

CLARY PETROLEUM CORPORATION
NEW MEXICO FEDERAL "D" #1
LEA COUNTY, NEW MEXICO

RECOMMENDED DRILLING FLUID PROGRAM

Depth ft	Mud Weight ppg	Viscosity sec/qt	API Filtrate ml	
0' - 470'	8.5-9.0	35-42	NC	Spud with Drilling Gel and Lime maintaining as needed to set 13-3/8 pipe.
470' - 5600'	8.5-10.0	32-34	NC	Drill out with fresh water letting native viscosity increase to 32 to 34 sec/qt. Around 1600', add 10 ppg brine water for salt stringers. Add and maintain 3% to 5% oil. Use Paper for seepage.
5600' - 11000'	8.5-8.8	28-30	NC	Drill with fresh water, adding Lime for pH and Paper for seepage. Use Visbestos sweeps for hole cleaning.
11000' - 14200'	10.0-10.2	30-34	Below 10	Displace with 10.0 ppg brine maintaining pH with Caustic Soda. At 13500', mud up with KCL, Drispac, Starch, and Soda Ash to produce the above properties. Adjust the mud weights and viscosities as hole conditions warrant.

Attachment IV

BEAMWORKS:

Brewster N-75 grooved drum for 1 1/4" line, 40" DRC hydromat
Catheds, Bear automatic driller

ENGINE AND DRIVE GROUP

3-Waukesha F-3520 gas butane engines, rated at 550 HP each, 3 engine Brewster inline compound

PUMPS AND MUD SYSTEM:

2-1,000HP PZ-9 Gardner Denver triplex pumps w/forged steel fluid ends, compound driven pump suction charged with 5x6 Mission centrifugal pump

3-Mud pits, 900 bbl. total w/low pressure mud system, w/60 HP electric motor
5x6 Mission centrifugal pump

1-Swaco 4 Clone 8" desander, powered by Waukesha 195 GLEU gas engine and
Mission 5x6 centrifugal pump

1-Link Belt Vibrating Shale Shaker

DEPRICK:

Lee C. Moore 133', 760,000# nominal capacity-racking capacity 14,000' of
4 1/2" drillpipe

SUBSTRUCTURE:

Lee C. Moore 16', 650,000# casing capacity, set back of 350,000#

ROTARY:

Brewster RSH 22" rotary table w/split and solid bushings

BLOCKS:

Brewster 5 sheave traveling block (400 ton capacity)

HOOK:

1 - Bryon Jackson 4300 super triplex (350ton)

SWIVEL:

Brewster 8 SX swivel (400 ton capacity)

OTHER EQUIPMENT:

12,000' of 4 1/2" Grade E 16.60 drillpipe
Drill Collars - 6", 7", 8", 9 1/2" as required for standard size hole
1-GMSCO Kelly Cock, 10,000 P.S.I.
1-Hydril 12"--900 GX Hydraulic Stripper type BOP
1-Cameron type U, double, 1500 series ram type blow-out preventor
1-4", 1500 series, 5,000# WF choke manifold w/5,000# HCR Cameron valve
160 gallon Kooney Accumulator 7-station w/remote control stand
2-500 bbl. horizontal water tanks
1-175 KW-AC 3 phase light plant, powered by GK Waukesha
1-35 KW-AC 3 phase light plant, powered by Hercules gas engine
2-way radio communications
1-Modern air conditioned trailer house
Fully equipped with vapor-proof lighting

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

CLEARY PETROLEUM CORPORATION
NEW MEXICO FEDERAL "D" NO. 1
3300' FSL and 1980' FWL, Sec. 4-21S-32E
LEA COUNTY, NEW MEXICO
LEASE NEW MEXICO 14791

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a highway map showing the location of the proposed well as staked. Five miles southeast of Halfway, New Mexico, and 34 miles northwest of Eunice, New Mexico on State Highway 176. A caliche road goes south from Highway 176 for 1.3 miles, right 0.8 miles to New Mexico Federal "B" #1, plus 0.5 mile. Road will be extended 0.5 miles to proposed wellsite and 0.25 miles to connect to existing lease road as shown.
- B. Exhibit "B" is a plat showing all existing roads within a one mile radius of the wellsite, and the planned access road.
- C. Entry and exit to the proposed location will be from State Highway 176 south past Pubco Federal Well No. 1, next right to New Mexico Federal "B" #1 plus 0.5 mile, and additional 0.5 mile over new caliche road.

2. PLANNED ACCESS ROADS:

- A. Length and Width: New road required will be 12 feet wide and 3,960 feet long (2640' west to location and 1320' to connect to existing lease road to west.) This new road is labled and color coded red on Exhibit "B". The center line of the proposed new road from the beginning to the wellsite, has been staked and flagged with the stakes being visible from any one to the next.
- B. Surfacing Material: Six inches of caliche, water, compacted, and graded
- C. Maximum Grade: 3 percent.
- D. Turnouts: One passing turnout will be constructed approximately 900' east of proposed location and 1800' east of proposed location toward New Mexico Federal "B" #1. The construction for

these passing turnouts will increase the width of the new road to 20 feet for a distance of 30 feet. Cleary's New Mexico Federal "C" #1 is in progress (2640' East and 1320' South of proposed location.)

- E. Drainage Design: New road will have a drop of 6 inches from center line on each side.
- F. Culverts: None required.
- G. Cuts and fills: None required.
- H. Gates, Cattleguards: No additional gates or cattleguards are required.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells within a one-mile radius are shown on Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. Location of the proposed tank battery production unit and flow line from New Mexico Federal "D" No. 1 are shown on Exhibit "C". There are no water disposal lines or injection lines. The flow line will not be buried. An Axelson Safomatic valve will be installed on the wellhead to shut in the well in the event of a line failure.
- B. If the proposed well is completed for production, the tank battery, production unit, and flow line will be located on the well pad, and no additional surface disturbance will occur. (As shown on Exhibit "C")

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. There is no adequate water supply in the area for drilling. Water will be purchased and trucked to the wellsite over the existing and proposed roads shown on Exhibits "A" and "C".

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche for surfacing the road and the well pad will be obtained from an existing pit in the NW/4 of the SW/4 of the North 640 acres of Sec. 2, T21S, R32E. The pit is approximately 200 feet north of Pubco Federal No. 1 well, operated by Cleary Petroleum Corporation. The pit is on land owned by The Bureau of Land Management. Location of the pit is shown on Exhibit "B". Royalty will be paid to The Bureau of Land Management by the road and location construction company.

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7. METHODS OF HANDLING WASTE DISPOSAL:
 - A. Drill cuttings will be disposed of in the drilling pits.
 - B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
 - C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.
 - D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
 - E. Trash, waste paper, garbage, and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of trash pits are shown on Exhibit "D".
 - F. All trash and debris will be buried or removed from the well-site within 30 days after finishing drilling and/or completion operations.
8. ANCILLARY FACILITIES:
 - A. None required.
9. WELLSITE LAYOUT:
 - A. Exhibit "D" shows the relative location and dimensions of the well pad, mud pits, reserve pit, trash pits and location of major rig components.
 - B. Only minor levelling of the wellsite will be required. No significant cuts and fills will be necessary.
 - C. The reserve pit will be plastic lined.
 - D. The pad and pit area has been staked and flagged.
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 location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as possible.

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BOBBS, R. M.

- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. After abandonment of the well, surface restoration will be in accordance with The Bureau of Land Management requirements. Pits will be filled and location will be cleaned. The bit area, well pad, and all unneeded access road will be ripped to promote revegetation. Rehabilitation should be accomplished within 90 days after abandonment. Any special rehabilitation and/or revegetation requirements of the surface management agency will be complied with and accomplished as expeditiously as possible. All pits should be filled and levelled within 90 days after abandonment.

11. OTHER INFORMATION:

- A. Topography: Land surface is gently sloping to the northwest. From an elevation of 3683 feet at the wellsite, the land surface slopes gently to the northwest at about 50 feet per mile.
- B. Soil: Soil is a deep fine sand underlain by caliche.
- C. Flora and Fauna: The vegetative cover is generally sparse and consists of mesquite, yucca, shinnery oak, sandsage and perennial native range grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove, quail, and an occasional antelope.
- D. Ponds and Streams: There are no rivers, streams, lakes or ponds in the area.
- E. Residences and Other Structures: The nearest occupied dwelling is a ranch house 3 miles northwest of the wellsite.
- F. ARCHEOLOGICAL, HISTORICAL AND CULTURAL SITES: None observed in the area.
- G. Land Use: Grazing and hunting in season.
- H. Surface Ownership: Wellsite and new roads are on Federal surface.

12. OPERATOR'S REPRESENTATIVE:

The field representatives responsible for assuring compliance with the approved surface use and operations plan are as follows:

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