CASE 2676: Application of GULF OIL CORP. for an unorthodox location and a dual completion.

Case No.

2676

pplication, Transcript,

mall Exhibits, Etc.

DRAFT

JMD/esr
November 15, 1962

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. 2676

Order No. R-2574

APPLICATION OF GULF OIL CORPORATION
FOR AN UNORTHODOX LOCATION, DUAL
COMPLETION, AND NON-STANDARD PRORA-
TION UNIT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on October 24, 1962, at Santa Fe, New Mexico, before Elvis A. Utz, 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 _____ day of November, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, 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, Gulf Oil Corporation, seeks permission to complete its Lillie Well No. 3, located 2310 feet from the North line and 330 feet from the West line of Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, as a dual completion (conventional) to produce oil from the Fowler-Fusselman Pool through 2 1/2-inch tubing and ~~to produce oil~~ from the Fowler-Ellenburger Pool through a parallel string of 2-inch tubing ~~separation of the zones to be achieved by means of a packer set at~~ approximately 9575 feet.

(3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(4) That the applicant further seeks approval of a non-standard location in the Fowler-Ellenburger Pool as its Lillie Well No. 3 is not located within 150 feet of the center of

either the northwest or southeast quarter of a governmental section and therefore will not comply with the well location requirements of the Special Rules and Regulations governing the Fowler-Ellenburger Pool.

(5) That the applicant proposes to dedicate the SW/4 NW/4 of Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, to the subject well as a non-standard proration unit in the Fowler-Ellenburger Oil Pool.

(6) That the Commission has taken administrative notice of the evidence presented to the Commission in Case No. 2556 concerning productive acreage in Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico.

(7) That the evidence establishes that the SW/4 NW/4 of Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, is productive of oil from the Fowler-Ellenburger Oil Pool.

(8) That approval of the subject application will prevent economic loss caused by the drilling of unnecessary wells, and will not impair correlative rights provided the SW/4 NW/4 of Section 23, Township 24 South, Range 37 East is dedicated to the Lillie Well No. 3, and provided one-half the normal 80-acre unit allowable is assigned thereto.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to complete its Lillie Well No. 3, located 2310 feet from the North line and 330 feet from the West line of Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, as a dual completion (conventional) to produce oil from the Fowler-Fusselman Pool through 2 1/2-inch tubing and ~~to produce oil~~ from the Fowler-Ellenburger Pool through a parallel string of 2-inch tubing, separation of the zones to be achieved by means of a packer set at approximately 9575 feet.

(2) That the applicant, Gulf Oil Corporation, is hereby authorized to complete its Lillie Well No. 3 in the Fowler-Ellenburger Pool at a non-standard location for said pool 2310 feet from the North line and 330 feet from the West line of Section 23, Township 24 South, Range 37 East, NMPM, ~~NMPM, Lea County, New Mexico in the Fowler-Ellenburger Pool~~, Lea County, New Mexico.

(3) That a 40-acre non-standard oil proration unit consisting of the SW/4 NW/4 of Section 23, Township 24 South, Range 37 East, NMPM, Fowler-Ellenburger Pool, Lea County, New Mexico, is hereby approved and dedicated to the Lillie Well No. 3 located 2310 feet from the North line and 330 feet from the West line of said Section 23.

(4) That one-half the normal 80-acre unit allowable for the Fowler-Ellenburger Pool is hereby assigned to the 40-acre non-standard proration unit set out above.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year herein-above designated.

Gulf Oil Corporation

ROSWELL PRODUCTION DISTRICT

Case 2676

W. B. Hopkins
~~W. A. Shenkenberger~~
DISTRICT MANAGER
F. O. Mortlock
DISTRICT EXPLORATION MANAGER
M. I. Taylor
DISTRICT PRODUCTION MANAGER
H. C. Vivian
DISTRICT SERVICES MANAGER

P. O. Drawer 1938
Roswell, New Mexico

September 21, 1962

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

Re: Application of Gulf Oil Corporation for an Exception to the Fowler-Ellenburger Pool Rules and Approval of a Dual Completion for its Lillie Well No. 3, Lea County, New Mexico

Gentlemen:

Gulf Oil Corporation respectfully requests an exception to the Fowler-Ellenburger Pool Rules and approval of a dual completion for its Lillie Well No. 3 in the Fowler-Fusselman and Fowler-Ellenburger Pools, Lea County, New Mexico. In Case No. 2556, the Commission issued Order No. R-2274 on July 10, 1962, which, although it denied an 80-acre allocation to the subject well, expressly retained jurisdiction over the matter for the entry of such further orders as may be deemed necessary. Applicant now seeks the approval of a 40-acre allocation to its Lillie Well No. 3. It is requested that this matter be set for Examiner Hearing at an early date.

In support of this application the following facts are submitted:

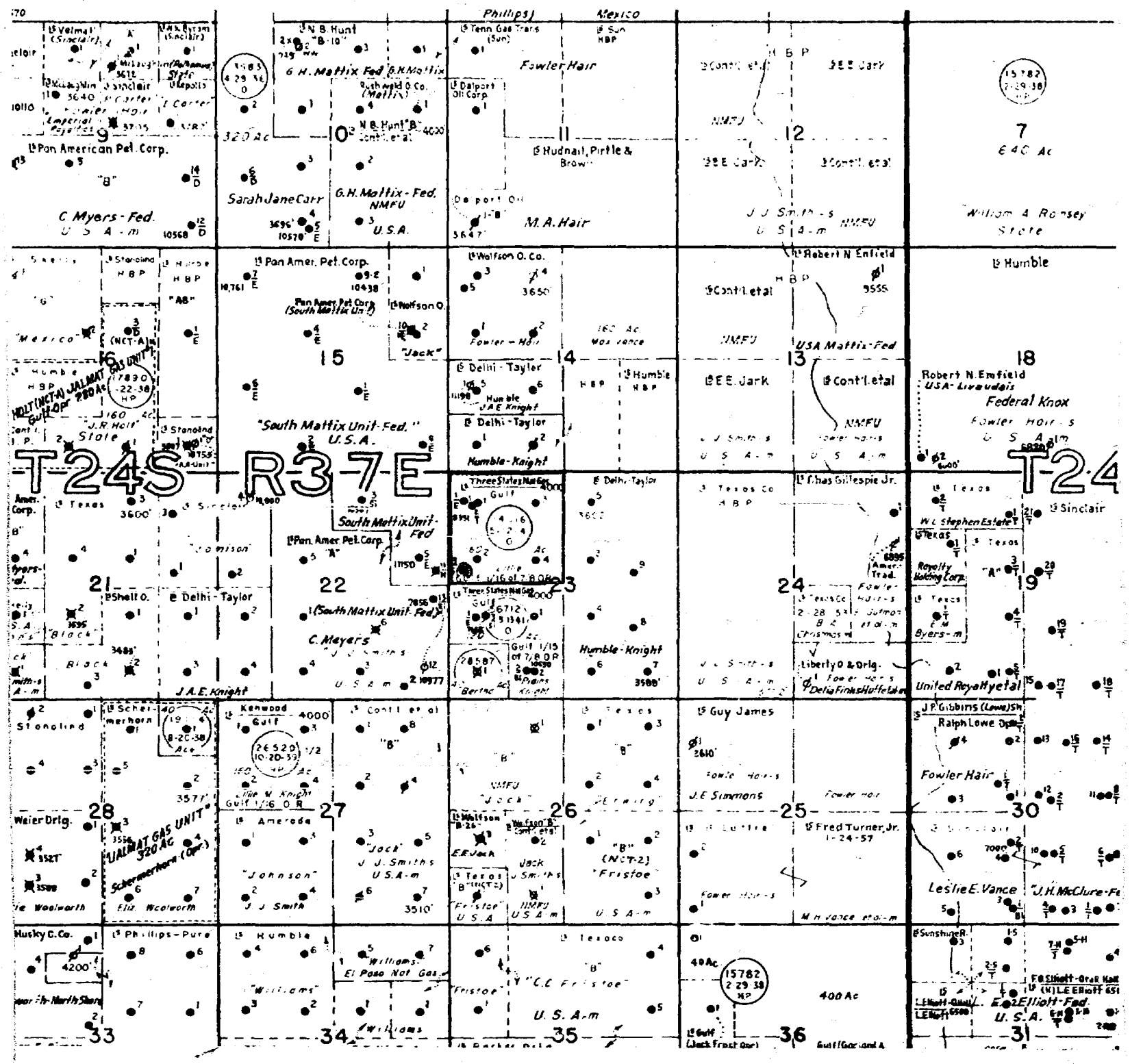
(1) Applicant's Lillie Well No. 3, located 2310 feet from the north line and 330 feet from the west line of Section 23, Township 24 South, Range 37 East, Lea County, New Mexico, is now completed in the Fowler-Fusselman Pool.

(2) Applicant proposes to deepen the above well to the Ellenburger formation and dually complete said well in the Fusselman and Ellenburger formations.

(3) Applicant proposes to produce this well in the Fowler-Ellenburger Pool under an exception to the portion of the existing pool rules, which provide that the well be located within 150 feet of the center of either the NW/4 or SE/4 of a governmental quarter-section.

(4) Applicant proposes to dedicate 40 acres consisting of the SW/4 NW/4 of Section 23 to said Ellenburger well with the allowable established in accordance with 80-acre proportional factors as provided in Rule 505(b) of the Rules and Regulations of the Commission.

GULF



LEASE PLAT

LILLIE LEASE

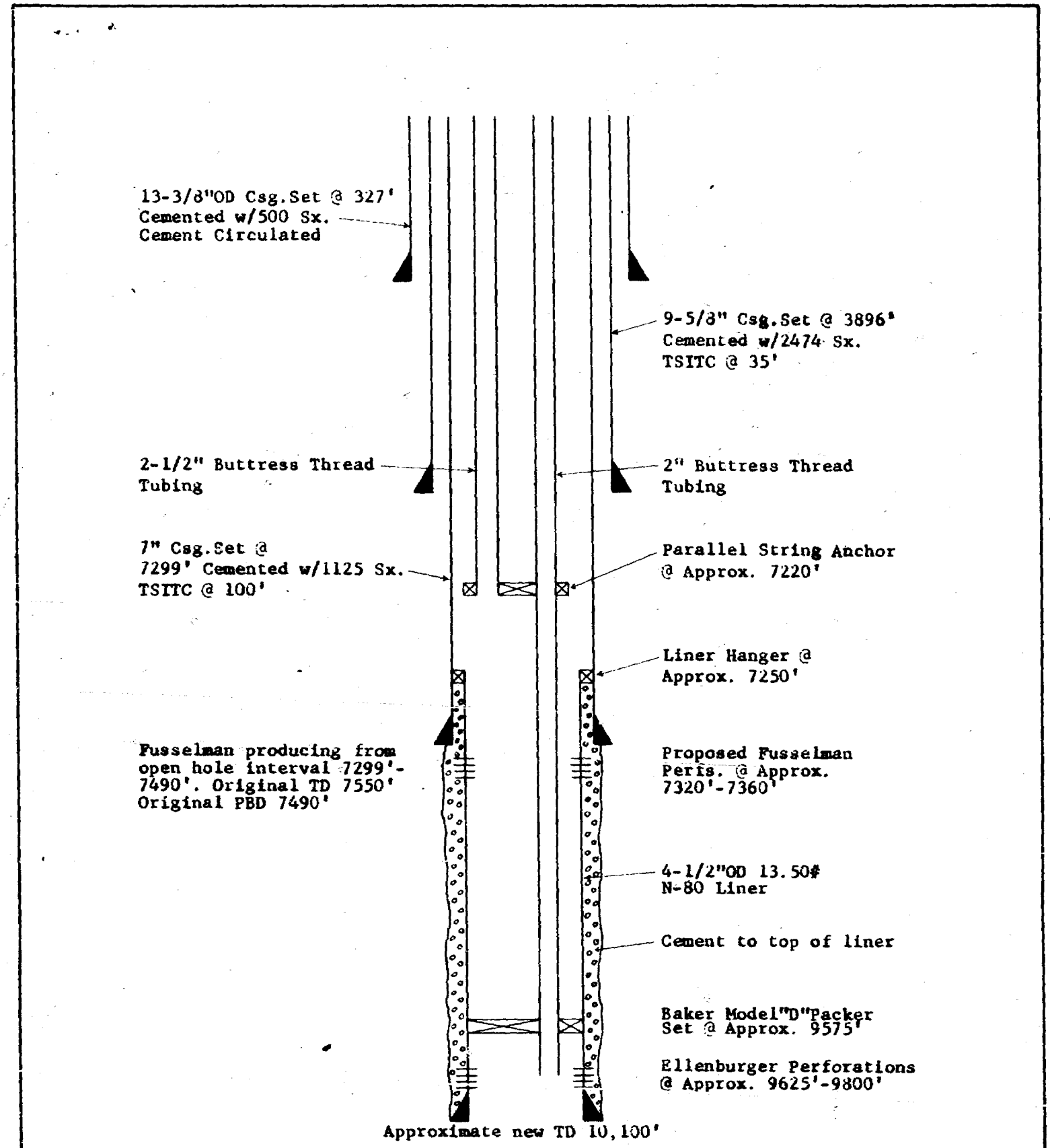
FOWLER ELLENBURGER - FOWLER FUSSELMAN OIL POOLS
Lea County, New Mexico

- LEGEND -

Pertinent Lease
Pertinent Well

Gulf Oil Corp. Roswell District

Case 2676



PROPOSED MECHANICAL INSTALLATION
DUAL COMPLETION
LILLIE WELL NO. 3

FOWLER FUSSELMAN - FOWLER ELLENBURGER OIL POOLS
LEA COUNTY, NEW MEXICO
GULF OIL CORPORATION

Case 3676

Case 2676

CONOCO

CONTINENTAL OIL COMPANY

FAIR BUILDING
FT. WORTH 2, TEXAS

R. G. PARKER
REGIONAL MANAGER OF PRODUCTION
SOUTHWESTERN REGION

October 19, 1962

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr., Member and Secretary

Re: Case 2676 - Application of Gulf Oil Corporation For Permission To Complete Its Lillie Well No. 3 in the Ellenburger at an Unorthodox Location 2310 Feet From North Line and 330 Feet From West Line, Section 23 Township 24 South, Range 37 East, Lea County, New Mexico

Gentlemen:

The above referenced case has been set for hearing on Docket 31-62 on October 24, 1962 at 9:00 A.M.

Continental Oil Cmmpany has interpreted the available data to indicate that only the west half of the northwest quarter of Section 23 is productive of oil and gas in the Ellenburger Formation. The north half of said northwest quarter is now allocated to Well No. 1 on Gulf's lease. In the above referenced application, applicant proposes to dedicate 40 acres comprising the southwest quarter of said northwest quarter to its Well No. 3, thereby resulting in a total allocation to that lease of 120 acres.

Continental Oil Company respectfully requests that the Commission deny the above referenced application. If, however, the Commission should see fit to grant the applicant to complete its well in the Ellenburger Formation at this location, it is further requested that the total allowable be granted to the lease be limited to that

proportion of a regular 80-acre allowable which the productive acreage bears to 80 acres.

Yours very truly,

R S Parker

RGP-SL

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF GULF OIL CORPORATION FOR AN UNORTHODOX LOCATION, AND A DUAL COMPLETION OF ITS LILLIE WELL NO. 3 IN THE FOWLER-FUSSELMAN AND FOWLER-ELLENBURGER POOLS, LEA COUNTY, NEW MEXICO.	No. 2 6 7 6

ENTRY OF APPEARANCE

The undersigned, Atwood & Malone of Roswell, New Mexico, a firm of attorneys all of whose members are duly licensed to practice law in the State of New Mexico, hereby enters its appearance as local counsel with Guy Buell, of the Texas Bar, appearing for Pan American Petroleum Corporation in said cause.

DATED at Roswell, New Mexico this 18th day of October, 1962.

ATWOOD & MALONE

By Russ L. Malone

Post Office Drawer 700
Roswell, New Mexico

ATWOOD & MALONE
LAWYERS

JEFF D. ATWOOD (1883-1960)
ROSS L. MALONE
CHARLES F. MALONE
RUSSELL D. MANN
PAUL A. COOTER
BOB F. TURNER
ROBERT A. JOHNSON

P. O. DRAWER 700
TELEPHONE 505 622-6221
SECURITY NATIONAL BANK BUILDING
ROSWELL, NEW MEXICO

October 18, 1962

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

Re: Docket of October 24, 1962
Case No. 2676

Gentlemen:

We enclose herewith our Entry of Appearance as local counsel for Pan American Petroleum Corporation in Case No. 2676 on the Docket of the Oil Conservation Commission for October 24, 1962.

Very truly yours,

Ross L. Malone

for ATWOOD & MALONE

RLM:ps
cc: w/2 J. K. Smith, Esquire
Pan American Petroleum Corp.
Oil and Gas Building
Fort Worth, Texas

encl.

Gulf Oil Corporation

ROSWELL PRODUCTION DISTRICT

Case 2676

P. O. Drawer 1938
Roswell, New Mexico

September 21, 1962

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

Re: Application of Gulf Oil Corporation for an Exception to the Fowler-Ellenburger Pool Rules and Approval of a Dual Completion for its Lillie Well No. 3, Lea County, New Mexico

Gentlemen:

Gulf Oil Corporation respectfully requests an exception to the Fowler-Ellenburger Pool Rules and approval of a dual completion for its Lillie Well No. 3 in the Fowler-Fusselman and Fowler-Ellenburger Pools, Lea County, New Mexico. In Case No. 2556, the Commission issued Order No. R-2274 on July 10, 1962, which, although it denied an 80-acre allocation to the subject well, expressly retained jurisdiction over the matter for the entry of such further orders as may be deemed necessary. Applicant now seeks the approval of a 40-acre allocation to its Lillie Well No. 3. It is requested that this matter be set for Examiner Hearing at an early date.

In support of this application the following facts are submitted:

(1) Applicant's Lillie Well No. 3, located 2310 feet from the north line and 330 feet from the west line of Section 23, Township 24 South, Range 37 East, Lea County, New Mexico, is now completed in the Fowler-Fusselman Pool.

(2) Applicant proposes to deepen the above well to the Ellenburger formation and dually complete said well in the Fusselman and Ellenburger formations.

(3) Applicant proposes to produce this well in the Fowler-Ellenburger Pool under an exception to the portion of the existing pool rules, which provide that the well be located within 150 feet of the center of either the NW/4 or SE/4 of a governmental quarter-section.

(4) Applicant proposes to dedicate 40 acres consisting of the SW/4 NW/4 of Section 23 to said Ellenburger well with the allowable established in accordance with 80-acre proportional factors as provided in Rule 505(b) of the Rules and Regulations of the Commission.

GULF

(5) All offset operators to Gulf's Lillie Lease have been furnished a copy of this application.

Respectfully submitted,

GULF OIL CORPORATION

W. B. Hopkins

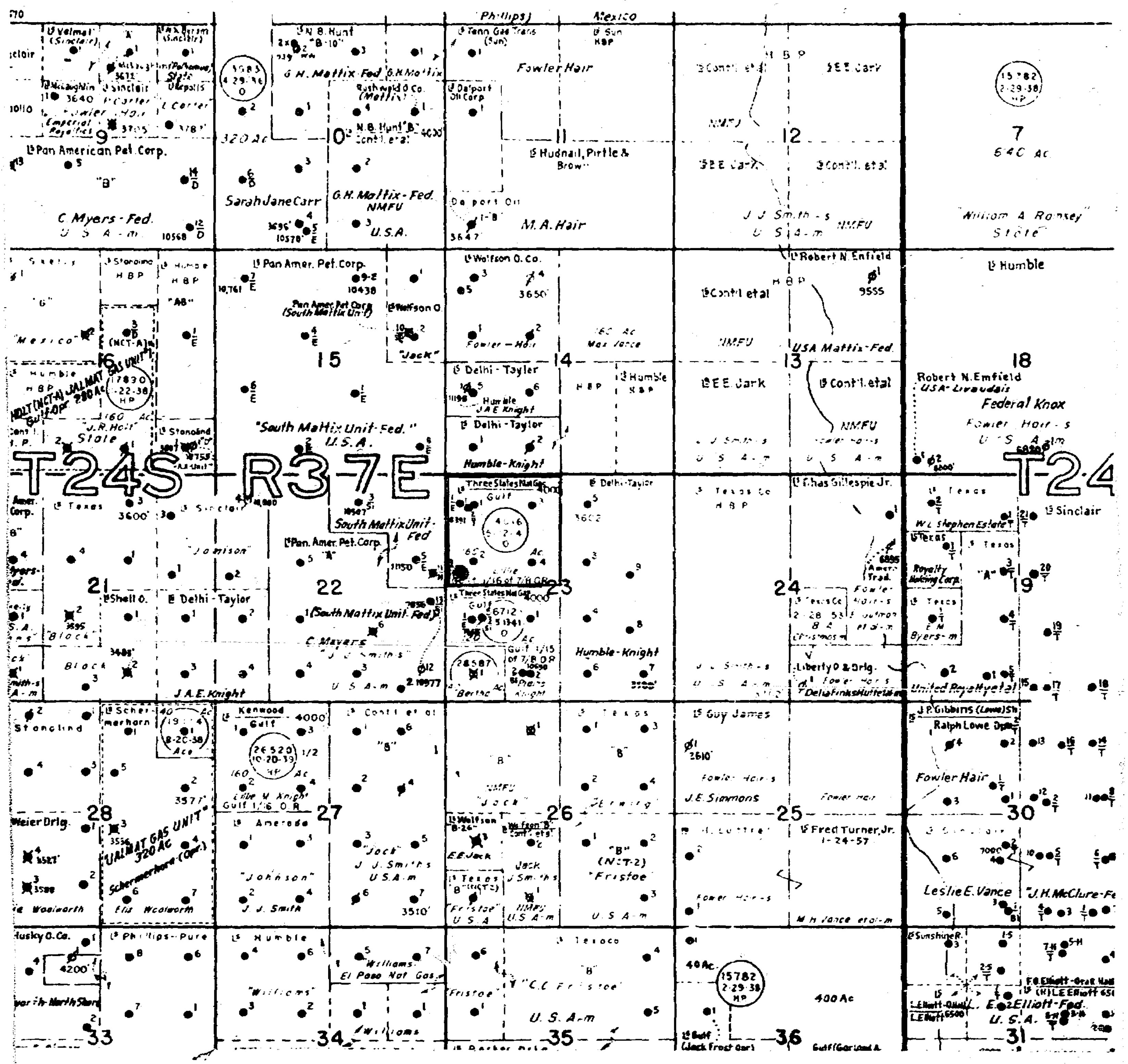
W. B. Hopkins

JHH:dch

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

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

Delhi-Taylor Oil Corporation
823 Corrigan Tower
Dallas, Texas



LEASE PLAT

LILLIE LEASE

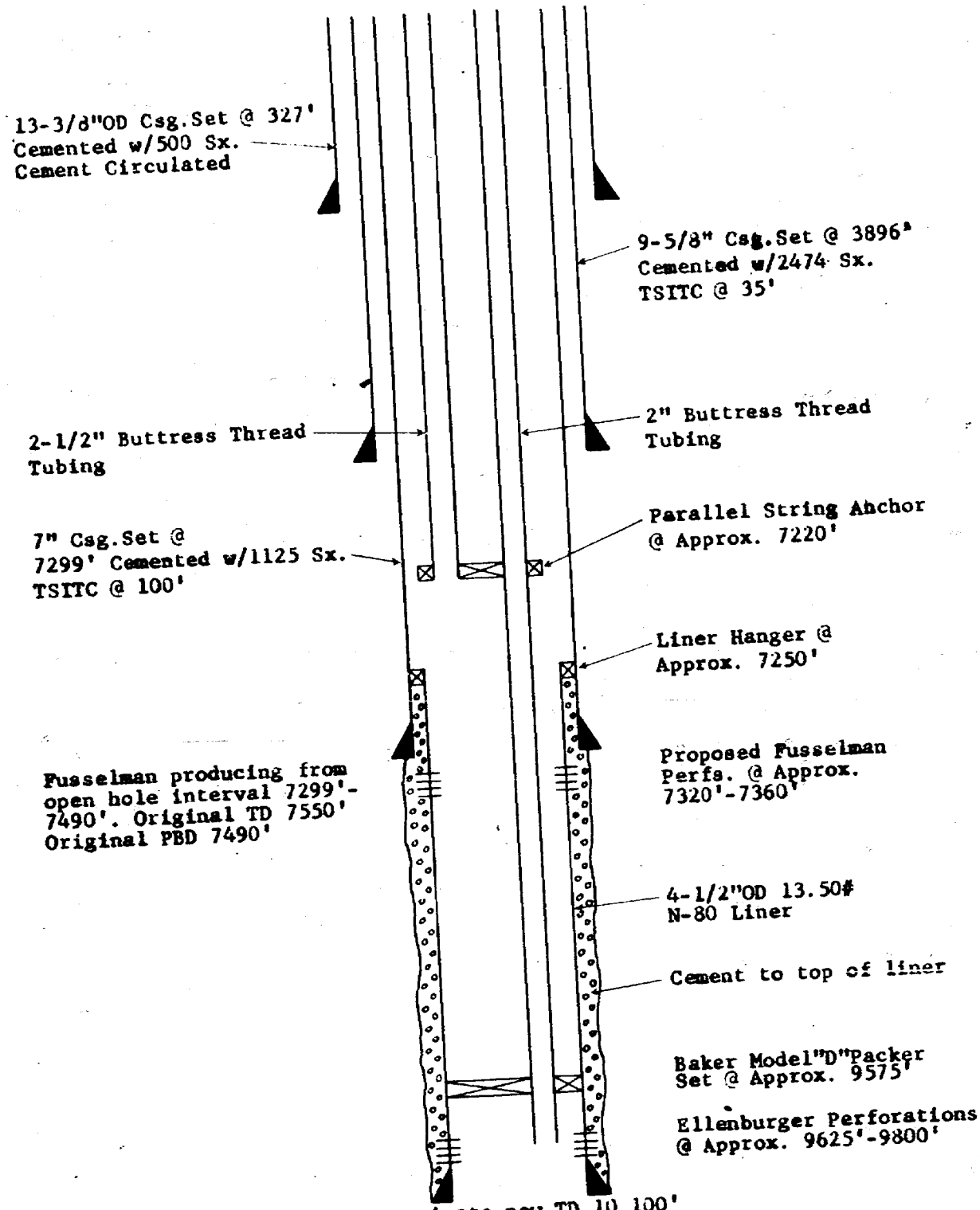
FOWLER ELLENBURGER - FOWLER FUSSELMAN OIL POOLS
Lea County, New Mexico

- LEGEND -

Pertinent Lease
Pertinent Well

Gulf Oil Corp. Roswell District

Case 2676



PROPOSED MECHANICAL INSTALLATION
DUAL COMPLETION
LILLIE WELL NO. 3

FOWLER FUSSELMAN - FOWLER ELLENBURGER OIL POOLS
LEA COUNTY, NEW MEXICO
GULF OIL CORPORATION

Case 2676

Case 2556
Heard 12-24-62
Rec. 11-5-62

1. Grant Gulf requested for an NSL and NSP ~~& Dual~~ for their Lillie #3 in the Double Ellenburger pool. Said well is located 2310/N, 330/W line sec. 23-24S-37E. This well is presently completed in the Double Pennsylvanian and it is their intention to deepen the well to the Ellenburger and dual. (conventional)

2. The 40 Ac. NSP is justified by the fact that there is no testimony in the record denying that the SW SW is productive.

3. The NSL is justified by the fact that they have a minimum of 50 Ac. productive in the S/2 of NW thereby they are being penalized 20% of their productive acreage for the NSL. Also they already have a Double-Pennsylvanian completion in an orthodox location which is drilled to 7480'. Economics would dictate that the dual in this well bore would be proper to prevent economic waste. As matter of fact the fault shown by Pan Am which runs thru the S/2 of NW could well be further east since the only control is the Gulf-Plains Knight in the SE SW of 23. Assuming this there could be as much as 65 Ac. productive in the S/2 NW-23.

3. Grant conventional Dual for the Lillis #2.
4. Grant ½ of 80 Ac. normal allowable to the well.

5. In the three units included in the NW/4 & the N/2 of SW/4 (23) there could reasonably be 200 productive acres, which after granting this order will be the amount dedicated to the three wells. I am of the opinion however that each unit & its productive acreage should stand on its own.

Yours truly,

Gulf Oil Corporation

ROSWELL PRODUCTION DISTRICT

W. B. Hopkins
DISTRICT MANAGER
M. I. Taylor
DISTRICT PRODUCTION MANAGER
F. O. Mortlock
DISTRICT EXPLORATION MANAGER
H. A. Rankin
DISTRICT SERVICES MANAGER

April 6, 1965

P. O. Drawer 1938
Roswell, New Mexico 88201

Oil Conservation Commission
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: Application of Gulf Oil Corporation for Reopening of Cases No. 2556 and 2676 on the Basis of New Evidence and to Reconsider Applicant's Request for Attributing 80 Acres to its Lillie Well No. 3, Fowler Ellenburger Pool, Lea County, New Mexico

Gentlemen:

Gulf Oil Corporation respectfully requests that an Examiner Hearing be scheduled to consider the subject application on the basis of new evidence.

Applicant will request that a full 80-acre allowable covering the S/2 NW/4 Section 23, Township 24 South, Range 37 East, Lea County, New Mexico, be approved for the Lillie Well No. 3, located 330 feet from the west line and 2310 feet from the north line of this Section 23.

Applicant further believes that this application for a new hearing is in the interest of conservation and the protection of correlative rights.

Respectfully submitted,

GULF OIL CORPORATION

M. I. Taylor

JHH:ers

cc: New Mexico Oil Conservation Commission
Post Office Box 1980
Hobbs, New Mexico 88240

DOCKET MAILED

Date 4-15-65

GOVERNOR
EDWIN L. MECHEM
CHAIRMAN

State of New Mexico
Oil Conservation Commission

LAND COMMISSIONER
E. S. JOHNNY WALKER
MEMBER

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

P. O. BOX 871
SANTA FE

November 21, 1962

Mr. Bill Kastler
Gulf Oil Corporation
Box 669
Roswell, New Mexico

Re: Case No. 2676
Order No. R-2374
Applicant:
Gulf Oil Corporation

DOCKET MAILED
Date 4-15-65

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.

A. L. PORTER, Jr.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC x
Artesia OCC
Aztec OCC
OTHER Mr. Guy Buell (Pan American)

DOCKET MAILED
Date 4-15-65

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. 2676
Order No. R-2374

APPLICATION OF GULF OIL CORPORATION
FOR AN UNORTHODOX LOCATION, DUAL
COMPLETION, AND NON-STANDARD PRORA-
TION UNIT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on October 24, 1962, at Santa Fe, New Mexico, before Elvis A. Utz, 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 21st day of November, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, 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, Gulf Oil Corporation, seeks permission to complete its Lillie Well No. 3, located 2310 feet from the North line and 330 feet from the West line of Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, as a dual completion (conventional) to produce oil from the Fowler-Tansill Pool through 2 1/2-inch tubing and from the Fowler-Blinebury Pool through a parallel string of 2-inch tubing, separation of the zones to be achieved by means of a packer set at approximately 9875 feet.

(3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(4) That the applicant further seeks approval of a non-standard location in the Fowler-Blinebury Pool as its Lillie Well No. 3 is not located within 150 feet of the center of either the northwest or southeast quarter of a governmental quarter

section and therefore will not comply with the well location requirements of the Special Rules and Regulations governing the Fowler-Ellenburger Pool.

(5) That the applicant proposes to dedicate the SW/4 NW/4 of Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, to the subject well as a non-standard oil proration unit in the Fowler-Ellenburger Oil Pool.

(6) That the Commission has taken administrative notice of the evidence presented to the Commission in Case No. 2556 concerning productive acreage in Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico.

(7) That the evidence establishes that the SW/4 NW/4 of Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, is productive of oil from the Fowler-Ellenburger Oil Pool.

(8) That approval of the subject application will prevent economic loss caused by the drilling of unnecessary wells, and will not impair correlative rights provided the SW/4 NW/4 of Section 23, Township 24 South, Range 37 East is dedicated to the Lillie Well No. 3, and provided one-half the normal 80-acre unit allowable is assigned thereto.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to complete its Lillie Well No. 3, located 2310 feet from the North line and 330 feet from the West line of Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, as a dual completion (conventional) to produce oil from the Fowler-Fusselman Pool through 2 1/2-inch tubing and from the Fowler-Ellenburger Pool through a parallel string of 2-inch tubing, separation of the zones to be achieved by means of a packer set at approximately 9575 feet.

(2) That the applicant, Gulf Oil Corporation, is hereby authorized to complete its Lillie Well No. 3 in the Fowler-Ellenburger Pool at a non-standard location for said pool 2310 feet from the North line and 330 feet from the West line of Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That a 40-acre non-standard oil proration unit consisting of the SW/4 NW/4 of Section 23, Township 24 South, Range 37 East, NMPM, Fowler-Ellenburger Pool, Lea County, New Mexico, is hereby approved and dedicated to the Lillie Well No. 3 located 2310 feet from the North line and 330 feet from the West line of said Section 23.

(4) That one-half the normal 80-acre unit allowable for the Fowler-Ellenburger Pool is hereby assigned to the 40-acre non-standard proration unit set out above.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

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

esr/

Docket No. 12-65

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 28, 1965

9 A. M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM, STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Elvis A. Utz, Alternate Examiner:

CASE 3217: (Continued from the March 10, 1965 examiner hearing) In the matter of the hearing called by the Oil Conservation Commission upon its own motion to permit S. S. Sutton, dba Eddy Oil Company and all other interested parties to show cause why the Eddy Oil Company Stanolind-State Wells Nos. 1 and 2, located in Units G and J, respectively, of Section 36, Township 19 South, Range 30 East, Eddy County, New Mexico, should not be plugged in accordance with a Commission approved plugging program.

CASE 3240: Application of Gulf Oil Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Central Drinkard Unit Area comprising 2,600 acres, more or less, of State and Fee lands in Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 3241: Application of Gulf Oil Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Drinkard Pool, Lea County, New Mexico, in its Central Drinkard Unit Area by the injection of water into the Drinkard formation through six wells in Sections 28, 29, and 32, Township 21 South, Range 37 East.

CASE 2676: (Reopened) In the matter of the application of Gulf Oil Corporation to reopen Case No. 2676 to reconsider applicant's request that a full 80-acre proration unit comprising the S/2 NW/4 of Section 23, Township 24 South, Range 37 East, Fowler Ellenburger Pool, Lea County, New Mexico, be approved for applicant's Lillie Well No. 3 located 2310 feet from the North line and 330 feet from the West line of said Section 23.

CASE 3242: Application of Austral Oil Company Incorporated, for an unorthodox location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the well location requirements for the Blanco-Mesaverde Gas Pool for its Bunny et al Well No. 1 at an unorthodox location 1040 feet from the South line and 1190 feet from the East line of Section 10, Township 27 North, Range 9 West, San Juan County, New Mexico.

CASE 3243: Application of Monsanto Company for special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Dagger Draw-Strawn Gas Pool and the Dagger Draw-Morrow Gas Pool, Eddy County, New Mexico, including a provision for 640-acre gas well spacing units.

CASE 3003: (Reopened) In the matter of Case No. 3003 being reopened pursuant to the provisions of Order No. R-2685, which order established temporary 80-acre proration units for the Tobac-Pennsylvanian Pool, Chaves County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 2997: (Reopened) In the matter of Case No. 2997 being reopened pursuant to the provisions of Order No. R-2677, which order established 80-acre spacing units for the Vacuum-Lower Pennsylvanian Pool, Lea County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 3244: Application of James E. Logan for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Rain Spring Unit Area comprising 10,542.00 acres, more or less, of State, Federal and Fee lands in Townships 22 and 23 South, Ranges 24 and 25 East, Eddy County, New Mexico.

DRAFT

JMD/esr
May 12, 1965

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

CF Subj. _____

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

CASE No. 2676

Order No. R-2374-A

APPLICATION OF GULF OIL CORPORATION
FOR AN UNORTHODOX LOCATION, DUAL
COMPLETION, AND NON-STANDARD PRORA-
TION UNIT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 28, 1965, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of May, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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 this case has been reopened to reconsider the applicant's request to dedicate the S/2 NW/4 of Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, to its Lillie Well No. 3 located 2310 feet from the North line and 330 feet from the West line of said Section 23 as a standard 80-acre proration unit in the Fowler-Ellenburger Pool and to receive an 80-acre allowable for said well.

(3) That by Order No. R-2374, dated November 21, 1962, the Commission approved a 40-acre non-standard oil proration unit consisting of the SW/4 NW/4 of Section 23, Township 24 South,

Range 37 East, NMPM, Fowler-Ellenburger Pool, Lea County, New Mexico, and dedicated said unit to the subject well.

(4) That by Order No. R-2374, dated November 21, 1962, the Commission assigned one-half the normal 80-acre unit allowable for the Fowler-Ellenburger Pool to the 40-acre non-standard proration unit.

(5) That subsequent development in the Fowler-Ellenburger Pool has established the productivity of the entire S/2 NW/4 of said Section 23.

(6) That approval of the applicant's request for the proposed 80-acre proration unit and 80-acre allowable will afford the applicant the opportunity to produce its just and equitable share of the oil in the Fowler-Ellenburger Pool and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That an 80-acre proration unit in the Fowler-Ellenburger Pool comprising the S/2 NW/4 of Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, is hereby established and dedicated to the Gulf Oil Corporation Lillie Well No. 3 located 2310 feet from the North line and 330 feet from the West line of said Section 23.

(2) That a normal 80-acre unit allowable for the Fowler-Ellenburger Pool is hereby assigned to the 80-acre proration unit set out above.

(3) That Order No. R-2374, dated November 21, 1962, is hereby superseded insofar as said order is inconsistent with this order.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission

LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

P. O. BOX 2088
SANTA FE

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

May 17, 1965

Mr. Bill Kastler
Gulf Oil Corporation
Post Office Box 1938
Roswell, New Mexico

Re: Case No. 2676
Order No. R-2374-A
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.

A. L. PORTER, Jr.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC x
Artesia OCC
Aztec OCC
OTHER

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. 2676
Order No. R-2374-A

APPLICATION OF GULF OIL CORPORATION
FOR AN UNORTHODOX LOCATION, DUAL
COMPLETION, AND NON-STANDARD PRORA-
TION UNIT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 28, 1965, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 17th day of May, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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 this case has been reopened to reconsider the applicant's request to dedicate the S/2 NW/4 of Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, to its Lillie Well No. 3 located 2310 feet from the North line and 330 feet from the West line of said Section 23 as a standard 80-acre proration unit in the Fowler-Ellenburger Pool and to receive an 80-acre allowable for said well.

(3) That by Order No. R-2374, dated November 21, 1962, the Commission approved a 40-acre non-standard oil proration unit consisting of the SW/4 NW/4 of Section 23, Township 24 South, Range 37 East, NMPM, Fowler-Ellenburger Pool, Lea County, New Mexico, and dedicated said unit to the subject well.

(4) That by Order No. R-2374, dated November 21, 1962, the Commission assigned one-half the normal 80-acre unit allowable

for the Fowler-Ellenburger Pool to the 40-acre non-standard proration unit.

(5) That subsequent development in the Fowler-Ellenburger Pool has established the productivity of the entire S/2 NW/4 of said Section 23.

(6) That approval of the applicant's request for the proposed 80-acre proration unit and 80-acre allowable will afford the applicant the opportunity to produce its just and equitable share of the oil in the Fowler-Ellenburger Pool and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That an 80-acre proration unit in the Fowler-Ellenburger Pool comprising the S/2 NW/4 of Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, is hereby established and dedicated to the Gulf Oil Corporation Lillie Well No. 3 located 2310 feet from the North line and 330 feet from the West line of said Section 23.

(2) That a normal 80-acre unit allowable for the Fowler-Ellenburger Pool is hereby assigned to the 80-acre proration unit set out above.

(3) That Order No. R-2374, dated November 21, 1962, is hereby superseded insofar as said order is inconsistent with this order.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Jack M Campbell
JACK M. CAMPBELL, Chairman

Guyton B. Hays
GUYTON B. HAYS, Member

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

esr

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
October 24, 1962

EXAMINER HEARING

IN THE MATTER OF:

Application of Gulf Oil Corporation for an unorthodox location, and a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Lillie Well No. 3 in the Fowler-Fusselman and Fowler-Ellenburger Pools, Lea County, New Mexico. Said well is presently completed in the Fowler-Fusselman Pool at an unorthodox Fowler-Ellenburger location 2310 feet from the North line and 330 feet from the West line of Section 23, Township 24 South, Range 37 East. Applicant proposes to dedicate 40 acres comprising the SW/4 NW/4 of said Section 23 to the Ellenburger completion. CASE 2676

BEFORE: Elvis A. Utz, Examiner

AFTERNOON SESSION

TRANSCRIPT OF HEARING

MR. UTZ: Case 2676.

MR. DURRETT: Application of Gulf Oil Corporation for an unorthodox location, and a dual completion, Lea County, New Mexico.

MR. KASTLER: If the Examiner please, my name is Bill Kastler; I'm from Roswell, New Mexico, appearing on behalf of Gulf. Our only witness in this case today is Mr. John H. Hoover.

(Witness sworn.)

(Whereupon, Applicant's Exhibits Nos. 1 and 2 marked for identification.)

JOHN H. HOOVER

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

DIRECT EXAMINATION

BY MR. KASTLER:

Q Will you please state your name, your employer and position?

A John Hoover, employed by Gulf Oil Corporation, petroleum engineer in Roswell, New Mexico.

Q Mr. Hoover, have you previously appeared before the New Mexico Oil Conservation Commission and qualified as an expert petroleum engineer?

A Yes, I have.

MR. KASTLER: Are the witness' qualifications satisfactory?

MR. UTZ: Yes, sir.

MR. BUELL: During this lull, may I enter an appearance for Guy Buell for Pan American Petroleum Corporation?

MR. UTZ: You may.

Q (By Mr. Kastler) Are you familiar with all the pertinent facts involved in this application of Gulf's?

A Yes, sir, I am.

Q What is Gulf seeking in this application?

A We are asking for an exception to the Fowler-Ellenburger Pool Rules and approval of a dual completion for our Lillie Well No. 3.

Q Do you have a lease plat showing Gulf's Lillie lease?

A Yes, sir, and it's marked Exhibit No. 1.

Q Why do you need an exception to the Fowler-Ellenburger Pool Rules?

A The existing Pool Rules provide -- do you want me to explain this?

Q Would you explain your Exhibit No. 1?

A Yes, sir. It's a plat showing the Lillie lease, which is outlined in red and described as the Northwest Quarter of Section 23, Township 24 South, Range 37 East, Lea County, New Mexico. Also outlined on this plat --

MR. PORTER: Isn't that 37 East?

A 37 East.

MR. PORTER: Yes, I see it here.

A Also shown circled in red and colored in red is the Lillie No. 3. There's one other thing on this lease I would like to call to the Examiner's attention. In the Northwest Quarter of the Northwest Quarter, Gulf's only two wells are No. 1-E in the Ellenburger and No. 2-E in the Drinkard; and in the Southwest Quarter of the Northwest Quarter, Gulf's only well is the No. 3 shown here Silurian, it's in the Fowler-Fusselman. All the other wells which have no designation except for a number are

shallow wells and belong to Three States Natural Gas Company.

Q Mr. Hoover, what acreage is now dedicated to the Ellenburger well that you have on this lease in this pool?

A The North Half of the Northwest Quarter is dedicated to the Lillie Well No. 1.

Q Why do you need an exception to the Fowler-Ellenburger Pool Rules?

A The existing Pool Rules provide that the well must be located within 150 feet from the center of either the Northwest Quarter or the Southeast Quarter of a governmental quarter section.

Q Then the Lillie No. 3 which you propose to deepen is not at a standard location for this pool, is that correct?

A That is correct.

Q Is the Lillie No. 3 Well a standard location for the Fowler-Fusselman Pool, in which it is now completed?

A Yes, it is. It's located 2310 feet from the North line and 330 feet from the West line of this Section 23. That makes it a 330-330 foot location from the southwest corner of the Northwest Quarter. This location is in accordance with the State-wide rules which govern the Fowler-Fusselman Pool.

Q What is the reason for Gulf wanting to use its Lillie Well No. 3 and dually complete it, instead of drilling a new well at a standard location in the Southeast of the Northwest Quarter?

A It's strictly a matter of economics. By deepening this existing well, we will realize a savings of $91,000, compared to the cost of drilling a new well at the standard location.

Q What acreage would Gulf allocate to this well if the application in this case were approved?

A We propose to dedicate 40 acres, being the Southwest Quarter of the Northwest Quarter of Section 23; and that the allowable be established in accordance with the 80-acre proportional factors as provided in Rule 505-B of the Commission's Rules and Regulations.

MR. UTZ: That's in the Fusselman?

MR. KASTLER: That's in the Ellenburger.

A In the Ellenburger. The well is completed in the Fusselman; we propose to deepen it to the Ellenburger and assign 40 acres.

MR. UTZ: How much is dedicated to the Ellenburger?

A 40 acres. The same 40 acres is dedicated to the Fusselman.

Q (By Mr. Kastler) Is it your understanding that under Rule 505-B where the Pool is prorated on 80-acre spacing, the allowable for 40 acres would only be one-half of the 80-acre allowable?

A Yes, sir, that is my understanding.

Q What would the allowable for this well for one-half of an 80-acre allowable be?

A Well, based on a unit allowable of 35 barrels which is applicable for October, and a depth factor of 4.77 which is applicable to 80 acres, and to the Fowler-Ellenburger Pool the allowable would be 167 barrels per day. Therefore, the allowable, based on 40 acres or one-half of the 80-acre allowable, would be 84 barrels.

Q 84 being as nearly as you can compute to the 167 barrels, 80-acre allowable?

A Yes, sir. Actually it would be 83-1/2.

Q Assuming that this pool were developed on 40-acre spacing, what would be the allowable then?

A The depth factor for 40 acres is 3.77, and using the same 35-barrel unit allowable, the State-wide 40-acre allowable would be 132 barrels.

Q Then the allowable of 84 barrels, being one-half of an 80-acre allowable, is considerably less than the State-wide 40-acre allowable, is that correct?

A Yes, sir, that is correct.

Q In your opinion, is this 40 acres productive in the Ellenburger?

A Yes, sir. In my opinion it is productive. In fact, it is my opinion that the entire Northwest Quarter is productive.

Q Is it not true that Gulf Oil Corporation in Case No. 2556 recently presented a considerable amount of evidence to this effect, that the Northwest, the entire Northwest Quarter was

productive?

A Yes, that's correct.

Q What acreage is dedicated to Gulf's Lillie Well No. 1 located in the Northwest Northwest of Section 23?

A The North Half of the Northwest Quarter of 23 is dedicated as a proration unit to the Lillie No. 1.

MR. UTZ: For the Ellenburger?

A For the Ellenburger.

Q (By Mr. Kastler) Is it in accordance with Fowler-Ellenburger Pool Rules?

A Yes, it is. The Fowler-Ellenburger Pool Rules provide that proration units may be dedicated as North Half, South Half, East Half, or West Half of a governmental quarter section.

Q Then the South Half of the Northwest Quarter of Section 23 is not dedicated to any producing well in the Fowler-Ellenburger Pool at this time?

A That is correct.

Q Is the development of Ellenburger production in the Southwest Northwest of Section 23, the proposed development, is it in the interest of protection of Gulf's correlative rights?

A Yes, sir, it is. If a well is not developed for Ellenburger production on the South Half of Section 23, the oil in place will be drained by offset wells. In fact, in my opinion there already has been some drainage taking place, and we are requesting approval of this unorthodox location so that we can

prevent further drainage as soon as possible and as economically as possible.

Q In your opinion, would correlative rights of offset operators be adversely affected by the production of Ellenburger production in the Lillie No. 3 on 40-acre, and assignment of one-half of the 80-acre allowable?

A The correlative rights of the offset operators would not be adversely affected, and as previously stated, Gulf's correlative rights would be protected.

Q Do you have anything further to add concerning the reason that Gulf desires to use the Lillie 3 to develop Ellenburger production in the South Half of Section 23?

A No, sir, nothing further.

Q Now as to the second part of Gulf's application in this case, do you have for Exhibit 2 a schematic diagram of the proposed dual completion of the Lillie Well No. 3?

A Yes, sir. This exhibit is the proposed dual completion of the Lillie Well No. 3. The well is now completed at a plug-back depth of 7490 feet from an original total depth of 7550 feet. The Fusselman is producing from the open hole interval 7299 to 7490 feet. The well has 13-3/8 inch O.D. casing set at 327 feet, and the cement was circulated. We have 9-5/8ths casing set at 3896 feet, and cemented with 2474 sacks. Temperature survey indicated the top of the cement at 35 feet. 7-inch casing is set at 7299 feet, cemented with 1125 sacks, and the temperature

survey indicated the top of the cement at 100 feet.

We propose to deepen this well to approximate total depth of 10,100 feet and install a 4-1/2 inch O.D. liner. This liner will be set at approximately 7250 feet to the total depth. We propose to cement the liner from the bottom to the top of the liner. The Ellenburger proposed perforations, of course, the log of this well if and when it is deepened will determine the exact total depth and the exact perforations, but the proposed perforations for the Ellenburger are approximately 9625 feet to 9800 feet. The proposed perforations for the Fusselman will then be 3320 feet to 3360 feet.

We propose to have a Baker Model "D" Packer set at approximately 9575 feet, and have two strings of 2-1/2 inch tubing, buttress thread tubing with the short string latched into a parallel string anchor installed at approximately 7220 feet.

Q Do you have any bottom hole pressure information and gravities to present?

A The average gravity of the Fusselman production from this lease is approximately 38 degrees, and the Ellenburger average gravity is approximately 45 degrees, both of them corrected to 60 degrees. We do not have any recent bottom hole pressure for the Fusselman; however, in October of 1958 in the Lillie No. 3 it was 2345 pounds. In February of 1962, the bottom hole pressure for the Ellenburger in the Plains Knight Well No. 1, which is the south offset to the Lillie No. 3, had a bottom hole pressure

of 1949 pounds.

Q Do you have anything further to add in this case?

A No, sir.

Q Were Exhibits 1 and 2 prepared by you or under your direction and supervision to illustrate facts pertinent to this case?

A Yes, sir, they were.

MR. KASTLER: Mr. Examiner, I now move that Exhibits 1 and 2 be admitted into evidence in this case.

MR. UTZ: Without objection, Exhibits 1 and 2 will be entered into this case.

(Whereupon, Applicant's Exhibits Nos. 1 and 2 entered in evidence.)

MR. KASTLER: I further move that inasmuch as reference has been made to Case 2556, the Commission Examiner take judicial and administrative notice of the entire proceedings and the exhibits thereto.

MR. UTZ: Would you brief me as to exactly what the subject matter was of that case?

MR. KASTLER: Yes, sir. Sometime earlier this year, seeking in application in Case 2556 to make an unorthodox well location by dually completing this same well and dedicating thereto 80 acres instead of 40's, the 80 being the entire South Half of the Northwest Quarter.--

MR. UTZ: To the Ellenburger?

MR. KASTLER: Yes, sir. Thereafter, the Commission

issued Order R-2274 on July 10, 1962, which although it denied an 80-acre allocation to the subject well expressly retained jurisdiction over the matter for the entry of such further order as may be deemed necessary.

MR. UTZ: The testimony and exhibits in Case 2556 will be made a part of the record in this case.

MR. KASTLER: This concludes my direct testimony.

MR. UTZ: Any questions of the witness? The witness may be excused --

MR. BUELL: I have a question, Mr. Examiner.

MR. UTZ: I was looking at you.

CROSS EXAMINATION

BY MR. BUELL:

Q You testified on direct that if the Commission approves this application of Gulf's and allows you to assign or take credit for 40 productive acres allowable-wise, that the correlative rights of the other operators in the pool would not be violated. Was that not the substance of your testimony?

A Yes, sir, that's correct.

Q Of course, in that answer you assume that there was 40 productive acres there, or I believe you even think there's more?

A Yes, sir.

Q Would you assume along with me, for the purpose of this question, that the structural interpretation presented by

Pan American at the May 10th, 1962 hearing in Case 2556, is in truth and in fact accurate, and that only 93 of the total 160 acres in Gulf's Lillie lease is actually productive? Under those circumstances, if the Commission allows you half of an 80-acre allowable, would not the correlative rights of other operators in the Pool be violated, with that assumption, which I know and recognize for the record you do not agree with?

A Yes, sir, recognizing that it is an assumption that your interpretation of the map is correct, then it would be correct that the correlative rights would not be protected.

Q What is the lease immediately to the south of your Lillie lease?

A That's our Plains Knight.

Q With respect to the Ellenburger, do you have the lease on the entire 160 acres in that lease?

A We have the entire 160 acres; however, it is not the entire Plains Knight lease. 40 acres is the Bertha lease.

Q But the Southwest Quarter of that section, you do have leasehold rights in the Ellenburger?

A Yes, sir, we do.

Q As I recall, shortly before the hearing in May of 1962, you re-arranged the proration unit of your Ellenburger producer in that 160 acres, did you not?

A No, sir, not re-arranged it.

Q Am I mistaken in saying that immediately prior to that

hearing there was a filing of a proration unit plat by Gulf assigning the North Half of that 160 acres to your producing well?

A No, you are not wrong in assuming that, but you said it was re-arranged. It was not re-arranged.

Q But immediately prior to the last hearing, such a proration unit plat was filed?

A Yes, sir, that is correct.

Q Could you tell the Commission, Mr. Hoover, at this time whether or not it's Gulf's intention, if the Commission should approve this request here today, that you will then come in for an additional Ellenburger well on your Plains Knight lease?

A No, sir. Not on the Plains Knight.

Q Sir?

A Another Ellenburger on the Plains Knight?

Q Yes, using the same method that you have used on the Lillie lease, by re-arranging the proration unit and locating an unorthodox well?

A No, sir, we don't plan another well on the Plains Knight.

Q In looking at your plat, look immediately to the left of your Lillie lease. What Section is that?

A 22.

Q In view of the action Gulf is taking here on their Lillie lease and the request they're making, would you think that Gulf would have any objection to an application of Pan American

for an Ellenburger well in the Northeast Quarter Northeast Quarter of Section 22?

A No, sir, we would have no objection to a Pan American Ellenburger well there, depending on what you ask for for acreage.

Q And let me give you this additional information, and it would be Pan American's intention to assign 80 acres to that well which -- let me look at your plat -- would be the North Half of the Northeast Quarter of Section 22.

A Well, based on Pan American's feeling in our case, we would have no objection to Pan American developing a well up there and getting 40 acres.

Q Even though they have possibly 80 productive?

A Yes, sir.

Q But because we oppose your 80, you would oppose our 80?

A Yes, sir, that's right.

Q Mr. Hoover, as I recall both you and Mr. Marshall, who was Gulf's geological witness at the last hearing about this, said that you had complete confidence in the fact that the entire Lillie 160-acre lease was productive. In fact, each of you testified that you either had recommended to Gulf management or you would recommend to Gulf management, if the Commission denied that application, that Gulf locate a well in a standard location on the Lillie lease; is my recollection correct?

A Yes, sir, that is correct.

Q When this application was denied in Case 2556, did you

so recommend to your management, that they locate a standard well and drill it and complete it like you and Mr. Marshall think they could, and take a full 80-acre allowable?

A Well, Mr. Buell, to correct this thing, I believe Mr. Marshall testified that he so recommended or had recommended a well at a standard location prior to that hearing. It was management's decision that the economics and the return on the investment, the profit to investment ratio of using the existing well and deepening it, that was the decision to go that way for the 80 acres which was turned down; but the well had been recommended prior to that hearing, so there was no further action after the order denied it except our action to come back and ask for a 40.

Q I believe it was also your testimony at that hearing that you would also, whether you had or not, you would also recommend a standard location to management?

A At that hearing we had already recommended, prior to the hearing.

Q And that you felt a standard location would be productive?

A That was the geological testimony, yes, sir, which I agreed with.

Q Has anything happened since May to change your ideas or your opinion on the productive aspects of this Lillie lease?

A No, sir.

Q You still feel that a well at a standard location would

be productive in the Ellenburger?

A That has been so recommended.

Q Your case is based strictly on economics, nothing else?

A Yes, sir.

Q Gulf is willing that, although they think they have 80 acres, to drill and complete at this unorthodox location and take half allowable, even though they think they have a full 80 productive?

A Yes, sir, the economics justify it that way.

Q Speaking of economics, how long will it take you at a half of an allowable to pay out your $90,000 which it will cost you to deepen and dual your Fusselman well?

A Well, it will cost us about $75,000 to deepen. We are saving approximately $91,000.

Q Just using the figures that I believe you presented at the May, '62 hearing?

A Yes, sir.

Q Of $90,000 to deepen?

A $91,000 is what we save. $75,000 would be the cost.

Q Are we together now? It cost you $90,000 to deepen?

A Seventy-five.

Q You are saying now it was not your testimony back in May that it would cost $90,000 to deepen and dual?

A That we would save $91,000 by deepening and dualling, was the testimony at that time. Anyhow, I have so testified today.

MR. UTZ: Yes, I think the record is clear on that. He testified today that he would save $91,000.

MR. BUELL: Yes, I realize that. The point I was trying to make is that it would cost them approximately twice as much to drill a new well as it would to deepen and dual the Lillie.

Q (By Mr. Buell) You say it only cost you $75,000 to deepen and dual?

A Yes, sir, that is correct.

Q How long would it take you to pay out the $75,000 at half an allowable?

A It takes about 1.6 years.

Q How long would it take you to pay out a well at a standard location with a full allowable?

A It takes something less than that year.

Q Is it still your testimony that this is based entirely on economics?

A Yes, sir.

Q Even though you would pay out a well at a standard location quicker than you would this unorthodox location?

A Yes, sir.

Q And that well at the unorthodox location would never have got but a half an allowable?

A That's right.

Q While a well at a standard location could produce top allowable as long as it could, and would pay out quicker, you

still say your case is based on economics?

A Yes, sir, that is correct.

MR. BUELL: That's all.

MR. KASTLER: May I ask some questions on redirect?

MR. UTZ: I have one or two questions.

BY MR. UTZ:

Q Mr. Hoover, in your Plains Knight lease, is there 80 acres dedicated to No. 1 Well?

A Yes, sir, there is. It's the North Half of the Southwest Quarter.

Q Is there an Ellenburger Well on the South Half of that quarter section?

A No, sir, there is not.

Q I believe you testified that you didn't intend to drill one?

A That's right. There was a deep test there which was the No. 2, which you might notice 10,650 right above it?

Q Yes, sir.

A That well at the other hearing was testified to, I believe the Ellenburger was under water. The Ellenburger was pretty deep, so that was an Ellenburger test at one time.

Q The No. 5 Well, which is immediately west of your No. 3 Well, which is the subject of this hearing, is that a Pan American Well?

A In Section 22?

Q Yes, sir.

A Southeast Quarter Northeast Quarter?

Q Yes, sir.

A Yes, sir, it is.

Q What is dedicated to that well?

A 80 acres. I don't know what they have dedicated.

Q We could probably assume, due to the Pool Rules, it would be the South Half, is that right?

A The Pool Rules say it could be the North Half, West Half or East Half, it could be either the East Half or the West Half.

Q At any rate, it's 80 acres?

A Yes.

Q Now the No. 3 Well on the Pan American lease which is in the Northwest of the Northeast, what formation is that completed in?

A I believe that's in the Upper Silurian, Fowler-Upper Silurian.

MR. UTZ: That concludes my questioning at the present time. Are there any other questions?

MR. DURRETT: Let me ask one question at this time, Mr. Hoover, for the point of clarification.

BY MR. DURRETT:

Q It's been called to my attention that there might have been some mistake in stating the proposed Fusselman perforations,

the depth of them. Would you restate that for the record?

A You mean what it is now or what is proposed?

Q Well, both, so we'll get it clear.

A It's now producing from the Fusselman from the open hole interval 7299 feet to 7490 feet. If and when we deepen and install the liner, the proposed Fusselman, the proposed perforations for the Fusselman will be approximately 7320 to 7360.

MR. DURRETT: Thank you. That clears it up.

MR. UTZ: Are there other direct questions? You may proceed, Mr. Kastler.

REDIRECT EXAMINATION

BY MR. KASTLER:

Q Going back to the hypothetical question you were asked concerning the Langley-Mattix or the South Mattix Unit Well No. 5, which is situated in the Southeast Quarter of the Northeast Quarter of Section 22 --

A Yes, sir.

Q -- Would Gulf be inclined to oppose a movement by Pan American to deepen a well or to drill a well in the Northeast Northeast and complete it in the Ellenburger formation, if this Northeast Northeast was included with the Southeast Northeast in an 80-acre present producing unit, so as to re-arrange their units and thereby take two 80-acre units, shifting the Well No. 5 acreage dedication to that, being the South Half of the Northeast Quarter; then proposing to complete the well in the

Ellenburger for the North Half of the Northeast Quarter?

A And assigning 80 acres?

Q Yes.

A I think that's a question that management -- I know what I'd do.

Q You can't answer the question?

A I don't know what management's decision would be; no, sir, I don't.

Q Mr. Hoover, I call your attention to the questioning in Case 2556, wherein you were asked the question: "Mr. Hoover, what is the total overall estimated cost for making this dual completion?" Answer: "We have estimated the dual completion to run $90,000." Question: "What is the total overall cost that you've estimated for drilling an Ellenburger well in the orthodox location?" Answer: "Our estimated cost for that well would be $181,000." Question: "What is the amount of your savings?" Answer: "We would effect a savings of $90,000 by deepening this well." Question: "$91,000?" Answer: $91,000, excuse me."

Do you wish to change your testimony today to correspond with what you've previously testified to? Is your recollection refreshed on the amount of the total completion as being $181,000?

A Well, I believe I testified here that we could realize a saving of $91,000 --

Q You did.

A -- which represented a saving there of ninety, of approximately $90,000, wasn't it?

Q Your savings would be $91,000, but you testified that the cost of dual completing this well, in May you testified it would be $90,000. Do you wish to correct your testimony today?

A Yes, I'll correct it. I'll accept those figures and change the testimony to read that, and that we will effect a saving of $90,000, as compared to my estimate here of approximately $91,000.

Q Well, you testified here that the cost of dually completing this well was $75,000, but that's at variance with your earlier testimony that the cost of dually completing this well would be $90,000.

A The difference, as I recall, on that, we had an estimate to deepen, run a liner, log, tubing, so forth, was $75,000. On that estimate was included pumping unit. It also includes a pumping unit in the $181,000. The figures I used as $75,000 does not include a pumping unit.

Q Would a pumping unit be reasonably required to complete this as a dual producer in the Fusselman and Ellenburger?

A We don't think initially that we would have to pump the Ellenburger. Our No. 1 is pumping, our Plains Knight No. 1 is flowing. Eventually, we might have to pump it and it can be pumped, but in the $75,000 of cost to dual that I gave, does not include a pump.

Q Do you believe that to get this smaller allowable out of the ground you wouldn't need a pump?

A We anticipate it will flow initially.

Q Mr. Hoover, has it been considered whether drilling a new well in the orthodox location, namely, the Southeast Northwest of Section 23, would be capable of producing any additional oil? In other words, would it be in the greater interest in the prevention of ultimate waste than simply dually completing this well and hoping that your production would last over a longer period?

A All right, now; that was over, doing this well here in the Southeast Quarter -- in the Southwest Quarter of the Northwest Quarter --

Q Against drilling a new well.

A The question was?

Q The question is, would the drilling of a new well produce any additional oil that Gulf believes it could not otherwise drain by dually completing this well?

A No, sir. In our economics we have assumed or have estimated that we'll recover approximately the same amount of oil.

Q You believe, therefore, that by spending $90,000, approximately, or $75,000 without the pump, but eventually pumping,and putting on the $90,000 expenditures in order to dually complete this well, that you will ultimately save $91,000, even granted that you don't get the larger allowable but you will pro-

duce all of the oil that there is in place?

A Yes, sir, that was our interpretation for the economics.

MR. KASTLER: That's all. Thank you.

MR. BUELL: One more, only.

MR. UTZ: Mr. Buell.

RECROSS EXAMINATION

BY MR. BUELL:

Q Mr. Hoover, from the standpoint of ultimate recovery from the Ellenburger reservoir, it's not going to vary substantially whether you drill a well at the standard location or unorthodox location that you are asking, or none at all?

A No, sir. Based on our economics, we have assigned the same amount of oil for the standard as for this unorthodox location, figuring that the unorthodox location is going to eventually get that oil under that 80 acres.

Q So from the standpoint of ultimate recovery, any additional wells drilled in this pool, whether they're drilled on the Gulf lease, on Pan American's South Mattix Unit, or anywhere around the periphery of the field, it's not going to increase ultimate recovery from this pool to any degree at all. It's a matter of correlative rights, is that not correct?

A I wouldn't say as far as the pool; I'm saying as far as our lease. I don't know on the total pool situation.

MR. BUELL: That's all.

BY MR. UTZ:

Q Mr. Hoover, is this a water drive pool?

A Mr. Utz, that's a question that I, not being a reservoir man -- I did discuss it with our reservoir people to ask if they thought it was a water drive or solution gas drive, and they tell me that they are not sure what it is. At this time the curves, the bottom hole pressure curves have fallen as a water drive and as a solution gas drive reservoir would perform. The curve is now at the point that if it is a solution gas drive, the bottom hole pressures will rapidly fall off; if it's a water drive, the pressures will more or less stay not constant, but the decline will be less. We generally figure the Ellenburger reservoir as a water drive, and in some cases a strong water drive, but there are other Ellenburger reservoirs that have no evidence of any water drive; and this one, it could be either or maybe a combination of both.

Q Is that an anticlinal structure?

A I don't know.

Q Why did you get the dry hole down in the south end of your Plains Knight; was it because of the steep dip in the structure?

A Yes, sir. It's deep.

Q Or pinchout permeability?

A Yes, sir, it's a dipping structure to the south and east.

Q It dips quite steeply to the east?

A Yes, sir, as I understand it.

Q That would account, then, for your statement that an orthodox location would not recover any more oil than this non-standard location?

A Well, we feel that in this pool, and particularly in this South Half of the Lillie lease, that there has been drainage by the well. We feel like it has been drained some, so therefore we would not expect to recover what the recoveries have been from these other wells which have been very good, very good recoveries, in the neighborhood of half a million barrels.

Q Have any of your Ellenburger wells produced water?

A Our Lillie No. 1 produces some water.

Q Is that on the increase or decrease?

A That is on the increase. Our Plains Knight No. 1 produces no water, but subsea it is deeper, the bottom of the perforations are deeper subsea than the Lillie No. 1. The Lillie No. 1 produces some water, but the Plains Knight does not. We are investigating that Lillie No. 1 to see if we can shut off water.

MR. UTZ: Any other questions of the witness? The witness may be excused.

(Witness excused.)

MR. UTZ: Any statements in this case?

MR. BUELL: I just have a statement, Mr. Examiner, no testimony.

MR. UTZ: I just called for statements.

MR. BUELL: May it please the Examiner, it's probably unfortunate for you, Mr. Utz, but it is going to be almost impossible to get the handle on this hearing today without reviewing extensively the old Case 2556, because it was in that case that Gulf put on exhibits and estensive testimony relating to their structural interpretation of this Ellenburger reservoir; and also it was at that hearing that Pan American put on detailed testimony and exhibits relating to our structural interpretation of this reservoir.

Under Gulf's interpretation, the 160 acres under the lease is productive. Under Pan American's interpretation, only approximately 93 acres are productive. Actually, that is the nub of the entire controversy that we're having here with Gulf. In this Pool, I'll be frank to admit, rigid spacing rules were adopted, but they were adopted many years ago and all operators have played by the rules of the game and have adhered to those rigid spacing rules.

If the Examiner will look back at some of the stucture maps introduced at the past hearing, he will see where some operators, to their detriment, drilled a dry hole because they adhered to the rigid spacing rules. Perhaps more flexible spacing rules now would be more proper, and in a new reservoir that could be the case, but these were adopted for Fowler-Ellenburger, and everyone but Gulf, every operator in the Pool has lived up to it.

The record of Case 2556 will also reflect that it is

uncontraverted testimony that if Gulf's unorthodox location is approved, and if the many unorthodox locations that are possible -- as was pointed out in that hearing -- are approved and drilled, it will not increase the ultimate recovery from this Ellenburger reservoir by any substantial amount of oil. The only thing that these unorthodox wells will do is to increase the current income of the operators who are fortunate to be located on the periphery of the reservoir that they can drill these unorthodox locations, assign scenery and take allowable credit.

Pan American felt then and we still feel now that it would be a gross violation of the correlative rights of all of the other operators in the pool for the Commission to approve Gulf's request here today.

I would also like to point out that, although Gulf hinged their case completely on economics, it's the testimony of their own witness that a well at a standard location which Gulf's technical witnesses say is productive and one they would recommend to management, would pay out quicker than a well at this unorthodox location.

Pan American urges that the Commission deny this application.

MR. UTZ: Mr. Buell, is there any controversy between you and Gulf as to productivity of the Southeast of the Northwest Quarter of this lease?

MR. BUELL: Sir?

MR. UTZ: Is there any controversy between Pan American and Gulf as to the productivity of the Southeast Quarter of the Northeast Quarter of Section 23?

MR. BUELL: What is the basis of it?

MR. UTZ: I say is there any controversy?

MR. BUELL: We claim their Lillie lease has only 93 productive acres.

MR. UTZ: I am asking about the Southeast of the Northeast Quarter; does Pan American claim that is not productive?

MR. BUELL: No, sir, that is productive. That's part of the 93 productive acres.

MR. UTZ: That's my question.

MR. BUELL: Yes, sir.

MR. KASTLER: I believe that the finest interest of correlative rights, which the Commission is charged to observe by statute, is that each operator should be entitled to recover his fair share of the oil and gas in place. You have just established, I believe, satisfactorily that we have oil and gas in place which can yet be recovered. We should be entitled to recover it by waiving or making an exception to the rules so as to permit this unorthodox dual completion. Thank you.

MR. UTZ: I think I possibly gave you a wrong location. It was the Southwest Quarter of the Northwest Quarter I have reference to, or the 40 acres on which the No. 3 well is located.

MR. BUELL: Southwest of the Northwest?

MR. UTZ: Yes, sir.

MR. BUELL: Mr. Examiner, I'm looking at a copy of our Exhibit No. 1 as introduced on May 10th, 1962, in Case 2556, and actually our productive limit line as shown by that exhibit shows that only the western half, approximately the western half of the Gulf's Lillie lease is productive.

MR. UTZ: Which would include the Southwest of the Northwest?

MR. BUELL: We show only 80 instead of 93. It would exactly split the lease in half. We believe 93 is productive, which overlaps a little into the East Half.

MR. UTZ: Yes, sir. Any further statements?

MR. DURRETT: Yes, sir. I have a letter in the Commission files I would like to read into the record at this time. I will read the entire letter, with your permission, as it is in opposition to the application.

Letter was received October 22, 1962, by the Commission, reads as follows:

"Gentlemen: The above reference case has been set for hearing on Docket 31-62 on October 24, 1962, at 9:00 A.M. Continental Oil Company has interpreted the available data to indicate that only the West Half of the Northwest Quarter of Section 23 is productive of oil and gas in the Ellenburger formation. The North Half of said Northwest Quarter is now allocated to Well No. 1 on Gulf's lease. In the above-referenced application,

applicant proposes to dedicate 40 acres, comprising the Southwest Quarter of said Northwest Quarter to its Well No. 3, thereby resulting in a total allocation to that lease of 120 acres. Continental Oil Company respectfully requests that the Commission deny the above-referenced application. If, however, the Commission should see fit to grant the application to complete its well in the Ellenburger formation at this location, it is further requested that the total allowable to be granted to the lease be limited to that proportion of a regular 80-acre allowable which the productive acreage bears to 80 acres." Signed by R. G. Parker.

MR. UTZ: Mr. Buell.

MR. BUELL: May it please the Examiner, I have also been authorized by Delhi-Taylor Oil Company to advise the Commission that they are opposed to the granting of this unorthodox location.

MR. UTZ: Any other statements? The case will be taken under advisement.

* * * * *

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing was reported by me in stenotype, and that the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this 6th day of November, 1962.

Ada Dearnley
NOTARY PUBLIC

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. 2676, heard by me on Oct. 24, 1962.

....., Examiner
New Mexico Oil Conservation Commission

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
April 28, 1965

EXAMINER HEARING

IN THE MATTER OF: The application of Gilf Oil Corporation to reopen Case No. 2676 to reconsider applicant's request that a full 80-acre proration unit comprising the S/2 NW/4 of Section 23, Township 24 South, Range 37 East, Fowler Ellenburger Pool, Lea County, New Mexico be approved for applicant's Lillie Well No. 3 located 2310 feet from the North Line and 330 feet from the West line of said Section 23.

Case No. 2676 (Reopened)

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
April 28, 1965

EXAMINER HEARING

IN THE MATTER OF: The application of Gulf Oil Corporation to reopen Case No. 2676 to reconsider applicant's request that a full 80-acre proration unit comprising the S/2 NW/4 of Section 23, Township 24 South, Range 37 East, Fowler Ellenburger Pool, Lea County, New Mexico, be approved for applicant's Lillie Well No. 3 located 2310 feet from the North line and 330 feet from the West line of said Section 23.

Case 2676 (Reopened)

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. DURRETT: In the matter of the application of Gulf Oil Corporation to reopen Case Number 2676 to reconsider applicant's request that a full 80-acre proration unit comprising the S/2 NW/4 of Section 23, Township 24 South, Range 37 East, Fowler Ellenburger Pool, Lea County, New Mexico, be approved for applicant's Lillie Well No. 3 located 2310 feet from the North line and 330 feet from the West line of said Section 23.

MR. KASTLER: If the Examiner please, I'm Bill Kastler from Roswell, appearing on behalf of Gulf Oil Corporation, and our two witnesses are Mr. J. L. Hutchison and Mr. John H. Hoover.

(Witness sworn.)

MR. NUTTER: Are there any other appearances in Case 2676?

MR. KASTLER: These have been marked "Exhibit Number" and the number is blank. If the Examiner please, I believe we had three --

MR. HUTCHISON: There were two exhibits in Case 2676.

MR. KASTLER: -- at the first hearing, and therefore we believe this should be Exhibit Number 3. We would also, at this time, like to ask that the record of Case 2556 be taken into consideration in conjunction with this application, insofar as it is pertinent.

MR. NUTTER: Is there objection to the record in Case 2556 being taken into consideration in the Case 2672 (Reopened)? The record will be incorporated.

(Whereupon, Applicant's Exhibit No. 3 marked for identification.)

MR. NUTTER: Exhibit 3 is your next exhibit in this case?

MR. KASTLER: It will be identified, and offered in evidence later.

MR. NUTTER: I think it might be well to put the date with that Exhibit Number, so it can be readily separated from the rest.

MR. DURRETT: It's on there.

MR. NUTTER: The date is on there.

J. L. HUTCHISON, called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KASTLER:

Q Would you please state your name, your employer and position?

A My name is J. L. Hutchison, District Production Geologist, Gulf Oil Corporation.

Q Have your qualifications previously been made a matter of record to the New Mexico Oil Conservation Commission?

A Yes, they have.

Q Are you familiar with the facts and background involved in Gulf's application?

A Yes, I am.

Q Have you made a study of the geology concerning the Fowler Ellenburger Pool?

A Yes, sir, I have.

Q Have you prepared or caused to be prepared an exhibit showing the geological aspects in this case?

A Ye, sir, I have.

Q Is this Exhibit Number 3?

A Yes, this is Exhibit Number 3.

Q What is Exhibit Number 3; identify that for the record.

A Exhibit Number 3 actually is an updated structure map of the Ellenburger formation, contoured on 100-foot contour interval. The only alteration made between this map and the map submitted in Case 2556 is the updating of the six wells that have been drilled in the Fowler Ellenburger Pool since the presentation of the structure map prepared by Mr. Lester Marshall in Case 2556.

Q Now, Mr. Hutchison, have youconfirmed Mr. Marshall's findings upon this structure map my looking on the logs of various wells, and confirming the correctness of his picks, insofar as the older wells are concerned?

A Yes, I have examined every electrical log that has penetrated the Ellenburger in this field, and examined all the sample logs that we have available in the field, plus other pertinent data pertaining to the Fowler Ellenburger field.

Q Therefore, except as the Marshall plat has changed and as you are showing now in Exhibit Number 3, you adopt all of the other findings of the Marshall plat?

A They are essentially correct, yes, sir.

Q So, it is your opinion that Exhibit Number 3, as corrected, is a correct and true depiction of the geological structure involved in the Fowler Ellenburger Pool?

A That is correct.

Q Would you mind going through and pointing out to the Commission the wells that have penetrated the Ellenburger formation in the Fowler Ellenburger Pool since the last structure map prepared by Gulf was presented to the Commission?

A Yes, there have been six wells that have penetrated the Ellenburger formation since the presentation of the previous map. Five of these wells were drilled from the surface to total depth, and one well was deepened from the Silurian to total depth.

Now, starting in the northern, northwest portion of the map the new wells that have been drilled are the Humble No. 2, State AB. The well is located in the northeast northeast oc Section 16. I'm sorry, that well is located in the southeast northeast. It's about 40 feet over the lease line. The well is on the minus 7,000 foot contour, structurally. Mr. Marshall's map had the well contoured, and it is nearly 7,000 feet as it can be expected. He may have had it contoured, maybe ten feet different but nothing of any significant value.

The second well drilled is the Pan American No. 17, South Mattix Unit. That well is located in the southwest of the northeast of Section 15. That well encountered the top of the Ellenburger by the electrical logs at a minus 6426. According to Mr. Marshall's map, he had the well contoured at a minus

6,600, or roughly 170 feet, 75 feet lower than actually what the Ellenburger came in.

Now, moving on southward we can go to the Well Number 2 Humble Knight in the southwest southwest of Section 14. The well encountered the top of the Ellenburger at a minus 6,624. Mr. Marshall had the well contoured on his map at roughly a minus 6,775, or some 150 feet lower than actually what the well came in.

The next well is the Number 15 South Mattix Unit Pan American operated well, encountered the top of the Ellenburger formation at a minus 6,241.

Q Is that situated in the northeast northeast of Section 22?

A Northeast northeast of 22.

Q Thank you, go ahead.

A It came in at a datum of minus 6,241. Mr. Marshall's previous map had it contoured being higher than a minus 6,400. He didn't have a closed contour of 6,400 feet. I would say it's in the neighborhood of maybe a hundred feet or something higher than what he anticipated.

Moving on southward, in the southwest of the northwest of Section 23, Gulf Number 3 Lillie was deepened to the Ellenburger and encountered that horizon at a minus 6,312, and again, according to Mr. Marshall's map, he had this closed within the

minus 6,400 feet, and it's rather hard to make a definite comparison as to how much higher the well is than he had it contoured, but anyhow, it shows that it was somewhat higher.

Now, moving over to Section 23, the Humble Number 3 Knight, located in the northwest of the southeast of Section 23, encountered the Ellenburger at a minus 7,037 feet, according to the previous map submitted projecting the well would be at approximately a minus 7,400 feet, or some 360 feet higher than actually the map, previous map would indicate. That is the list of the six wells.

Q That last well, the Number 3 has caused you to some degree to change contours, is that not correct?

A Yes, sir, that is very correct.

Q What, in your opinion, is the most significant new well drilled which is penetrating the Ellenburger formation?

A Well, Mr. Kastler, as far as the hearing today influencing the structure aspects of the Ellenburger formation, the Humble Number 3 Knight in my opinion is by far the most significant well, since it came in at such a high structural position, and almost insuring production throughout the 80-acre tract, being the south half of the northwest of Section 23, that Gulf Oil Corporation is asking today the Commission consider giving 80-acre proration unit.

Q When was that well completed?

A The Humble Knight Well, as far as my scout information, was completed the first day of March, 1965. However, I think from the schedule, I don't have that, Mr. Hoover does, some production was reported for the month of February.

Q Mr. Hutchison, taking the 80-acres which is closed within the area outlined, of the south half northwest of Section 23 --

A Yes.

Q Is there Ellenburger production on all sides of that area now?

A Yes, sir, there's Ellenburger on all sides of it, as well as being on it. Our Number 3 Lillie is an Ellenburger well; there is Ellenburger production directly north, directly west, directly south and directly diagonally southeast, as shown by the Humble Number 3. So you might say it's practically surrounded by Ellenburger production.

Q Does this cause you to feel or believe that there is oil in place under the entire 80 acres?

A Very definitely.

Q Do you feel that there are grounds for increasing the acreage dedicated to Gulf's Lillie Number 3 from 40 acres to 80 acres?

A Yes, I think the allowable is half an 80 rather than a 40. We are asking for a half an 80 to a full 80.

Q Do you believe that this is beyond a reasonable doubt so?

A I think that beyond a reasonable doubt this entire 80 acres is productive.

Q Was Exhibit Number 3 now prepared or modified by you, prepared under your direction and your supervision?

A Yes, it was.

MR. KASTLER: This concludes the direct testimony from this witness, and I would like at this time to move that Exhibit 3 be entered into evidence.

MR. NUTTER: Gulf's Exhibit Number 3, April 28, 1965, is admitted in evidence.

(Whereupon, Applicant's Exhibit No. 3 was admitted in evidence.)

MR. NUTTER: Does anyone have any questions of the witness?

MR. DURRETT: I have a question please.

CROSS EXAMINATION

BY MR. DURRETT:

Q Mr. Hutchison, I believe in the previous case there was some opposition to your application?

A That is correct.

Q Pan American, was it?

A Yes, sir.

Q Where is their acreage, now weren't they due offsets

as far as your Lillie Number 3, due offsets to the west?

A The Number 15, well, it is the west offset to the -- I mean the Number 5 is the Pan American South Mattix Unit offsetting westward the Number 3 Lillie Well.

Q And that's in the southeast of the northeast?

A That would be in the southeast of the northeast of 22.

Q Referring to the southeast of the northeast of 22, what's this Well Number 11 down in the southeast corner?

A My notation, that is a Holt Gas well.

Q So the Number 5 E --

A Is the Ellenburger producer.

Q Ellenburger?

A Yes, sir.

Q What size unit are they on there, do you know?

A To my knowledge, they have an 80-acre spacing running east-west, and 80 acres dedicated to the Number 5 well.

Q And getting a full 80-acre allowable?

A Yes, sir, to my knowledge. I don't actually have the production figures, but I believe that is a top allowable well.

MR. DURRETT: Thank you, I think that's all I have.

BY MR. NUTTER:

Q In effect, Mr. Hutchison, what your testimony is here today is that Gulf previously thought the contours went out somewhere in that neighborhood, but the development and drilling

of the Humble Knight 3 simply confirms that the contours do go out there, as a matter of fact pulls them a little farther to the east?

A Considerably farther. Also, Mr. Nutter, the Knight Number 2 also benefits some, not as much as the 3, but they are some 175 feet higher at the Humble Knight 3, so both of these wells, as far as the 80-acre tracts, extend the contours very definitely in an eastward direction.

MR. KASTLER: The Knight Number 2 you are referring to is Humble's Knight Number 2?

A Southwest-southwest, 14.

MR. KASTLER: Yes, thank you.

MR. NUTTER: Are there any further questions of Mr. Hutchison?

BY MR. DURRETT:

Q Is that Number 2 the nearest production to the north of your Lillie Number 3?

A No, sir, we have a Lillie Number 1 that is located in the northwest-northwest 23, that is producing in the Ellenburger formation.

Q That's designated by a minus 6,523?

A That is correct.

BY MR. NUTTER:

Q That's an old well and was drilled on pattern?

A I do not know exactly when that well was drilled. I could check.

Q But at least it was drilled prior to the Case 2556?

A Yes, sir, very definitely before that.

MR. NUTTER: Are there further questions? The witness may be excused.

(Witness excused.)

* * * * * * * * *

JOHN H. HOOVER, called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KASTLER:

Q Please state your name, employer, and position.

A John Hoover, employed by Gulf Oil Corporation, District Production Engineer, Roswell, New Mexico.

Q And you've appeared many times before the New Mexico Oil Conservation Commission and testified as an expert witness?

A Yes, sir.

Q Will you please review briefly the past history concerning Gulf's request that a full 80-acre proration unit be granted in the south half northwest of Section 23?

A Yes, sir. In April of 1962, we made application for a hearing to consider our request for an unorthodox location and a dual completion for our Lillie Well Number 3 in the Fowler

Fusselman and Fowler Ellenburger Pools. We proposed to dedicate the south half od the northwest quarter of Section 23 to this well for Ellenburger production. The Lillie Well Number 3 was already drilled at this time, having been drilled back in April of 1954. It was producing from the Fowler Fusselman Pool. We propose to deepen this well to the Ellenburger.

Q As a dual?

A As a dual. The well is off pattern for the Fowler Ellenburger Pool Rules, and it is located 330 feet from the west line and 2310 feet from the north line of this Section 23. The reason for wanting to use this well was strictly t matter of economics, since we estimated we could save approximately $91,000.00 over the cost of a new well and still be able to produce the oil from the 80 productive acres.

Gulf's application was denied by Order R2274 in Case 2556 dated July 10, 1962. In September of 1962 we again applied for unorthodox location and a dual completion for this Lillie Well Number 3, and we proposed to contribute 40 acres for Ellenburger production. The 40 acres would have been the southwest quarter northwest quarter of Section 23, and that the allowable would be only one-half of an 80-acre allowable.

Q That's only one-half instead of a full 40-acre allowable?

A Yes. The one-half of an 80 is less than what a well

would get on a 40-acre pattern; a pool with 40-acre rules.

Q Was this application in Case 2676 the original case; this subsequent application asking for the one-half of an 80-acre allowable?

A Yes, that was the original case asking for the one-half of an 80.

Q Yes.

A It was approved by Order R2374 in Case 2676, dated November 21, 1962. The Lillie Well Number 3, the deepening of this well was started on December 19, 1962, and it was completed in January, January 31, 1963. It was placed on production in March, 1963.

Q Actually, Mr. Hoover, your application for the 80 acres to be contributed to the Lillie Well Number 3 was only made in Case 2556?

A That's correct.

Q And in Case 2676, which is now reopened, you applied for the 40 acres, but now you wish that application amended, insofar as necessary, so that you will be awarded a full 80-acre allowable?

A Yes, we are asking for a full 80-acre allowable.

Q The reason for Gulf wanting to use an existing well was a matter of economics you testified, is that correct?

A Yes, it was.

Q Will you briefly review the past testimony in regard to economics?

A In the first case, or Case 2556, I testified that the estimated cost to deepen the Lillie Well Number 3 to the Ellenburger was $90,000.00, which represented $75,000.00 for the deepening, logging, running liner and completing, and so forth, plus $15,000.00 for a pump if one was needed.

The cost of a new well was estimated to be $181,000.00, which represented $166,000.00 for the drilling and completing, plus $15,000.00 for a pump, if and when needed. This gave a saving of $91,000.00.

Q Well, have the fundamental economics changed?

A They have changed in this respect, that we have now spent the money to deepen the Lillie Well Number 3, and if we are required to drill a new well to recover the oil under the remaining 40 productive acres, we will have to spend $166,000.00 estimated, plus $15,000.00 if we have to install a pump, for a total cost of $181,000.00. This will require a considerable unnecessary expenditure, since we have a well that can produce the allowable for this 80 productive acres.

Q And this well that can produce the allowable, is, in your opinion, capable of draining the same 40 acres?

A Yes, sir.

Q And therefore an additional well would be simply

supplementary expense for the purpose of obtaining the full allowable?

A Yes, sir. We would get no more oil by drilling the new well.

Q In your opinion, or in Gulf's opinion, is Gulf presently receiving its fair share of the oil in place under its Lillie Lease, insofar as this 80 acres is concerned?

A No, we're not.

Q Has this Commission in approving spacing rules at any previous time, or in non-associated cases, ever provided exceptions to well locations so that in the interest of cost savings an operator could utilize a well that was previously drilled to another horizon?

A Yes, they have, in a number of pools; however the Fowler Ellenburger Pool rules have no such provision.

Q Well, would you cite an example where there is such a provision made?

A Yes, sir. The Fowler-Blinebry Oil Pool has recently been approved for 80-acre spacing. This exception was proposed by Pan American in order to take advantage of existing wells which are off location. The rules allow a well to be within 150 feet of the center of either 40 acres in the 80-acre proration unit, and the rules specifically provide that you can utilize a well that has previously been drilled to another horizon.

This provision is not new, although it is more prevalent now than it was in 1953 or '52, about the time that the Fowler Ellenburger Pool rules were adopted.

Q What is your opinion about the practice of providing for the utilization of an existing well by an administrative approval?

A This practice is sound, it allows economical development and the maximum use of wells while at the same time it does not impair correlative rights. An operator should not be denied the use of an existing well because the rules do not expressly provide for it, but he should be able to seek approval upon proper notification and hearing.

Q In other words, what you are saying is that if the pool rules make this exception, which appears to be a modern trend, why administrative approval is sufficient; but if the pool rules have not foreseen this necessity that the exception could still be made, and should still be made after proper notice and hearing?

A Yes, sir.

Q Have exception for wells been granted to the strict well requirements for the Fowler Ellenburger?

A Yes, there has been exceptions, and I will mention two of them; Pan American's South Mattix Unit Well Number 17, and the Number 15. The Well Number 15 was drilled off pattern in the

center of the northeast quarter, northeast quarter of Section 22. This well was assigned 60 acres as an allowable, for allowable purposes.

Q Or three-fourths of an 80?

A Yes. And this acreage splits the South Mattix Unit Well Number 3, which in 1955 ceased to produce any oil. The Well Number 17, South Mattix Unit Number 17 was drilled off pattern in the center of the southwest quarter northeast quarter of Section 15; the South Mattix Unit Well Number 9 was producing oil for this 80 acres and had for a number of years; however it was approaching its economic limit. Pan American requested and received approval to produce the 80-acre allowable from both wells, and to shut in Number 9 when the economics justified. Therefore, Well Number 17 is assigned 80 acres, 40 acres of which in my opinion has been drained, or will soon be drained, yet they still receive and produce an 80-acre allowable.

Q Do you conclude that from these two exceptions that the New Mexico Commission has attempted to award fairness and equity in regard to correlative rights?

A Yes, sir.

Q And therefore, they should extend the opportunity to afford equity to Gulf in this case?

A Yes, sir.

Q In your opinion, is there an economic saving by

deliberately drilling a new well off pattern?

A No, sir.

Q Did Gulf deliberately drill its Lillie Number 3 off pattern?

A No, we did not. The Lillie Well Number 3 was originally drilled and spaced in accordance with the Fowler Fusselman Pool and it was located satisfactorily for that pool.

Q In your opinion, is the Lillie Well Number 3 capable of producing the 80-acre allowable, if given the opportunity to do so?

A Yes, it is. In April, or the April, 1965 80-acre allowable in the Fowler Ellenburger Pool is 182 barrels of oil per day. We tested this well, the Lillie Number 3, on April 4, 1965, and produced 269.25 barrels of oil, 5.52 barrels of water through a flowing tubing pressure of 90 pounds; gas-oil ratio nine fifty. This is approximately one and a half times the 80-acre allowable.

Q Undoubtedly it is a good well, but if you had a 182 barrel on the 80-acre allowable, then the actual allowable given to this well for April, '65, this month, is only 61 barrels, is that correct? It's one-half of the 80?

A No, sir, it would be 91 barrels.

Q About 91?

A Yes.

Q In your opinion, is all of the southwest northwest of Section 23 productive of oil in the Fowler Ellenburger Pool?

A Yes, sir, it is my opinion it is, and I believe that the Humble J. E. Knight Well Number 3 which is located in northwest quarter of the southeast quarter of Section 23 proves it. I further believe that if the Commission ever had any reasonable doubt as to the productivity of our 80 acres, being the south half of the northwest quarter of Section 23, that this doubt should be eliminated.

Q In your opinion, is Gulf's request for an 80-acre allowable for Lillie Number 3 in the interest of conservation and protection of correlative rights?

A Yes, it is.

Q Do you have anything further to add in this case?

A No, sir.

MR. KASTLER: This concludes my examination, and I have no exhibits to offer at this time.

MR. NUTTER: Does anyone have any questions of Mr. Hoover?

CROSS EXAMINATION

BY MR. NUTTER:

Q What is the potential on the Humble Knight 3?

A Well, it came in for 68 -- Here it is. It pumps 68 barrels of oil per day, based on a 24-hour test; gravity, 46; on 31-64 choke

gas-oil ratio, 309, that was through perforations, Ellenburger perforation 10,236 feet to 10,242 feet.

Q Did it make water on the IP?

A None was reported on the IP.

Q Do you have an estimate as to where the water-oil contact is in this part of the pool, the southeast end of the pool?

A I don't, no, sir.

MR. KASTLER: By analyzing the logs, or have you analyzed the logs of the Humble well?

A I have not.

MR. KASTLER: Has Mr. Hutchison, to your knowledge?

A Yes, sir, I believe he has.

Q (By Mr. Nutter) What is the perforated interval of your Number 3 Lillie?

A It's -- The perforations are 9650 to 9660, and the open hole interval, 9710 to 9765.

MR. KASTLER: Those are beneath the surface, they are not converted to subsea datum.

A No, they are not.

Q (By Mr. Nutter) You stated in April that you tested the well and made 205 barrels of oil and five barrels of water?

A 269. 269 and a quarter barrels of oil, 5.52 barrels of water.

MR. NUTTER: Are there further questions of Mr. Hoover? He may be excused.

(Witness excused.)

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

MR. KASTLER: No, I haven't.

MR. NUTTER: Does anyone have anything they wish to offer in Case 2676 (Reopened)?

MR. DURRETT: I would like to make a statement at this time, as Mr. Kastler may also wish to comment on what I would suggest to the Examiner.

I believe the testimony in this case has shown that there was not a request in Case 2676 for a full 80-acre proration unit to be assigned to the subject well. In view of that I would suggest to the Examiner that there may very well be a question concerning whether or not the ad was proper in this case. There may be a defect in the ad, and I would suggest, particularly since this matter has been contested in the past, that the Examiner might consider continuing the case, not making a recommendation until it has been properly readvertised; and at that time, if there are no objections, to incorporate the record of the hearing today and then issue whatever order the Examiner would deem appropriate.

MR. NUTTER: In orther words, Mr. Durrett, this case was advertised to reconsider applicant's request that a full

80-acre proration unit be approved, and that the original case wasn't for a full 80-acre--

MR. DURRETT: Well, it's my understanding, Mr. Examiner, maybe Mr. Hoover can clear us up, that Case 2676 which is reopened and before the Examiner at this time, in that case there was no request for a full 80-acre proration unit; that that was another case with a different number. If so, I would suggest that the advertisement or legal notice may be defective, and it should be readvertised to reopen the proper case where the request was made, and then at that time if there are no objections, to incorporate the record to make whatever recommendation you would deem proper.

MR. KASTLER: Our position is that the advertisement speaks plainly of awarding, or seeking a full 80-acre proration unit, and exactly the acreage which is involved in it. That it is implicit in the order that we are seeking is the 80-acre proration, that this, at the most, is only a highly refined technicality, because in the original going over of 2676 we again incorporated the record and continued the case substantially showing our original request and our denial, and therefore, our renewed request to recomplete this Well Number 3 and take whatever else we could get; but at the conclusion of that case the Oil Commission then expressly kept its jurisdiction open, or maintained jurisdiction over the matter to enter such further

orders as would be meet and just.

MR. DURRETT: Mr. Kastler, in the Case Number 2676, was the record of the case where the original request for a full 80-acre proration unit was made, was that record incorporated into the record in Case 2676, to your knowledge?

MR. KASTLER: It's my understanding, but I have the copy of the record here and I can look into it further.

MR. DURRETT: My thinking is, if it was, that would probably cure any defect that there might be.

MR. NUTTER: I believe that it was. Yes, on Page 12 of the transcript, the statement by Mr. Utz: "The testimony and Exhibits in Case 2556 will be made a part of the record in this case".

MR. DURRETT: If that was the case where the original request was made, then I would feel that would cure the defect in the advertisement.

MR. KASTLER: I think it would. Well, the advertisement is sufficient; and the primary antagonist is Pan American, and they have been advised by this advertisement, and seen fit not to appear, unless they have submitted a letter or wire.

MR. DURRETT: Did you contact them in fact about this, Mr. Kastler?

MR. KASTLER: No, I did not. Did you, Mr. Hoover?

MR. HOOVER: No, I did not.

MR. DURRETT: I would suggest that in view of the fact that it was incorporated, I don't feel there would be any defect.

MR. NUTTER: We'll take Case 2676 (Reopened) under advisement, and take a fifteen minute recess.

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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 Examiner 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 10th day of May, 1965.

Ada Dearnley
Notary Public - Court Reporter

My Commission Expires:

June 19, 1967.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2676 reopened heard by me on 4/28, 1965.

....., Examiner
New Mexico Oil Conservation Commission