



SUD-19
due: now
(waivers attached)

Magnolia Petroleum Company

A Socony Mobil Company

P. O. Box 2406
Hobbs, New Mexico

February 27, 1959

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

Gentlemen:

Submitted herewith is an application to dispose of produced water by injection into the Bough "B" and Bough "D" zones, Permian Formation, of Magnolia Petroleum Company's Santa Fe "B" No. 1, which is located 660' T1E and 1930' T3E, Section 28, Township 9-S, Range 36-E, Lea County, New Mexico. An electrical log of the subject well and waivers from surface owner and offset operators are attached.

The proposed injection zones, Bough "B" and Bough "D", Permian Formation, are non-productive of oil and/or gas within a radius of two miles from Santa Fe "B" No. 1.

The produced water from the Pennsylvanian and Devonian reservoirs is considered unfit for domestic use. Analysis of these waters showed chloride concentrations of 74,000 ppm and 33,000 ppm, respectively.

The present disposal well, Magnolia's Santa Fe Pacific "D" No. 2, is believed in critical condition because of the present high injection pressures, approaching 1900. For this reason, use of the subject well for disposal well is requested.

The subject well will be used for disposal of all produced water from the Crossroads Field.

A copy of this application has been sent by registered mail to the State Engineer's Office, Box 1079, Santa Fe, as well as to all offset operators and the surface owner, Mr. J. D. Sanger.

The applicant alleges that the granting of this application will be in the interest of conservation and aid in the prevention of any pollution of the fresh water strata.

Yours very truly,

MAGNOLIA PETROLEUM COMPANY

C. F. Evans

C. F. Evans
District Petroleum Engineer

HEF:kb
Attachments

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

APPLICATION
TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION
NOT PRODUCTIVE OF OIL OR GAS

POOL Name Crossroads Penn County Lea County

Operator Magnolia Petroleum Company

Address P. O. Box 2406, Hobbs, New Mexico

Lease Name Santa Fe "B" Well No. 1

Depth to top of injection zone 9696-9706 (Top interval "B" zone)

Depth to base of injection zone 9344-9364 (Bottom interval "D" zone)

Size of surface casing 13 3/8"

Length of surface casing 357

Number of sacks of cement used on surface casing 375 sx. circ.

Size of long string 7"

Length of long string 9333

Number of sacks of cement used on long string 135 sx. bottom of collar @ 9567 350 through collar.
Cement Top 5060' Tested, no break.

Size of tubing 3" plastic coated Length of tubing 5500'

Depth of tubing packer setting 5500'

Name and model of packer Baker model "D" Production Retainer Packer

Is injection through tubing or long string or annulus? Tubing

Is injection through perforations or open hole? Perforations

Was the well drilled for salt water disposal purposes? No. Presently T. A.

List perforated intervals and number of sacks of cement used on any squeeze cementing operations Will squeeze old prod. zone, interval 9740-9745 "C" zone

What is depth of the shallowest zone productive of oil or gas in this Pool 4900' San Andres

What is depth of the deepest zone containing fresh water in this Pool? 2230' top of anhydrite

Are there any other salt water disposal wells in this Pool using this same zone for injection purposes? No If so, list operator, lease and well number

What is the approximate volume of salt water to be injected daily? 3500-10,000 bbls.

Will system be open or closed type? Closed

Will injection be by gravity or pump pressure? Pump pressure

If by pump pressure, give approximate number of pounds per square inch 1200#

Will it be necessary for water to be filtered or chemically treated? Filtered

Is this well so cased and completed that water can enter no other formation than the above setout injection zone? Yes

1. Attach a complete full-scale electrical log of this well (one Copy to OCC only).
2. List names and addresses of all offset operators and surface owners.

Sunray Mid-Continent, 1101 Wilco Building, Midland, Texas
Oil Development Company of Texas - Mr. John C. Major, 900 Polk Street, Amarillo, Texas
Gulf Oil Corporation - Mr. C. H. Bumpass, Hobbs, New Mexico
Surface Owner - Mr. U. D. Sawyer, Crossroads, New Mexico

3. Have notices of this application been sent by registered mail or given to all offset operators, surface owners and to the N. M. State Engineer? Yes
4. Attach waivers from all offset operators.
5. Attach waivers from surface owners of land on which well is located or a letter from company making application to the surface owner explaining said application and requesting waiver.
6. No application will be processed until Item 1 has been attached to the application. Should all necessary waivers not accompany application, the Commission shall hold such application for a period of fifteen (15) days from date of receipt in the Santa Fe Office. If, after said fifteen (15) day period, no protest or request for hearing is received in the Santa Fe Office, the application will then be processed.

MAGNOLIA PETROLEUM COMPANY
 Operator

CTE:kb

C. J. Evans
 By

THE STATE OF New Mexico

COUNTY OF Lea

BEFORE ME, The undersigned authority, on this day personally appeared C. J. Evans known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein and that said report is true and correct.

SUBSCRIBED AND SWORN TO before me, this the 27th day of February 1959.

*My Comm. Expires
 January 1, 1962*

C. J. Evans
 Notary Public in and for Lea County, New Mexico



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

ADDRESS CORRESPONDENCE TO:
P. O. BOX 1079
SANTA FE, N. M.

March 3, 1959

File SWD-19 ✓

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

Dear Mr. Porter:

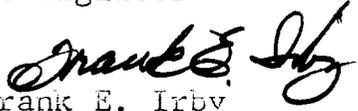
Reference is made to Magnolia Petroleum Company application SWD-19 seeking permission to dispose of salt water by injection into two formations through the Santa Fe "B" No. 1 well which is located 660 feet FEL and 1980 feet FEL, Section 28, Township 9 South, Range 30 East.

The casing and cementing program set forth in the proposal appears to be adequate for the protection of the waters which we anticipate will be encountered. Therefore, this office offers no objection to the granting of this application.

Yours truly,

S. E. Reynolds
State Engineer

FEI/ma
cc-F. H. Hennighausen
C. T. Evans

By: 
Frank E. Irby
Chief
Water Rights Division

February 27, 1959

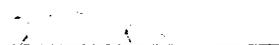
Magnolia Petroleum Company
P. O. Box 662
Roswell, New Mexico

Gentlemen:

You have advised me that you have filed for administrative approval with the New Mexico Oil Conservation Commission, which is an application to use a well in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 23, Twp. 9 S., Rge. 36 E., N.M.P.M., as a well into which salt water may be injected in the Pennsylvanian formation at about 9630' to 9330' from the surface, and said well is to be used as a salt water disposal well.

As surface owner of the land where the above described disposal well is located, I hereby consent to the foregoing use of said well. A copy of this letter may be delivered to said Oil Conservation Commission to reflect my consent.

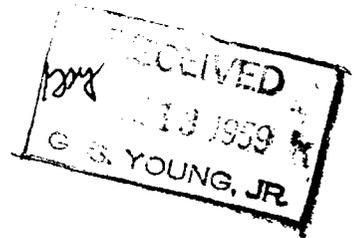
Yours very truly,



U. D. Sawyer

SUNRAY MID-CONTINENT OIL COMPANY

P. O. Box 128
Hobbs, New Mexico



Magnolia Petroleum Company
P. O. Box 2046
Hobbs, New Mexico

Attention: C. T. Evans

Gentlemen:

In reference to Magnolia's application to dispose of salt water in the Santa Fe "B" No. 1, Crossroads Pool, Lea County, New Mexico, please be advised that Sunray Mid-Continent Oil Company waives objection to disposing salt water in this well at depths between 9000 to 10,000', and hereby waives its rights of notice and appeal.

SUNRAY MID-CONTINENT OIL COMPANY

By:


Robert E. Statton

CC: SRMC, Tulsa
SRMC, Midland
File



Santa Fe Pacific Railroad Company

900 Polk Street
AMARILLO, TEXAS

Office of Assistant Land Commissioner

February 16, 1959

107-1-SW

AIRMAIL

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

Gentlemen:

We are advised that Magnolia Petroleum Corporation is planning to convert its abandoned Santa Fe "B" No. 1 Well in the NE/4 SE/4 of Section 28, T 9 S, R 36 E, Crossroads Field, Lea County, into a salt water disposal well by injecting salt water at an interval between 9833' and 9850'.

This is to advise that Santa Fe Pacific Railroad Company, as the mineral owner of offset acreage, hereby waives all objections to the granting of a permit to Magnolia for this purpose.

Yours very truly,

SANTA FE PACIFIC RAILROAD COMPANY

By

J. Paschal
Its Assistant Land Commissioner

EAP
MT

OIL DEVELOPMENT COMPANY OF TEXAS

900 POLK STREET
AMARILLO, TEXAS

OFFICE OF MANAGER OF PRODUCTION

February 16, 1959

107-1-SW

AIRMAIL

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

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This is to advise that Oil Development Company of Texas, as an Oil and Gas Lessee of offset acreage hereby waives all objections to the granting of a permit to Magnolia for this purpose.

Yours very truly,

OIL DEVELOPMENT COMPANY OF TEXAS

By *E. Paschal*
Its Manager of Production

EAP
MT



PETROLEUM AND ITS PRODUCTS

ROSWELL DISTRICT

W. A. SHELLSHEAR
District Manager

E. S. GREAR
District Exploration Manager

M. I. TAYLOR
District Production Manager

G. A. PRICE
District Services Manager

GULF OIL CORPORATION

P. O. DRAWER 669 — ROSWELL, NEW MEXICO

February 20, 1959

**FORT WORTH
PRODUCTION DIVISION**

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

Gentlemen:

This is to advise that Gulf Oil Corporation has been given due notice that Magnolia Petroleum Company has made application for permission to dispose of salt water into the intervals of 9000 feet to 10,000 feet in their Santa Fe "B" Well No. 1 described below. We hereby waive any objection to the granting of their request to dispose of salt water into this well at the following location:

Section 28, Township 9 South,
Range 36 East, Lea County, New
Mexico.

Executed this 20th day of February, 1959.

Very truly yours,

W. A. SHELLSHEAR

