

100-409

# Gulf Oil Company-U.S.

PRODUCTION DEPARTMENT  
MIDLAND DISTRICT

W. B. Hopkins  
DISTRICT PRODUCTION MANAGER  
J. L. Pike  
DISTRICT OPERATIONS MANAGER  
M. B. Moseley  
DISTRICT SERVICES MANAGER  
A. J. Evans, Jr.  
DISTRICT ENVIRONMENTAL & SAFETY MANAGER  
J. C. Howard  
DISTRICT EMPLOYEE RELATIONS MANAGER

January 21, 1974

P. O. Drawer 1150  
Midland, Texas 79701  
15-642-7301

Mr. A. L. Porter, Jr.  
Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Dear Sir:

Gulf Oil Corporation respectfully requests your administrative approval to utilize two additional water injection wells within the project area of the Central Drinkard Unit, namely Unit Wells 119 and 160, in Sections 30 and 29, respectively, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

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4 A  
The Central Drinkard Unit Waterflood Project was authorized May 6, 1965 under Order No. R-2904, Case No. 3241 and expanded February 8, 1972 under Order No. R-4256, Case No. 4652. Water injection began into six pilot wells on September 12, 1967. The pilot project succeeded in recovering a significant amount of additional oil thereby proving that successful waterflooding of the Drinkard formation was feasible. The project has been expanded since 1972 to include fifteen additional water injection wells as Phase I of the project. The Phase II portion of the project of the operation was to be initiated after cooperative arrangements were made with offset operators. The conversion to injection of Wells 119 in Unit I of Section 30 and 160 in Unit E of Section 29 of T-21S, R-37E was included in Phase II. Further study in this area has revealed that offset wells have been very poor producers with oil cumulatives of approximately 35,000 barrels per well as compared to recoveries for Unit Wells 160 and 163 of 170,000 to 197,000 barrels. Some offset wells are now completed in other zones while others are marginal producers. Due to the poor pay quality underlying the offset leases in the immediate area of Wells 119 and 160, we do not plan to arrange for cooperative line injection and see no reason to delay conversion of Unit Wells 119 and 160 to injection service.

These proposed conversions will close the pattern for center producer Unit Well No. 160 and provide for a three-way push for Unit Well No. 120. The conversion of these wells will improve sweep efficiency and prevent additional oil from being swept off the unit area.



A DIVISION OF GULF OIL CORPORATION

Mr. A. L. Porter, Jr.  
January 21, 1974  
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In support of this application the following is submitted:

- 1) A plat of the project and surrounding area showing the location of injection and producing wells.
- 2) Logs of Unit Wells No. 119 and 160.
- 3) Diagramatic sketches of the proposed injection wells showing all casing strings, including diameters and setting depths, quantities used and tops of cement, perforated or open-hole intervals, tubing strings, including diameters and setting depths, and the type and location of packers.
- 4) Produced water as well as brackish San Andres water from supply wells on the unit will be injected into the Drinkard formation at a depth of approximately 6500 to 6650 feet. Initial injection volumes will be at an approximate rate of 1,000 barrels and declining after fillup. It is anticipated that water will be injected initially by vacuum and the maximum well head pressures will be in the range of 2000 to 3000 psi.

A copy of this letter, with attachments, is being furnished offset operators Texaco Inc. and MacDonald Oil Corporation. We respectfully request these offset operators, if they have no objection, to execute a letter of waiver and forward to the New Mexico Oil Conservation Commission in Santa Fe. A waiver, with stamped addressed envelope, is attached.

Your early approval of this request will be appreciated.

Yours very truly,



J. L. PIKE

CFK:jm  
Attachments

cc: Joe D. Ramey, Supervisor  
Oil Conservation Commission  
P. O. Box 1980  
Hobbs, New Mexico 88240

Offset Operators - List attached

OFFSET OPERATORS

2 / Texaco Inc.  
P. O. Box 3109  
Midland, Texas 79701

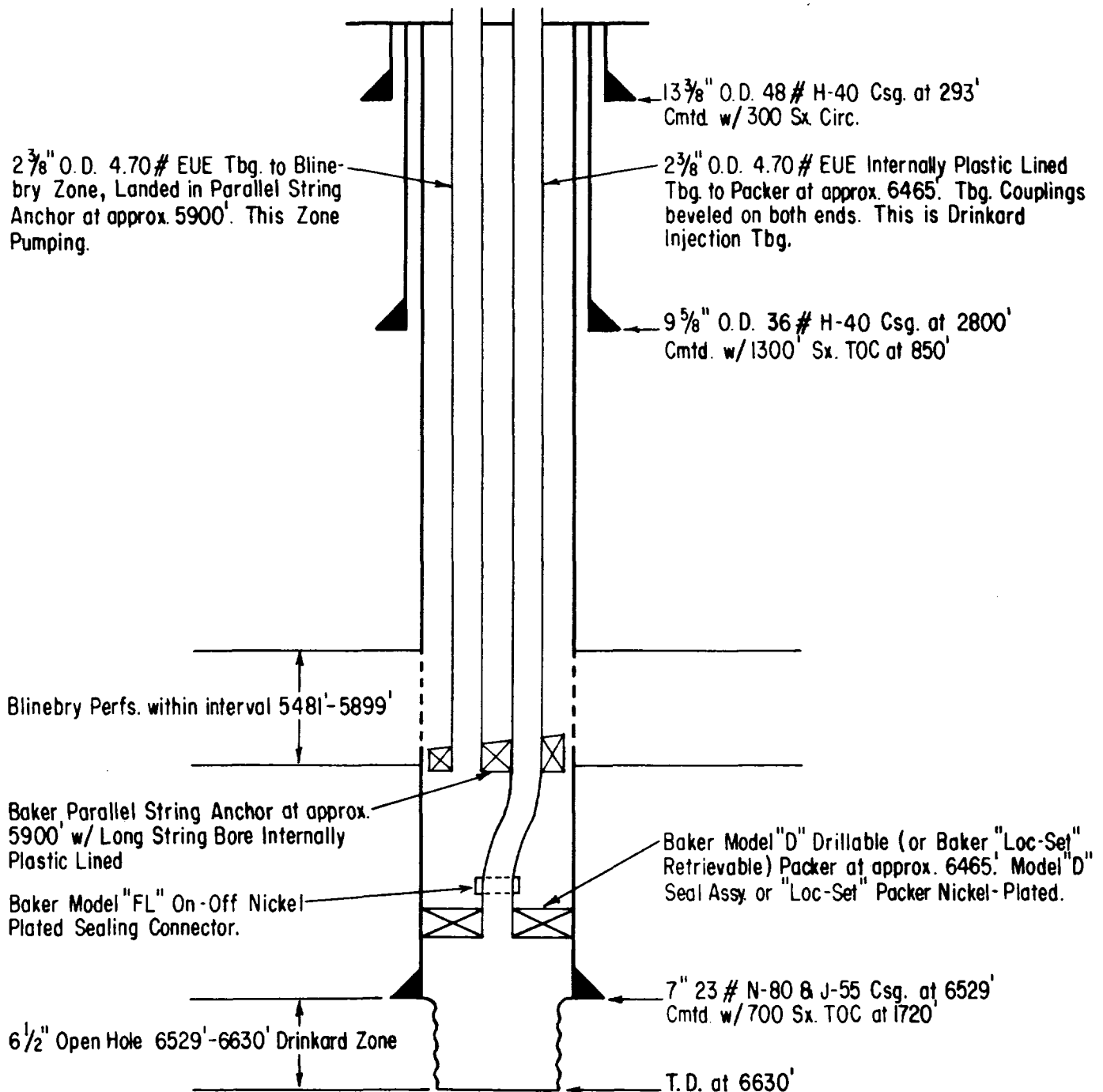
11 / MacDonald Oil Corporation  
1210 Western United Life Bldg.  
Midland, Texas 79701

Gulf Oil Corporation  
P. O. Box 1150  
Midland, Texas 79701

SCHEMATIC DIAGRAM OF PROPOSED COMPLETION

CENTRAL DRINKARD UNIT NO. 119-WIW

DUALLED w/ GULF'S H.T. MATTERN (NCT-B) NO. 8-BLINEBRY OIL  
LOCATION: 330' FEL, 2160' FSL, SEC. 30, T-21-S, R-37-E  
LEA COUNTY, NEW MEXICO

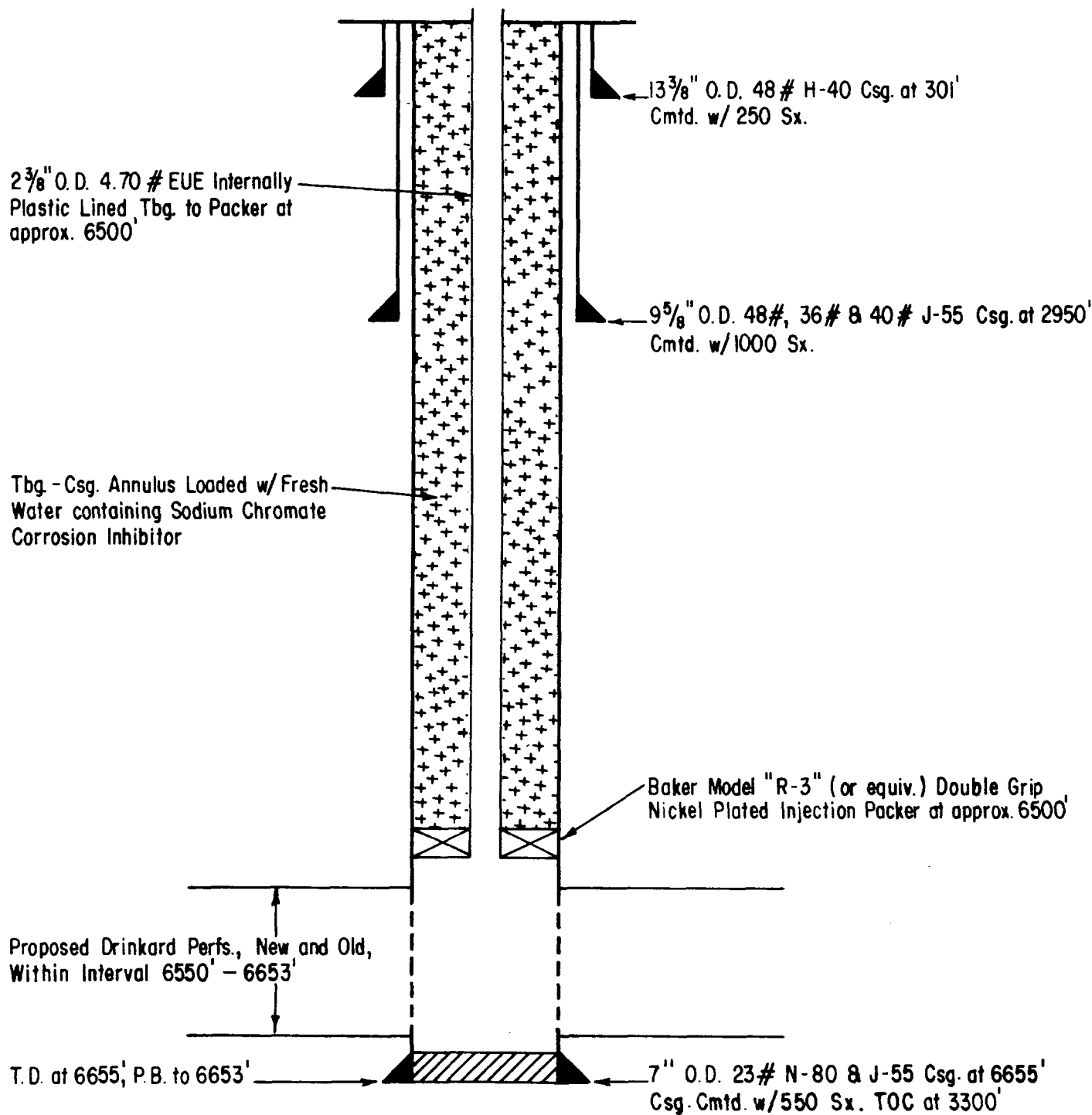


Set for casing

— SCHEMATIC DIAGRAM OF PROPOSED COMPLETION —

**CENTRAL DRINKARD UNIT NO. 160 - WIW**

LOCATION: 1980' FNL, 660' FWL, SEC. 29, T-21-S, R-37-E  
LEA COUNTY, NEW MEXICO



OK for edm app.

OIL CONSERVATION COMMISSION  
I DISTRICT

OIL CONSERVATION COMMISSION  
BOX 871  
SANTA FE, NEW MEXICO

DATE Jan. 23, 1974

Re: Proposed NSP \_\_\_\_\_  
Proposed Triple \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed NFO \_\_\_\_\_  
Proposed DC X \_\_\_\_\_

Gentlemen:

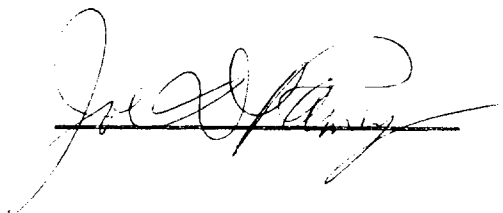
I have examined the application dated 1/18/74  
for the Gulf Oil Corp. H. T. Mattern (NCT-B) #8-I 30-21-37  
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

O.K.---J.D.R.

O.K.---J.W.R.

Yours very truly,



Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Gentlemen:

This is to advise that as an offset operator, we have been duly notified of Gulf Oil Corporation's application to inject water into two additional wells in the Central Drinkard Unit Waterflood Project located in Lea County, New Mexico as follows:

<u>Well No.</u>	<u>Location</u>
119	330' FEL & 2160' FSL Unit I, Section 30, T-21S, R-37E
160	660' FWL & 1980' FNL, Unit E, Section 29, T-21S, R-37E

As an authorized representative of the offset operator, you are advised that we hereby waive any objection to approval of water injection into these wells.

Yours very truly,

TEXACO INC.  
Offset Operator

By 

Address P. O. Box 3109

City & State Midland, Texas 79701

Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

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160	660' FWL & 1980' FNL, Unit E, Section 29, T-21S, R-37E

As an authorized representative of the offset operator, you are advised that we hereby waive any objection to approval of water injection into these wells.

Yours very truly,

MACDONALD OIL CORP  
Offset Operator

By J. J. Turner

Address Box 1812

City & State Midland Texas 79701



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