

CASE 5572: GULF OIL CORPORATION
FOR DOWNHOLE COMMINGLING, LEA
COUNTY, NEW MEXICO

CASE NO.

5572

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,

ETC.

CASE NO.

5572

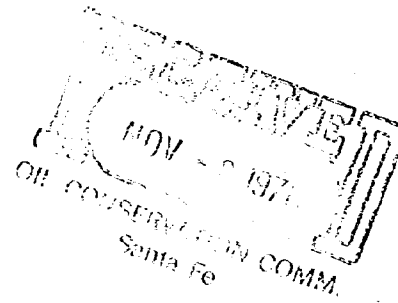
APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,
ETC.

OIL CONSERVATION COMMISSION

HOBBS, NEW MEXICO 88240

Case 5572

November 2, 1976



C
O
P
Y

Gulf Oil Corporation
P. O. Box 670
Hobbs, New Mexico

Attention: Mr. C. D. Borland

Gentlemen:

This is to advise that the reallocation formula for downhole commingled production from your H. T. Mattern (NCT-F) Well No. 4, as authorized by Commission Order No. R-5114, is satisfactory with this office.

Yours very truly,

OIL CONSERVATION COMMISSION

Jerry Sexton
Supervisor, District 1

mc
cc-OCC, Santa Fe
Attach.

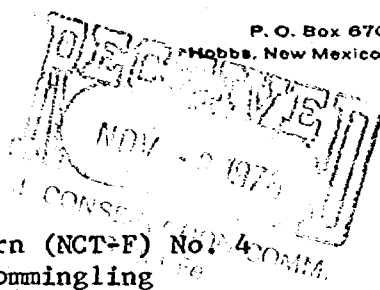
Gulf Energy and Minerals Company - U. S.

PRODUCTION DEPARTMENT
HOBBS AREA

C. D. Borland
AREA PRODUCTION MANAGER

October 28, 1976

P. O. Box 670
Hobbs, New Mexico 88240



OK ✓ J

Re: H. T. Mattern (NCT-F) No. 4
Down Hole Commingling
Order R-5114

Mr. Jerry Sexton, District Supervisor
Oil Conservation Commission
P. O. Box 1980
Hobbs, NM 88240

Dear Sir:

Water production in the subject well has decreased after a successful squeeze job in the Blinebry zone. Subsequent oil and gas production increased due to increased pumping efficiency.

It is our recommendation, based on the attached C-116 test of the down-hole commingled Blinebry and Drinkard zones, and a stabilized production test on the attached C-116 from the old Drinkard zone, the following reallocation be made on the commingled production:

| | | | |
|--------------|-----|--------------|-----|
| Blinebry Oil | 58% | Blinebry Gas | 55% |
| Drinkard Oil | 42% | Drinkard Gas | 45% |

If you are in agreement with this allocation formula, please advise.

Yours very truly,

C. D. BORLAND

Attachments
RDWo/dch



A DIVISION OF GULF OIL CORPORATION



DIRECTOR
JOE D. RAMEY

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 1980 - HOBBS

88240

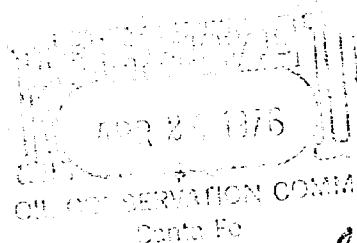
LAND COMMISSIONER

PHIL R. LUCERO

April 23, 1976



STATE GEOLOGIST
EMERY C. ARNOLD



Gulf Oil Corp.
Box 670
Hobbs, New Mexico

Attention: Mr. C. D. Borland

Gentlemen:

This is to advise that this office finds the allocation formula as outlined in your letter of April 22, 1976, for your Harry Leonard (NCT-C) Well No. 17 to be acceptable.

Yours very truly,

OIL CONSERVATION COMMISSION

Jerry Sexton

Jerry Sexton
Supervisor, District 1

cc-D. S. Nutter, Chief Engineer
OCC, Santa Fe
Attach.

File Case No. 5572

Gulf Energy and Minerals Company - U. S.

PRODUCTION DEPARTMENT
HOBBS AREA

C. D. Borland
AREA PRODUCTION MANAGER

April 22, 1976

P. O. Box 670
Hobbs, New Mexico 88240

Harry Leonard (NCT-C) #17
Downhole Commingling Order #R-5114

Mr. Jerry Sexton
District Supervisor
N. M. Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico 88240

Dear Sir:

In accordance with the provisions of downhole commingling order #R-5114, we are submitting tests from the Drinkard Pool, the Blinebry Pool and commingled Blinebry - Drinkard Pools on the attached C-116.

It is our recommendation, based on these tests, that the following allocation be made on the commingled production:

| | | | |
|--------------|-----|--------------|-----|
| Blinebry Oil | 69% | Blinebry Gas | 46% |
| Drinkard Oil | 31% | Drinkard Gas | 54% |

If you are in agreement with this allocation formula, please advise.

Yours very truly,

C. D. Borland
C. D. BORLAND

RDWo:ec
Att'd.



A DIVISION OF GULF OIL CORPORATION



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

DIRECTOR
JOE D. RAMEY

LAND COMMISSIONER
PHIL R. LUCERO
November 18, 1975



STATE GEOLOGIST
EMERY C. ARNOLD

James E. Sperling
Modrall, Sperling, Roehl,
Harris & Sisk
Attorneys at Law
Post Office Box 2168
Albuquerque, New Mexico 87103

Re: CASE NO. 5572
ORDER NO. R-5114

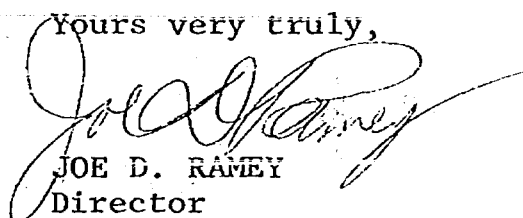
Applicant:

Gulf Oil Corporation

Dear Sir:

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

Yours very truly,


JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCC x
Artesia OCC _____
Aztec OCC _____

Other Robert Thomas

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. 5572
Order No. R-5114

APPLICATION OF GULF OIL CORPORATION
FOR DOWNHOLE COMMINGLING, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 22, 1975, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 17th day of November, 1975, 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 the applicant, Gulf Oil Corporation, is the owner and operator of the H. T. Mattern Wells Nos. 4 and 3 and the Harry Leonard Well No. 17, located, respectively, in Unit B of Section 1, Township 22 South, Range 36 East, Unit E of Section 6, Township 22 South, Range 37 East, and Unit C of Section 36, Township 21 South, Range 36 East, NMPM, all in Lea County, New Mexico.

(3) That each of said wells is presently completed in and producing from the Drinkard formation only.

(4) That the applicant proposes to perforate each of said wells to also produce from the Blinbry formation, and to commingle said Blinbry production with the Drinkard production in the wellbore of each of said wells.

(5) That from the Drinkard formation, each of said wells is capable of marginal production only.

(6) That it is expected that the Blinbry formation will be capable of marginal production only upon completion of said wells in said formation.

-2-

Case No. 5572
Order No. R-5114

(7) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(8) That the reservoir characteristics of each of the subject zones in the aforesaid wells is expected to be such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(9) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Hobbs district office of the Commission any time any of the subject wells are shut-in for 7 consecutive days.

(10) That in order to allocate the commingled production to each of the commingled zones in each of the subject wells, the operator, upon completion of the wells, should consult with the supervisor of the Hobbs district office of the Commission to determine an allocation formula.

(11) That an administrative procedure should be established whereby additional wells may be completed in the manner described above on applicant's H. T. Mattern and Harry Leonard Leases.

(12) That the authority for downhole commingling of production in the wellbores of the subject wells or in wells approved by administrative procedure should be subject to rescission by the Secretary-Director of the Commission and the requirement for down-hole separation equipment in the event that high marginal or top allowable production is obtained or if reservoir pressures or other reservoir conditions are encountered which render down-hole commingling inadvisable.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to commingle Blinbry and Drinkard production within the wellbore of its H. T. Mattern Wells Nos. 4 and 8 and its Harry Leonard Well No. 17 located, respectively, in Unit B of Section 1, Township 22 South, Range 36 East; Unit E of Section 6, Township 22 South, Range 37 East; and Unit C of Section 36, Township 21 South, Range 36 East, all in Lea County, New Mexico.

(2) That upon completion of each of said wells to produce from both the Blinbry and Drinkard formations, the applicant shall consult with the supervisor of the Hobbs district office of the Commission to determine the proper formula for allocation of oil and gas production to each zone open in the wells.

(3) That the operator of the subject wells shall immediately notify the Commission's Hobbs district office any time any of said wells have been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.

-3-

Case No. 5572

Order No. R-5114

(4) That the Secretary-Director of the Commission may authorize the completion of other wells on applicant's H. T. Mattern and Harry Leonard Leases in Section 36, Township 21 South, Range 36 East, NMPM, Section 1, Township 22 South, Range 36 East, NMPM, and Sections 6 and 7, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, in the manner described in Order No. (1) above and subject to the provisions of this order when the application for such commingling is filed in accordance with the applicable provisions of Rule 303 C 2 of the Commission Rules and Regulations.

(5) That the Secretary-Director of the Commission shall have authority to rescind downhole commingling authority for any well approved for such commingling by this order or pursuant to the provisions of Order No. (4) above in the event that high marginal or top allowable production is obtained or if reservoir pressures or other reservoir conditions are encountered which in his opinion render downhole commingling inadvisable.

(6) 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.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



Phil R. Lucero

PHIL R. LUCERO, Chairman

Emery C. Arnold
EMERY C. ARNOLD, Member

Joe D. Ramey
JOE D. RAMEY, Member & Secretary

S E A L

jr/

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICOHearing Date OCTOBER 22, 1975 TIME: 9:00 A.M.

| NAME | REPRESENTING | LOCATION |
|------------------------|-------------------------|---------------|
| R.W. Sullivan | Film Exploration Corp. | Denver, Colo. |
| Paul H. Hinkle | Alt-Richfield | Rockwell |
| James H. Borgarding | Film Exploration Corp. | Casper Wyo. |
| Robert H. Thomas | Gulf Oil Corp. | Midland, Tx. |
| Charles J. Kallies | " " " | " " |
| E.R. Manning | El Paso Natural Gas | El Paso, Tx. |
| John J. Eickelmann Jr. | " " | Santa Fe |
| Paul W. Burchell | El Paso " " | El Paso |
| NEIL BECK | EL PASO NATURAL GAS CO. | EL PASO, TEX. |
| AR Kendrick | OCG | Aytec |
| GORDON E. Sommers | ARCO | Midland, Tex. |
| HUGH CHRISTIANSON | ATLANTIC RICHFIELD CO | " " |
| Frank Conham | Questar Int'l | ABQ |

sid morrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

Page 1

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
October 22, 1975

EXAMINER HEARING

IN THE MATTER OF:

Application of Gulf Oil Corporation
for downhole commingling, Lea County,
New Mexico.

CASE
5572

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil Conservation Commission: Thomas Derryberry, Esq.
Legal Counsel for the Commission
State Land Office Building
Santa Fe, New Mexico

For The Applicant: Robert Thomas, Esq.
Gulf Oil Corporation
Midland, Texas

sid morrish reporting service
General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

I N D E X

| | <u>Page</u> |
|----------------------------------|-------------|
| <u>CHARLES F. KALTEYER</u> | |
| Direct Examination by Mr. Thomas | 3 |
| Cross Examination by Mr. Nutter | 10 |

EXHIBIT INDEX

| | <u>Page</u> |
|--|-------------|
| Gulf's Exhibit Number One, Plat | 10 |
| Gulf's Exhibit Number Two, Schematic Diagram | 10 |
| Gulf's Exhibit Number Three, Schematic Diagram | 10 |
| Gulf's Exhibit Number Four, Schematic Diagram | 10 |
| Gulf's Exhibit Number Five, Tabulation | 10 |
| Gulf's Exhibit Number Six, Tabulation | 10 |
| Gulf's Exhibit Number Seven, Tabulation | 10 |

1 MR. NUTTER: We will call the next Case, Number
2 5572.

3 MR. DERRYBERRY: Case 5572, application of Gulf
4 Oil Corporation for downhole commingling, Lea County, New
5 Mexico.

6 MR. THOMAS: Mr. Examiner, Robert Thomas appearing
7 for Gulf Oil from Midland, Texas and I have one witness to be
8 sworn.

9 (THEREUPON, the witness was duly sworn.)

10 CHARLES F. KALTEYER

11 called as a witness, having been first duly sworn, was
12 examined and testified as follows:

13
14 DIRECT EXAMINATION

15 BY MR. THOMAS:

16 Q Please state your name, with whom you are employed
17 and in what position?

18 A Charles F. Kalteyer, K-a-l-t-e-y-e-r, district
19 proration engineer for Gulf Oil Corporation in Midland,
20 Texas.

21 Q Have you previously testified before the Commission
22 in this capacity?

23 A Yes, sir.

24 MR. THOMAS: Mr. Examiner, is the witness qualified?

25 MR. NUTTER: Yes, he is.

1 Q (Mr. Thomas continuing.) What is Gulf seeking
2 in this application?

3 A Gulf is seeking authority to downhole commingle
4 the Blinebry and Drinkard production in the wellbore of its
5 H. T. Mattern NCT-D Well Number 8, H. T. Mattern NCT-F Well
6 Number 4 and the Harry Leonard NCT-C Well Number 17, located
7 respectively in Unit E of Section 6, Township 22 South, Range
8 37 East; Unit B of Section 1, 22 South, Range 36 East; and
9 Unit C of Section 36, Township 21 South, Range 36 East, all in
10 Lea County, New Mexico, and to establish procedure for
11 administrative approval of future applications for similar
12 downhole commingling authority on these three leases.

13 Q Do you have a plat showing the H. T. Mattern and
14 Harry Leonard tracts involved?

15 A Yes, sir, our Exhibit Number One is a plat of the
16 area. You will notice that the Mattern D lease is outlined
17 in green; the Mattern F lease is outlined in red; and the
18 Leonard C lease is outlined in blue. The wells that are
19 completed in the Drinkard pool are circled in red and the
20 wells in the Blinebry pool are circled in green. Other wells
21 on these leases are either completed in the Arrowhead or
22 Eumont pools.

23 Q Do you have any exhibits depicting the downhole
24 particulars of these wells?

25 A Yes, sir, Exhibits Two, Three and Four are

sid morrison reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

Page 5

1 schematic diagrams of the downhole particulars of the wells,
2 together with the proposed completion intervals of the
3 Brinebry Field.

4 Q Please give us a history of the wells which are
5 in question for downhole commingling?

6 A Number 8 which is enclosed in a green square on
7 the H. T. Mattern lease was drilled to a total depth of
8 sixty-eight feet. It was completed in the Drinkard through
9 selected perforations in five and a half inch casing between
10 sixty-five feet and sixty-six feet. On
11 July 15th, 1974 on initial potential it flowed one hundred and
12 thirty-five barrels of oil per day and fifty-two barrels of
13 water per day. It was necessary to equip the well to pump
14 two weeks later, and on the latest test, October 2nd, 1975
15 the well pumped at a daily rate of forty barrels of oil,
16 fifteen water, a hundred and ninety-five MCF of gas with a
17 gas-oil ratio of forty-eight to one and thirty-
18 nine point six API gravity.

19 H. T. Mattern Well Number 4, which is also enclosed
20 in a green square on Exhibit Number One, was drilled to a
21 total depth of sixty-eight feet and completed in
22 the Drinkard through selective perforations and five and a
23 half inch casing between sixty-five feet and sixty-eight
24 feet on July 3rd, 1975. On initial potential on
25 July 24, it pumped fifty-one barrels of oil, eighteen barrels

1 of water per day. On the latest test, October 2nd, it pumped
2 at a daily rate of thirty-five barrels of oil, seven barrel
3 of water and two hundred and two MCF gas with the ratio of
4 five thousand, seven hundred and seventy-one to one and
5 thirty-seven point eight API gravity.

6 The Harry Leonard C Number 17, also enclosed in a
7 green square, was drilled to a total depth of sixty-eight,
8 fifty-six and completed in the Drinkard through selective
9 perforations in five and a half inch casings between sixty-five
10 sixty-two and sixty-seven sixteen. On initial potential it
11 pumped fifty-five barrels of oil per day and seventy-eight
12 barrels of water per day. On latest test October 1st, 1975
13 it pumped at a daily rate of sixteen barrels of oil, five
14 water and ninety-one MCF of gas, and gas-oil ratio of
15 fifty-eight sixty-seven to one and a gravity of thirty-seven
16 point one.

17 Exhibits Five, Six and Seven are tabulations
18 of monthly and cumulative production, together with the
19 latest well test data.

20 Q. Mr. Kalteyer, has the precedent been set in this
21 immediate area to downhole commingle the Blinebry and
22 Drinkard pools?

23 A. Yes, under orders R-4492 on March 16th, 1973 and
24 Order R-4824 on July 16th, '74 and R-4914 on November 12th,
25 1974 the Commission authorized Continental Oil Company to

sid morish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-92

1 downhole commingle their Lockhart B-1 Wells 7, 8 and 9 in
2 Section 1 of Township 22 South, Range 36 East. By referring
3 to Exhibit One you will see that these wells offset Gulf's
4 H. T. Mattern NCT-D and NCT-F leases.

5 MR. NUTTER: What were those order numbers again,
6 please?

7 A. 4492, 4824 and 4914.

8 MR. NUTTER: Thank you.

9 Q. (Mr. Thomas continuing.) Is it physically possible
10 to dual complete the three Gulf wells that are the subject
11 of this Hearing?

12 A. Yes, sir, but it is rather impractical because of
13 the following reasons: The wells are all completed in five
14 and a half inch casings which will barely allow two strings of
15 two and a sixteenth internal joint tubing to be run. Fishing
16 a parted tubing is most difficult. We anticipate that both
17 zones would have to be pumped. We have found that attempts to
18 pump the gassy Drinkard zone from under packer are very
19 difficult and inefficient. In order to rod pump from this
20 depth, we would have to use API grade D three-quarter inch
21 rods with slim hole couplings in the two and a sixteenth
22 tubing. Rod string failures in the couplings would be
23 impossible to fish and would necessitate a tubing stripping
24 job.

25 The use of the API grade D rods is not very

1 successful without treating for corrosion and it is not
2 possible to completely treat the Drinkard side for corrosion.

3 Dual completion of each of the wells would require
4 replacement of present downhole equipment with two strings of
5 tubing and rods, as well as adding another pumping unit for
6 additional outlay of some seventy-two thousand dollars, less
7 salvage of present equipment to approximately fifty-six
8 thousand dollars per well.

9 Q Do you have any bottom-hole pressure datum on these
10 wells?

11 A Yes, sir, we have calculated Drinkard bottom-hole
12 pressures at a sub-sea depth of three thousand and fifty based
13 on fluid level soundings after a twenty-four hour shut in
14 period earlier this month. The Mattern D-8 measured eight
15 hundred and thirty-three psi, the Mattern F-4, one thousand
16 sixteen psi and the Harry Leonard C-17 was one thousand sixty-
17 nine. These were all taken October 14th.

18 MR. NUTTER: They were all calculated to the
19 same datum?

20 A Yes, sir, to a minus three oh five oh. We have no
21 current Blinebry bottom-hole pressure data within several
22 miles of our well in the New Mexico Oil and Gas Engineering
23 Committee Publication.

24 Q (Mr. Thomas continuing.) Are you currently surface
25 commingling the Blinebry and Drinkard production on the leases

sid morrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

1 under consideration today?

2 A. Only on the Harry Leonard C lease.

3 Q. How do you propose to allocate production between
4 the Blinebry and the Drinkard pools?

5 A. After completions have been made in the Blinebry
6 zone we propose that the production test information be
7 submitted to the Hobbs District supervisor and a split be
8 established based on projected recovery from both zones.

9 Q. What do you propose in the event that secondary
10 recovery operations are undertaken in this area?

11 A. We will recommend separation of zones as being
12 necessary for efficient secondary recovery operations.

13 Q. What are your views in regard to possible cross
14 flow between these zones?

15 A. We believe that we will be able to keep the wells
16 pumped down sufficiently to prevent possible cross flows between
17 zones.

18 Q. What do you anticipate regarding the production
19 capability of these wells under commingled conditions?

20 A. In view of the current marginal production rates
21 that are in each zone and the rapid fall off of capabilities
22 of the Blinebry completions, we believe that the wells will
23 not be capable of producing the top allowable of the
24 Blinebry pool of one hundred and seven barrels of oil and
25 four hundred and twenty-eight MCF of gas per day. We would

1 further recommend that the wells' allowable be set at their
2 ability to produce up to that top allowable.

3 Q The top allowable on the Blinebry?

4 A Right.

5 Q Would you again state what Gulf is seeking in this
6 application?

7 A In order to protect correlative rights, prevent
8 waste and obtain maximum oil recovery in an efficient and
9 feasible manner we request authority to downhole commingle
10 the Blinebry-Drinkard productive zones in our H. T. Mattern
11 NCT-D Well Number 8, H. T. Mattern NCT-F Well Number 4 and
12 Harry Leonard NCT-C Well Number 17 and to establish a procedure
13 for administrative approval of future applications for similar
14 downhole commingling authority on these three leases.

15 Q Were these exhibits prepared by you or by someone
16 under your supervision?

17 A Yes, sir, they were.

18 MR. THOMAS: Mr. Examiner, we move that these
19 exhibits be entered into the record.

20 MR. NUTTER: Exhibits One through Seven?

21 MR. THOMAS: Exhibits One through Seven.

22 MR. NUTTER: Gulf's Exhibits One through Seven
23 will be admitted into evidence.

24 MR. THOMAS: That's all we have.
25

CROSS EXAMINATION

2 BY MR. NUTTER:

3 Q Mr. Kalteyer, you mentioned these three orders that
4 pertain to a similar application in this area, would the
5 wells that these orders cover be shown on your Exhibit Number
6 One?

7 A Yes, sir.

8 Q Would you point out the location of them?

9 A Those wells are located in Section 1, Township 22
10 South, Range 36 East and they are the three wells that have
11 red and green in their circles.

12 Q So they are direct offsets to one of the wells you
13 are proposing today?

14 A Yes, sir, right.

15 Q Two of them?

16 A Two of them, right. Their Number 8 is a direct
17 offset to our Mattern D-8 and their Number 7 is a direct
18 offset to our Number 4 Mattern F.

19 Q Do you have any idea what the results of the completions
20 in the original -- were they originally Drinkard wells also?

21 A One moment, please. I might have to look in their
22 testimony. I know that on their Number 7 when they
23 commingled their combined production was approximately
24 forty-three barrels a day and it is currently approximately
25 thirteen barrels a day combined production. And their

sid morrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

1 Number 8, the Blinebry, was completed first and their
2 combined production was thirty-nine barrels a day, approximately.
3 That was like in August of '74, and their production rate
4 has held approximately at that rate, as of the July report and
5 their Number 9 was originally in the Blinebry and then
6 completed in the Drinkard, with a combined production rate
7 of approximately nineteen barrels of oil per day and that was
8 in February of this year, and it is holding approximately
9 the same rate now in July.

10 Q So while you don't have any Blinebry bottom-hole
11 pressure data available, it wouldn't appear that excessive
12 pressures would be encountered in the Blinebry in this
13 area?

14 A That is correct, yes, sir.

15 Q Now how do you intend to pump these wells, Mr.
16 Kalteyer? Your schematics here show a tubing anchor and
17 a seating nipple at a specific depth for each well. Would
18 that remain at that point?

19 A Yes, sir, that would be approximately the same
20 depth.

21 Q So the only thing, you would have some perforations
22 up above there?

23 A Right.

24 Q And it would be seated low so you could keep the
25 well pumped up?

sid morrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

1 A. Yes, sir.

2 MR. NUTTER: Are there further questions of Mr.
3 Kalteyer? You may be excused.

4 MR. MANNING: Mr. Examiner?

5 MR. NUTTER: Yes, sir.

6 MR. MANNING: I would like to ask a clarifying question
7 of Mr. Kalteyer, if I may, I am E. R. Manning with El Paso
8 Natural Gas.

9 Mr. Kalteyer, are you proposing that administrative
10 procedures be set up for three leases here in southeast Lea?

11 MR. KALTEYER: Yes, sir.

12 MR. MANNING: Just those three leases and not a
13 blanket administrative procedure for all of southeast Lea?

14 MR. KALTEYER: That is correct.

15 MR. MANNING: Okay, thank you, sir.

16 MR. NUTTER: The witness may be excused.

17 (THEREUPON, the witness was excused.)

18 MR. NUTTER: Do you have anything further in this
19 Case, Mr. Thomas?

20 MR. THOMAS: No.

21 MR. NUTTER: Does anyone have anything they wish
22 to offer in Case 5572? We will take the Case under advise-
23 ment.

24


25

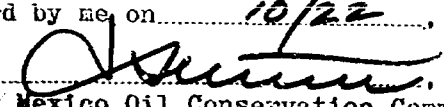
sid morrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a court reporter, do hereby
 certify that the foregoing and attached Transcript of Hearing
 before the New Mexico Oil Conservation Commission was reported
 by me, and the same is a true and correct record of the said
 proceedings to the best of my knowledge, skill and ability.


 Sidney F. Morrish, Court Reporter

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Examiner hearing of Case No. 5572,
 heard by me on 10/22, 1975.

 Examiner
 New Mexico Oil Conservation Commission

sid morrish reporting service
 General Court Reporting Service
 825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
 Phone (505) 982-9212

Case 5572

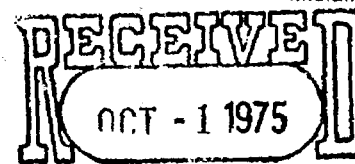
Gulf Energy and Minerals Company - U. S.

PRODUCTION DEPARTMENT
MIDLAND DISTRICT

B. L. Choate
DISTRICT PRODUCTION MANAGER
R. F. Ward, Jr.
DISTRICT OPERATIONS MANAGER
C. E. Fields
DISTRICT SERVICES MANAGER
A. J. Evans, Jr.
DISTRICT ENVIRONMENTAL & SAFETY MANAGER
J. C. Howard
DISTRICT EMPLOYEE RELATIONS MANAGER

P. O. Drawer 1150
Midland, Texas 79701

29 September 1975



OIL CONSERVATION COMM.
Santa Fe

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

Attention: Mr. Joe D. Ramey

Re: Application of Gulf Oil Corporation for
Exception to Rule 303 to Allow Down-hole
Commingling, Lea County, New Mexico

Gentlemen:

Gulf Oil Corporation respectfully requests that a hearing be scheduled on your Examiner's hearing docket of October 22nd to consider Gulf's application for down-hole commingling of the below listed wells in the Drinkard and Blinebry Pools.

H. T. Mattern (NCT-D) Well No. 8 2
Unit E, Section 6, T-22S, R-37E

H. T. Mattern (NCT-F) Well No. 4 1
Unit B, Section 1, T-22S, R-36E

Harry Leonard (NCT-C) Well No. 17 3
Unit C, Section 36, T-21S, R-36E

Gulf will request that the combined allowable of the two zones in each well be assigned at the wells' commingled ability to produce up to one top oil and gas allowable as established for the Blinebry Oil and Gas Pool, i.e. 107 barrels of oil and 428 MCF per day of gas. Gulf will further seek authority to establish a procedure for administrative approval of future applications for similar down-hole commingling authority on these three leases.

Yours very truly,

R. F. WARD, JR.

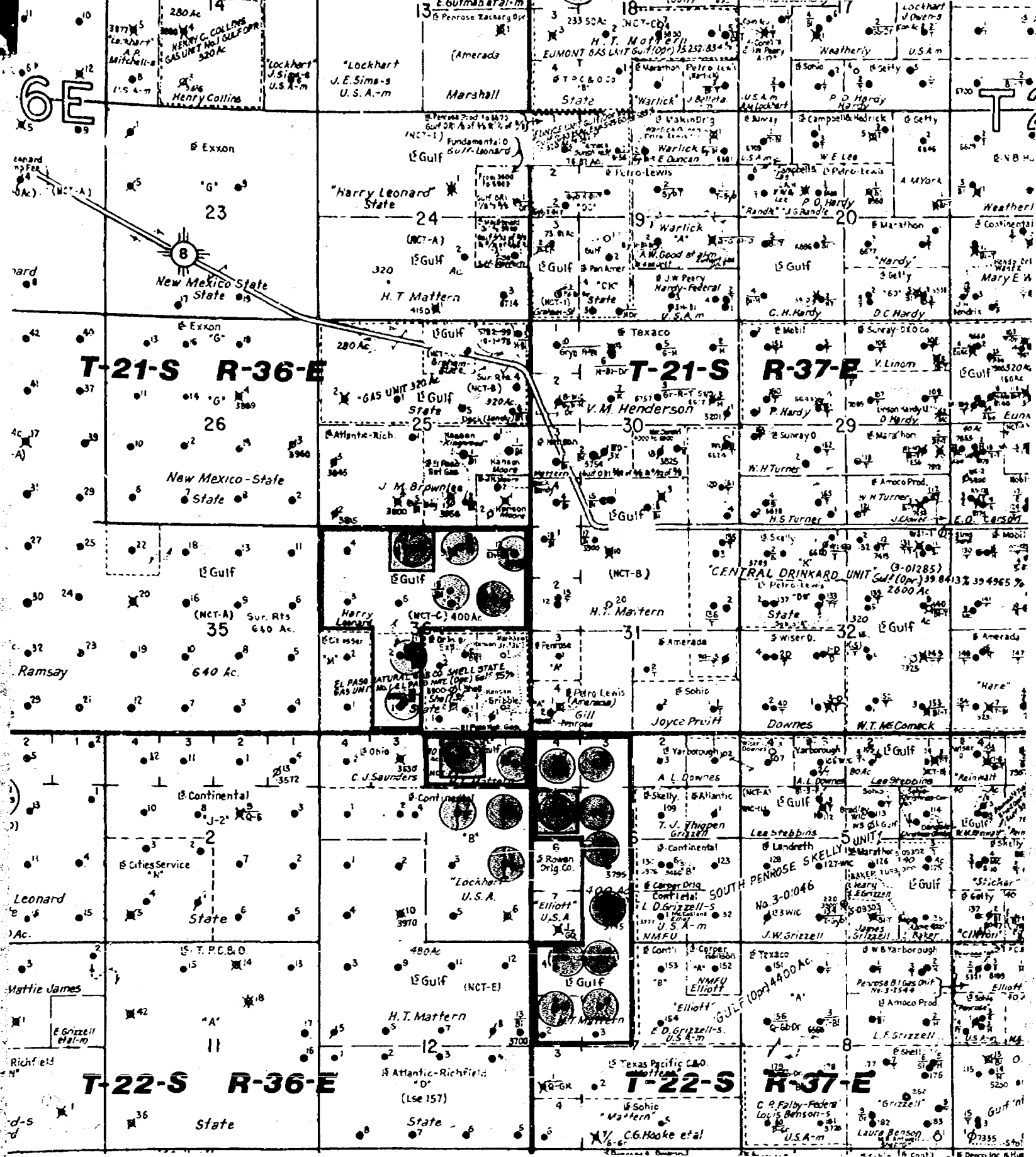
CFK:jm

cc: New Mexico Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico 88240

James E. Sperling
P. O. Box 2166
Albuquerque, New Mexico 87100



A DIVISION OF GULF OIL CORPORATION



GULF OIL CORPORATION
LEA COUNTY, NEW MEXICO
1" = 3000'

Legend




-  Drinkard Pool
-  Blinbry Pool
-  Proposed Blinbry Pool

EXHIBIT NO. 1
CASE NO. 5572
OCTOBER 22, 1975

SCHEMATIC DIAGRAM
 GULF OIL CORPORATION
 H. T. MATTERN (NCT-D) WELL NO. 8
 UNIT E, 1980' FNL & 660' FWL SEC 6, T-22-S, R-37-E
 LEA COUNTY, NEW MEXICO

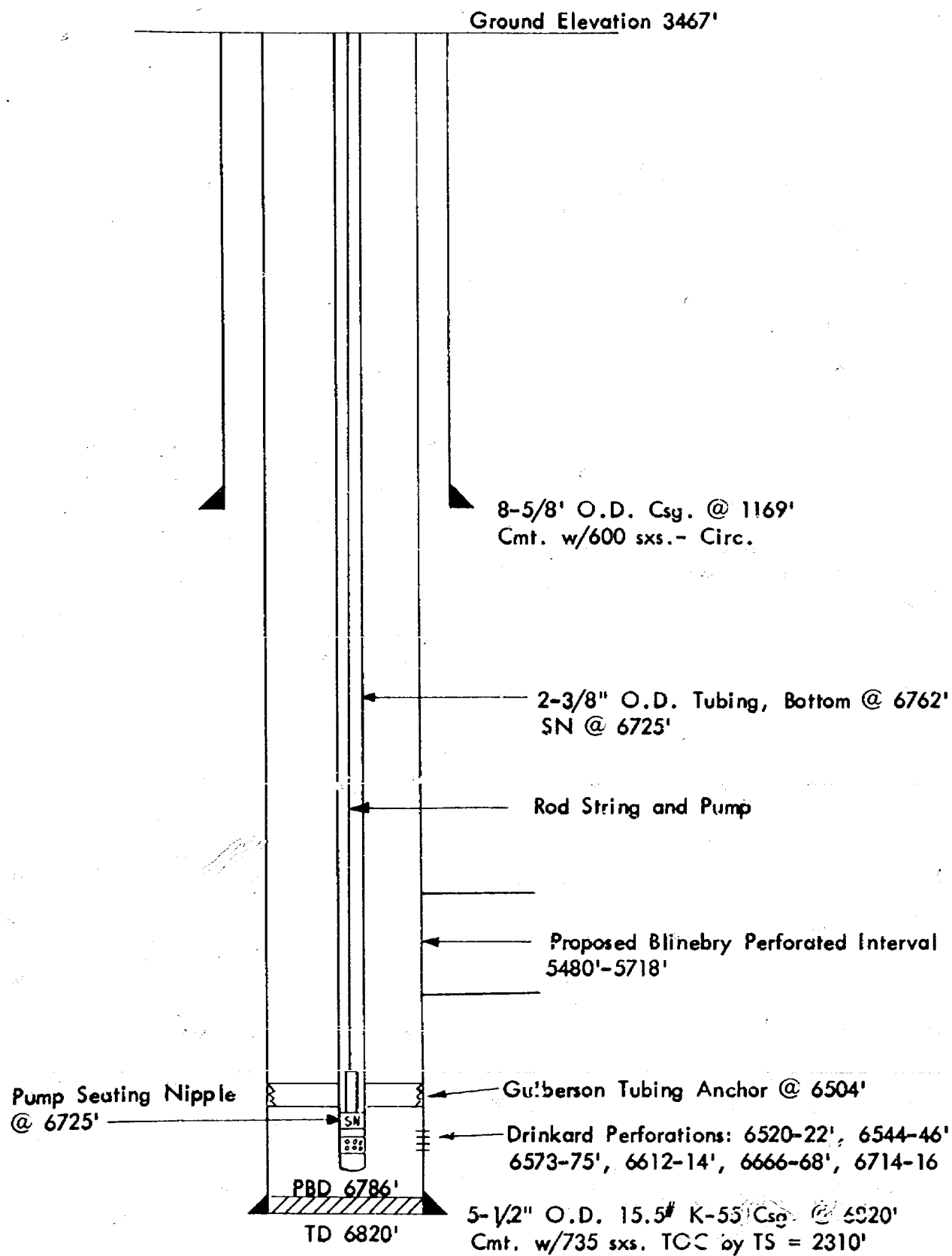


EXHIBIT NO. 2
 CASE NO. 5572
 OCTOBER 22, 1975

SCHEMATIC DIAGRAM
GULF OIL CORPORATION
H. T. MATTERN (NCT-F) WELL NO. 4
UNIT B, 660' FNL & 1650' FEL, SEC. 1, T-22-S, R-36-E
LEA COUNTY, NEW MEXICO

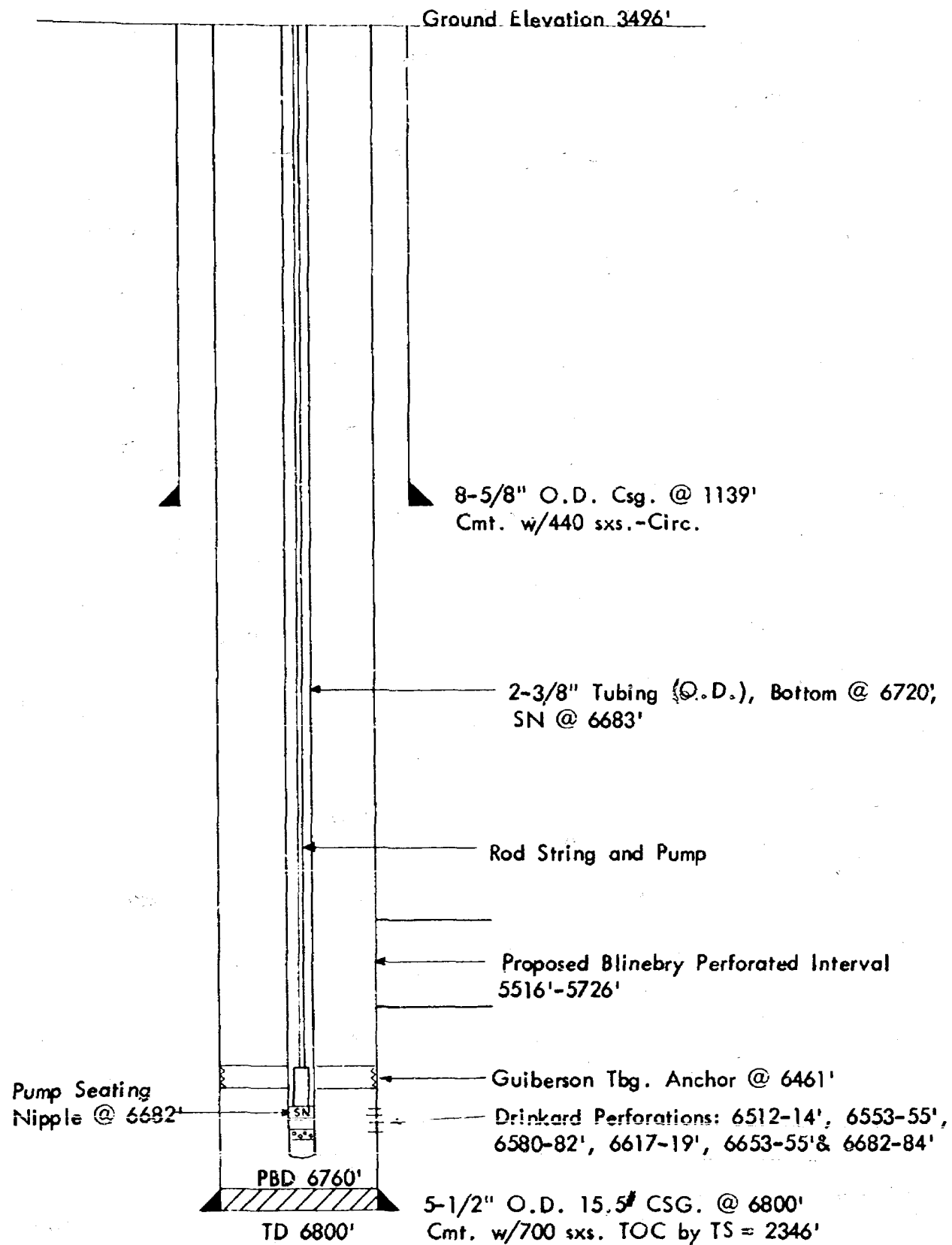


EXHIBIT NO. 3
CASE NO. 5572
OCTOBER 22, 1975

SCHEMATIC DIAGRAM
 GULF OIL CORPORATION
 HARRY LEONARD (NCT-C) WELL NO. 17
 UNIT C, 560' FNL & 2310' FWL SEC. 36, T-21-S, R-36-E
 LEA COUNTY, NEW MEXICO

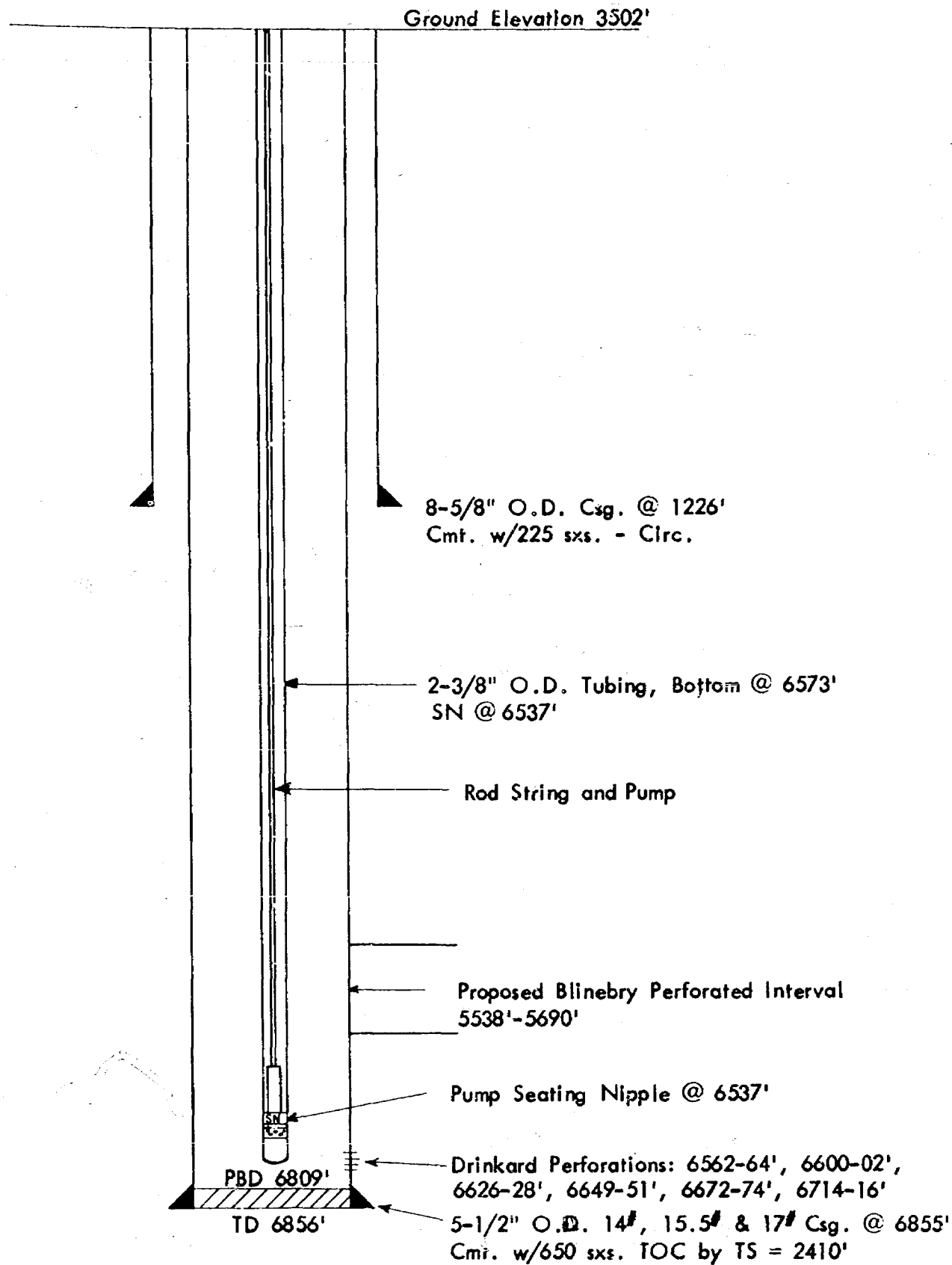


EXHIBIT NO. 4
 CASE NO. 5572
 OCTOBER 22, 1975

TABULATION OF PRODUCTION
 GULF OIL CORPORATION
 H. T. MATTERN (NCT-D) NO. 8
 DRINKARD POOL
 LEA COUNTY, NEW MEXICO

| <u>Year and Month</u> | <u>Oil (Bbls)</u> | <u>Gas (MCF)</u> | <u>Water (Bbls)</u> |
|---------------------------|-----------------------|----------------------|-------------------------|
| <u>1974</u> | | | |
| July | 1,350 | 1,790 | 600 |
| August | 1,830 | 2,427 | 760 |
| September | 1,619 | 2,032 | 800 |
| October | 1,755 | 2,592 | 900 |
| November | 592 | 12,912 | 300 |
| December | 1,556 | 1,976 | 1,500 |
| <u>1975</u> | | | |
| January | 1,427 | 1,898 | 630 |
| February | 971 | 1,279 | 700 |
| March | 1,071 | 1,513 | 700 |
| April | 900 | 1,405 | 900 |
| May | 862 | 4,514 | 720 |
| June | 1,368 | 9,254 | 930 |
| July | 1,368 | 8,538 | 930 |
| August | 686 | 1,364 | 270 |

Cumulative Oil Production to 9-1-75: 17,355 bbls.

Latest Test: 10-2-75 40 BOPD, 15 BWPD, 195 MCFGPD
 4875/1 GOR, 39.6° API Pump

EXHIBIT 5
 CASE NO. 5572
 OCTOBER 22, 1975

TABULATION OF PRODUCTION
GULF OIL CORPORATION
H. T. MATTERN (NCT-F) WELL NO. 4
DRINKARD POOL
LEA COUNTY, NEW MEXICO

| <u>Year and Month</u> | <u>Oil (Bbls.)</u> | <u>Gas (MCF)</u> | <u>Water (Bbls.)</u> |
|---------------------------|------------------------|----------------------|--------------------------|
| July | 834 | 18,510 | 300 |
| August | 1,177 | 19,100 | 324 |

Cumulative Oil Production to 9-1-75: 2,011 Bbls.

Latest Test: 10-2-75 35 BOPD, 7 BWPD, 202 MCFGPD
5771/1 GOR, 37.8° API Pump

EXHIBIT 6
CASE NO. 5572
OCTOBER 22, 1975

TABULATION OF PRODUCTION
 GULF OIL CORPORATION
 HARRY LEONARD (NCT-C) NO. 17
 DRINKARD POOL
LEA COUNTY, NEW MEXICO

| <u>Year and Month</u> | <u>Oil (Bbls.)</u> | <u>Gas (MCF)</u> | <u>Water (Bbls.)</u> |
|---------------------------|------------------------|----------------------|--------------------------|
| May | 706 | 1,268 | 400 |
| June | 744 | 1,31 | 450 |
| July | 688 | 1,018 | 440 |
| August | 520 | 525 | 140 |

Cumulative Oil Production to 9-1-75: 2,658 Bbls.

Latest Test: 10-1-75 16 BOPD, 5 BWPD, 91 MCFGPD
 5687/1 GOR, 37.1° API Pump

EXHIBIT 7
 CASE NO. 5572
 OCTOBER 22, 1975

Docket No. 26-75

Dockets Nos. 28-75 and 29-75 are tentatively set for hearing on November 5 and November 19, 1975. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 22, 1975

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 Richard L. Stamets, Alternate Examiner:

- CASE 5572: Application of Gulf Oil Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Blinebry and Drinkard production in the wellbore of its H. T. Mattern Wells Nos. 4 and 8, and its Harry Leonard Well No. 17, located, respectively, in Unit B of Section 1, Township 22 South, Range 36 East, Unit E of Section 6, Township 22 South, Range 37 East, and Unit C of Section 36, Township 21 South, Range 36 East, all in Lea County, New Mexico.
- CASE 5573: Application of El Paso Natural Gas Company for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Blanco-Mesa-verde and Basin-Dakota production in the wellbore of its Mudge Well No. 11, located in Unit M of Section 10, Township 31 North, Range 11 West, San Juan County, New Mexico.
- CASE 5574: Application of Filon Exploration Corporation for pool creation, assignment of a discovery allowable, and special pool rules, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of oil from the Entrada formation for its Federal 12 Well No. 1 located in Unit M of Section 12, Township 19 North, Range 4 West, Sandoval County, New Mexico, and the assignment of a discovery allowable to said well; applicant further seeks the promulgation of special pool rules for said pool, including a provision for a special depth bracket allowable.
- CASE 5575: Application of Morris R. Antweil for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the E/2 of Section 20, Township 22 South, Range 27 East, South Carlsbad Field, Eddy County, New Mexico, to be dedicated to a well to be drilled 2030 feet from the North line and 1980 feet from the East line of said Section 20. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

Examiner Hearing - Wednesday - October 22, 1975

Docket No. 26-75

-2-

CASE 5576: Application of George D. Riggs for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Saladar-Yates Pool by the injection of water through his Hughes-Federal No. 4, Malco Well No. 2, and Mayfield-Federal No. 4 Wells located, respectively, in Units F, L, and O of Section 33, Township 20 South, Range 28 East, Eddy County, New Mexico.

CASE 5577: Application of Atlantic Richfield Company for amendment of Order No. R-4549, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4549, as amended, which order approved the institution of the Empire-Abo Pressure Maintenance Project in the Empire-Abo Unit Area, Eddy County, New Mexico, and established rules for the operation of said project. Applicant seeks the amendment of said rules to permit the injection of non-Abo gas and to establish a separate non-Abo gas bank for said project.

5572

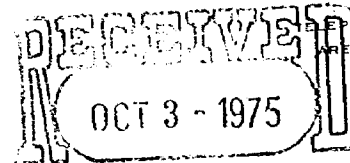
J. R. MODRALL
JAMES E. SPERLING
JOSEPH E. ROEHL
GEORGE T. HARRIS, JR.
DANIEL A. SISK
LELAND S. SEDBERRY, JR.
ALLEN C. DEWEY, JR.
FRANK H. ALLEN, JR.
JAMES A. PARKER
JOHN R. COONEY
KENNETH L. HARRIGAN
PETER J. ADANG
DALE W. EK
DENNIS J. FALK
ARTHUR D. MELENDRES
BRUCE D. BLACK
JOE R. G. FULCHER
JAMES P. HOUGHTON
GEORGE J. HOPKINS
PAUL M. FISH
JUDY A. FRY

LAW OFFICES OF
MODRALL, SPERLING, ROEHL, HARRIS & SISK

PUBLIC SERVICE BUILDING
P. O. BOX 2168
ALBUQUERQUE, NEW MEXICO 87103

October 2, 1975

JOHN F. SIMMS (1885-1954)
AUGUSTUS T. SEYMOUR
(1907-1965)



OIL CONSERVATION COMM.
Santa Fe

Mr. Joe D. Ramey
Secretary-Director
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Application of Gulf Oil Corporation for
Exception to Rule 303 to Allow Down-
hole Commingling, Lea County, New Mexico

Dear Mr. Ramey:

Enclosed is Entry of Appearance on behalf of the Applicant,
Gulf Oil Corporation, in the above-captioned application,
which has been requested for docketing at the Examiner's
hearing on October 22, 1975.

Very truly yours,

James E. Sperling
James E. Sperling

/jv

Enclosure

cc: Mr. Charles C. Hairston, w/encl.
Divisional Attorney - Law Department
Gulf Energy and Minerals Company-U.S.
P. O. Drawer 1150
Midland, Texas 79701

Mr. R. F. Ward, Jr., w/encl.
Production Department
Gulf Energy and Minerals Company-U.S.
P. O. Drawer 1150
Midland, Texas 79701

DOCKET MAILED
Date 10/14/75

BEFORE THE OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF GULF OIL CORPORATION FOR
EXCEPTION TO RULE 303 TO ALLOW
DOWN-HOLE COMMINGLING, LEA
COUNTY, NEW MEXICO

Case No. _____

ENTRY OF APPEARANCE

The undersigned, Modrall, Sperling, Roehl, Harris &
Sisk, of Albuquerque, New Mexico, hereby enter their appear-
ance for the Applicant, Gulf Oil Corporation, with its
house counsel of Midland, Texas.

MODRALL SPERLING ROEHL HARRIS & SISK

By: _____

James E. Sperling
James E. Sperling, Attorneys for
Gulf Oil Corporation
P. O. Box 2168
Albuquerque, New Mexico 87103
Telephone: (505) 243-4511

Chas L. Katterer

Case 5572

Gulf Oil Corp.
downhole commencing
Lea Co., N Mex.

10/22

Dr - Bl

H T Mattern NCT-D Well # 8
E 6-22-37

" " NCT-F Well No 4

" " B 1-22-36

Harry Leonard NCT-C Well # 17
C - 36-21-36

1 top oil & gas all in Bl

10780428 MCF

day

adm proc for similar DHC
on said leases.

DRAFT

dr/

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. 5572

Order No. R- 5114

APPLICATION OF GULF OIL CORPORATION
FOR DOWNHOLE COMMINGLING, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 22,
19 75, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this day of October, 1975, 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 the applicant, Gulf Oil Corporation, is the owner
and operator of the H. T. Mattern Wells Nos. 4 and 8 and the
Harry Leonard Well No. 17, located, respectively, in Unit B of
Section 1, Township 22 South, Range 36 East, Unit E of Section 6,
Township 22 South, Range 37 East, and Unit C of Section 36,
Township 21 South, Range 36 East, NMPM, all in Lea County, New
Mexico.

(3) That each of said wells is presently completed in and
producing from the Drinkard formation only.

(4) That the applicant proposes to perforate each of said
wells to also produce from the Blinebry formation, and to commingle
said Blinebry production with the Drinkard production in the well-
bore of each of said wells.

(5) That from the Drinkard formation, each of said wells is capable of marginal production only.

(6) That it is expected that the Blinebry formation will be capable of marginal production only upon completion of said wells in said formation.

(7) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(8) That the reservoir characteristics of each of the subject zones in the aforesaid wells is expected to be such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(9) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Hobbs district office of the Commission any time any of the subject wells is shut-in for 7 consecutive days.

(10) That in order to allocate the commingled production to each of the commingled zones in each of the subject wells, the operator, upon completion of the well, should consult with the Supervisor of the Hobbs District office of the Commission to determine an allocation formula.

(11) That an administrative procedure should be established whereby additional wells may be completed in the manner described above on applicant's H. T. Mattern and Harry Leonard Leases.

(12) That the authority for downhole commingling of production in the wellbores of the subject wells or in wells approved by administrative procedure should be subject to rescission by the Secretary-Director of the Commission and the requirement for down-hole separation equipment in the event that high marginal or top allowable production is obtained or if reservoir pressures or other reservoir conditions are encountered which render down-hole commingling inadvisable.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to commingle Blinebry and Drinkard production within the wellbore of its H. T. Mattern Wells Nos. 4 and 8 and its Harry Leonard Well No. 17 located, respectively, in Unit B of Section 1, Township 22 South, Range 36 East, Unit E of Section 6, Township 22 South, Range 37 East, and Unit C of Section 36, Township 21 South, Range 36 East, all in Lea County, New Mexico.

(2) That upon completion of each of said wells to produce from both the Blinebry and Drinkard formations, the applicant shall consult with the Supervisor of the Hobbs District Office of the Commission to determine the proper formula for allocation of oil and gas production to each zone open in the well.

(3) That the operator of the subject well shall immediately notify the Commission's Hobbs district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.

(4) That the Secretary-Director of the Commission may authorize the completion of other wells on applicant's H. T. Mattern and Harry Leonard Leases in Section 36, Township 21 South, Range 36 East, NMPM, Section 1, Township 22 South, Range 36 East, NMPM, and Sections 6 and 7, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, in the manner described in Order No. (1) above and subject to the provisions of this order when the application for such commingling is filed in accordance with the applicable provisions of Rule 303 C 2 of the Commission Rules and Regulations.

(5) That the Secretary-Director of the Commission shall have authority to rescind downhole commingling authority for any well approved for such commingling by this order or pursuant to the provisions of Order No. (4) above in the event that high marginal or top allowable production is obtained or if reservoir pressures or other reservoir conditions are encountered which in his opinion render downhole commingling inadvisable.

(6) 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.