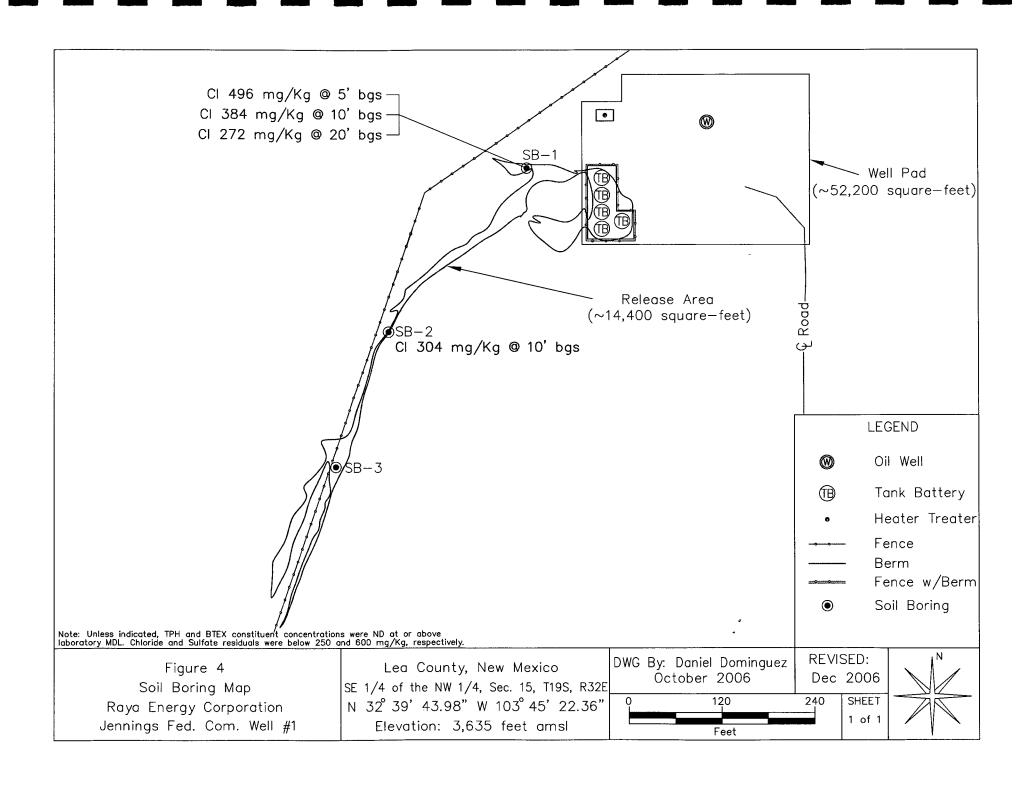
Copy of Initial NMOCD Form C-141

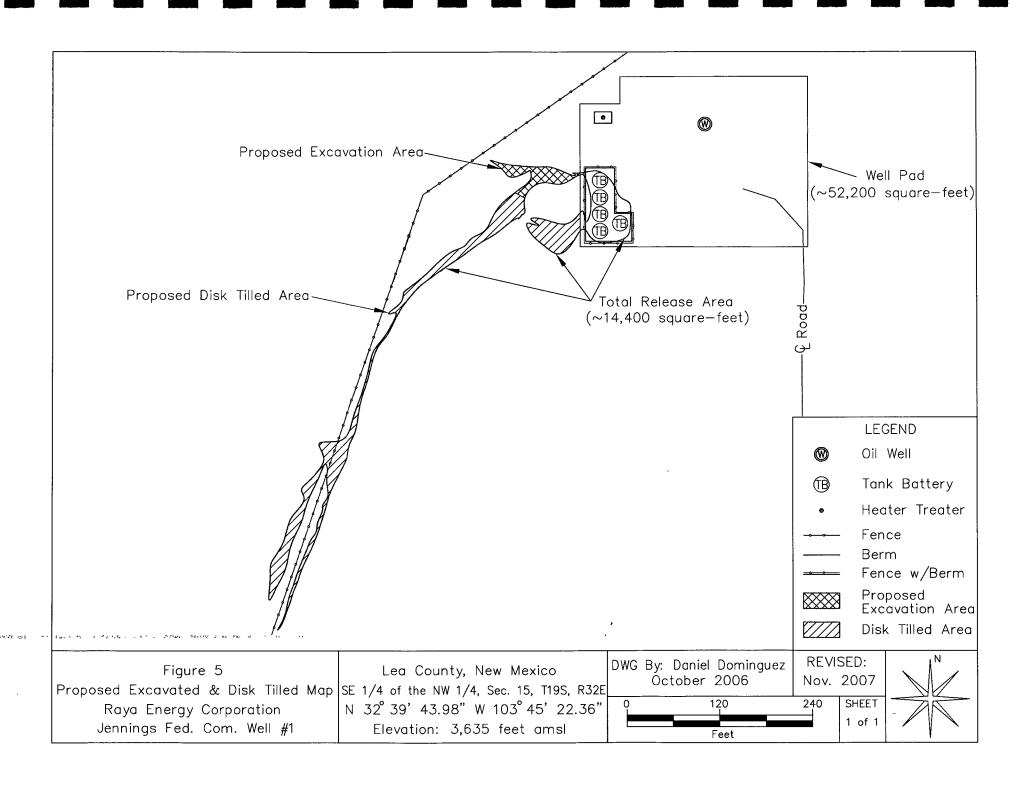
FIGURES











TABLES

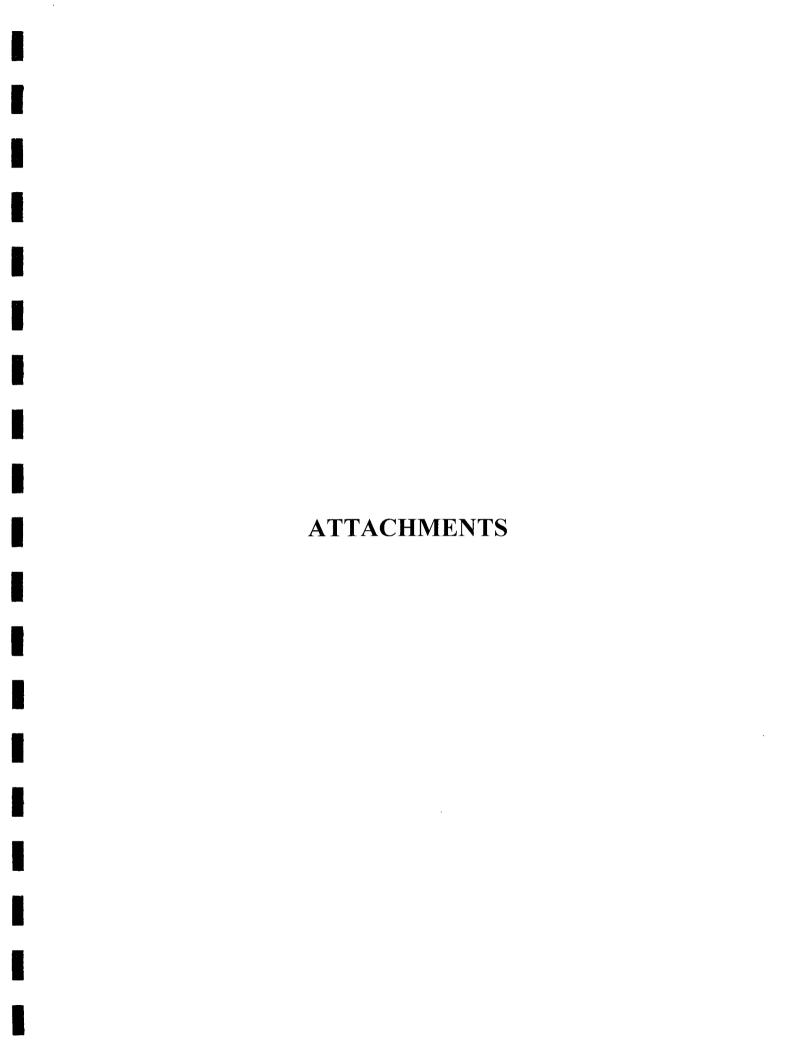
TABLE 1
Summary of Soil Boring Soil Sample Field Analyses and Laboratory Analytical Results

Raya Energy - Jennings Fed. Com. Well #1 (EPI Ref. #306001)

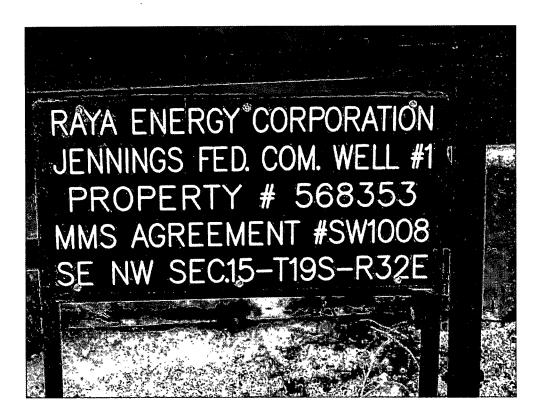
Sample ID	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	Carbon Ranges C6-C10 (mg/Kg)	Carbon Ranges >C10-C28 (mg/Kg)	TPH (mg/Kg)	Sulfate (mg/Kg)	Chloride (mg/Kg)
SB-1	5	In situ	6-Nov-06	2	560	< 0.005	< 0.005	<0 005	< 0.015	< 0.030	<10.0	<10.0	<20.0	394	496
SB-1	10	In situ	6-Nov-06	0	480	<0005	<005	<005	<015	< 0.030	<10.0	<10.0	<20 0	193	384
SB-1	15	In situ	6-Nov-06	0	320									49	144
SB-1	20	In situ	6-Nov-06	0	400									29	272
SB-1	25	In situ	6-Nov-06	0	320									191	160
SB-1	30	In situ	6-Nov-06	0	160									209	32
SB-2	5	In situ	6-Nov-06	0	160	< 0.005	< 0.005	< 0.005	< 0.015	< 0.030	<10 0	<10.0	<20.0	160	32
SB-2	10	In situ	6-Nov-06	0	400	< 0.005	< 0.005	<0 005	<0.015	< 0.030	<10.0	<10 0	<20.0	128	304
SB-2	15	In situ	6-Nov-06	0	200									220	112
SB-2	20	In situ	6-Nov-06	0	160								- -	87	16
SB-3	5	In situ	6-Nov-06	0.5	200	< 0.005	< 0.005	< 0.005	< 0.015	<0 030	<10 0	<10.0	<20.0	151	64
SB-3	10	In situ	6-Nov-06	0	400	< 0.005	< 0.005	< 0.005	<0.015	< 0.030	<10 0	<10 0	<20.0	85	240
SB-3	15	In situ	6-Nov-06	0	240									188	128
SB-3	20	In situ	6-Nov-06	0	160									104	32
NMOC	CD Reme	dial Thre	esholds	100		10				50			5,000	600	250

--= Not Analyzed

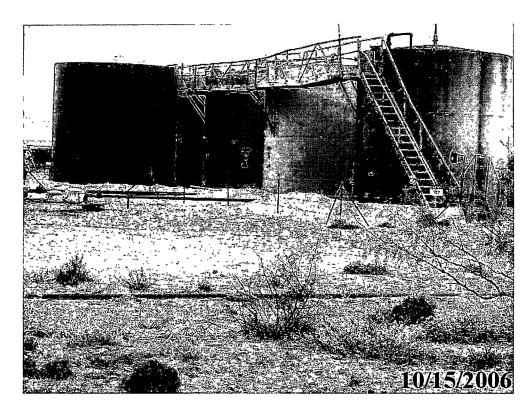
Bold values are in excess of NMOCD Remediation Threshold Goals



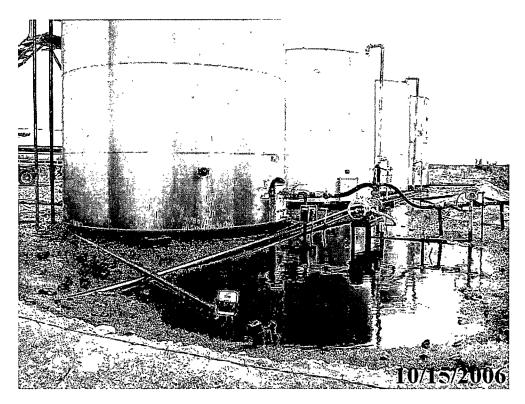
ATTACHMENT I PROJECT PHOTOGRAPHS



Photograph #1 – Lease sign.



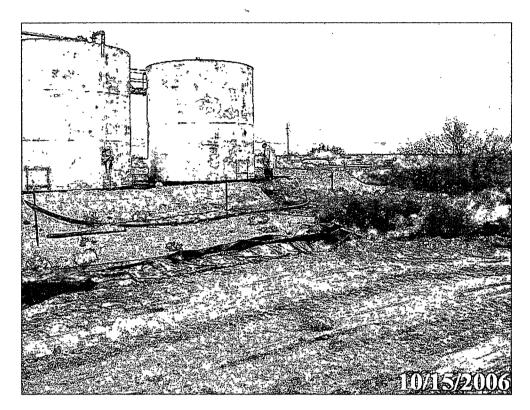
Photograph #2 - Looking north at the release area and tank battery with berm.



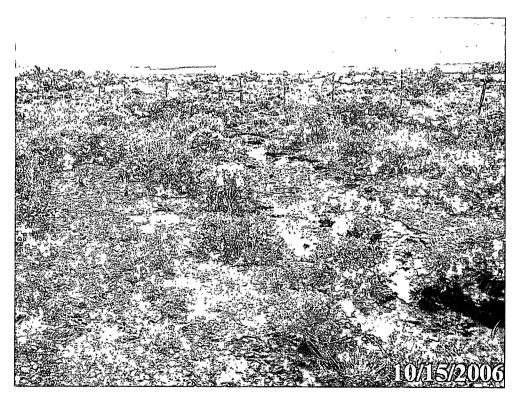
Photograph #3-Looking northerly at release area inside Tank Battery berms.



Photograph #4-Looking westerly at release area and emergency response personnel.



Photograph #5-Looking easterly at release area.



Photograph #6-Looking east at release area.



Photograph #7-Looking westerly at release area.



Photograph #8-Looking east at release area.

ATTACHMENT II LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY FORM



PHONE (505) 393-2326 • 101 E MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR ENVIRONMENTAL PLUS, INC. ATTN: DAVID P. DUNCAN

P.O. BOX 1558 EUNICE, NM 88231 FAX TO: (505) 394-2601

Receiving Date: 11/07/06 Reporting Date: 11/13/06

Project Owner: RAYA ENERGY (306001)

Project Name: JENNINGS #1

Project Location: UL-F, SECT. 15, T 19 S, R 32 E

Sampling Date: 11/06/06

Sample Type: SOIL Sample Condition: COOL & INTACT

Sample Received By: HM

Analyzed By: BC

LAB NO.	SAMPLE ID	GRO $(C_6$ - $C_{10})$ (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS [DATE:	11/10/06	11/10/06	11/10/06	11/10/06	11/10/06	11/10/06
H11768-1	SB-1 (5')	<10.0	_<10.0	<0.005	<0.005	\$4 <0.005	<0.015
H11768-2	SB-1 (10')	<10.0	<10.0	<0.005	<0.005	€ < 0.005	<0.015
H11768-7	SB-2 (5')	<10.0	<10.0	<0.005	<0.005	% ₹0.005	<0.015
H11768-8	SB-2 (10')	<10.0	<10.0	<0.005	<0.005	≲0.005	<0.015
H11768-11	SB-3 (5')	<10.0	<10.0	<0.005	<0.005	∜<0.005	<0.015
H11768-12	SB-3 (10')	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
Quality Cont	rol	749	763	0.101	0.103	0.102	0.294
True Value (2C	800	800	0.100	0.100	0.100	0.300
% Recovery		93.6	95.4	101	103	102	97.9
Relative Per	cent Difference	2.1	5.2	4.1	1.2	0.1	0.4

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8260.

Burgess J. A. Cooke. Ph. D.

Date

H11768A



PHONE (505) 393-2326 • 101 E MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR ENVIRONMENTAL PLUS, INC. ATTN: DAVID P. DUNCAN

P.O. BOX 1558 **EUNICE, NM 88231** FAX TO: (505) 394-2601

Receiving Date: 11/07/06 Reporting Date: 11/09/06

Project Owner: RAYA ENERGY (306001)

Project Name: JENNINGS #1

Project Location: UL-F, SECT. 15, T 19 S, R 32 E

Sampling Date: 11/06/06

Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: HM

Analyzed By: AB

		SO ₄	CI
LAB NUMBER	SAMPLE ID	(mg/Kg)	(mg/Kg)

		T	
ANALYSIS DATI	•	11/08/06	11/08/06
H11768-1	SB-1 (5')	394	496
H11768-2	SB-1 (10')	193	384
H11768-3	SB-1 (15')	49	144
H11768-4	SB-1 (20')	79	272
H11768-5	SB-1 (25')	191	160
H11768-6	SB-1 (30')	209	32
H11768-7	SB-2 (5')	160	32
H11768-8	SB-2 (10')	128	304
H11768-9	SB-2 (15')	220	112
H11768-10	SB-2 (20')	87	16
H11768-11	SB-3 (5')	151	64
H11768-12	SB-3 (10')	85	240
H11768-13	SB-3 (15')	188	128
H11768-14	SB-3 (20')	104	32
Quality Control		27.2	490
True Value QC		25.0	500
% Recovery		109	98
Relative Percent	Difference	13.0	2.0

**		
METHODS: EPA 600/4-79-020	375.4	SM 4500 CIB

NOTE: Analyses performed on 1:4 w:v aqueous extracts.

Environmental Plus, Inc.

Chain of Custody Form

2100 Avenue O, Eunice, NM 88231 (505) 394-3481 FAX: (505) 394-2601

P.O. Box 1558, Eunice, NM 88231

LAB:

Cardinal

Company Name												В	III T		er benedigt a			A	1AL	YSI	SR	EQ	JES	T		
EPI Project Mana	iger David P. Du	ncan																								
Mailing Address	P.O. BOX 15	58											ıllı				ı			ļ			l		ŀ	
City, State, Zip	Eunice New	Mexico 8	382	31_								/	E	_												1
EPI Phone#/Fax#	505-394-348	1 / 505-39	94-2	260	1						=	=	P				1	- 1	1	1		1		- 1	- 1	1
Client Company	RAYA ENER(ŞΥ											III						- 1			1				
Facility Name	Jennings #1												HH										ı			
Location	UL-F, Sect.	15, T 19 S	3, R	32	E												ŀ		- 1			ı	-		- 1	
Project Referenc	e 306001																					ı				
EPI Sampler Nan	ne George Blac	kburn								Je		ngs Fed. Com. #1											1			
							MAT	RIX			PR	ESE	RV.	SAMPLII	NG								١			.
LAB I.D.	SAMPLE I.D.		(G)RAB OR (C)OMP	# CONTAINERS	GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	studge	отнея:	ACID/BASE	ICE/COOL	отнев	DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (CI')	SULFATES (SO4")	Hd	TCLP	OTHER >>>	РАН			
#11768 - 1	SB-1 (5')		G	1			X					Х		06-Nov-06	8:30	Χ	Χ	Χ	Χ							
2	SB-1 (10')		G	1			Х					Х		06-Nov-06_	9:00	Х	Χ	Х	X							
	SB-1 (15")		G	1	Ш		Х					Х		06-Nov-06	9:30	X	X	Х	Х					TES		Ш
4	SB01 (20')		G	1			Х					X		06-Nov-06	9:58	X	X	Х	Х					TES		\square
5	SB-1 (25')		G	1			X				<u> </u>	X		06-Nov-06	10:35	X	X	Х	Х					TES		Ш
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	SB-2 (5')		G	1			X			<u> </u>	<u> </u>	X		06-Nov-06	13:28	X	X	X	X	<u> </u>		<u> </u>		<u> </u>		
	SB-2 (10')		G	1			Х			_	<u> </u>	X		06-Nov-06	13:47	X	X	X	Х		 _	<u> </u>	<u> </u>		<u> </u>	
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10	SB-2 (20')	1	G	1	<u>i-å</u>	L	X	<u> </u>	L.,	7 87	ببا	X	F-893	06-Nov-06	14:40_	X	X	X	X	<u> </u>	نيا	SEE	INC	TES	<u> </u>	4
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Sampler Relinquished: Relinquished by Delivered by	Tim Dai	e 7 - 2 - 2 - 16 - 7 - 2 - 2	Rece	j koji	By. (I	ab sta	iff)		ecked	E-mail results to: dduncan@envplus.net NOTES: Analyze soil samples for TPH and BTEX concentrations until two (2) consecutive analyses are below the following remedial threshold goals: benzene <10 mg/Kg, BTEX < 50 mg/Kg and TPH <5000 mg/Kg. Analyze all soil samples for chloride and sulfate concentrations. ANY QUESTIONS, PLEASE CALL DAVID P. DUNCAN AT (505) 394-348 ### WOTE: TALKED TO PRIVID (11-01-06) ABOT SAMPLE HI1768-3. SHOULD								50								
Sample Co					act Vo					,		N	OTE:	BE 151 WIT	15"	0 1 -	· · · ·							, ,		

Environmental Plus, Inc.

Chain of Custody Form

2100 Avenue O, Eunice, NM 88231 (505) 394-3481 FAX: (505) 394-2601

P.O. Box 1558, Eunice, NM 88231

LAB:

Cardinal

`	any Name Environmental Plus, Inc.												BIII To ANALYSIS REQUEST													
Company Name	Environme	ental Plus,	Inc				, ,		, d)		11 84	В	III: T	O () () () ()		15° \	٠.	Al	VAL	.YSI	SR	EQI	JES	T		
EPI Project Mana	iger David P. D	uncan																								٦
Mailing Address	P.O. BOX	1558											ıllı													
City, State, Zip	Eunice Ne	w Mexico	882	31									F	_						.	1	i	. 1			
EPI Phone#/Fax#	505-394-3	481 / 505-3	94-	260	1						7.5 8/	7 - Tank	_b						. 1							
Client Company	RAYA ENE	RGY										`	III													
Facility Name	Jennings	#1																								ı
Location	UL-F, Sec	t. 15, T 19	S, F	32	E																					
Project Referenc	e 306001																									
EPI Sampler Nan	ne George Bl	ackburn								Je	nniı	ngs	Fed	d. Com. #1												l
							MAT	RIX			PR	ESE	RV.	SAMPLI	NG											
LAB I.D.	SAMPLE I.I) .	(G)RAB OR (C)OMP	# CONTAINERS	GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	отнея:	ACID/BASE	ICE/COOL	отнея	DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (CI)	SULFATES (SO4")	Нd	TCLP	OTHER >>>	РАН			
	SB-3 (5')		G	1			X					Х		06-Nov-06	15:00	X	Х	Х	Х							
	SB-3 (10')		G	1			Х					X		06-Nov-06	15:28	X	Х	Х	Х							
- / 3	SB-3 (15')		G	1			Х					X		06-Nov-06	15:50	Х	Х	Х	_		<u>. </u>	SEE		<u>. </u>		
- / 4	SB03 (20')		G	1			X					X		06-Nov-06	16:20	X	X	X	X			SEE	NO	TES	3	
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• 10			<u>L</u>	<u></u>	<u> </u>	ـــا			<u> </u>			<u>L</u>	L_		<u> </u>	<u>L</u>	<u> </u>	<u>L</u>	ب	上						
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Sampler Relinquished Date Received By: Time Received By: Received By: (late the property of the property												E-n NO ana	n <mark>ail r</mark> ΓΕ S : lyses	esults to: ddun Analyze soil samp are below the follo	can envr les for TPH owing remed	and E dial th	net BTEX resho	cond	oals: b	benze	ene <	<10 m	g/Kg.			
Delivered by		Time 3/5		L-72		<i>ـر</i> .	m_		ecked	l By				nd TPH <5000 mg, ations. ANY QUES										5) 39	14-341	81.
Sample Cool & Intact Yes No																										

ATTACHMENT III
SOIL BORING LOGS

Log Of Test Borings

(NOTE - Page 1 of 1)

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ENVIRONMENTAL PLUS, INC.

CONSULTING AND

REMEDIAL CONSTRUCTION

EUNICE, NEW MEXICO

505-394-3481

306001 Project Number:

Project Name: Raya Energy-Jennings #1

UL-F, Section 15, Township 19 South, Range 32 East Location

11			505-39	4-3481		Во	oring N	Number: SB-1 Surface Elevation: 3,635-feet amsl
Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Start Date: 11-6-06 Time: 0800 hrs Completion Date: 11-6-06 Time: 1245 hrs Description
						,		SAND, Red CLAY/Sand, Red —
0830	22	6	little	1.9	560		5 — —	5' CALICHE/Sand, Tan
0900	22	6	little	0	480		10	10' CALICHE/Sand, Tan
0930	22	6	no	0	320		15	15' CALICHE/Sand, Tan
0958	22	6	no	0	400		20 	20' SAND/Gravel, Reddish Brown
1035	22	6	no	0	320		25 25	25' SAND/Gravel, Reddish Brown
1108	22	6	no	0	160		30	CLAY/Sand, Red 30' CLAY/Sand, Red End of Soil Boring at 30' bgs
Date -	Wate Tim	e So		urement Casing Depth	ts (feet Cave-i Depth	n Wat	vel	rilling Method: Auger ackfill Method: Bentonite
_	_		-	-		<u>-</u>	_	ield Representative: GB

Log Of Test Borings

(NOTE - Page 1 of 1)



ENVIRONMENTAL PLUS, INC.
CONSULTING AND
REMEDIAL CONSTRUCTION
EUNICE, NEW MEXICO
505-394-3481

Project Number: 306001

Project Name: Raya Energy-Jennings #1

Location: UL-F, Section 15, Township 19 South, Range 32 East

Boring Number: SB-2 Surface Elevation: 3.635-feet amsl

			202-35	94-3481]]	Boring	nber: SB-2 Surface Eleve	ation: 3,635-feet amsl
Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Start Date: <u>11-6-06</u> Completion Date: <u>11-6-06</u> Description	Time: 1310 hrs Time: 1455 hrs
							_	SAND/Clay, Red	_ _ _ _
1328	22	5	200	0	160		5	5' CALICHE/Sand, Tar	, /-
1320	33	J	no	O	100			J CALICHE/SURIA, TUR	
1347	22	5	no	0	400		10	10' CALICHE/Sand, To	an .
1347	33			-	400		_	SANDSTONE/Gravel, Br	
								SANDSTUNE/Gravet, Br	own
							\vdash		; —
1412	22	6	no	0	200		15	15' SANDSTONE/Gravel,	Brown
							_	SANDSTONE, Reddish Br	own:
							\vdash		·
									·
1440	22	6	no	0	160		 -20	20' SANDSTONE, Reddish	Brown
								End of Soil Boring at 2	
							_		_
							\vdash		_
							25		-
									<u> </u>
									·
							<u> </u>		——————————————————————————————————————
					j				'
	 Wate	r Leve	l Measi	l urement	s (feet	>	<u> </u>		
Date	Tim	e Sa	mple	Casing Depth	Cave-ir Depth	n I Wa	Svel	ing Method: Auger	
	-		-		-		_ F	kfill Method: Bentonite	1
	_				_		F	Representative: GB	4

Log Of Test Borings

(NOTE - Page 1 of 1)



ENVIRONMENTAL PLUS, INC.

CONSULTING AND

REMEDIAL CONSTRUCTION

EUNICE, NEW MEXICO

505-394-3481

Project Number: 306001

Project Name: Raya Energy-Jennings #1

Location: UL-F, Section 15, Township 19 South, Range 32 East

Boring Number: SB-3 Surface Elevation: 3,635-feet am:

]			505-3	94-3481		B	Boring	Number: SB-3 Surface Elevation: 3,635-feet amsl
Тіме	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Start Date: 11-6-06 Time: 1500 hrs Completion Date: 11-6-06 Time: 1645 hrs Description
								SAND, Black Dily
1510	SS	6	little	.5	200			5' CALICHE
1528	22	6	no	0	400		1	10' SANDSTONE, Whitish
1550	22	6	no	0	240		<u> </u>	15' SANDSTONE/Gravel, Reddish Brown
1600								
1620	22	6	no	0	160			20' SANDSTONE/Gravel, Reddish Brown
	Vota	n Love	l Moos					
Date	Wate Tim		ample epth	Casino	s (feet Cave-ir	n Wa	(C)	Orilling Method: Auger
_	-	ית	- [Depth -	Depth -		rvel 1	Backfill Method: Bentonite
			-+	-		+ -	- F	Field Representative: GB

ATTACHMENT IV INFORMATION AND METRICS FORM INITIAL NMOCD FORM C-141

Incident Date: 15 October 2006 **NMOCD Notified:** 16 October 2006

Raya Energy Corporation Information and Metrics

Assigned Site Reference: #306001 Site: Jennings Fed. Com. Well #1

Company: Raya Energy Corporation

Street Address:

Mailing Address: P.O. Box 200685 City, State, Zip: Austin, Texas 78720

Representative: Ronnie Rogers

Representative Telephone: (512) 250-8692

Telephone:

Fluid volume released (bbls): 400 bbls Recovered (bbls): 250 bbls

> >25 bbls; Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas)

5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)

Leak, Spill, or Pit (LSP) Name: Jennings Fed. Com. Well #1

Source of contamination: Tank Battery

Land Owner, i.e., BLM, ST, Fee, Other: BLM

LSP Dimensions: 144 feet by 100 feet

LSP Area: $\sim 14,400 \text{ ft}^2$

Location of Reference Point (RP):

Location distance and direction from RP:

Latitude: N 32° 39' 43.98" **Longitude:** W 103° 45' 22.36"

Elevation above mean sea level: 3,635 feet

Feet from North Section Line: Feet from West Section Line:

Unit Letter: F Location- Unit or 1/4: SE1/4 of the NW1/4

Location-Section: 15

Location- Township: T19S

Location- Range: R32E

Surface water body within 1000 ' radius of site: none

Domestic water wells within 1000' radius of site: none

Agricultural water wells within 1000' radius of site: none

Public water supply wells within 1000' radius of site: none

Depth from land surface to groundwater (DG): ~380 feet

Depth of contamination (DC): unknown

Depth to groundwater (DG – DC = DtGW): \sim 380 feet

1. Groundwater	2. Wellhead Protection Area	3. Distance to Surface Water Body
If Depth to GW <50 feet: 20 points	If <1000' from water source, or;<200' from	<200 horizontal feet: 20 points
If Depth to GW 50 to 99 feet: 10 points	private domestic water source: 20 points	200-1000 horizontal feet: 10 points
If Depth to GW >100 feet: 0 points	If >1000' from water source, or; >200' from private domestic water source: 0 points	>1000 horizontal feet: 0 points

Site Rank (1+2+3) = 0+0+0=0

Total Site Ranking Score and Acceptable Concentrations										
Parameter	>19	10-19	0-9							
Benzene ¹	10 ppm	10 ppm	10 ppm							
BTEX ¹	50 ppm	50 ppm	50 ppm							
TPH	100 ppm	1,000 ppm	5,000 ppm							
100 ppm field	VOC headspace measurement ma	y be substituted for lab analysis								

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 Fc, NM 87505

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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

		A	teleas	e Notification	om 2	and Correc	tive Action	· • •				
OPERATOR Initial Report Final Report												
	Name of Company: Raya Energy Corporation Contact: Ronnie Rogers											
Address: P.O. Box 200685, Austin, Tx 78720					Telephone No.: (512) 250-8692							
Facility Name: Jennings Fed. Com. Well #1					Facility Type: Tank Battery							
Surface Owner: BLM Mineral Own					ner: Lease No.:							
LOCATION OF RELEASE												
Unit Letter	Section	Township	Range	Feet from the		North/South Line Feet from the East/West Line			1	- 1		
F	15	198	32E						Le	a		
380' Latitude: N 32° 39' 43.98" Longitude: W 103° 45' 22.36"												
380' Latitude: N 32° 39' 43.98" Longitude: W 103° 45' 22.36"												
NATURE OF RELEASE Type of Release: Petroleum and/or production fluids Volume of Release: 400 bbls Volume Recovered: 260 bbls												
Source of Relea			duction t	luids		Volume of Release: 400 bbls Volume Recovered: 260 bbls Date and Hour of Occurrence: Date and Hour of Discovery:						
Source of Res	CASE. I COLIN	Daniery ~				15 October 20	06 @ 1100 hrs		2006@11001			
Was Immedia	ite Notice (νω ÍΩ	No Not Requ	لمحند	If YES, To W	hom?					
By Whom? R	au Deavec		- A	140 🗀 Mar Kedi	uneu		ur. 16 October 200	6 @ s m				
Was a Water		ched?				Date and Hour: 16 October 2006 @ a.m. If YES, Volume Impacting the Watercourse:						
			Yes 🛛	No		Not Applicable						
Depth to wate												
If a Watercou	ırse was In	ipacted, Desc	ribe Fully	y.* Not Applicable	:							
Describe Cau	Describe Cause of Problem and Remedial Action Taken.* The release is due to a tank battery overflow.											
Describe Area Affected and Cleanup Action Taken.* Approximately 400 barrels of oil/produced water were released from the tank battery with recovery of approximately 260 barrels. Approximately 14,400 square-feet of surface area were impacted by the release. Environmental Plus, Inc. (EPI) responded on an emergency call and assisted another crew in temporarily cleaning the surface impacted soil. An unknown volume of soil was									Inc.			
				s covered with top				and prevent spre	ading of the			
commingled fluid. EPI will develop a remediation plan and submit it to the NMOCD for approval. 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.										nay ater.		
	•					OIL CONSERVATION DIVISION						
Signature:						6w100 G196						
Printed Name: Ronnie Rogers					Approved by Di	strict Supervisue		<u> </u>				
Title: Pumper	**************************************				_	Approval Date:	10.20-06	Expiration 1	Date: 12.26	20.0		
E-mail Addre	55:					Conditions of Approval:						
Date: Phone: (512) 250-8692 Attach, Additional Sheets If Necessary				SUBMIT DELIPSATION &			···					
Attach Ad GCi Unic	lity ident	Sheets If I - FPA - A P	Necessa ACO ACC	ary 162923 1629 <i>2</i> 3 <i>0</i> 62923	111 3 12	4 4 94 295	12, 20 ·C	८ ह ि ।	RPF	[‡] /093		
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