

Case No.

2035

Application, Transcript,
and Exhibits, Etc.

**BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:**

**CASE No. 2035
Order No. R-1738**

**APPLICATION OF GULF OIL CORPORATION
FOR AN OIL-OIL DUAL COMPLETION IN THE
DRINKARD POOL AND THE WANTS-ABO POOL
IN LEA COUNTY, NEW MEXICO.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 27, 1960, at Santa Fe, New Mexico, before Daniel S. Futter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 4th day of August, 1960, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Futter, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant is the owner and operator of the W. T. McCormack Well No. 12, located 554 feet from the North line and 1874 feet from the East line of Section 32, Township 21 South, Range 37 East, NMPN, Lea County, New Mexico.
- (3) That the applicant proposes to dually complete the above-described well in such a manner as to permit the production of oil from the Drinkard Pool and the production of oil from the Wants-Abo Pool through parallel strings of 2-3/8 inch OD SUE tubing.
- (4) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.
- (5) That approval of the subject application will neither cause waste nor impair correlative rights.

-2-
CASE No. 2035
Order No. R-1738

IT IS THEREFORE ORDERED:

That the applicant, Gulf Oil Corporation, be and the same is hereby authorized to dually complete its W. T. McCormack Well No. 11, located 554 feet from the North line and 18 1/4 feet from the East line of Section 32, Township 21 South, Range 37 East, NMPL, Lea County, New Mexico, in such a manner as to permit the production of oil from the Drinkard Pool and the production of oil from the Wants-Abo Pool through parallel strings of 2-3/8 inch OD KUE tubing.

PROVIDED HOWEVER, That the applicant shall complete, operate, and produce said well in accordance with the provisions of Section V, Rule 112-A.

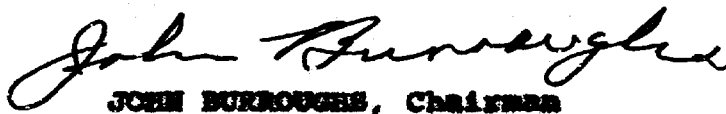
PROVIDED FURTHER, That the applicant shall take packer-leakage tests upon completion and annually thereafter during the Annual Gas-Oil Ratio Test Period for the Wants-Abo Pool and at such other times as the Secretary-Director may prescribe.

IT IS FURTHER ORDERED:


That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the applicant to comply with any requirement of this order, the Commission may terminate the authority herein granted and require the applicant or its successors and assigns to limit its activities to regular single-zone production in the interest of conservation.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


JOHN BURROUGHS, Chairman


MURRAY E. MORGAN, Member


A. L. PORTER, Jr., Member & Secretary

S E A L

esx/

GOVERNOR
JOHN BURROUGHS
CHAIRMAN

State of New Mexico
Oil Conservation Commission

LAND COMMISSIONER
MURRAY E. MORGAN
MEMBER



STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY DIRECTOR

P. O. BOX 871
SANTA FE
August 4, 1960

Mr. Bill Kastler
Box 660
Roswell, New Mexico

Re: Case No. 2035
Order No. R-1738

Applicant:

Gulf Oil Corporation

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. PORTER, Jr.,
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC ☒
Artesia OCC _____
Aztec OCC _____

Other _____



PETROLEUM AND ITS PRODUCTS

GULF OIL CORPORATION

ROSWELL DISTRICT

W. A. SHELLSHEAR
District Manager

F. O. MORTLOCK
District Exploration Manager

M. I. TAYLOR
District Production Manager

G. A. PRICE
District Services Manager

P. O. DRAWER 669 • ROSWELL, NEW MEXICO

June 22, 1960

Re: Application for Approval to
Recomplete W. T. McCormack
Well No. 12 as an Oil-Oil Dual,
Wantz-Abo and Drinkard Oil
Pools, Section 32, T-21-S,
R-37-E, Lea County, New Mexico

Oil Conservation Commission
State of New Mexico
Post Office Box 871
Santa Fe, New Mexico

Gentlemen:

Gulf Oil Corporation respectfully submits application for permission to oil-oil dually complete subject well utilizing two strings of tubing, and requests that the Commission set this matter for Examiner Hearing at an early date. A hearing is being requested for this oil-oil dual completion as the two zones involved have not previously been approved by the Commission.

The following facts are offered in support of this application:

- (1) Gulf Oil Corporation is the owner and operator of the 320-acre W. T. McCormack Lease, which consists of the E/2 of Section 32 in T-21-S, R-37-E, Lea County, New Mexico. Subject well is located 1874 feet from the east line and 554 feet from the north line of said Section 32.
- (2) The 13-3/8" casing in Gulf's W. T. McCormack Well No. 12 was set at 311 feet and the cement circulated. The 9-5/8" casing was set at 2850 feet and cemented with 1300 sacks and the 7" casing was set at a depth of 7410 feet and cemented with 800 sacks. Applicant proposes to perforate the 7" casing opposite the Abo formation in the interval 7100 to 7250 feet. The Drinkard oil perforations are in the interval 6515 to 6620 feet.
- (3) If approved, the subject well will be dually completed through the use of parallel strings of tubing as shown in the diagrammatic sketch attached hereto. The two producing intervals will be separated by means of a Baker Model "DA" Packer set at approximately 6700 feet, which is capable of withstanding any differ-

*See
diagrammatic
for
pages*

June 22, 1960

ential in pressures expected to be encountered between the two producing formations.

The manner and method of the proposed dual completion is mechanically feasible and practical and the granting of this application is in the interest of conservation and the protection of correlative rights. Applicant will comply with all rules and regulations of the New Mexico Oil Conservation Commission to maintain separation of production from the two pays.

By copy of this letter of application, all offset operators are notified of the proposed dual completion.

Respectfully submitted,

GULF OIL CORPORATION



W. A. Shellshear

FWM:ers

cc: Oil Conservation Commission
State of New Mexico
Post Office Box 2045
Hobbs, New Mexico

Socony-Mobil Oil Company
Post Office Box 2406
Hobbs, New Mexico

Amerada Petroleum Corporation
Post Office Box 706
Eunice, New Mexico

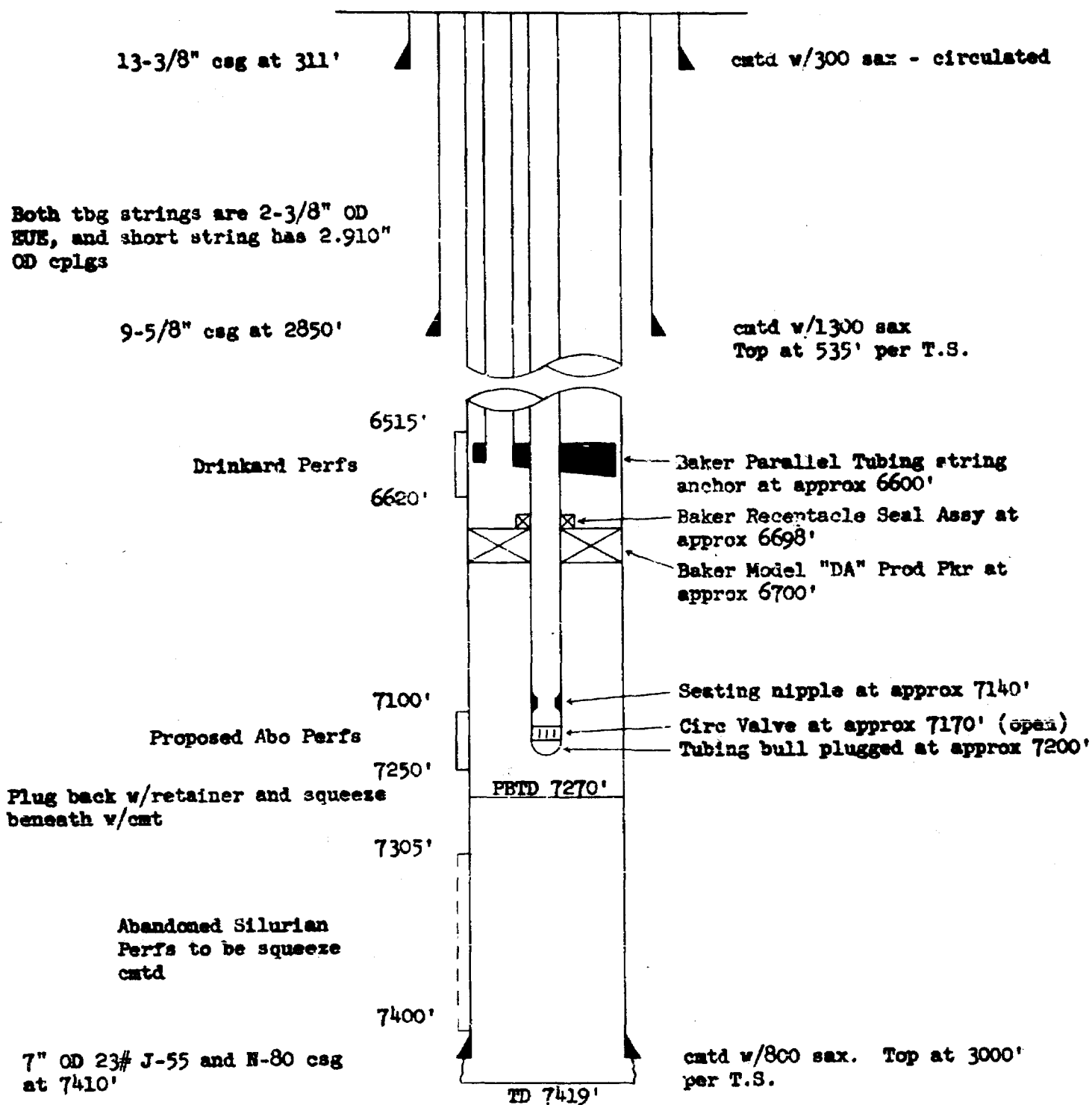
Radford-Zachary Oil Company
Post Office Box 1685
Hobbs, New Mexico

Southern Petroleum Exploration, Inc.
Post Office Box 1017
Roswell, New Mexico

Skelly Oil Company
Post Office Box 38
Hobbs, New Mexico

Sinclair Oil & Gas Company
520 East Broadway
Hobbs, New Mexico

Pan American Petroleum Corporation
Post Office Box 1410
Fort Worth, Texas



NOTE

Drawing not to scale

PROPOSED MECHANICAL INSTALLATION
OIL-OIL DUAL COMPLETION
W. T. McCORMACK NO. 12

WANTZ ABO AND DRINKARD OIL
POOLS
LEA COUNTY, NEW MEXICO

Gulf Oil Corp.

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date July 28, 1960

CASE NO. 2035

HEARING DATE DSN, Santa Fe, 9a.m. 7/27

My recommendations for an order in the above numbered case(s) are as follows:

Approve application of Gulf for the dual completion of its W. T. McCormack Well No. 12 located 554 feet from the North and 1874 feet from the East line of Section 22, Township 21 South, Range 37 East, in such a manner as to permit the production of oil from the Drinkard and the production of oil from the Wantz-Abo Pool through parallel strings of 2 3/8 O.D. EUE tubing.

Staff Member

DOCKET: EXAMINER HEARING JULY 27, 1960

Oil Conservation Commission - 9 a.m., Mabry Hall, State Capitol, Santa Fe, N.M.

The following cases will be heard before Daniel S. Nutter, Examiner, or Oliver E. Payne, Attorney, as alternate Examiner:

CASE NOS. 2023 through 2033 will not be heard before 1 p.m. on July 27, 1960.

CASE NOS. 2034 through 2040 will not be heard before 9 a.m. on July 28, 1960.

CASE 2017: Application of Continental Oil Company for an order authorizing an automatic custody transfer system to handle the Maljamar Pool production from its Miller "BX" lease comprising in pertinent part the E/2 of Section 14, Township 17 South, Range 32 East, Lea County, New Mexico.

CASE 2018: Application of Continental Oil Company for an order authorizing the triple completion of its Jicarilla Apache Well No. 27-2, located in the NW/4 NW/4 of Section 27, Township 25 North, Range 4 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of oil from the Gallup formation, the production of oil from the Greenhorn formation and the production of oil from the Dakota formation through parallel strings of 4½ inch, 2 7/8 inch, and 4½ inch casing cemented in a common well bore. Applicant proposes to install tubing to the Gallup and the Dakota formations.

CASE 2019: Application of Continental Oil Company for an order authorizing the triple completion of its Northeast Haynes Apache Well No. 9-1, located in the NW/4 SW/4 of Section 9, Township 24 North, Range 5 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of gas from the Mesaverde formation, the production of gas from the Gallup formation and the production of gas from the Greenhorn formation through parallel strings of 2 7/8 inch, 4½-inch, and 4½-inch casing respectively, cemented in a common well bore. Applicant also proposes to install tubing in the latter two zones.

CASE 2020: Application of Amerada Petroleum Corporation for an order authorizing the triple completion of its Wimberly Well No. 13, located in Unit M, Section 24, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of gas from the Langlie Mattix Pool, the disposal of salt water into the Grayburg and San Andres formations in the interval from 3500 feet to 4200 feet, and the production of oil from the Justis-Blinbry Pool by means of two parallel strings of 3½-inch casing cemented in a common well bore. Applicant would dispose of the salt water through one string of casing, produce the Blinbry oil through 1½-inch tubing set in the second string of casing, and produce Langlie Mattix gas through the annulus of the 1½-inch tubing and the second casing string.

CASE 2021: Application of Shell Oil Company for authority to recomplete its State BUA Well No. 2 (formerly its Bluit Unit Well No. 2) at an unorthodox oil well location in the Pennsylvanian formation within one mile of the Bluit Pennsylvanian Pool. Said well is located 1980 feet from the North line and 660 feet from the West line of Section 16, Township 8 South, Range 37 East, Roosevelt County, New Mexico.

CASE 2022: Application of Sinclair Oil & Gas Company for an order authorizing the dual completion of its Turner "B" SP Well No. 67, located in Unit L, Section 20, Township 17 South, Range 31 West, Eddy County, New Mexico, in such a manner as to permit the production of oil from the Grayburg-Jackson Pool and the production of oil from an undesignated Abo pool through parallel strings of 2-inch tubing.

The following cases will not be heard before 1 p.m. on July 27, 1960:

CASE 2023: Application of Honolulu Oil Corporation for an order authorizing it to institute a ~~pressure maintenance project in the~~ Horseshoe-Gallup Oil Pool by the injection of water into the Gallup formation through its Navajo Well No. 4, located in the SE/4 SE/4 of Section 5, Township 31 North, Range 17 West, San Juan County, New Mexico; applicant further seeks the adoption of special rules governing the operation of said project.

CASE 2024: Application of Humble Oil & Refining Company for an order authorizing it to institute a pressure maintenance project in the Horseshoe-Gallup Oil Pool by the injection of water into the Gallup formation through 29 wells located in Sections 3, 4, 9, 10, and 11, Township 31 North, Range 17 West, San Juan County, New Mexico; Applicant further seeks the adoption of special rules governing the operation of said project.

CASE 2025: Application of Socony Mobil Oil Company for permission to convert to water injection its Navajo "A" Well No. 9, located in NE/4 NW/4 of Section 14, Township 31 North, Range 17 West, Rio Arriba County, New Mexico, in conjunction with a proposed adjacent pressure maintenance project in the Horseshoe-Gallup Oil Pool.

CASE 2026: Application of The British American Oil Producing Company for an order authorizing the "slim-hole" completion of its Fullerton Well No. 7, located 1850 feet from the South and West lines of Section 11, Township 27 North, Range 11 West, Dakota Producing Interval, San Juan County, New Mexico, utilizing 2 7/8-inch tubing as casing.

- CASE 2027: Application of Hondo Oil & Gas Company for an amendment of Order No. R-1643 to provide an alternative to the fail-safe features required in the automatic custody transfer system authorized therein for the Hondo-Western-Yates State 647 lease, Empire-Abo Pool, Eddy County, New Mexico.
- CASE 2028: Application of Pan American Petroleum Corporation for an order authorizing it to commingle the production from the Empire-Abo Pool from all wells on eight separate leases in Sections 27 and 34, Township 17 South, Range 28 East, Eddy County, New Mexico. Applicant also seeks authorization of an automatic custody transfer system to handle said commingled production.
- CASE 2029: Application of Pan American Petroleum Corporation for an amendment of Order R-1399 to permit the commingling of Empire-Abo Pool production from Federal Lease No. LC-064050-A, E/2 SE/4 of Section 34 and NW/4 SW/4 of Section 35, Township 17 South, Range 27 East, with the Empire-Abo Pool production from those leases for which commingling was approved by paragraph one of said order and to permit the commingling of Empire-Abo Pool production from Federal Lease No. NM-025602, NW/4 and N/2 SW/4 of Section 15, Township 18 South, Range 27 East with the Empire-Abo Pool production from those leases for which commingling was approved by paragraph two of said order. Applicant also seeks an amendment of Order No. R-1399-A to permit production from the above-described leases in Eddy County, to be handled by the automatic custody transfer systems authorized in said order.
- CASE 2030: Application of Pan American Petroleum Corporation for permission to commingle the Empire-Abo Pool production from eleven separate State leases in Townships 17 and 18 South, Range 28 East, Eddy County, New Mexico. Applicant further seeks permission to install automatic custody transfer facilities to handle said commingled production.
- CASE 2031: Application of Union Oil Company of California for approval of its South Caprock Queen Unit Agreement, which unit is to embrace 9526 acres in Townships 14 and 15 South, Ranges 30 and 31 East, Caprock Queen Pool, Chaves County, New Mexico.
- CASE 2032: Application of Union Oil Company of California for an order authorizing it to institute a waterflood project in the Caprock-Queen Pool on its proposed South Caprock Queen Unit by the injection of water into the Queen formation through ten wells located in Township 15 South, Range 31 East, Chaves County, New Mexico, and for authority to drill a water injection well at an unorthodox location, being 330 feet West of the East line and 1320 feet South of the North line of Section 18, Township 15 South, Range 31 East.

CASE 2033: Application of Cabeen Exploration Corporation for permission to complete its State 1-K Well located 1980 feet from the South and West lines of Section 11, Township 10 South, Range 32 East, in an undesignated Permo-Pennsylvanian pool in Lea County, New Mexico as a "slim-hole" completion, using 2-7/8 inch casing.

The following cases will not be heard before 9 a.m. on July 28, 1960

CASE 2034: Application of Gulf Oil Corporation for an order authorizing the dual completion of its J. N. Carson Well No. 6, located 330 feet from the South line and 965 feet from the East line of Section 28, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Penrose-Skelley Pool and the production of gas from the Blinbry Gas Pool through parallel strings of 2 3/8-inch tubing.

CASE 2035: Application of Gulf Oil Corporation for an order authorizing the dual completion of its W. T. McCormack Well No. 12, located 554 feet from the North line and 1874 feet from the East line of Section 32, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Drinkard Pool and the production of oil from the Wantz-Abo Pool through parallel strings of 2 3/8-inch tubing.

CASE 2036: Application of Charles Loveless, Jr., for the establishment of a 280-acre non-standard gas unit in the Atoka-Pennsylvanian Gas Pool consisting of the NE/4, N/2 NW/4 and SW/4 NW/4 of Section 21, Township 18 South, Range 26 East, Eddy County, New Mexico. Applicant proposes that said unit be dedicated to the Brunner No. 1 Dayton Townsite Well to be located on an unorthodox location at a point 1650 feet from the North line and 2310 feet from the East line of said Section 21.

CASE 2037: Application of Sun Oil Company for the creation of a new oil pool for Wolfeamp production to be designated as the Jenkins-Wolfeamp pool and to consist of Sections 2, 3, 4, 8, 9, 10 and 11 of Township 9 South, Range 34 East, Lea County, and Sections 34 and 35, Township 8 South, Range 34 East, Roosevelt County, New Mexico. Applicant further seeks the promulgation of special rules and regulations for said pool including a provision for 80-acre drilling and proration units.

CASE 2038: Application of Benson-Montin-Greer Drilling Corporation for an order authorizing the dual completion of the Jones Well No. 1, located in Unit P, Section 17, Township 28 North, Range 13 West, San Juan County, New Mexico, in such a manner as to permit the production of oil from an undesignated Gallup Pool and the production of gas from the West Kutz-Dakota Pool through parallel strings of 1½-inch OD tubing.

CASE 2039:

Application of Southwest Production Company for approval of an unorthodox oil well location in the Gallegos-Gallup Oil Pool for its Rummel Federal Well No. 1, located 790 feet from the North line and 1190 feet from the West line of Section 36, Township 27 North, Range 12 West, San Juan County, New Mexico.

CASE 2040:

Application of Neville G. Penrose, Inc., for an order authorizing the dual completion of its Grizzel Well No. 1, located in Unit G, Section 5, Township 22 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of gas from the Tubb Gas Pool and the production of oil from the Drinkard Pool through the casing-tubing annulus and 2 3/8-inch tubing respectively.

13-3/8" csg at 311'

Both tbg strings are 2-3/8" OD
EUE, and short string has 2.910" \checkmark
OD cplgs

9-5/8" csg at 2850'

Static BHP 1000 psi
GOR 8000+ 6515'
38.1
Drinkard Perfs 6620'

9.000 41.90
GOR 2000+ but in group
2800 psi BHP
2816 #8

7140' 7200'
Proposed Abo Perfs

7270' 7250'
Plug back w/retainer and squeeze
beneath w/cmt

Abandoned Silurian
Perfs to be squeeze
cmt

7" OD 23# J-55 and N-80 csg
at 7410' \checkmark

TD 7419'

cmtd w/300 sax - circulated

hurry, complete 210'
del + cmt to Wantz also
100000

cmtd w/1300 sax
Top at 535' per T.S.

Baker Parallel Tubing string
anchor at approx 6600'

Baker Receptacle Seal Assy at
approx 6698'

Baker Model "DA" Prod Pkr at
approx 6760' *from 710'*

Seating nipple at approx 7140'

Circ Valve at approx 7170' (open)
Tubing bull plugged at approx 7200'

7281'
PBTD 7270'

cmtd w/800 sax. Top at 3000'
per T.S.

Case No. 2035
Exhibit No. 3

NOTE

Drawing not to scale

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

EXHIBIT NO. 3

CASE NO. 2035

PROPOSED MECHANICAL INSTALLATION
OIL-OIL DUAL COMPLETION
W. T. McCORMACK NO. 12

WANTZ ABO AND DRINKARD OIL
POOLS
LEA COUNTY, NEW MEXICO

Gulf Oil Corp.

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 28, 1960

EXAMINER HEARING

IN THE MATTER OF:

Application of Gulf Oil Corporation for an order authorizing the dual completion of its W. T. McCormack Well No. 12, located 554 feet from the North line and 1874 feet from the East line of Section 32, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Drinkard Pool and the production of oil from the Wantz-Abo Pool through parallel strings of 2 3/8-inch tubing.

Case 2035

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. PAYNE: Application of Gulf Oil Corporation for an order authorizing the dual completion of its W. T. McCormack Well No. 12, located 554 feet from the North line and 1874 feet from the East line of Section 32, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Drinkard Pool and the production of oil from the Wantz-Abo Pool through parallel strings of 2 3/8-inch tubing.

MR. KASTLER: If the Commission please, Bill Kastler of Roswell, appearing on behalf of Gulf. Our witness in this case is also Mr. J. L. McGill.

MR. PAYNE: Who has testified in Case 2034. Let the record show Mr. McGill has already been sworn.

J. L. MCGILL

called as a witness, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. KASTLER:

Q Mr. McGill, are you familiar with the W. T. McCormack Well No. 12 of Gulf Oil Corporation and Gulf's proposal to dually complete that well in the Wantz-Abo Oil Pool and the Drinkard Oil Pool?

A I am.

Q I wish to call your attention to what is labeled "Lease Plat", Exhibit No. 1 in Case No. 2035. Will you briefly state what are the confines of Gulf's fee lease and where the proposed well is located?

A Exhibit No. 1 is a lease plat showing the W. T. McCormack lease outlined in green and described as the East Half of Section 32, Township 21 South, Range 37 East, Lea County, New Mexico. Also shown is the W. T. McCormack Well No. 12 circled in red. This is located 1874 feet from the East line and 554 feet from the North line of Section 32. It was originally completed in the Drinkard Pool on April 10, 1948, at a total depth of 7,419 feet and plugged back to 6666 feet, subsequent to an

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PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO



unsuccessful attempt to complete in the Silurian through perforations from the interval 7305 to 7400 feet.

Q Are the offset operators also shown on this plat, Exhibit No. 1?

A They are.

Q Have all those offset operators been given a copy of this application?

A They have.

Q To the best of your knowledge, had any of them appeared and contested Gulf's right to dually complete this well?

A To the best of my knowledge, they have not.

Q I now wish to call your attention to what is marked as Exhibit No. 2, Case 2035, "West Texas Electric Log Survey". Will you state what Exhibit No. 2 is and what is shown on Exhibit No. 2, which is pertinent to this case?

A Exhibit No. 2 is a log for the W. T. McCormack No. 12 showing the perforated intervals in the Wantz-Abo and Drinkard Pools. The Drinkard Pool is perforated within the interval 6515 to 6620, effective and produced at the approximate rate of 8 barrels a day and with a trace of water with 69 MCF of gas per day by flowing. However, it is planned to stimulate oil production from the zone during the process of dual completion.

Q In what way are you going to stimulate this production?

A We plan to employ fracture treatment.

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Q Fine.

A Work is now in progress and the well has been cleaned out to a depth of 7398 feet; the Silurian perforation between 7305 and 7398 squeeze cemented and the plugged back total depth is 7281. The Wantz-Abo zone is selectively perforated in the interval 7140 to 7270.

Q Has it been perforated at this time?

A It has already been perforated.

Q Have any tests been taken?

A As yet they have not, sir, but on that report the well is flowing.

Q I shall now call your attention to what is labeled Exhibit No. 3 in Case No. 2035, which is Gulf's proposed schematic diagram. Would you please outline what is shown on this schematic diagram or mechanical installation plat?

A The Exhibit No. 3 is a schematic sketch of the proposed mechanical installation of the dual completion. It shows 13-3/8 inch OD casing at 311 feet and cemented with 300 sacks of the cement circulated to the surface; 9-5/8 inch OD intermediate set at 2850 feet and cemented with 1300 sacks of cement, and the top of the cement behind the 9-5/8 inch casing is at 535 feet as per a temperature survey. The 7 inch OD oil string is at 7410 feet and cemented with 800 sacks of cement, whose top behind the 7 inch casing is at 3,000 feet as per a temperature survey. The total



depth is 7419 feet and, as indicated, the plug back TD is 7261 feet.

It is planned to set a Baker Model DA production packer at approximately 6700 feet. This model packer has been used in other dual completions by Gulf and approved by the Commission. The long string will be set at approximately 7200 feet and bull plugged on bottom with a circulating valve in the open position at approximately 7170 feet. Above the Baker Model DA production packer will be a Baker receptacle seal assembly. The purpose of this receptacle seal assembly is to part the tubing for any work to be conducted above the packer with the circulating valve below the packer in the closed position. The Wantz-Abo is effectively and temporarily plugged off. It is also planned to run a parallel tubing string anchor as a part of the long string and set at approximately 6600 feet. It is planned to use two strings of 2-3/8 inch OD upset tubing. The short string will have machined and beveled couplings having an OD of 2.910 inches and will be latched into the tubing string anchor.

Q What are the relative pressures in the Drinkard and Wantz-Abo zones?

A In the Wantz-Abo zone we anticipate a bottom hole pressure of approximately 2800 psi, which is based on a pressure of 2816 psi in our J. N. Carson "A" 11 Well at a depth of 7200 feet, as recorded on February the 12th, 1960. In our Drinkard completion

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it is anticipated that the bottom hole pressure, that is the static bottom hole pressure, will be approximately 1,000 psi.

Q Do you expect the Baker Model DA production packer to adequately insure complete separation between the two zones?

A Yes, we do.

Q If this application is granted, would Gulf perform the necessary tests and other requirements made by the Oil Conservation Commission of New Mexico?

A Yes.

Q Will you please state what the relative saving of cost would be by making a dual completion in this well as opposed to drilling a second well?

A Yes. The estimated cost to dually complete the W. T. McCormack No. 12 in the Wantz-Abo and Drinkard Oil Pools is \$21,000. The estimated cost to drill and complete a new well to the Wantz-Abo Oil Pool is \$100,000. That is based on a 7400 foot hole. Therefore, we have an indicated savings of \$79,000. However, in view of the speculative aspects of this venture, a new well for single completion in the Wantz-Abo will certainly not be attempted at this time. The opportunity afforded by the fact that the prospective Wantz-Abo pay is already penetrated and cased in the well bore of the W. T. McCormack No. 12 makes its evaluation economically feasible.

Q If you were to drill a separate well to the Drinkard

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PHONE CM 2-6691

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zone, what would be your cost, or have you calculated that?

A It has not been figured prior to this.

Q That is some 1600 feet shallower?

A I would estimate it would be on the order of \$5,000.

Q At any rate, it would result in a substantial saving to be allowed to dually complete this well?

A Would you repeat?

Q Would it result in a substantial saving to the operator to be allowed to dually complete this well?

A Yes, sir, it certainly would.

Q In your opinion would the rights of any royalty owner or offset operator be adversely affected by the granting of this application?

A To the best of my knowledge they would not be adversely affected.

Q Were Exhibits 1, 2 and 3 prepared by you or at your direction and under your supervision?

A They were.

MR. KASTLER: I wish to move for the introduction of Exhibits 1, 2 and 3 in this case. That concludes my questions on direct examination.

MR. NUTTER: Gulf's Exhibits 1, 2 and 3 will be admitted in evidence. Any questions of the witness?

MR. PAYNE: Yes.



MR. NUTTER: Mr. Payne.

CROSS EXAMINATION

BY MR. PAYNE:

Q Is this Model DA packer a permanent type packer?

A That's right, it's a retainer type packer.

Q Did I understand you to say that you had already squeezed the Silurian perforations?

A We have.

Q Your plugged back total depth is 7281 rather than 7270?

A That is right. When the exhibit was first made up we anticipated a plugged back TD on the order of 7270, but it is actually now 7281.

Q Do you have the gravities of the liquid produced from each zone?

A That of the Wantz-Abo is anticipated to be approximately 41.9 degrees corrected, and that, again, is based on the Wantz-Abo completion in our J. N. Carson "A" No. 11. On our Drinkard zone it is 38.1 degrees corrected.

Q How about relative gas-oil ratios?

A I didn't figure the actual GOR of the Drinkard. It can be figured, as testified earlier, it produces at the rate of 8 barrels of oil a day with 69 MCF of gas. That would be slightly in excess of 8,000 to 1.

Q That's the Drinkard?

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ALBUQUERQUE, NEW MEXICO



A That is the Drinkard, that's right. On the Wants-Abo it is anticipated it will be something below 2,000 to 1, but based on other completions of ours in the past it will probably increase.

MR. PAYNE: Thank you.

BY MR. NUTTER:

Q Now, Mr. McGill, you stated that the Wants-Abo is presently flowing, is that correct?

A That's right.

Q Has the tubing been run to the Drinkard?

A The statement it is flowing is subsequent to an acid treatment we just applied. We are now in the hole testing it with 2½-inch tubing and packer. We have not yet put, as indicated on this Exhibit No. 3, we have not yet put that equipment in there yet.

Q You have a temporary string of tubing and temporary packer in there at the present time and you are producing and testing the Abo?

A For test purposes, yes, sir.

Q What about the Drinkard, is it shut in?

A Well, it's packed off.

Q You have only the one string of tubing in there?

A One string, yes, sir.

Q You are not producing anything through the casing?

A No, sir, we are not.

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MR. NUTTER: Any further questions of the witness? He
may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Kastler?

MR. KASTLER: Nothing further.

MR. NUTTER: Does anyone have anything further for
Case 2035? We will take the case under advisement and call Case
2036.

STATE OF NEW MEXICO)
: SS
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, do hereby certify that the
foregoing and attached transcript of proceedings before the New
Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a
true and correct record to the best of my knowledge, skill and
ability.

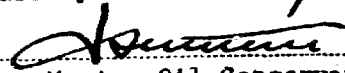
IN WITNESS WHEREOF I have affixed my hand and notarial seal
this 3rd day of August, 1960.


Notary Public-Court Reporter

My commission expires:

June 19, 1963.

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 2035
heard by me on 7/27, 1960.

 Examiner
New Mexico Oil Conservation Commission

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO





PETROLEUM AND ITS PRODUCTS

ROSWELL DISTRICT

W. A. SHELLSHEAR
District Manager

F. O. MORTLOCK
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

June 22, 1960

*File
2035*

Re: Application for Approval to
Recomplete W. T. McCormack
Well No. 12 as an Oil-Oil Dual,
Wantz-Abo and Drinkard Oil
Pools, Section 32, T-21-S,
R-37-E, Lea County, New Mexico

Oil Conservation Commission
State of New Mexico
Post Office Box 871
Santa Fe, New Mexico

Gentlemen:

Gulf Oil Corporation respectfully submits application for permission to oil-oil dually complete subject well utilizing two strings of tubing, and requests that the Commission set this matter for Examiner Hearing at an early date. A hearing is being requested for this oil-oil dual completion as the two zones involved have not previously been approved by the Commission.

The following facts are offered in support of this application:

- (1) Gulf Oil Corporation is the owner and operator of the 320-acre W. T. McCormack Lease, which consists of the E/2 of Section 32 in T-21-S, R-37-E, Lea County, New Mexico. Subject well is located 1874 feet from the east line and 554 feet from the north line of said Section 32.
- (2) The 13-3/8" casing in Gulf's W. T. McCormack Well No. 12 was set at 311 feet and the cement circulated. The 9-5/8" casing was set at 2850 feet and cemented with 1300 sacks and the 7" casing was set at a depth of 7410 feet and cemented with 800 sacks. Applicant proposes to perforate the 7" casing opposite the Abo formation in the interval 7100 to 7250 feet. The Drinkard oil perforations are in the interval 6515 to 6620 feet.
- (3) If approved, the subject well will be dually completed through the use of parallel strings of tubing as shown in the diagrammatic sketch attached hereto. The two producing intervals will be separated by means of a Baker Model "DA" Packer set at approximately 6700 feet, which is capable of withstanding any differ-

June 22, 1960

ential in pressures expected to be encountered between the two producing formations.

The manner and method of the proposed dual completion is mechanically feasible and practical and the granting of this application is in the interest of conservation and the protection of correlative rights. Applicant will comply with all rules and regulations of the New Mexico Oil Conservation Commission to maintain separation of production from the two pays.

By copy of this letter of application, all offset operators are notified of the proposed dual completion.

Respectfully submitted,

GULF OIL CORPORATION



W. A. Shellshear

FWM:ers

cc: Oil Conservation Commission
State of New Mexico
Post Office Box 2045
Hobbs, New Mexico

Socony-Mobil Oil Company
Post Office Box 2406
Hobbs, New Mexico

Amerada Petroleum Corporation
Post Office Box 706
Eunice, New Mexico

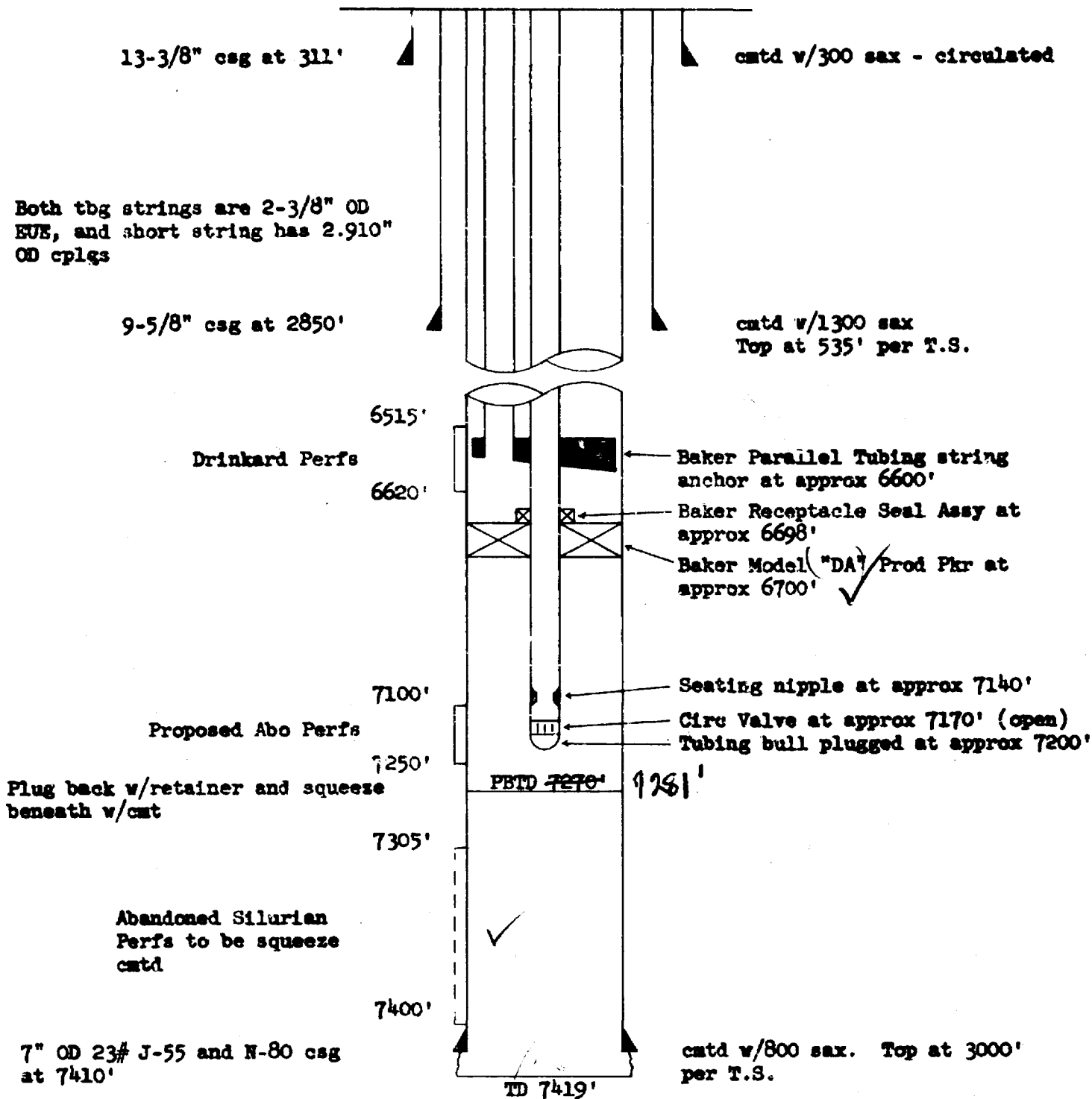
Radford-Zachary Oil Company
Post Office Box 1685
Hobbs, New Mexico

Southern Petroleum Exploration, Inc.
Post Office Box 1017
Roswell, New Mexico

Skelly Oil Company
Post Office Box 38
Hobbs, New Mexico

Sinclair Oil & Gas Company
520 East Broadway
Hobbs, New Mexico

Pan American Petroleum Corporation
Post Office Box 1410
Fort Worth, Texas



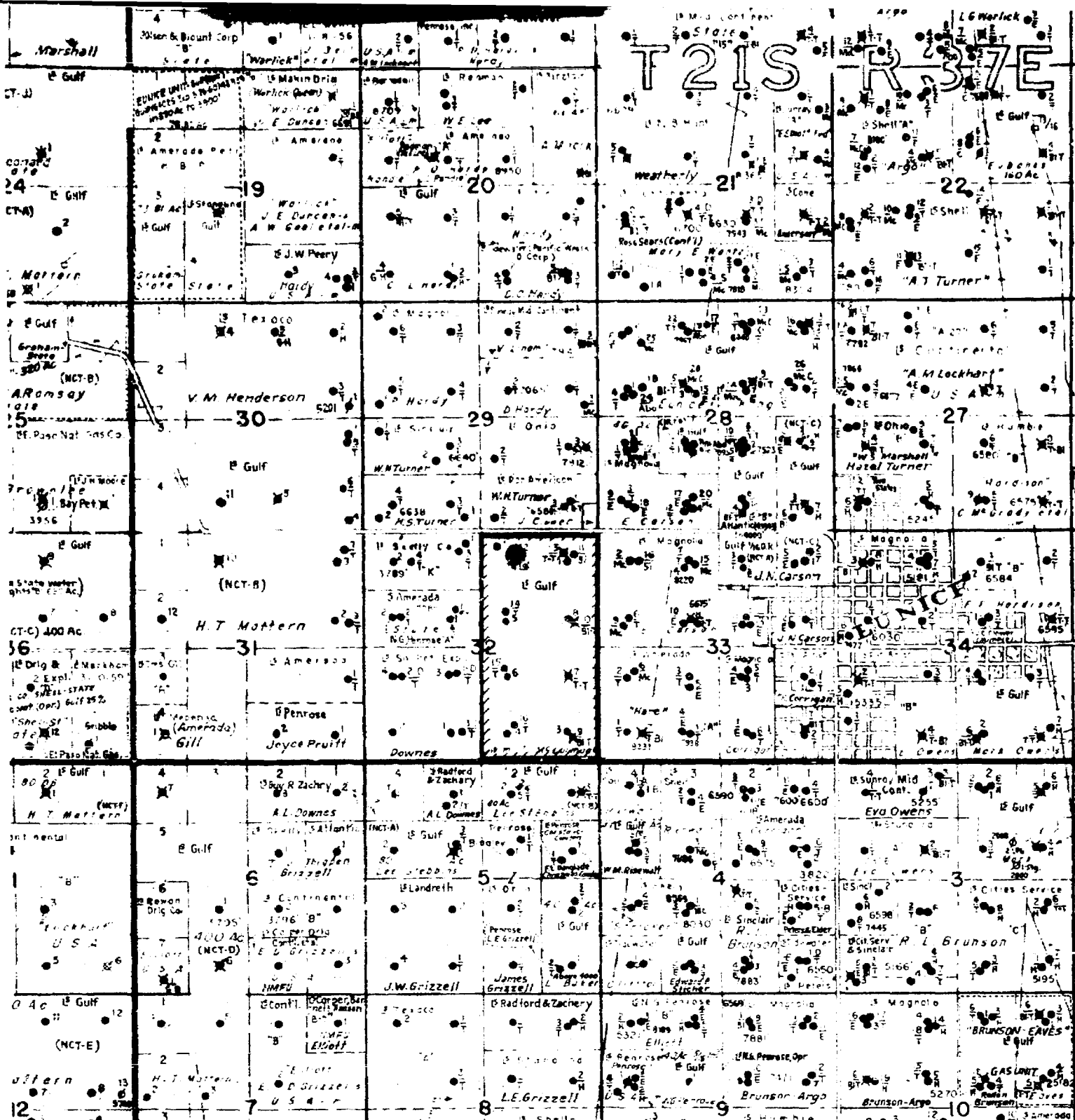
NOTE

Drawing not to scale

PROPOSED MECHANICAL INSTALLATION
OIL-OIL DUAL COMPLETION
W. T. MCCORMACK NO. 12

WANTZ ABO AND DRINKARD OIL
POOLS
LEA COUNTY, NEW MEXICO

Gulf Oil Corp.



-LEGEND-

 Pertinent Gulf Lease

 Pertinent Gulf Well

Gulf Oil Corporation