NE AEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

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N.M.O.C.D. COPY United States Department of the Interior

GEOLOGICAL SURVEY P. O. Drawer U Artesia, New Mexico 88210

June 13, 1979

Mesa Petroleum Company 1000 Vaughn Building Midland, Texas 79701

MESA PETROLEUM COMPANY Runyan Federal No. 2 1980 FNL 660 FEL Sec. 18 T. 19S R. 23E Eddy County Lease No. NM-6019

Above Data Required on Well Sign

_ Gentlemen:

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 7900 feet to test the Morrow Formation is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

- 1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.
- 2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
- 3. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should not be less than 8" x 5" in size and each page should identify the well.
- All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).
- 5. Before drilling below the 8-5/8" Intermediate casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.
- 6. A kelly cock will be installed and maintained in operable condition.



RECEIVED JUN 14 1979 D. C. C. Artebia, Office

- 7. After setting the 8-5/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.
- 8. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:
 - (1) A recording pit level indicator to determine pit volume gains and losses.
 - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
 - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
- 9. Notify the Survey in sufficient time to witness the cementing of the 8-5/8" casing.
- 10. Cement behind the 13-3/8" and 8-5/8" casing must be circulated.
- 11. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

Wind Sec.) JOF G. LARA

Joe G. Lara Acting District Engineer

APPLICATION FOR DRILLING

MESA PETROLEUM CO RUNYAN FEDERAL COM. WELL NO. 2 EDDY COUNTY, NEW MEXICO

In conjunction with Form 9-331C, Application for Permit to Drill subject well in Section 18, Township 19 South, Range 23 East, Eddy County, New Mexico, Mesa Petroleum Co submits the following items of pertinent information in accordance with USGS requirements:

- 1. The geologic surface formation is Permian San Andres Limestone.
- 2. The estimated tops of geologic markers are as follows:

Glorieta	1463'	Cisco-Canyon	6033'
Tubb	28 08'	Strawn	7173'
Abo	34 43'	Atoka	7443'
Wolfcamp	459 3'	Morrow	7628'
·		Mississippian Lime	7763'

3. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered are:

Water: Approximately 250' to 300' Oil or Gas: Abo - approximately 3443' to 4593' Wolfcamp - approximately 4593' to 4800' Strawn - approximately 7173' to 7400' Atoka - approximately 7443' to 7600' Morrow - approximately 7628' to 7700'

- 4. Proposed casing program: See Form 9-331C.
- 5. Pressure control equipment: See Form 9-331C and Exhibit E.
- 6. Mud program: See Form 9-331C.
- 7. Auxiliary equipment: Blowout preventer, inside blowout preventer, kelly cock.
- 8. Testing, logging and coring programs; Two possible DST's: (1) Strawn approximately 7173' to 7400' (2) Atoka - approximately 7443' to 7600'
- 9. No abnormal pressures or temperatures are anticipated.
- Anticipated starting date: July 1, 1979. Anticipated completion of drilling operations: August 20, 1979. Completion operations will immediately follow the drilling operations.