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O. C. D.

DEC 2 1992

*8160(067) NM-38463 ccc-11-16-92 Rem 11/17/92 Ram 11-2-3-92 Mun 11-2-3-92

CERTIFIED--RETURN RECEIPT REQUESTED P 696 486 667

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

RE: Pure Gold "B" Federal Well No. 4 NM-38463 660' FSL & 660' FEL, Sec. 20, T23S, R31E Eddy County, New Mexico

Dear Mr. Griffin:

On October 15, 1992, 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,

Larry L. Woodard

Larry L. Woodard State Director

1 Enclosure

cc: IMC Fertilizer Gary Williams P. O. Box 71 Carlsbad, NM 88220 bcc: NM (910, L. Woodard) NM (920, R. Smith) NM (060, A. Lopez) NM (060, L. Cone) NM (067, T. Herrell)

067:CCranston:ls:11/13/92:A:\20goldB4.AL

Form 3160-3 (December 1990)	DEPARTMEN	CONS. CONTENTS TED STATES TOF THE INTER	(Other instru reverse s	ctions on ide)	Budget Bureau	No. 1004-0136 ember 31, 1991
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		DEEPEN	19 11-19	¥,F	7. UNIT AGREEMENT	NAMB
				PLB [-]	8. FARM OR LEASE NAME, W	
2. NAME OF OPERATOR	BLL OTHER	2	ONE A ZONE		Pure Gold B	
Kaiser-Fra	ancis Oil Compan	ny 🗸			9. AF WELL NO.	
3. ADDRESS AND TELEPHONE NO.					4	
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PERVIT NO Application approval does CONDITIONS OF APPROVA		oplicant holds legal or equitable	APPROVAL DATE	t lease which v		_
APPROVED BY					DATE 12-2	-92

*See Instructions On Reverse Side

Tista 18 11 S.C. Section 1001 makes it a crime for any nervon knowingly and willfully to make to any department or agancy of the

District Office	
State Lease - 4 copies	
Fee Lease - 3 copies	

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

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DISTRICI	
P. O. Box 1980	
Hobbs, NM 88240	
DISTRICT II	

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

OIL CONSERVATION DIVISION P. 0. Box 2088 Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

Kais	er-Francis O	il Company	L	PU	RE GOL	D 'B' FED	ERAL	Well No. 4
alt Letter	Section	Township	R	Ange	·		County	<u>і т</u>
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							/ he information complete knowledge Signature- Printed Name Milton Position Operat Company Kaiser Date 10/15/	Griffin ions Engineer -Francis Oil Co
[UNEY Y. BURG	\					I he well locatio was plotted actual sur- under my the same to the be and belief. Date Surveye	ereby certify that is on shown on this p d from field notes veys made by me supervision, and t is true and corru- st of my knowled
	11998 ABOPR3510N	SULTER S		•	66	- 660'- 0'	Signature an Professional	d Seal of Surveyor

APPLICATION FOR PERMIT TO DRILL KAISER-FRANCIS OIL COMPANY Pure Gold "B" Federal No. 4 660' FSL & 660' FEL Sec. 20, 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 "B" Federal #4 Eddy County, NM

SUMMARY

Drilling, Casing and Cementing Program

- 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 1000; 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.



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

Drilling Fluid Program

	Depth	Weight	Viscosity	Filtrate
	Ft.	lb/gal	Sec	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'	10.0	30	No
	to	to	to	Control
	4070'	10.3	34	

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'	8.4	28	No
	to	to		Control
	7800'	9.0		

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'	8.6	30	15
to	to	to	to
TD	9.6	32	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 "B" Federal No. 4 Sec. 20, 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 5.2 miles on State Highway 128, thence south 0.3 mile on lease road, thence west 0.1 mile on lease road to a point approximately 100' south of the location.

2. PLANNED ACCESS ROADS:

No new access road construction will be required.

- 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.

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 A.

7. METHODS OF HANDLING WASTE DISPOSAL:

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

- 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 soil.
- 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 for Section 20, T23S, R31E indicate the recording of ASC Site 91-49-Si (Ruebelman, 8/25/92). The site will not be endangered by construction activity. The survey did not reveal any cultural resources at this drilling pad. 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.

10/15/92 Date

Milton Cry

Milton Griffin Operations Engineer

NEW THE 918 BOX BOX NINE-SECTION PLAT Scale: 1 inch = 2200 feet Printed in U. S. A.

Exhibit G KFOC Pure Gold "B" Fed #4

TOWNSHIP_______ RANGE 3/E COUNTY_ Eddy STATE_N.M. SANte FE YATES PET. YATES PET. \$2-6 • 3 18 16 YATES PET. MEDAND STATE SANTE FE PURE Gold 19 20 21 4B Proposed Location KFOC ¥1A KFOC #'B 0 PURE Cold Pure Gold Pogo Poso • >1 28 30 29 ENRON XE CNG ϕ' Mobil STATE Cord. SANDOUNES F.D . Δ

PRINTED IN U.S.A.



PRODUCTION FACILITIES

Exhibit H KFOC Pure Gold "B" Fed #4



WELLSITE LAYOUT

Exhibit I KFOC Pure Gold "B" Fec

VICINITY MAP

Exhibit F KFOC Pure Gold "B" #4



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 AT SHOWING PROPOSED LL. LOCATION AND LEASE ROAD IN CTION 20, T-23-S, R-31-E, N.M.P.M. DY COUNTY, NEW MEXICO Exhibit E KFOC Pure Gold "B" Fed. #4



LOCATION & ELEVATION VERIFICATION MAP

Exhibit D KFOC Pure Gold "B" #4



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

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