c/sf

MAR 26 1993

3160(067)
NM-38464

CERTIFIED--RETURN RECEIPT REQUESTED
P 864 875 252

Kaiser-Francis Oil Company
Attention: Milton Griffin
P. O. Box 21468
Tulsa, OK 74121-1468

RE: Pure Gold A Federal Well No. 4
NM-38464
Surface: 1650' FSL & 330' FWL, Sec. 21, T23S, R31E
Eddy County, New Mexico

Dear Mr. Griffin:

On January 4, 1993, Kaiser-Francis Oil Company filed an Application for Permit to Drill (APD) at the above referenced location. I am pleased to approve your APD at the present location. Your copy of the APD, with attached stipulations, is enclosed.

Through our analysis of the APD, we have determined that the well site is located a sufficient distance from the ore zones that potash resources should not be impacted.

If you need any additional information, please contact Tony Herrell in the Carlsbad Resource Area at (505) 887-6544.

Sincerely,

/s/ Monte G. Jordan

for Larry L. Woodard
State Director

1 Enclosure

bcc:
NM (910, L. Woodard)
NM (920, R. Smith)
NM (060, A. Lopez)
NM (060, L. Cone)
NM (067, T. Herrell) ✓

30-015-27388

Form 3160-3
(December 1990)

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N. M. OIL CONS. COMMISSION
RECEIVED
Artesia, NM 88210

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

JAN 4 8 43 AM '93

CARLSBAD, NEW MEXICO 88220

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ]

b. TYPE OF WELL
OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
Kaiser-Francis Oil Company

3. ADDRESS AND TELEPHONE NO.
P.O. Box 21468, Tulsa, Oklahoma 74121-1468

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
1650' FSL & 330' FWL
At proposed prod. zone
Same

5. LEASE DESIGNATION AND SERIAL NO.
NM 38464

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.
Pure Gold "A" Federal

9. API WELL NO.
4

10. FIELD AND POOL, OR WILDCAT
Wildcat Delaware

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Unit L
Sec 21, T23S, R31E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
17 miles East from Loving

12. COUNTY OR PARISH: Eddy
13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
330'	640	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
990'	8100'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3349', GR

22. APPROX. DATE WORK WILL START*

23. PROPOSED CASING AND CEMENTING PROGRAM Secretary's Potash / R-111-P Potash

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2	13-3/8	48#	700	700 sacks Circulated
11	8-5/8	32#	4070	1000 sacks Circulated
7-7/8	5-1/2	17#	8100	1370 sacks top at ~~4000'~~ 3870'
		Stage tool @ 6200'		

1. MIRU Rotary.
2. Drill 17-1/2" hole to 700', run & set 13-3/8" surface casing & cmt w/700 sx.
3. Install 3000# BOP & test to 600#.
4. Drill 11" hole to 4070', run & set 8-5/8" intermediate csg & cmt w/1000 sx.
5. Test csg to 1000#.
6. Drill 7-7/8" hole to 8100' & run electric logs.
7. If hydrocarbons are indicated, run & set 5-1/2" csg @ 8100' w/stage collar at 6200' and cmt 1st stage w/580 sx & 2nd stage w/790 sx.
8. RDMO rotary, install wellhead, run cement bond log, perforate and stimulate for production.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED, and to NMOCD's R-111-P.

Post ID-1
4-9-93
NEW LOC. API

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
SIGNED Milton Cruffen TITLE Operations Engineer DATE 12/29/92

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY _____ TITLE _____ DATE 3-26-93

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the

Submit to the Appropriate
District Office
State Lease – 4 copies
Fee Lease – 3 copies

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

Form C-102
Revised 1-1-89

DISTRICT I
P. O. Box 1980
Hobbs, NM 88240

DISTRICT II
P. O. Drawer DD
Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd
Aztec, NM 87410

OIL CONSERVATION DIVISION
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the section.

Operator	Lease	Well No.
KAISER - FRANCIS OIL COMPANY	PURE GOLD 'A' FEDERAL	4

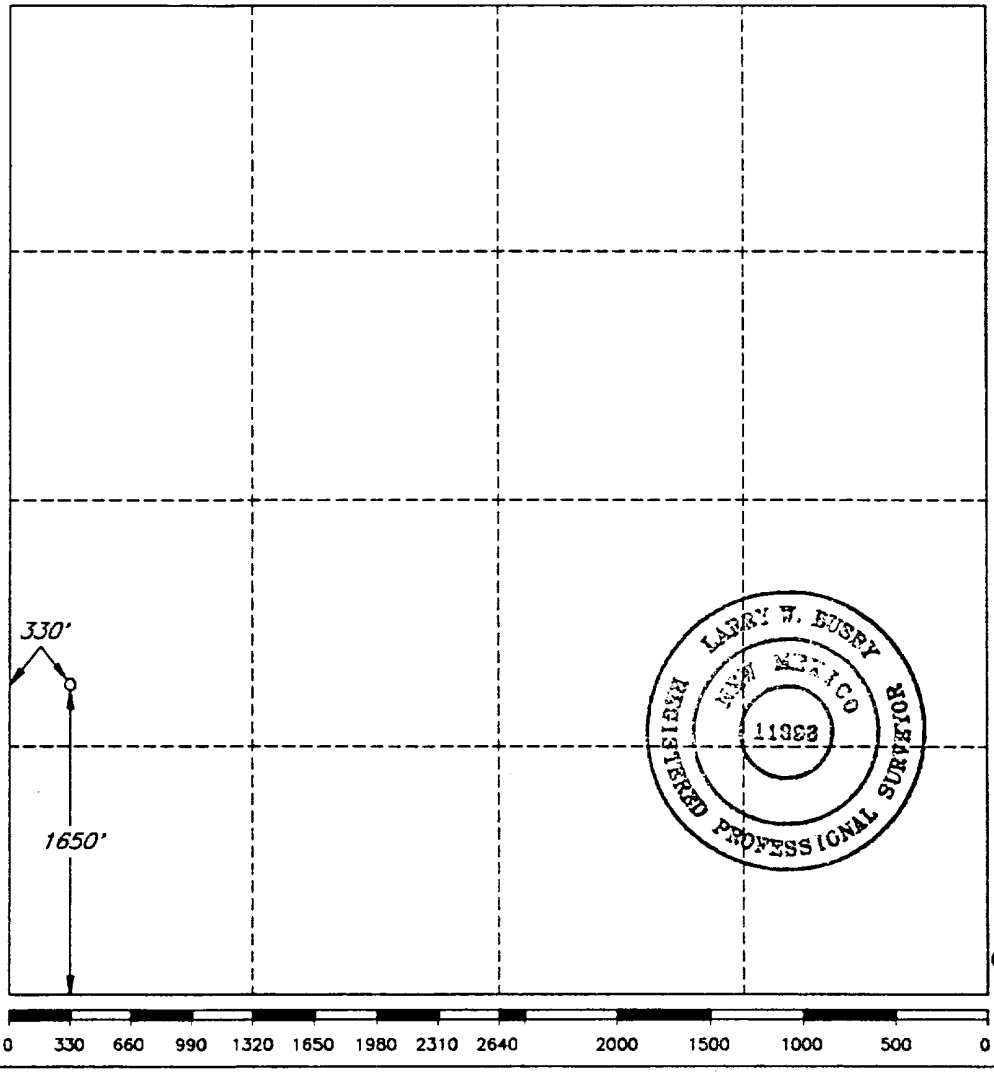
Unit Letter	Section	Township	Range	County
L	21	23 SOUTH	31 EAST, N.M.P.M.	EDDY

Actual Footage Location of Well

1650 feet from the SOUTH line and 330 feet from the WEST line

Ground Level Elev.	Producing Formation	Pool	
3349'	Delaware	Wildcat-Delaware	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all the owners been consolidated by communitization, unitization, forced-pooling, etc.?
   ☐ Yes ☐ No If answer is "yes", type of consolidation _____
   If the answer is "no", list the owners and tract descriptions which have actually been consolidated. (Use the reverse side of this form if neccessary.) _____
   No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the division.



OPERATOR CERTIFICATION

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

Signature: Milton Griffin

Printed Name: Milton Griffin

Position: Operations Engineer

Company: Kaiser-Francis Oil Co.

Date: December 29, 1992

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 knowledge and belief.

Date Surveyed: NOVEMBER 2, 1992

Signature and Seal of Professional Surveyor

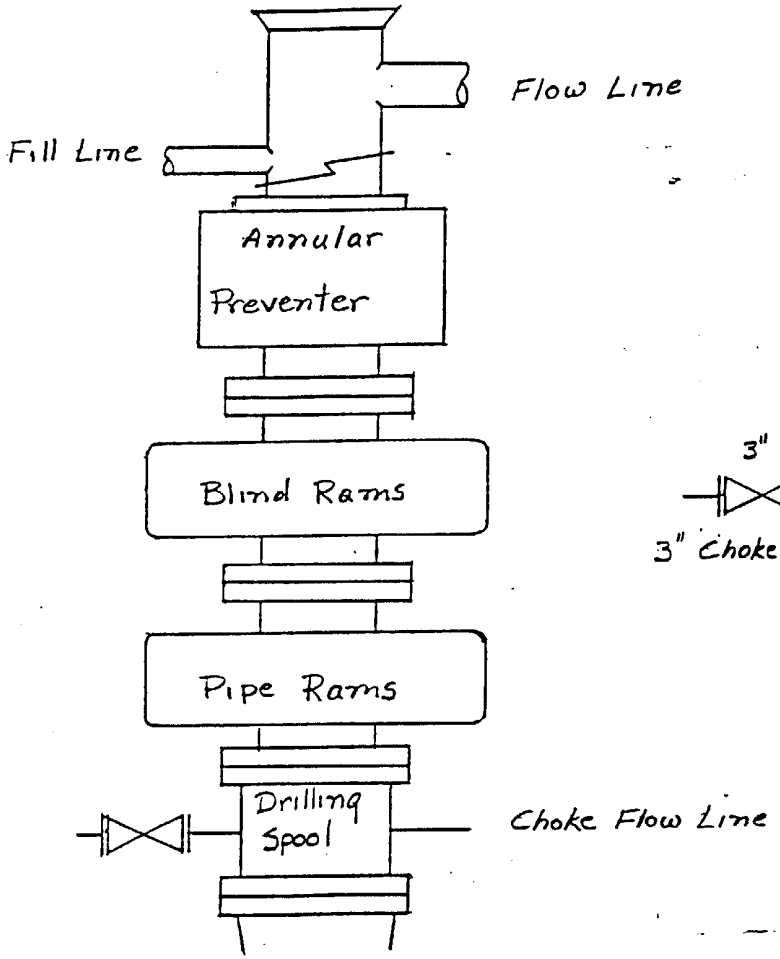
Certificate No. LARRY W. BUSBY R.P.S. #11398

JOB NO. 92814 V.H.B.

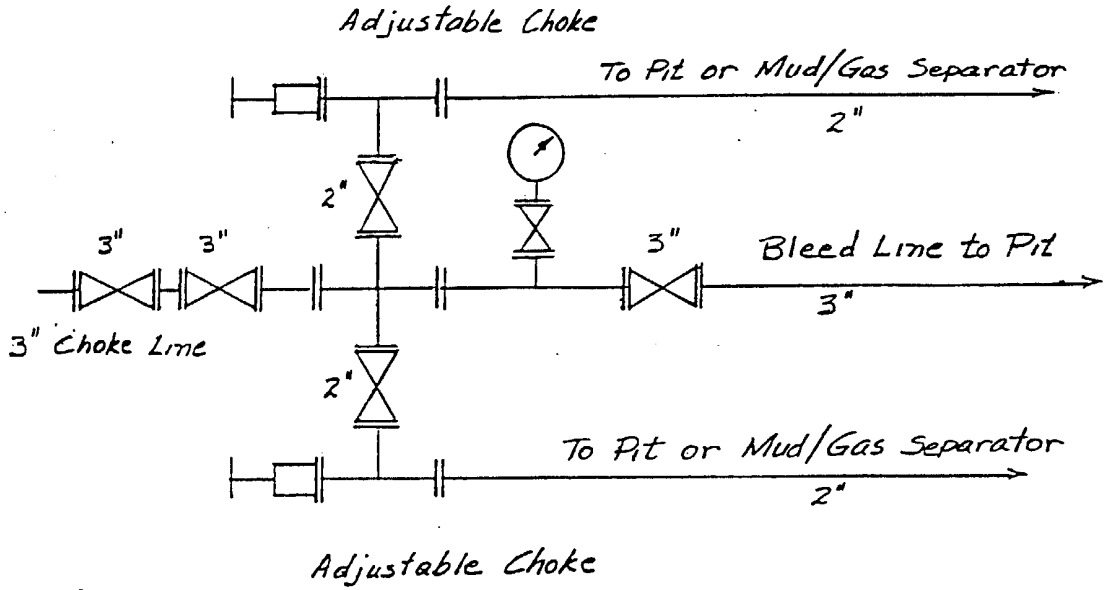
125630

Exhibit B
Kaiser-Francis Oil Company
Pure Gold "A" Federal #4
Eddy County, NM

PRESSURE CONTROL EQUIPMENT



3000 Psi
BOP Stack



3M Choke Manifold

APPLICATION FOR PERMIT TO DRILL
KAISER-FRANCIS OIL COMPANY
Pure Gold "A" Federal No. 4
1650' FSL & 330' FWL
Sec. 21, T23S, R31E
Eddy County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill, Kaiser-Francis Oil Company submits the following items of pertinent information in accordance with Onshore Oil & Gas Order Nos. 1&2, and with all other applicable federal and state regulations.

1. The geologic surface formation is Quaternary alluvium and other surficial deposits.

2. The estimated tops of geologic markers are as follows:

Delaware	4150'
Bone Springs	8000'
TD	8100'

3. We do not anticipate encountering water, and oil and gas formations are as follows:

   Delaware

4. Proposed Casing Program: See Form 3160-3 and Exhibit A.

5. Pressure Control Equipment: See Exhibit B.

6. Mud Program: See Exhibit C.

7. Auxiliary equipment: Blowout preventer.

8. Testing, Logging, and Coring Programs: No coring or DST's are anticipated. Electric logs will consist of a Compensated Neutron/Litho Density w/ Gamma Ray and Caliper and a Dual Laterolog. A Mudlogging unit will be used from 4150' to TD.

9. No abnormal pressures, no abnormal temperatures and no H2S are expected.

10. Anticipated starting date: As soon as possible.

EXHIBIT A
KAISER-FRANCIS OIL CO.
Pure Gold "A" Federal #4
Eddy County, NM

SUMMARY

Drilling, Casing and Cementing Program

1. Drill 17 1/2" hole to 700' and run 13 3/8", 48#, H40 casing. Use guide shoe on bottom joint with a float insert 1 joint above the guide shoe. Run 1 centralizer per joint on bottom 3 joints. Cement with 500 sx Class "C" + 2% CaCl + 1/4 pps Cello Flake lead cement followed by 200 sx Class "C" + 2% CaCl. Drop top plug and displace cement with mud.

2. Nipple up and install BOP's. Cement shall be allowed to stand 12 hours under pressure. After 24 hours test casing to 600 psi for 30 minutes and drill out cement. After drilling the plug and below the casing seat, test again to 600 psi for 30 minutes.

3. Drill 11" hole to 4070" and run 8 5/8", 32#, J55 casing. Use guide shoe on bottom and a float collar 1 joint above the shoe. Use 1 centralizer per joint on bottom 5 joints and 5 other centralizers. Cement with 800 sx Class C Lite (35:65:6) + 9.5 pps salt + 1/4 pps Celloflake lead cement followed by 200 sx Class C + 1% KCl + 5 pps salt. A Fluid Caliper will be run to determine the exact volume of cement required to circulate cement to the surface.

4. Nipple up and install BOP's. Cement shall be allowed to stand 12 hours under pressure. After 24 hours test casing to 1000 psi for 30 minutes and drill out cement. After drilling the plug and below the casing seat, test again to 1000 psi for 30 minutes.

5. Drill 7 7/8" hole to 8100' and run 5 1/2", 17#, K55 casing with a stage tool at approximately 6200'. Use a float shoe on bottom and a float collar 2 joints above the shoe. Use 1 centralizer per joint on bottom 5 joints and as required across potential productive intervals. Cement the first stage with 580 sx Class H + additives, and cement the second stage with 690 sx Class C Lite (35:65:6) lead cement followed with 100 sx Class C neat. The exact volume to bring the cement top to 4000' will be determined after logging the well.

6. Perforations and stimulation treatments will be determined after running electric logs and setting the 5 1/2" casing.

EXHIBIT C
KAISER-FRANCIS OIL CO.
Pure Gold "A" Federal #4
Eddy County, NM

Drilling Fluid Program

	Depth Ft.	Weight lb/gal	Viscosity Sec	Filtrate ml
Surface:	0' to 700'	8.5 to 9.2	35 to 45	No Control

Spud with fresh water gel. Add lime for sufficient viscosity to clean the hole. Paper may be used to control seepage, and mixed coarse LCM for severe to total loss.

Intermediate:	700' to 4070'	10.0 to 10.3	30 to 34	No Control

Drill out from under surface casing with brine. Circulate a controlled section of the reserve pit with brine water + additives for solids control. May use paper to control seepage and additives to help with hole cleaning.

Production:	4070' to 7800'	8.4 to 9.0	28	No Control

Drill out from under intermediate casing with fresh water/cut brine. Circultate a separate controlled section of the reserve pit with fresh water/cut brine + additives for solids control. Use lime or caustic soda for a 9.0-10.0 pH and paper to control seepage. Use additives for hole cleaning sweeps, if needed.

	7800' to TD	8.6 to 9.6	30 to 32	15 to 20

Start cut brine polymer. Return to the steel working pits with clean cut brine and prepare a light mud-up before reaching TD and logging. Use additives for filtrate control. Density may be adjusted to control pressures that may be encountered by addition of brine or fresh water as needed. Use caustic soda to maintain at 9.0.

SURFACE USE PLAN

KAISER-FRANCIS OIL COMPANY
Pure Gold "A" Federal No. 4
Sec. 21, T23S, R31E
Eddy County, New Mexico

1. EXISTING ROADS:

Exhibit D is a portion of a USGS Topographic map showing the existing roads into the proposed location. Exhibit E shows the existing access roads onto the drilling pad.

Exhibit F is a road map showing directions into the lease. From the Junction of State Highway 128 and the Lea/Eddy county line, go northwest 5.7 miles on State Highway 128, to a point approximately 200' northeast of the location.

2. PLANNED ACCESS ROADS:

No new access road will be constructed.

3. LOCATION OF EXISTING WELLS:

Exhibit G is a plat showing existing wells and their locations

4. LOCATIONS OF TANK BATTERY, ELECTRICAL LINES, ETC:

In the event the well is completed as a producing well, temporary production facilities will be installed on the well site until the feasibility of further development drilling is evaluated. If additional development wells are drilled, a central production facility will be constructed on one of the well pads that will minimize flow line lengths and transport truck travel on the lease. Exhibit H is a diagram of a permanent tank battery facility. Flow lines and electric lines will be constructed down existing access road right of ways.

5. LOCATION AND TYPE OF WATER SUPPLY:

Water will be from commercial sources, either hauled or pipelined.

6. SOURCE OF CONSTRUCTION MATERIALS:

If needed, construction materials will be obtained from the drill site's excavations or from a local source. These materials will be transported over the access route as shown on Exhibit E.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. 1. Drill cuttings will be disposed of in the reserve pit.

2. Trash, waste paper, and garbage will be contained in covered trash containers and disposed of in an authorized land fill.

3. If needed, sewage from the trailer house will drain into holes with minimum depth of 10' 00". These holes will be covered during drilling and backfilled upon completion. Portable sanitation facilities will be provided and properly maintained during drilling and completion operations for the rig crews.

4. All extraneous material such as surplus casing, tubing, thread protectors, unused chemicals and containers, will be removed from the location.

B. Remaining drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for backfilling.

Water produced during testing of the well will be disposed of in the reserve pit. Oil produced during testing of the well will be stored in test tanks until sold and hauled from the site.

8. ANCILLARY FACILITIES:

None are planned or required.

9. WELLSITE LAYOUT:

A. Exhibit I shows the relative location and dimensions of the well pad, reserve pits and major rig components.

B. The land is relatively flat with sandy soil.

C. The pad and pit area have been staked.

10. PLANS FOR RESTORATION OF THE SURFACE:

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

After finishing drilling and/or other completion operations, all equipment and other materials not needed for further operations will be removed. Pits will be filled, and the location cleaned of all trash and junk to leave the wellsite as pleasant in appearance as possible.

If the proposed well is nonproductive, all restoration and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as quickly as possible. All

pits will be filled and levelled within 90 days after abandonment.

11. OTHER INFORMATION:

A. The minerals are Federal Government.

B. The topography is undulating to slightly inclined terrain with vegetation of grassland formation, scrub-grass scrub disclimax community. The soil is Berino complex sands.

C. The surface is owned by J. C. Mills, P.O. Box 190, Abernathy, Texas 79311 and is used to mainly access producing wells in the area and grazing for livestock.

D. An Archaeological Survey has been made of the proposed location by Archaeological Survey Consultants, Roswell, New Mexico, and a copy of the report is attached. BLM records (Kyte, 11/02/92) do not indicate the prior recording of sites in Section 21, T23S, R31E. The survey on this drilling pad did not reveal any cultural resources. Also, there are no occupied dwellings or windmills.

12. OPERATOR'S REPRESENTATIVES:

The field representative for contact regarding compliance with the Surface Use Plan is:

David Rodawalt
Kaiser-Francis Oil Company
2440 Market St.
Rt. 5, Box 208
Odessa, Texas 79766
Phone (915) 337-2992

13. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Kaiser-Francis Oil Company and its contractors/subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

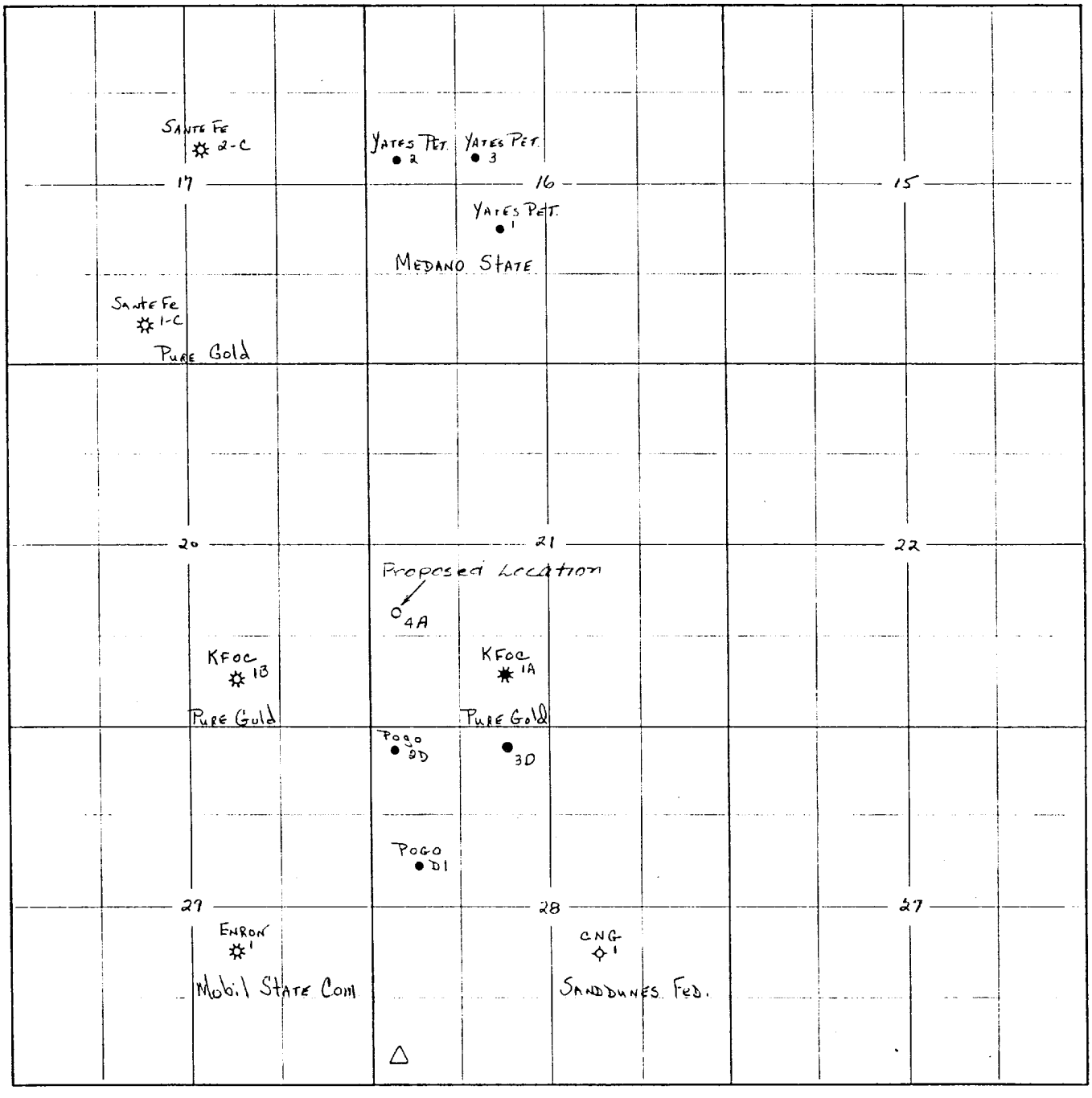
12/29/92
Date

Milton Griffin
Operations Engineer

NINE-SECTION PLAT
Scale: 1 inch = 2200 feet
Printed in U. S. A.

Kaiser-Francis Oil C
Pure Gold "A" Federal #4
Eddy County, NM

TOWNSHIP 23S RANGE 31E COUNTY Eddy STATE N.M



PRINTED IN U.S.A.

PRODUCTION FACILITIES

Exhibit H
Kaiser-Francis Oil Co.
Pure Gold "A" Federal #4
Eddy County, NM

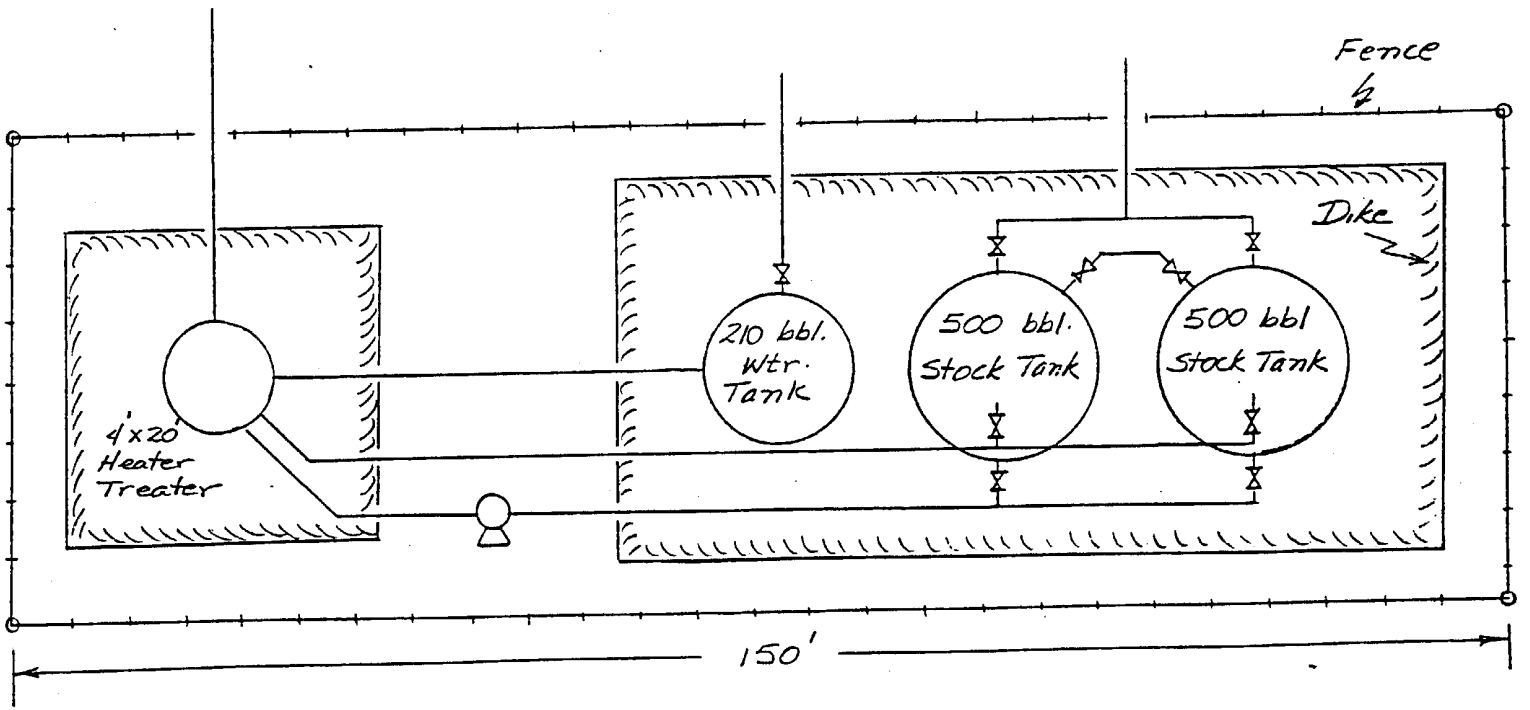


Exhibit I
Kaiser-Francis Oil Co.
Pure Gold "A" Federal #4
Eddy County, NM

WELLSITE LAYOUT

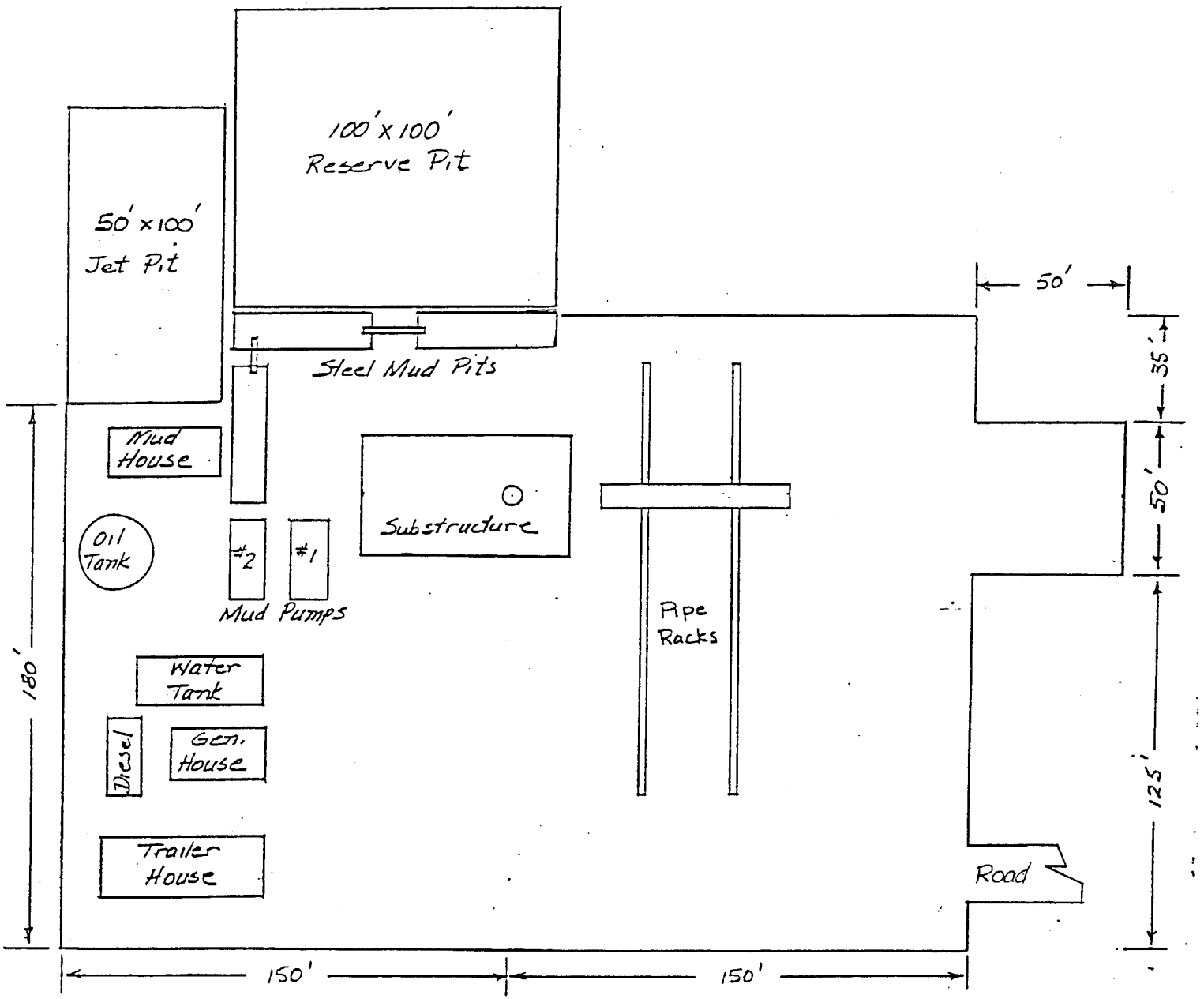
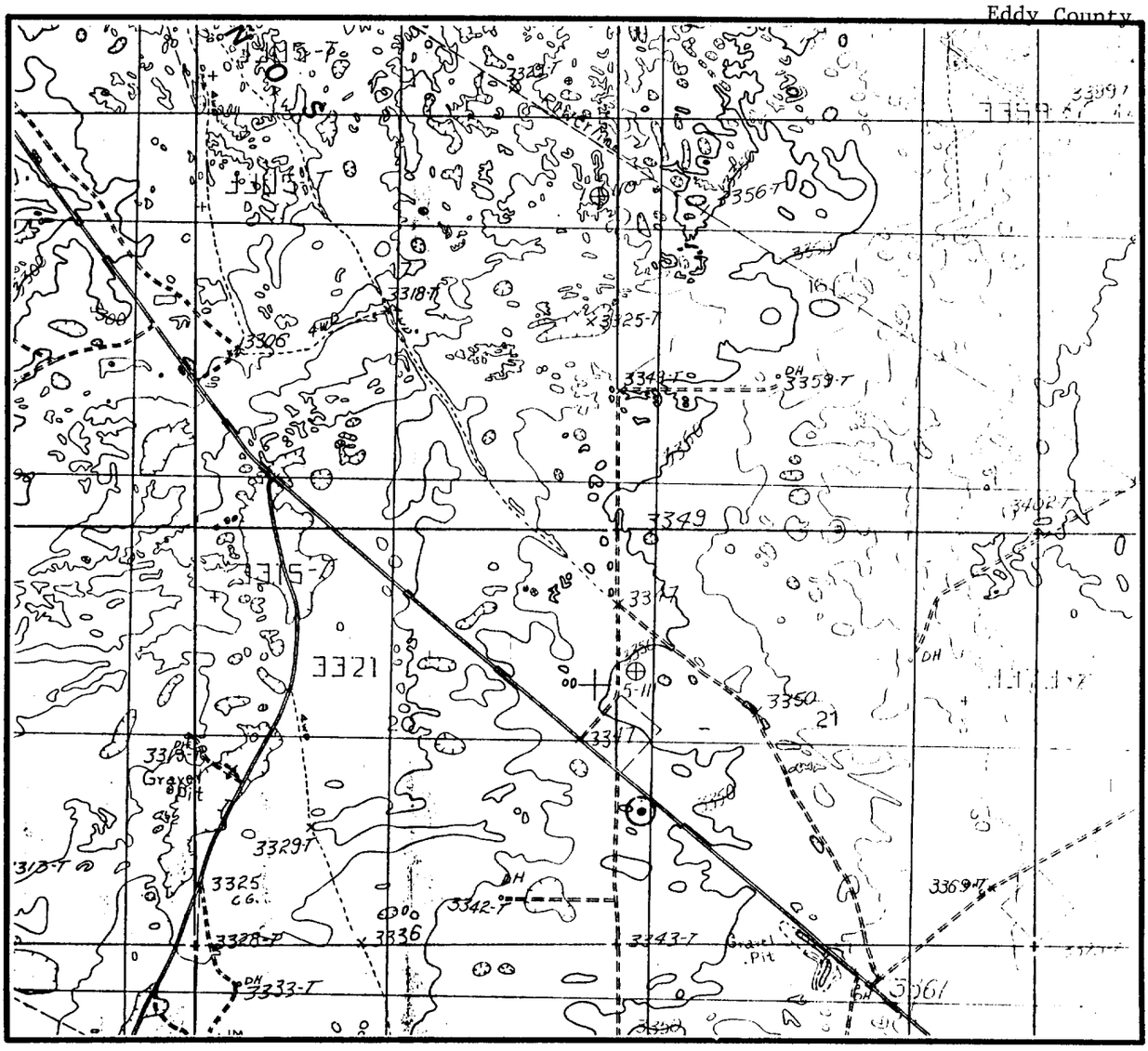


EXHIBIT D
Kaiser-Francis O
Pure Gold "A" Fe
#4
Eddy County, NM

LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000'

CONTOUR INTERVAL 10'

SECTION 21 TWP 23-S RGE 31-E

SURVEY NEW MEXICO PRINCIPAL MERIDIAN

COUNTY EDDY STATE NM

DESCRIPTION 1650' FSL & 330' FWL

ELEVATION 3349'

OPERATOR KAISER-FRANCIS OIL COMPANY

LEASE PURE GOLD "A" FEDERAL #4

U.S.G.S. TOPOGRAPHIC MAP

LOS MEDANOS, NEW MEXICO

SCALED LAT. N 32°17'13"

LONG. W 103°47'23"

This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.

Review this plat and notify us immediately of any possible discrepancy.

TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

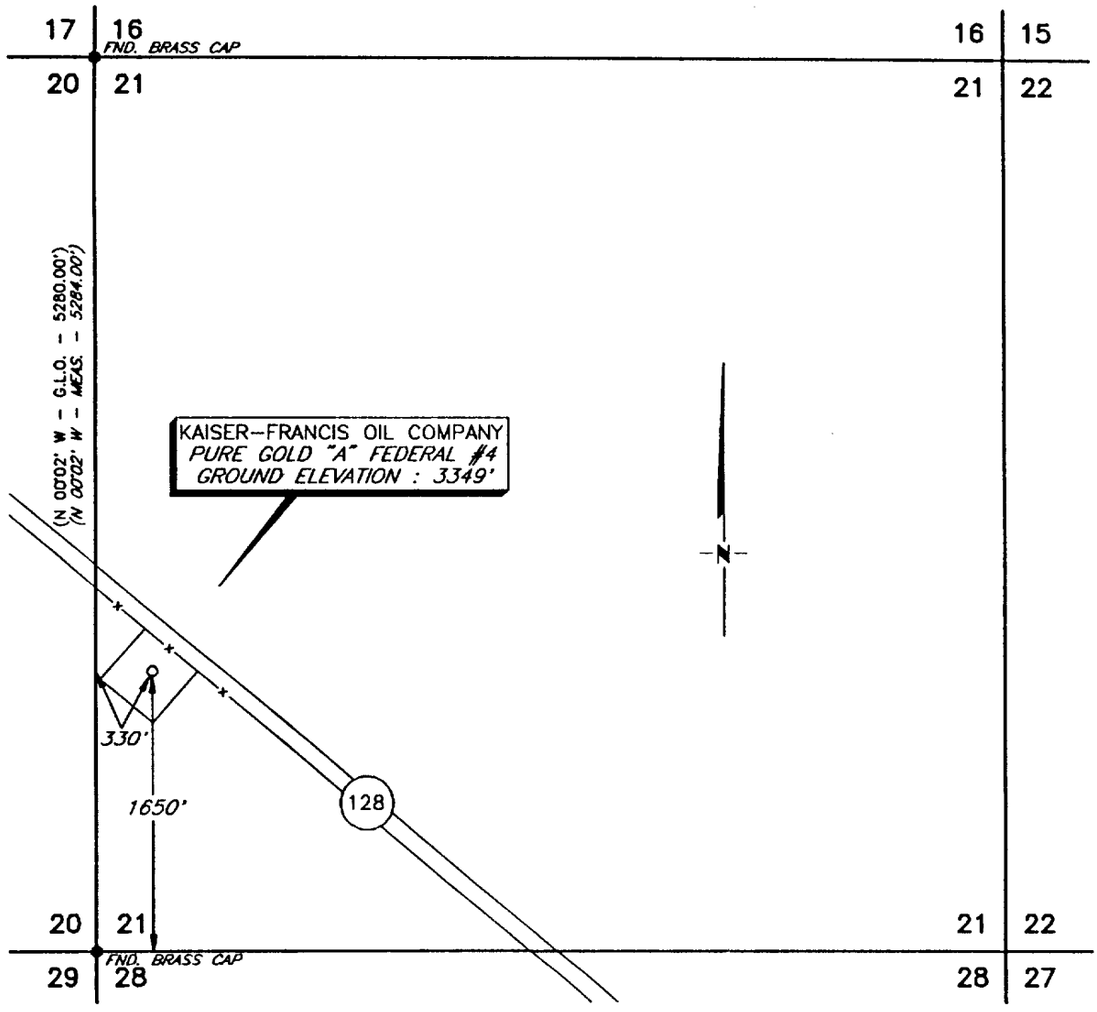
1307 N. HOBART
PAMPA, TX. 79065
(806) 665-7218

2903 N. BIG SPRING
MIDLAND, TX. 79705
(915) 682-1653

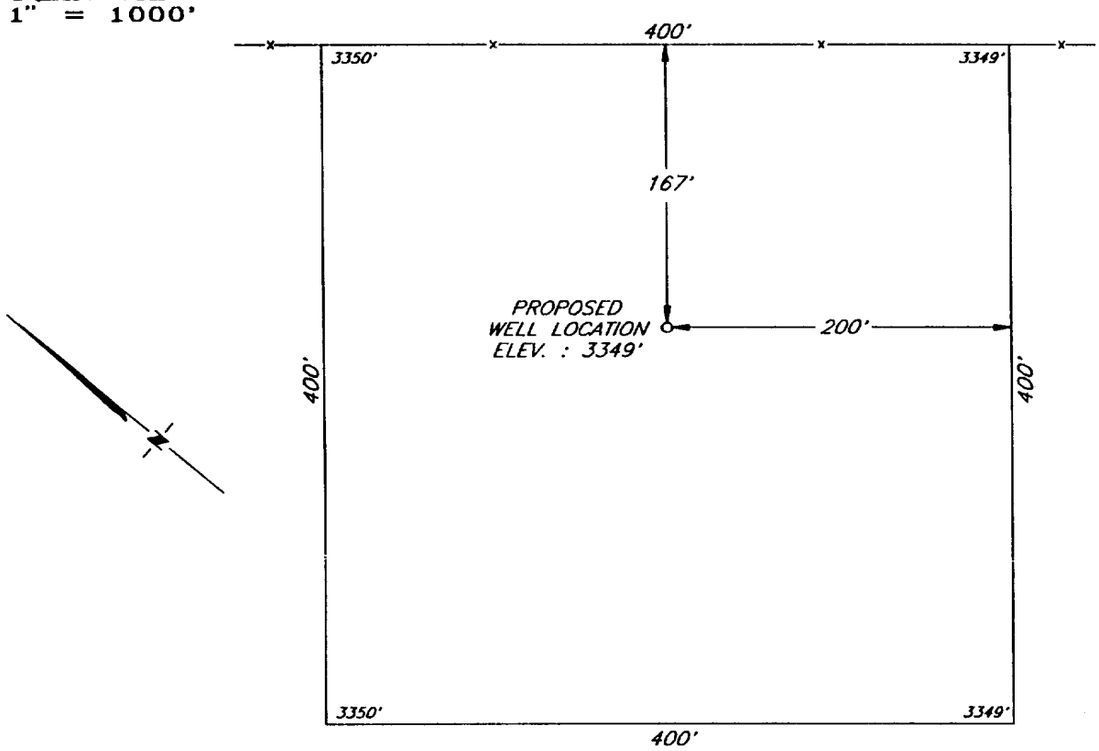
621 SUNSET CIRCLE
HOBBS, NM. 88240
(505) 392-5173

PLAT SHOWING PROPOSE WELL LOCATION AND LEASE ROAD IN SECTION 21, T-23-S, R-31-E, N.M.P.M. EDDY COUNTY, NEW MEXICO

Exhibit E
Kaiser-Francis Oil Co.
Pure Gold "A" Federal #4
Eddy County, NM



PLAN VIEW
1" = 1000'



DETAIL VIEW
1" = 100'

NO.	REVISION	DATE	BY

SURVEYED BY:	R.B.
DRAWN BY:	V.H.B.
APPROVED BY:	L.W.B.

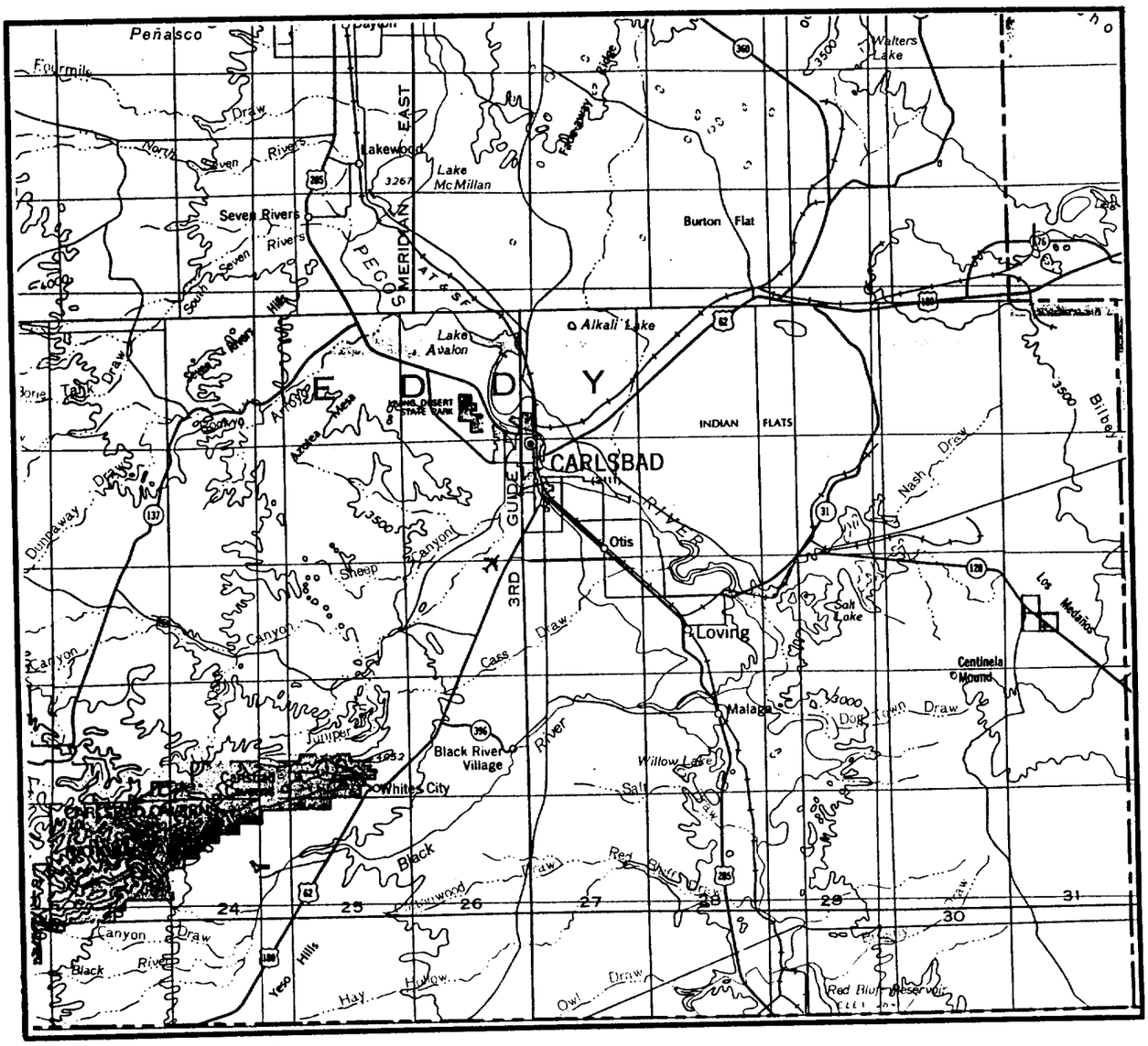
KAISER - FRANCIS OIL COMPANY
ODESSA, TEXAS

SURVEYING AND MAPPING BY
TOPOGRAPHIC LAND SURVEYORS
MIDLAND, TEXAS

SCALE:	AS SHOWN
DATE:	NOVEMBER 2, 1992
JOB NO.:	92814
	48 SE
SHEET :	1 OF 1

Exhibit F
Kaiser-Francis Oil Co
Pure Gold "A" Fed. #4
Eddy County, NM

VICINITY MAP



SCALE: 1" = 8 MILES

SECTION 21 TWP 23-S RGE 31-E

SURVEY NEW MEXICO PRINCIPAL MERIDIAN

COUNTY EDDY STATE NM

DESCRIPTION 1650' FSL & 330' FWL

ELEVATION 3349'

OPERATOR KAISER-FRANCIS OIL COMPANY

LEASE PURE GOLD "A" FEDERAL #4

DISTANCE & DIRECTION FROM THE INTERSECTION OF STATE HWY. 128 & THE LEA / EDDY COUNTY LINE, GO NORTHWEST 5.7 MILES ON STATE HWY. 128 TO A POINT ±200' NORTHEAST OF THE LOCATION.

N

This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.

Review this plat and notify us immediately of any possible discrepancy.

TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

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