

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

1957 APR 23 PM 1:00
TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION
NOT PRODUCTIVE OF OIL OR GAS

POOL Name SOUTH DENTON (DEVONIAN) County LEA

Operator SIGNAL OIL AND GAS COMPANY

Address 1010 Fort Worth National Bank Bldg. , Fort Worth, Texas

Lease Name GULF-STATE Well No. 2

Depth to top of injection zone 10,790'

Depth to base of injection zone 10,800'

Size of surface casing 13-3/8"

Length of surface casing 350'

Number of sacks of cement used on surface casing 350

Size of long string 7-5/8"

Length of long string 11,189'

Number of sacks of cement used on long string 1025 light weight and 100 neat

Size of tubing 2-3/8" Length of tubing 10,800'

Depth of tubing packer setting 10,770'

Name and model of packer Guiberson L-8

Is injection through tubing or long string or annulus? Thru tubing

Is injection through perforations or open hole? Hole will be perforated 10790' - 10800'

Was the well drilled for salt water disposal purposes? no

List perforated intervals and number of sacks of cement used on any squeeze cementing operations no perforations

What is depth of the shallowest zone productive of oil or gas in this Pool 13,033' (Devonian)

What is depth of the deepest zone containing fresh water in this Pool? 235'

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? Start at 1500 bbls. and may increase to 10,000

Will system be open or closed type? closed

Will injection be by gravity or pump pressure? gravity (or pump, if necessary)

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

Will it be necessary for water to be filtered or chemically treated? no

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.

<u>Cities Service Oil Co.- Hobbs, New Mexico</u>	<u>Shell Oil Company, Hobbs, New Mexico</u>
<u>G. M. Cone, Lovington, New Mexico</u>	<u>Sinclair Oil & Gas Co., Midland, Texas</u>
<u>Gulf Oil Corporation- Roswell, New Mexico</u>	<u>The Texas Co., Midland, Texas</u>
<u>Honolulu Oil Corporation, Midland, Texas</u>	<u>Warren Petroleum Co., Midland, Texas</u>
<u>Magnolia Petroleum Co., Hobbs, New Mexico</u>	

Mr. Elvis P. Caudill
East Star Route, Lovington, New Mex.

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.

SIGNAL OIL AND GAS COMPANY
Operator

N. E. Godbe
By N. E. Godbe
Chief Division Engineer

THE STATE OF Texas
COUNTY OF Tarrant

BEFORE ME, The undersigned authority, on this day personally appeared N. E. Godbe 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 June 19 57.

Mary G. Russell
MARY G. RUSSELL
Notary Public in and for Tarrant
County, Texas

SIGNAL OIL AND GAS COMPANY

GENERAL OFFICES, 811 WEST SEVENTH STREET, LOS ANGELES 17, CALIFORNIA

CONTINENT DIVISION OFFICE
1010 FORT WORTH NATIONAL BANK BLDG.
FORT WORTH 2, TEXAS

June 27, 1957

Cities Service Oil Company
Box 97, Hobbs, New Mexico

Mr. G. M. Cone
Box 997, Lovington, New Mexico

Gulf Oil Corporation
Box 962, Roswell, New Mexico

Honolulu Oil Corporation
Box 1391, Midland, Texas

Magnolia Petroleum Company
Box 2406, Hobbs, New Mexico

Shell Oil Company
Box 1957, Hobbs, New Mexico

Sinclair Oil and Gas Company
Box 1470, Midland, Texas

The Texas Company
Box 1270, Midland, Texas

Warren Petroleum Company
Box 1538, Midland, Texas

Mr. Elvis P. Caudill ✓
East Star Route, Lovington, New Mexico

Gentlemen:

Signal Oil and Gas Company plans to dispose of produced salt water by injection into its Gulf-State #2 well in SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 4, Township 16 South, Range 38 East, South Denton field, Lea County, New Mexico. This well is at present an abandoned dry hole at total depth of 13,346 feet.

You will find all pertinent data as to the method of disposal on the attached copy of application to the State of New Mexico Oil Conservation Commission.

If you have no objection to the disposal as described in the application, please execute the attached waiver and return the original and one copy to the writer at our Fort Worth address at your earliest convenience.

Very truly yours,

SIGNAL OIL AND GAS COMPANY

By _____
N. E. Godbe
Chief Division Engineer

NEG:LP

New Mexico Oil Conservation Commission
Box 371
Santa Fe, New Mexico

Gentlemen:

We have been advised that Signal Oil and Gas Company has applied for permission to dispose of salt water by injection into its Gulf-State #2 well which is now a temporarily abandoned dry hole. The well is located in South Denton field in SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 4, Township 16 South, Range 38 East, Lea County.

As offset operator, we waive right of protest and hereby approve the use of this well by Signal for salt water disposal purposes.

Very truly yours,

By _____

DATE _____

REGISTERED NO. _____

POSTMARK

Value \$ _____ Spec. del'y fee \$ _____

Fee \$ 40 Ret. receipt fee \$ _____

7 6-28-57

Surcharge \$ _____ Ret. del'y fee \$ _____

Postage \$ _____ Airmail

From [Illegible]
[Illegible]
To [Illegible]
[Illegible]

FD-10 Form 3504
Rev. 1-19-57

INSTRUCTIONS TO DELIVERING EMPLOYEE

- DELIVER ONLY TO ADDRESSEE (For additions)
- SHOW ADDRESSEE HOW TO BE DELIVERED IN ITEM 3 BELOW (For additions)

RECEIPT

Received from the Postmaster the Registered, Certified, or Insured Article, the number of which appears on the face of this return receipt.

1 SIGNATURE OR NAME OF ADDRESSEE

X Elvira P. Candell

2 SIGNATURE OF ADDRESSEE'S AGENT (Agent should enter addressee's name in item 1 above)

3 DELIVERY DATE

Jul. 6 - 1957

ILLEGIBLE

March 11, 1958

Oil Conservation Commission
State Capitol
Santa Fe, New Mexico

Attn. Mr. Daniel Nutter

Dear Mr. Nutter:

Reference is made to our telephone conversation of this date pertaining to salt water disposal applications 1, 2, 2a, 4, 5, 9 and 11.

This office has no objection to the disposal of salt water in the manner proposed as listed below:

SWD-1
Pool-Crossroads
Operator-Magnolia Petroleum Company
Lease name-Santa Fe Pacific
Well No.-C-2
Injection zone-4706 feet to 5616 feet

SWD-2a
Pool-Baum-Wolfcamp
Operator-Champlin Oil & Refining Co.
Lease name-Featherstone State "A"
Well No.-1
Injection zone-1560 feet to 1620 feet

SWD-4
Pool-South Denton
Operator-Signal Oil & Gas Company
Lease name-Gulf State
Well No.-2
Injection zone-10,790 feet to 10,800 feet

C

O

P

Y

SWD-5
Pool-Denton
Operator-The Atlantic Refining Company
Lease name-Dickinson "A-13"
Well No.-1
Injection zone-9,950 feet to 10,100 feet

SWD-9
Pool-Echol
Operator-Shell Oil Company
Lease name-State A
Well No.-1
Injection zone-4,249 feet to 6,000 feet

SWD-11
Pool-Caudill
Operator-Shell Oil Company
Lease name-AuttHeirs
Well No. -1
Injection zone-4,873 feet to 6,500 feet

This office objects to any and all changes that may be proposed in connection with these applications.

Yours truly,

S. E. Reynolds
State Engineer

By:
Frank E. Irby
Chief
Water Rights Division

FEI/ma
cc-F. H. Hennighausen

C
O
P
Y

NEW MEXICO OIL CONSERVATION COMMISSION
Box 871
Santa Fe, New Mexico

Gentlemen:

We have been advised that Signal Oil and Gas Company has applied for permission to dispose of salt water by injection into its Gulf-State No. 2 well which is now a temporarily abandoned dry hole. The well is located in South Denton field in SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 4, Township 16 South, Range 38 East, Lea County.

As offset operator, we waive right of protect and hereby approve the use of this well by Signal for salt water disposal purposes.

Very truly yours,

CITIES SERVICE OIL COMPANY

By



Date



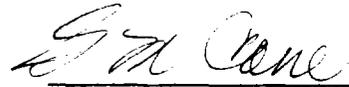
NEW MEXICO OIL CONSERVATION COMMISSION
Box 871
Santa Fe, New Mexico

Gentlemen:

We have been advised that Signal Oil and Gas Company has applied for permission to dispose of salt water by injection into its Gulf-State No. 2 well which is now a temporarily abandoned dry hole. This well is located in South Denton field in SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 4, Township 16 South, Range 38 East, Lea County.

As offset operator, we waive right of protect and hereby approve the use of this well by Signal for salt water disposal purposes.

Yours very truly,



G. M. Cone

Date July 3, 1957

NEW MEXICO OIL CONSERVATION COMMISSION
Box 871
Santa Fe, New Mexico

Gentlemen:

We have been advised that Signal Oil and Gas Company has applied for permission to dispose of salt water by injection into its Gulf-State No. 2 well which is now a temporarily abandoned dry hole. The well is located in South Denton field in SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 4, Township 16 South, Range 38 East, Lea County.

As offset operator, we waive right of protect and hereby approve the use of this well by Signal for salt water disposal purposes.

Very truly yours,

GULF OIL CORPORATION


By E. HOSFORD
District Manager

Date 7/11/59

HONOLULU OIL CORPORATION

P. O. DRAWER 1391
MIDLAND, TEXAS

July 3, 1957

New Mexico Oil Conservation Commission
Box 871
Santa Fe, New Mexico

Gentlemen:

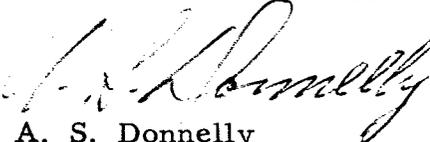
We have been advised that Signal Oil and Gas Company has applied for permission to dispose of salt water by injection into its Gulf-State No. 2 well which is now a temporarily abandoned dry hole. The well is located in South Denton Field in SW-1/4 NW-1/4 Section 4, Township 16 South, Range 38 East, Lea County.

As an offset operator, Honolulu Oil Corporation waives notice of hearing and hereby approves the use of this well by Signal for salt water disposal purposes.

Very truly yours,

HONOLULU OIL CORPORATION

By:



A. S. Donnelly
Vice President

ASD:led

NEW MEXICO OIL CONSERVATION COMMISSION
Box 871
Santa Fe, New Mexico

Gentlemen:

We have been advised that Signal Oil and Gas Company has applied for permission to dispose of salt water by injection into its Gulf-State No. 2 well which is now a temporarily abandoned dry hole. The well is located in South Denton field in SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 4, Township 16 South, Range 38 East, Lea County.

As offset operator, we waive right of protect and hereby approve the use of this well by Signal for salt water disposal purposes.

Yours very truly,

MAGNOLIA PETROLEUM COMPANY

By *M. R. Bradley*

Date 7/16/57

NEW MEXICO OIL CONSERVATION COMMISSION
Box 871
Santa Fe, New Mexico

Gentlemen:

We have been advised that Signal Oil and Gas Company has applied for permission to dispose of salt water by injection into its Gulf-State No. 2 well which is now a temporarily abandoned dry hole. The well is located in South Denton field in SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 4, Township 16 South, Range 38 East, Lea County.

As offset operator, we waive right of protect and hereby approve the use of this well by Signal for salt water disposal purposes.

Very truly yours,

SHELL OIL COMPANY

By W. S. Owey

Date 7/9/57

NEW MEXICO OIL CONSERVATION COMMISSION
Box 871
Santa Fe, New Mexico

Gentlemen:

We have been advised that Signal Oil and Gas Company has applied for permission to dispose of salt water by injection into its Gulf-State No. 2 well which is now a temporarily abandoned dry hole. The well is located in South Denton field in SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 4, Township 16 South, Range 38 East, Lea County.

As offset operator, we waive right of protect and hereby approve the use of this well by Signal for salt water disposal purposes.

Very truly yours,

THE TEXAS COMPANY

By


O. F. Sebesta

Assistant Division Manager

Date July 8, 1957

SINCLAIR OIL & GAS COMPANY

PETROLEUM LIFE BUILDING

MIDLAND, TEXAS

July 8, 1957

FLOYD BRETT
VICE-PRESIDENT & DIVISION MANAGER

LOREN WARE
ASSISTANT DIVISION MANAGER

H. DEFENBAUGH
DIVISION PRODUCTION SUPT.

F. C. ROGERS
DIVISION GAS & GAS PRODUCTS SUPT.

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

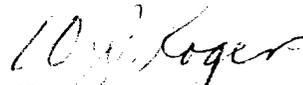
Attention: Mr. A. L. Porter, Jr.

Gentlemen:

We have been advised by Signal Oil and Gas Company that they have applied for permission to dispose of salt water by injection into their Gulf-State Well #2 which is a dry hole located in the SW/4 NW/4 of Section 4-16S-38E, South Denton Field, Lea County, New Mexico. We understand that Signal intends to inject from 1500 up to a maximum of 10,000 barrels of salt water a day into the Pennsylvanian formation in the interval 10,790 to 10,800 feet.

Sinclair Oil & Gas Company has no objection to this application and hereby waives our right to notice of hearing on same.

Yours very truly,


W. J. Rogers
Division Engineer

WJR:FMA:mk

Orig. & 1 cc: Signal Oil and Gas Co.
1010 Ft. Worth Nat'l Bank Bldg.
Ft. Worth, Texas

Warren Petroleum Corporation

P. O. Box 1589

Tulsa 2, Oklahoma

July 8, 1957

New Mexico Oil Conservation Commission
Box 871
Santa Fe, New Mexico

Gentlemen:

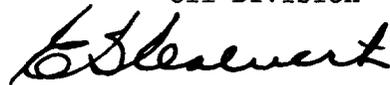
We have been advised that Signal Oil and Gas Company has applied for permission to dispose of salt water by injection into its Gulf-State No. 2 well which is now a temporarily abandoned dry hole. The well is located in South Denton field in SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 4, Township 16 South, Range 38 East, Lea County.

As offset operator, we waive right of protest and hereby approve the use of this well by Signal for salt water disposal purposes.

Very truly yours,

WARREN PETROLEUM CORPORATION,
Oil Division

By



E. S. CALVERT

Natural Gasoline • Natural Gas

Crude Oil • Propane • Butane • Hexane • Heptane • Iso-Butane • Iso-Pentane

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