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NEWMONT OIL COMPANY
300 BOOKER BUILDING
ARTESIA, NEW MEXICO
October 31, 1961

NEW MEXICO
DISTRICT OFFICE

State Of New Mexico
Oil Conservation Commission
P.O. Box 871
Santa Fe, New Mexico

Gentlemen:

Square Lake Pool
C-116 not reg'd

We hereby make application for administrative approval for conversion of the following producing wells to water injection.

State "C" No. 2 NE/4 NE/4 32-16S-31E
State "C" No. 4 SW/4 NE/4 32-16S-31E
Johnson No. 1 NE/4 NW/4 33-16S-31E
Johnson No. 2 SW/4 SW/4 28-16S-31E
Texas Trading Federal No. 2 SW/4 NW/4 33-16S-31E

These wells are to be converted to water injection into the Grayburg-San Andres zone as Stage I as established in Order No. R-2064.

Casing Programs: State "C" No. 2-- 8 5/8" seamless 24 pound surface casing set at 669 feet and cemented with 50 sacks of cement. 5 1/2" seamless 14 pound oil string casing set at 3300 feet and cemented with 100 sacks of cement. Total depth is 3485 feet.

State "C" No. 4-- 8 5/8" surface casing set at 560 feet and cemented with 50 sacks of cement. 5 1/2" oil string casing set at 3210 feet and cemented with 100 sacks of cement. Total depth is 3470 feet.

Johnson No. 1--8 5/8", 32 pound surface casing set at 703 feet and cemented with 50 sacks of cement. 7", 20 pound oil string casing set at 3375 feet and cemented with 100 sacks of cement. Total depth is 3598 feet.

Johnson No. 2-- 8 5/8", 28 pound surface casing set at 705 feet and cemented with 50 sacks of cement. 5 1/2", 14 pound oil string casing set at 3344 feet and cemented with 100 sacks of cement. Total depth is 3587 feet.

Texas Trading Federal No. 2--8 5/8" surface casing set at 737 feet and cemented with 50 sacks of cement. 5 1/2" oil string casing set at 3330 feet and cemented with 100 sacks of cement. Total depth is 3586 feet.

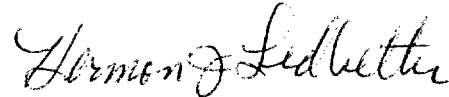
During the drilling of these wells, no fresh water was reported and since the surface casing in these wells is set at the top of the salt zone all possible fresh water zones are behind the surface pipe. When these wells are on injection the bradenhead between the surface pipe and the oil string will be left open. Should a leak in the oil string develop, only salt water zones below the surface pipe will be exposed to the water and it has

been our experience that such leaks are easily detected from the large increase in injections rates, decreases in injection pressure and flow of water at the surface from between the surface pipe and the oil string, and at that time a packer can be run to shut off the leak. Therefore, we believe it is not necessary to run tubing and packers upon conversion to adequately protect any potential fresh water zones.

A copy of this application is being sent to the State Engineer and to Beal, Trobaugh and Associates.

Yours truly,

NEWMONT OIL COMPANY

A handwritten signature in cursive script, reading "Herman J. Leobetter". The signature is written in dark ink and is positioned above the printed name and title.

HERMAN J. LEOBETTER
Superintendent

NEWMONT OIL COMPANY

300 BOOKER BUILDING
ARTESIA, NEW MEXICO

October 31, 1961

NEW MEXICO
DISTRICT OFFICE

Mr. Frank E. Irby
Chief, Water Rights Division
State Engineers Office
Box 1079
Santa Fe, New Mexico

Dear Mr. Irby,

Attached is our application to the New Mexico Oil Conservation Commission for conversion of five wells to water injection in our Square Lake Waterflood.

If you have no objection to the conversion of these wells, we would appreciate your notifying the Commission of that fact in order that our application can be approved as soon as possible.

Yours truly,

NEWMONT OIL COMPANY


HERMAN J. LEDBETTER
Superintendent

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

November 7, 1961

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, N. M.

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Newmont Oil Company under date of October 31, 1961 which seeks administrative approval for conversion of the following producing wells to water injection wells.

State "C" No. 2 NE $\frac{1}{4}$ NE $\frac{1}{4}$ 32-16-S-31-E
State "C" No. 4 SE $\frac{1}{4}$ NE $\frac{1}{4}$ 32-16-S-31-E
Johnson No. 1 NE $\frac{1}{4}$ NW $\frac{1}{4}$ 33-16-S-31-E
Johnson No. 2 SW $\frac{1}{4}$ SW $\frac{1}{4}$ 28-16-S-31-E
Texas Trading Federal No. 2 SW $\frac{1}{4}$ NW $\frac{1}{4}$ 33-16-S-31-E

Since no water was encountered above the salt zone, it appears that no early threat of contamination would occur from the granting of the application. However, if a leak should occur in the long string and fluids of a corrosive nature be permitted to stand in the annulus between the long string and the surface string for extended periods of time, a leak could also occur in the surface string and fluids of a contaminating nature could migrate from this leak down dip to areas where usable water does exist. There is no certainty that this will occur and I am not inclined to be unreasonable in this matter. However, I feel that periodic inspection of such practices should be made and any possible threat of contamination reported. I have confidence that the Commission staff is qualified to judge and to police such matters and that they will do so. Therefore, I offer no objection to the granting of the subject application.

Yours truly,

S. E. Reynolds
State Engineer

FEI/ma
cc-Newmont Oil Co.
F. H. Hennighausen

By: *Frank E. Irby*
Frank E. Irby
Chief
Water Rights Division