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

Form C-101 May 27, 2004 Submit to appropriate District Office

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

☐ AMENDED REPORT

1220 S. St. Fr	ancis Dr., Sa	nta re, NM	87505		Santa	re, MIVI o	7303			
APPI	LICATIO	ON FOR	PERMIT Operator Name a			ENTER,	DEEPE	N, PLUGBA	ACK, OR AD	
Kaiser-	Franci	s 0il (	Company	ing Agares	is				API Number	012361
		68, Tu	lsa, OK	74121				30- 0	17 34	457
<sup>3</sup> Prope	rty Code		Mes	a "33	Property l	Name			*We	ell No. 2
Uanny	Valle	y Morr	roposed Pool 1			н	anny V	alley Str	oposed Pool 2	
парру	Valle	y HOLL	OW		<sup>7</sup> Surface		TPPY V	arrey ber	TWII	
UL or lot no.	Section	Township	Range	Lot I			th/South line	Feet from the	East/West line	County
I	33	21S	26E		<u>-</u>		South	660	East	Eddy
	·	···			om Hole Locat			1	/a	
UL or lot no.	Section	Township	Range	Lot I	dn Feet fro	m the No	th/South line	Feet from the	East/West line	County
					lditional We					
11 Work	Type Code N		12 Well Type Cod G	•		/Rotary R		<sup>14</sup> Lease Type Code S		and Level Elevation
<sup>16</sup> M	ultiple		17 Proposed Depti	1	18 Fort	nation	<b>—</b>	19 Contractor		<sup>20</sup> Spud Date
Depth to Grou	No indwater 16	4 / (Morr	11400	\Distance	Barnett from nearest fres			Unknown Distance fr	om nearest surface w	approval <sup>rater</sup> Unk.
			s thick Clay				illing Metho	d:		UIIX.
	d-Loop Syste						•		/Oil-based Cas/	Air 🗖
<u> </u>			21	Propos	ed Casing a	nd Ceme	nt Progra	m		
Hole S		GAS ZON	and wa Es	TER 13 e	ER ALL ( BEARING	OIL,	— W — SI — C	TITNESS CE URFACE & ASING	O OF SPUD & MENTING C INTERMEDI	DF
Describe the land of the land	blowout prev 17½" su st. Dr est to csg. ance w/	rface ill 12 5000#. Set & Rule 1	am, if any. Use a hole to 3 1/4" hol WOC 18 h cmt w/435	dditional s 50'. e to irs. I s sxs.	Run 13 3, 2650'. Run Drill 8 3, TOC @ 9.	/8" csg un 9 5/ /4" ho1 500 <b>'</b> +/	. Cmt : 8" csg e to 1 BOP	to surf w . Cmt to 1400'. L equipmen	/390 sxs. surf w/895 og. Evalua t will be tingency p	WOC 18 hrs. sxs. NU te. Run used in
Fres	h War	., M	d' er a	. T	918) 491- , © 76	4343 Sc'	Bl	为		
of my knowle	dge and beli according to alternative	ef. I further NMOQD g OGD-app	the.	drilling pi general pe	it will <u>be</u>	Approved b	OIL O	DISERY List	London IL Sy	en i
Printed name Title: Tec		Otte V	an Valker	burg	0	Title: Approval D	DEC	0 7 2005	Expiration Date:	JEC 0 7 2006
E-mail Addre	ss: Char	lotv@K	FOC.net							
Date: 12/	7/05		Phone: 918	-491-	-4314	Conditions of	f Approval A	Attached		

Please catch every loc' Mud samples from flow line
350-2650 in order to determine Chloride levels.
Please submit data to OCD District II office
Thanks Bryan Annuat - OCD

If earthen pits are used in association with the drilling of thi well, an OCD pit permit must be obtained prior to pit construction.

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District IV 1220 S. St Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy, Minerals and Natural Resources** 

**Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

Form C-102 Permit 18785

WELL LOCATION AND ACREAGE DEDICATION PLAT

***	EE EGGIII GIVIE E			
1. API Number	2. Pool Code	2. Pool Code 3. Pool		
	78060 HAPPY VALLEY;		;MORROW (GAS)	
4. Property Code	5. Property	5. Property Name MESA "33" FUERTE		
	MESA "33"			
7. OGRID No.	8. Operato	r Name	9. Elevation	
12361	KAISER-FRAN	ICIS OIL CO	3259	

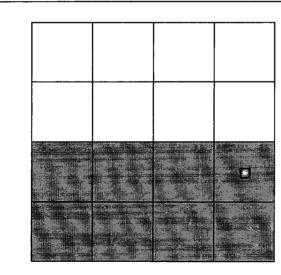
10. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County	l
I	33	21S	26E		1980	S	660	Е	EDDY	l

11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Id	n Fe	et From	N/S Li	ine	Feet From	E/W Line	County
	cated Acres	13	oint or Infill		14. Cons	solidation (	Code			15. Order No.	

#### NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



#### **OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

E-Signed By:

Title:

Date:

#### SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Surveyed By: Macon McDonald Date of Survey: 11/5/2004 Certificate Number: 12185

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

Form C-102 Permit 18785

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Poo	l Name	
	78070	HAPPY VALLEY	;STRAWN (GAS)	
4. Property Code	5. Property	Name	6. Well No.	
	MESA "33" F	FUERTE	002	
7. OGRID No.	8. Operator	Name	9. Elevation	
12361	KAISER-FRANC	CIS OIL CO	3259	

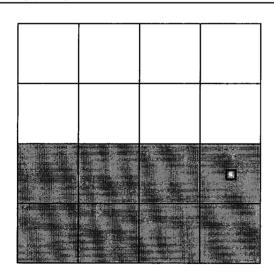
10. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	33	21S	26E		1980	S	660	Е	EDDY

11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
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I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Surveyed By: Macon McDonald Date of Survey: 11/5/2004 Certificate Number: 12185

Sent: Wed 12/7/2005 2:58 PM

#### Arrant, Bryan, EMNRD

Arrant, Bryan, EMNRD From:

Charlotte VanValkenburg To:

Cc:

RE: Attached Image - Mesa "33" Fuerte #2 (C-101) Subject:

Attachments:

Thanks Charlotte.

I have approved your APD. The API # is: 30-015-34457.

If you need a copy before the 1st of next week, please send me a fax # to

fax you over a copy of the C-101. There are a number of conditions of approval.

One of the conditions of approval is that drilling mud samples from the flow line be caught every 100' in order to determine the chloride levels in the drilling mud. The results of this data is to be submitted to the District II

office here in Artesia before drilling the well to total depth. We are requiring this of all operators that drill in the Capitan Reef.

Thanks and I'll visit with you later,

Bryan Arrant PES-Artesia 505-748-1283.103

From: Charlotte VanValkenburg [mailto:CharlotV@kfoc.net]

Sent: Wed 12/7/2005 2:32 PM To: Arrant, Bryan, EMNRD

Subject: FW: Attached Image - Mesa "33" Fuerte #2 (C-101)

---Original Message--

From: noreply@kfoc.net [mailto:noreply@kfoc.net] Sent: Wednesday, December 07, 2005 2:32 PM To: Charlotte VanValkenburg

Subject: Attached Image

<<1255\_001.pdf>>

### **Permit Comments**

Operator: KAISER-FRANCIS OIL CO, 12361

Well:

MESA "33" FUERTE #002

API:

There are no comments for this permit

November 14, 2005

NMOCD Artesia, NM.

RECEIVED

NOV 28 2005

OOD-WATESIA

Re:

BOP

Mesa "33" Fuerte #2

33-21S-26E Eddy Co., NM.

The pipe rams will be function tested on a daily basis and the blind rams will be function tested on all trips due to the close proximity of dwellings. This will follow the NU and testing of the BOP.

Sincerely,

Kaiser-Francis Oil Company

Drew Tyler

Engineer

105000

2.374.5

#### Kaiser-Francis Oil Company **Drilling Procedure Summary**

Mesa "33" Fuerte # 2 33-21S-26E Eddy Co., NM.

#### **DRILLING CONTRACTOR:**

Unknown at this time

#### **ESTIMATED FORMATION TOPS:**

Strawn	9,850'
Atoka	10,180'
Morrow Lime	10,530'
Morrow A Sd	10,850'
Barnett Shale	11,330'

#### CASING PROGRAM:

Hole Size	Casing	Depth	Cement	TOC
17 ½"	13 3/8"	350'	390 sxs	Surface
12 1/4"	9 5/8"	2,650'	895 sxs	Surface
8 3/4"	5 ½"	11,400'	435 sxs	9500'

#### MUD PROGRAM: (SUBJECT TO CHANGES PENDING ON HOLE CONDITIONS)

Depth	Mud Type	Weight
0-350'	Fresh Water/Spud	8.6 - 9.3
500'-2600'	Brine Water Fresh Water Only	8.6 - 9.3 9.8 - 10.1
2600'-8500'	Fresh Water w/LCM as needed	8.3 - 10.5
	Fluid loss seroes zone loss than 12	

Fluid loss across zone less than 12.

#### **HYDROGEN SULFIDE CONTINGENCY PLAN:**

This well/facility is not expected to have hydrogen sulfide in excess of 100 PPM. but due to the sensitive location, a contingency plan has been included with this permit. See attached.

#### **BLOWOUT PREVENTION PROGRAM:**

Blowout prevention equipment will be used during the drilling of this well. There will be regular testing of the BOP during drilling operations. BOP used will depend on the rig used to drill the well.

November 14, 2005

**NMOCD** Artesia, NM.

RECEIVED

NOV 28 2005 **GUU-ARTEQIA** 

Re:

**Nearest Dwelling** 

Mesa "33" Fuerte #2

33-21S-26E Eddy Co., NM.

The nearest occupied dwelling to the proposed location is 1233' to the south. There is also an unoccupied mobile home 913' SE of the proposed location.

Sincerely,

Kaiser-Francis Oil Company

Drew Tyler Engineer

# KAISER-FRANCIS OIL COMPANY HYDROGEN SULFIDE (H<sub>2</sub>S) CONTINGENCY PLAN FOR DRILLING/COMPLETION WORKOVER/FACILITY

MESA FUERTE # 2 SECTION 33-T21S-R26E EDDY COUNTY, NM NOV 2 8 2005 OCU-ARTESIA

This well/facility is not expected to have  $H_2S$ , but due to the sensitive location, the following is submitted as requested.

#### TABLE OF CONTENTS

Emergency Response Activation and General Responsibilities	3
Individual Responsibilities During An H₂s Release	4
Procedure For Igniting An Uncontrollable Condition	5
Emergency Phone Numbers	6
Protection Of The General Public/Roe	7
Characteristics Of H <sub>2</sub> S And SO <sub>2</sub>	8
Training	8
Public Relations	8
Maps	

#### **EMERGENCY RESPONSE ACTIVATION AND GENERAL RESPONSIBILITIES**

#### Activation of the Emergency Action Plan

In the event of any emergency situation, all personnel on location should first ensure that the following items are initiated. After that, they should refer to the appropriate Specific Emergency Guidance sections below for further responsibilities:

- 1. Notify the senior ranking contract representative on site.
- 2. Notify Kaiser-Francis representative in charge.
- 3. Notify civil authorities if the Kaiser-Francis Representative cannot be contacted and the situation dictates.
- 4. Perform rescue and first aid as required (without jeopardizing additional personnel).

#### **General Responsibilities**

In the event of an H<sub>2</sub>S emergency, the following plan will be initiated.

- 1) All personnel will immediately evacuate to an up-wind and if possible up-hill "safe area".
- 2) If for any reason a person must enter the hazardous area, they must wear a SCBA (Self contained breathing apparatus).
- 3) Always use the "buddy system".
- 4) Isolate the well/problem if possible.
- 5) Account for all personnel
- 6) Display the proper colors warning all unsuspecting personnel of the danger at hand
- 7) Contact the Company personnel as soon as possible if not at the location. (use the enclosed call list as instructed)

At this point the company representative will evaluate the situation and coordinate the necessary duties to bring the situation under control, and if necessary, the notification of emergency response agencies and residents.

#### INDIVIDUAL RESPONSIBILITIES DURING AN H2S RELEASE

The following procedures and responsibilities will be implemented on activation of the H<sub>2</sub>S siren and lights.

#### All Personnel:

On alarm, don escape unit (if available) and report to upwind briefing area.

#### Rig Manager/Tool Pusher:

- 1. Check that all personnel are accounted for and their condition.
- 2. Administer or arrange for first aid treatment, and/or call EMTs as needed.
- 3. Identify two people best suited to secure well and perform rescue, and instruct them to don SCBA.
- 4. Notify Contract management and Kaiser-Francis Representative.
- 5. Remain at the briefing area, assess and monitor personnel and overall situation for hazards or conditions that might warrant a change in the action plan.

#### Two People Responsible for Shut-in and Rescue:

- 1. Don SCBA and acquire tools to secure well and perform rescue, i.e., wrenches, retrieval ropes, etc.
- 2. Utilize the buddy system to secure well and perform rescue(s).
- 3. Return to the briefing area and stand by for further instructions.

#### All Other Personnel:

1. Isolate the area and prevent entry by other persons into the 100 ppm ROE.

Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

#### Kaiser-Francis Oil Company Representative:

- 1. Remain at the briefing area, assess and monitor personnel and overall situation for hazards or conditions that might warrant a change in the action plan.
- 2. Notify company management or Local Incident Commander, and Police, Fire Department, or other local emergency services as required.

#### PROCEDURE FOR IGNITING AN UNCONTROLLABLE CONDITION:

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police shall be the Incident Command of any major release.

The decision to ignite a well should be a last resort and one if not both of the following pertain.

- 1) Human life and/or property are in danger.
- 2) There is no hope of bringing the situation under control with the prevailing conditions at the site.

#### **INSTRUCTIONS FOR IGNITION:**

- 1) Two people are required. They must be equipped with positive pressure; self contained breathing apparatus and a "D"-ring style, full body, OSHA approved safety harness. Non-flammable rope will be attached.
- 2) One of the people will be a qualified safety person who will test the atmosphere for H<sub>2</sub>S, Oxygen, & LFL. The other person will be the company supervisor; he is responsible for igniting the well.
- 3) Ignite up-wind from a distance no closer than necessary. Make sure that where you ignite from has the maximum escape avenue available. A 25mm flare gun shall be used, with a +/-500' range to ignite the gas.
- 4) Prior to ignition, make a final check for combustible gases.
- 5) Following ignition, continue with the emergency actions & procedures as before.

#### **CONTACTING AUTHORITIES**

Kaiser-Francis personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. This response plan must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER).

#### EMERGENCY CALL LIST: (Start and continue until ONE of these people have been reached)

	<u>OFFCE</u>	MOBILE	<u>HOME</u>		
Kaiser-Francis Oil Co.	918/494-0000				
David Rodawalt	432/563-2992	432/238-6969	432/520-7339		
Drew Tyler	918/491-4343				
Charles Lock	918/491-4337	918/671-6510	918/250-1935		
Ted Jacobson	918/491-4341				
EMERGENCY RESPONSE	NUMBERS: Eddy C	ounty, New Mex	ico		
State Police – Artesia State Police – Carlsbad State Police – Hobbs		505/748-9718 505/885-3137 505/392-5588			
Eddy County Sheriff - Carlsba	ad		505/887-7551		
Local Emergency Planning C Local Emergency Planning C			505/887-9511 505/397-9231		
Fire Fighting, Rescue & Amb Fire Fighting, Rescue & Amb Fire Fighting, Rescue & Amb	ulance - Carlsbad		911 911 or 505/885-2111 911 or 505/397-9308		
New Mexico Oil & Gas Comn New Mexico Oil & Gas Comn			505/748-1283 505/393-6161		
Aerocare – Lubbock Med Flight Air Ambulance – A		806/725-1100 505/842-4433			
American Safety Indian Fire & Safety Callaway Safety		505/748-6660 505/746-4660 505/392-2973			
BJ Services		505/746-3569 505/748-3746			

Halliburton

505/748-2746

#### PROTECTION OF THE GENERAL PUBLIC/ROE:

In the event of a release with a concentration greater than 100 ppm H<sub>2</sub>S, the ROE (Radius of Exposure) calculations will be done to determine if the following conditions have been met:

- Does the 100 ppm ROE include any public area (any place not associated with this site)
- Does the 500 ppm ROE include any public road (any road which the general public may travel)
- Is the 100 ppm ROE equal to or greater than 3000 feet

If any one of these conditions have been met then the Contingency Plan will be implemented. The following shows how to calculate the radius of exposure and an example.

#### Calculation for the 100 ppm ROE:

X = [(1.589)(concentration)(Q)] (0.6258)

(H2S concentrations in decimal form)

10,000 ppm +=1.+

1,000 ppm +=.1+

100 ppm +=.01+

10 ppm +=.001+

Calculation for the 500 ppm ROE:

X+[(0.4546)(concentration)(Q)] (.06258)

EXAMPLE: If a well/facility has been determined to have 150 ppm H<sub>2</sub>S in the gas mixture and the well/facility is producing at a gas rate of 200 MCFPD then:

ROE for 100 PPM

X=[(1.589)(.0150)(200)] (0.6258)

X=2.65'

ROE for 500 PPM

X=[(.4546)(.0150)(200)] (0.6258)

X=1.2'

(These calculations will be forwarded to the appropriate District NMOCD office when applicable.)

#### **PUBLIC EVACUATION PLAN:**

(When the supervisor has determined that the General Public will be involved, the following plan will be implemented)

- 1) Notification of the emergency response agencies of the hazardous condition and Implement evacuation procedures.
- 2) A trained person in H<sub>2</sub>S safety, shall monitor with detection equipment the H<sub>2</sub>S Concentration, wind and area of exposure (ROE). This person will determine the outer perimeter of the hazardous area. The extent of the evacuation area will be determined from the data being collected. Monitoring shall continue until the situation has been resolved. (All monitoring equipment will be UL approved, for use in class I groups A,B,C & D, Division I, hazardous locations. All monitors will have a minimum capability of measuring H<sub>2</sub>S, oxygen, and flammable values.)
- 3) Law enforcement shall be notified to set up necessary barriers and maintain such for the duration of the situation as well as aid in the evacuation procedure.
- 4) The company supervising personnel shall stay in communication with all agencies through out the duration of the situation and inform such agencies when the situation has been contained and the effected area(s) is safe to enter.

#### CHARACTERISTICS OF H<sub>2</sub>S AND SO<sub>2</sub>

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air = 1	10 ppm	100 ppm	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air = 1	2 ppm	N/A	1000 ppm

#### **TRAINING:**

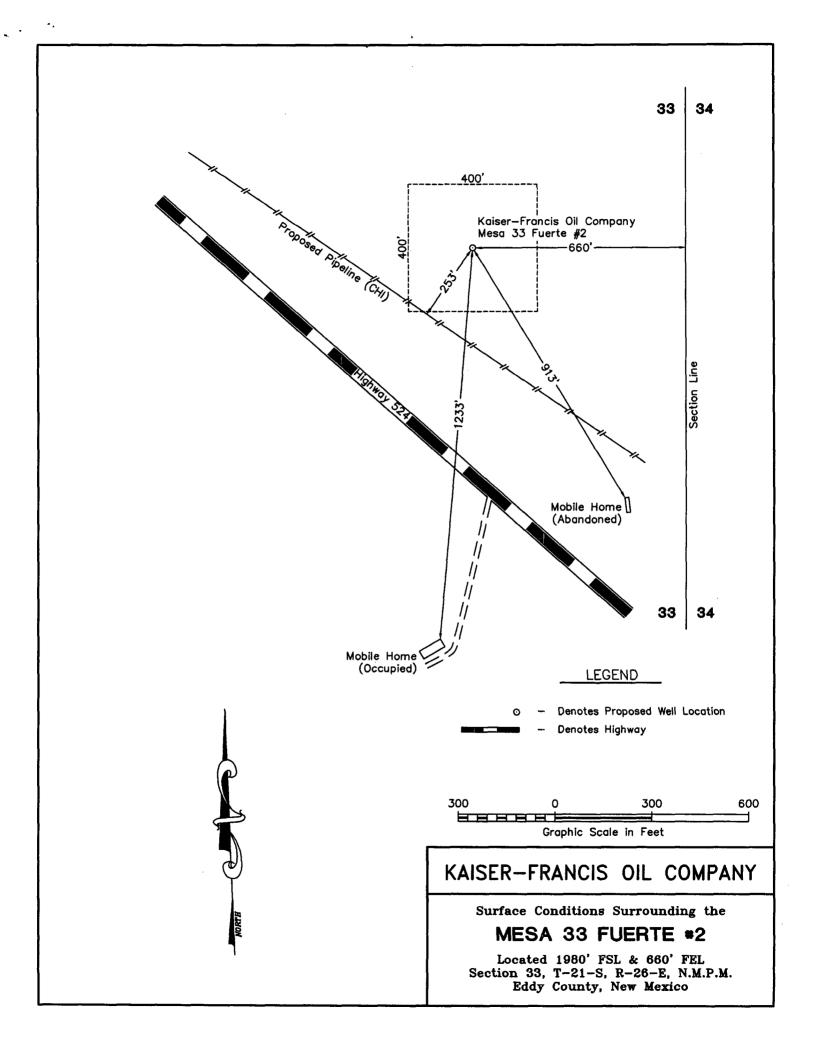
All responders must have training in the detection of  $H_2S$  measures for protection against the gas, equipment used for protection and emergency response. Weekly drills by all crews will be conducted and recorded in the IADC daily log. Additionally, responders must be equipped with  $H_2S$  monitors at all times.

#### **PUBLIC RELATIONS**

Kaiser-Francis recognizes that the news media have a legitimate interest in incidents at Kaiser-Francis facilities that could affect the public. It is to the company's benefit to cooperate with the news media when incidents occur because these media are out best liaison with the public.

Our objective is to see that all reports of any emergency are factual and represent the company's position fairly and accurately. Cooperation with news media representatives is the most reliable guarantee that this objective will be met.

All contract and Kaiser-Francis employees are instructed <u>NOT</u> to make any statement to the media concerning the emergency incident. If a media representative contacts any employee, they should refer them to the designated Emergency Command Center where they should contact the Incident Commander or his designated relief for any information concerning the incident.



6733 South Yale Avenue, 74136 (918) 494-0000

November 22, 2005

Mr. Bryan Arrant OCD 1301 W. Grand Ave Artesia. NM 88210 RECEIVED

NOV 28 2005 OCUMANTESIA

Re:

Mesa "33" Fuerte #2 SE/4 Section 33-21S-26E

Eddy Co., NM.

**Emergency Response** 

Kaiser-Francis Oil Company herewith submits additional information regarding emergency response for this proposed well.

Mr. David Rodawalt (Production Superintendent) will schedule an appointment with the Carlsbad City Manager to discuss the drilling process and emergency response capabilities that will be implemented by Kaiser-Francis Oil Company for this well. In addition, prior to drilling the well, we will provide the city with contact telephone numbers in the event of any emergency.

Mr. Rodawalt will also schedule a meeting with the Carlsbad City Fire Department to discuss the safety precautions we will be implementing and will discuss the notifications we will make to insure that the residents located in the proximity to the well are informed in the event of an emergency.

Kaiser-Francis Oil Company is committed to operating in a manner that will maintain the health and safety of our employees, contractors, and the public. If anyone has questions or concerns, please contact me at (918) 491-4343 or Mr. Rodawalt at (432) 563-2992.

Sincerely, KAISER-FRANCIS OIL COMPANY

Drew Tyler

**Operations Engineer** 

DT:klw

cc: Charles Lock

David Rodawalt

Charlotte Van Valkenburg