SUPPLEMENTAL DRILLING DATA

MCDONNOLD OPERATING, INC.

Well #9 Jack A-29 2364' FNL, 1126' FEL, Sec. 29, T-24-S, R-37-E Lea County, New Mexico

1. <u>SURFACE FORMATION:</u> Permian

2. ESTIMATED TOPS OF GEOLOGICAL MARKERS:

Rustler	1180 ′		
Yates	2900 ′		
Seven Rivers	3220′		
Queen	3435 ′		

3.	<u>ANTICIPATED</u>	POROSITY	ZONES:
	Water		180 '
	Gas		30201
	0	11	34351

4. CASING DESIGN:

<u>Size</u>	<u>Casing</u>	<u>Interval</u>	<u>Weight</u>	<u>Class</u>	<u>Joint</u>	<u>Condition</u>
	8 5/8"	0 - 400'	24.0#	K-55	STC	New
7 7/8"	5 1/2"	0 - 3700'	14.0#	K-55	STC	New

- 5. <u>SURFACE CONTROL EQUIPMENT:</u> A 3000 psi working pressure BOP system. A sketch of BOP is attached.
- 6. <u>CIRCULATING MEDIUM:</u> 0'- 400' Fresh water with gel added if needed for viscosity 400'- TD Salt water conditioned as necessary for control of viscosity and water loss.
- 7. <u>AUXILIARY EQUIPMENT:</u> Drill string safety valve.
- 8. <u>TESTING, LOGGING, AND CORING PROGRAMS</u>: No coring or DST's are planned. Compensated Neutron-Formation Density w/Gamma Ray Log, 0-TD; Dual Lateral Log Shoe to TD.
- 9. <u>ABNORMAL PRESSURES, TEMPERATURES OR GASES:</u> None anticipated.
- 10. <u>ANTICIPATED DATES</u>: It is planned that drilling operations will commence about June 16, 1994. Duration of drilling and completion operations should be 20 to 60 days.

Road Log to the Jack A-29 #9

Starting Point is Jal, New Mexico at the intersection of County Road 128 and County Road 18.

- 0.0 Turn left (North) and proceed on County Road 18 in a Northerly direction for a distance of 5.25 miles to an unpaved county road.
- 5.25 Turn right (East) and proceed on a County Road in an easterly direction for a distance of .75 miles to an existing lease road.
- 6.00 Turn right (South) and proceed in a southerly direction for a distance of .38 miles to the northwest edge of the proposed drill pad.
- 6.38 Jack A-29 #9 drillsite.

THIRTEEN POINT PROGRAM

- 1. <u>Existing Roads</u>: Existing roads which lead to the proposed drillsite are shown on Exhibits "A" and "B".
- 2. <u>Proposed New Road:</u> Proposed new access road will be approximately 60' in length and connect the northhwest edge of 200' x 150' area to an existing lease shown on Exhibit "B".
 - A. <u>Width:</u> 14 feet with 30-foot R-O-W
 - B. <u>Surfacing Material:</u> The new road will be surfaced with caliche or other available material, if required.
 - C. <u>Maximum Grade:</u> Less than one percent
 - D. <u>Turnouts:</u> None required.
 - E. <u>Drainage Design:</u> New road will be crowned with drainage to the side.
 - F. <u>Culverts:</u> None planned.
 - G. <u>Gates, Cattleguards:</u> None required.
- 3 <u>Location of Existing Facilities:</u> Existing wells in the vicinity of the proposed drillsite are shown on Exhibit "C".
- 4. <u>Location of Proposed Facilites:</u>
 - A. If this well is productive, production and storage facilities will be located on the wellpad.
- 5. Location and Type of Water Supply:

A. Water for leasehold operations will be purchased from an available permitted water hauling company. 6. <u>Source of Construction Materials</u>: Where possible, material-in-place will be used for upgrading the road and construction of the well pad. If additional material is required, it will be obtained from a caliche pit located on the lease northeast of the location owned by J. T. Crawford.

7. <u>Method of Handling Waste Disposal:</u>

- A. Pits will be dug a minimum of 4' below ground level and lined.
- B. Drill cuttings will be disposed of in the pits.
- C. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- D. Water produced during test will be disposed of in the drilling pits.
- E. Plastic lining of the pits will be removed before reclaiming the pit area.
- F. Trash, waste paper garbage and junk will be stored in an above ground container, emptied when full and taken to an authorized landfill or other suitable disposal facility. At the conclusion of well completion operations, or plugging operation in the case of a dry hole, the trash and debris containers shall be removed from the location.
- 8. <u>Ancillary Facilites:</u> None anticipated.
- 9. <u>Wellsite Layout:</u>
 - A. The dimensions and relative location of the drill pad, mud pit and trash container with respect to the well bore are shown on Exhibit "D".
 - B. Four inches of top soil will be removed from the surface and stockpiled on southwest corner of location. Four inches of cliche will be used for surfacing of location.
- 10. Plans for Restoration of the Surface:
 - A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in as aesthetically pleasing condition as possible.

Other Information: 11.

- Topography: The wellsite elevation is 3260' GR +/-. Α.
- Soil: Top soil is sandy loam. в.
- Land Type & Use: The vicinity surrounding the с. drillsite is semi-arid rangeland and its primary use is for grazing.
- Flora & Fauna: The vicinity surrounding the drillsite D. is semiarid desert ranchland. Flora consists primarily of mesquite and range grasses interspersed with other desert plants. Fauna for this type of habitat includes rabbits, lizards, snakes, rodents, skunks, coyotes, dove, quail, and other small birds.
- Ε. Ponds and Streams: None
- Water Wells: nearest known water well is located in F. the SW/4 of Section 21, T-24-S, R-37-E.
- G. Residences and Other Structures: Nearest occupied dwelling is 3 miles southwest of the location.
- Archaeological reconnaissance of the well pad will be н. forwarded directly to the BLM office.
- Land Use: Grazing I.
- J. Surface Owner: Woolworth Estate
- Operator's Representative: Representative responsible for 12. assuring compliance with the approved Surface Use Plan:

Office: (915) 682-6396 Craig McDonnold 505 N. Big Spring, Ste 204 Midland, TX 79701

13. <u>Certification:</u>

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in the 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 MCDONNOLD OPERATING, INC. and its subcontractors in conformity with this plan and the terms and conditions under which it is approved.

5/24/94 Date

Craig McDonnold

MCDONNOLD OPERATING, INC.