

CASE 5809: GULF OIL CORP. FOR DOWNHOLE
CORRELING, LEA COUNTY, NEW MEXICO

CASE NO.

5809

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,

ETC.

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

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 10, 1976

EXAMINER HEARING

IN THE MATTER OF:

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

CASE
5809

BEFORE: Richard L. Stamets, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil
Conservation Commission:

Lynn Teschendorf, Esq.
Legal Counsel for the Commission
State Land Office Building
Santa Fe, New Mexico

For the Applicant:

Jeffrey G. Shrader, Esq.
Legal Counsel for Gulf Oil Corp.
Midland, Texas

James. E. Sperling, Esq.
MODRALL, SPERLING, ROEHL,
HARRIS & SISK
Attorneys at Law
Public Service Building
Albuquerque, New Mexico

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CHARLES F. KALTEYER

Direct Examination by Mr. Shrader

Cross Examination by Mr. Stamets

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EXHIBIT INDEX

Offered

Admitted

Gulf's Exhibit One, Plat

Gulf's Exhibit Two, Schematic Diagram

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1 MR. STAMETS: We will call next Case 5809.

2 MS. TESCHENDORF: Case 5809, application of Gulf
3 Oil Corporation for downhole commingling, Lea County,
4 New Mexico.

5 MR. SHRADER: Mr. Examiner, my name is Jeff Shrader,
6 I represent Gulf Oil in Midland, Texas. Mr. Sperling in
7 Albuquerque has again entered an appearance by letter in this
8 case and I would ask that the record so indicate.

9 MR. STAMETS: Will your witness be the same in this
10 case?

11 MR. SHRADER: Yes, sir. I have one witness.

12 MR. STAMETS: He has already been sworn and is
13 still sworn in this case.

14
15 CHARLES F. KALTEYER

16 called as a witness, having been previously sworn, was
17 examined and testified as follows:

18
19 DIRECT EXAMINATION

20 BY MR. SHRADER:

21 Q What is Gulf seeking in this application?

22 A Gulf is seeking approval of an exception to State-
23 wide Rule 303-A to permit downhole commingling of Blinebry,
24 Tubb and Drinkard oil production in the wellbore of our
25 Manda "B" Tract C Well No. 1 located four hundred and thirty

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1 feet from the north line and nineteen hundred and eighty feet
2 from the west line in Unit C of Section 28, Township 22 South,
3 Range 37 East, Lea County, New Mexico.

4 Q Do you have a plat of the area surrounding Gulf's
5 Manda "B" lease and if so, what does it show?

6 A Yes, sir, our Exhibit One is a six-section plat of
7 the area. You will note that Gulf's Manda "B" forty acre
8 lease is outlined in red. Gulf Well No. 1 and the subject of
9 this hearing is circled in yellow. All of the Blinebry
10 completions are circled in green. The Tubb completions are
11 circled in blue and the Drinkard completions circled in red.

12 You will also note that there are no Blinebry or
13 Tubb completions within a mile of our well. There is one
14 Drinkard completion in the immediate vicinity and that is
15 Millard Deck's offsetting No. 3 Annie L. Christmas.

16 Q What kind of a well is it?

17 A In August of this year the record shows that it
18 produced approximately three barrels of oil per day on pump.

19 MR. STAMETS: What zone is that from?

20 A This is also from the Drinkard. This is the
21 Millard Deck's No. 3 Annie Christmas.

22 MR. STAMETS: The three barrels a day is from the
23 Deck's Well?

24 A Right.

25 MR. STAMETS: Okay.

1 Q (Mr. Shrader continuing.) Do you have an exhibit
2 depicting the particulars of this proposed downhole commingling?

3 A Yes, sir, Exhibit Two is a schematic diagram of
4 the wellbore of our Manda "B" Tract C Well No. 1 and a special
5 note is the information on the cementing of the five-and-a-half
6 inch casing. By the use of a DV tool and external casing
7 packer we were able to cement the long string in its entirety
8 from the casing shoe to the surface. The well does operate
9 in the area of the Langlie-Mattix Penrose Sand Unit operated
10 by Anadarko.

11 Q What is the history of the Manda "B" Tract C Well
12 No. 1?

13 A It was drilled to a total depth of sixty-seven
14 hundred feet and completed May 21st of this year through
15 selective perforations from sixty-four, oh, two to sixty-five,
16 sixty-one. On the initial potential on June 8th the well
17 pumped a hundred and four barrels of oil and ninety-six
18 barrels of water with a gas-oil ratio of nine hundred and
19 sixty-two to one after frac treatment.

20 MR. STAMETS: What was the water volume?

21 A Ninety-six barrels.

22 On June 25th, 1976 the well had declined to twenty-
23 eight barrels of oil and fifty-one barrels of water with a
24 gas-oil ratio of two thousand, eight hundred and fifty-six to
25 one.

1 During the first fifteen days of August the well
2 averaged seven barrels of oil and seventeen barrels of water a
3 day with the gas-oil ratio of three thousand and ninety-seven
4 to one.

5 The Drinkard completion was then temporarily abandoned
6 on August 16th and a completion attempt made in the Tubb
7 Pool through selective perforations from six thousand and five
8 to six thousand, two hundred and sixty-five. On test August
9 30th the Tubb completion pumped at the daily rate of twenty
10 barrels of oil and fifty-four barrels of water. By September
11 13th, 1976 the Tubb completion on stable production pumped at
12 the daily rate of nine barrels of oil and sixteen barrels of
13 water with a gas-oil ratio of five hundred and fifty-six to
14 one.

15 On September 16th the Tubb zone was temporarily
16 abandoned and a completion attempt made in the Blinebry Pool
17 through selective perforations from fifty-four, sixty-two to
18 fifty-seven, eighty-two.

19 On September 25th of this year the Blinebry completion
20 potentialled at a daily pumping rate of fifty-nine barrels of
21 oil and one hundred and twenty-six barrels of water. By
22 October 13th the well was pumping at the daily rate of thirty
23 barrels of oil and fifty-one barrels of water with a gas-oil
24 ratio of seven thousand, two hundred and sixty-seven to one.

25 Q Have precedents been set in the immediate area to

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1 downhole commingle the Blinebry, Tubb and Drinkard Pools?

2 A No, sir, as you can see on Exhibit One there is no
3 Blinebry-Tubb production in the area and only one Drinkard
4 completion in the immediate area.

5 Q Do you have any bottom-hole pressures in this
6 area?

7 A No, sir, the marginal rates of production by
8 artificial lift are indicative of low bottom-hole pressures
9 in all three zones.

10 Q What are your views regarding possible cross flow
11 between the zones?

12 A We believe that we will be able to keep the well
13 pumped down sufficiently to prevent possible cross flow
14 between zones.

15 Q What do you propose in the event secondary recovery
16 operations are undertaken in the area of these pools?

17 A At this time we think the chance for successful
18 secondary recovery operations is rather remote, however,
19 we will be prepared to separate the zones as deemed necessary
20 for efficient recovery operations.

21 Q Do you believe that there will be any compatibility
22 problem in regard to commingling these three pools?

23 A No, sir, we are surface commingling production from
24 these pools in other areas with no apparent problems.

25 Q How do you propose to allocate production between

1 the three pools?

2 A We propose to submit production and test information
3 to the Hobbs District Supervisor of the Oil Conservation
4 Commission in order that a split may be established based on
5 projected recovery from each zone.

6 Q What do you anticipate regarding the production
7 capabilities of this well under commingled conditions?

8 A In view of the low marginal rates of production already
9 exhibited by each zone, that is the seven barrels of oil a
10 day in the Drinkard, nine barrels a day in the Tubb and thirty
11 barrels in the Blinebry, we believe that the wells' combined
12 rate of production will still be marginal and we would recommend
13 that the wells' allowable be set at its ability to produce up
14 to the top per well allowable of the Blinebry Pool, which is
15 one hundred and seven barrels of oil per day with a four
16 thousand to one gas-oil ratio limit, with four hundred and
17 twenty-eight MCF of gas per day limit.

18 Q Have all of the offset operators been notified in
19 writing of this proposed commingling?

20 A Yes, sir, our Hobbs office originally requested
21 administrative approval of this commingling. They were
22 notified, as well as the publication of the notice for this
23 hearing.

24 Q Will you again state what Gulf is seeking in this
25 application?

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1 A In order to protect correlative rights, prevent
2 waste and obtain maximum oil recovery by means of an overall
3 lower economic limit in the most feasible manner, we request
4 authority to downhole commingle the Blinbry, Tubb and Drinkard
5 productive zones in our Manda "B" Tract C Well No. 1 located
6 in Unit C, Section 28, Township 21 South, Range 37 East, Lea
7 County, New Mexico.

8 Q Is the Township 22 South?

9 A 22 South, yes, sir.

10 Q Were these exhibits prepared by you or under your
11 supervision?

12 A Yes, sir, they were.

13 MR. SHRADER: Mr. Examiner, I have no further
14 questions at this time and I would move that Exhibit Numbers
15 One and Two be admitted into evidence.

16 MR. STAMETS: These exhibits will be admitted.

17 (THEREUPON, Gulf's Exhibits One and Two
18 were admitted into evidence.)
19

20 CROSS EXAMINATION

21 BY MR. STAMETS:

22 Q Mr. Kalteyer, are the economics of this well such
23 that a dual completion could be run?

24 A No, sir, if you will note that we do have five-and-a-
25 half inch casing in the hole. It is possible to run two strings

1 but when you are artificially lifting both zones you run into
2 excessive expense in the case of rod failures in the boxes.

3 Q Now, the Blinebry is in an oil and gas pool with
4 special pool rules for gas wells. Do you anticipate gas
5 production in this well will be such that it would be classed
6 as a gas well or as an oil well?

7 A We anticipate that it will be classed as an oil
8 well. It has a rate of only two hundred and eighteen MCF
9 per day on last test in the Blinebry.

10 Q Is the Blinebry production still declining?

11 A I have no further record than the last test but I
12 would assume that it would continue to decline.

13 MR. STAMETS: Any other questions of this witness?
14 He may be excused.

15 (THEREUPON, the witness was excused.)

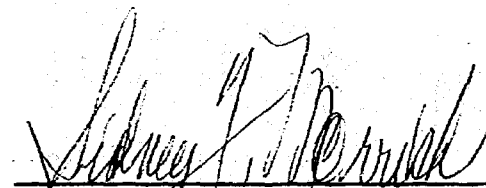
16 MR. STAMETS: Is there anything further in this
17 case? We will take the case under advisement.
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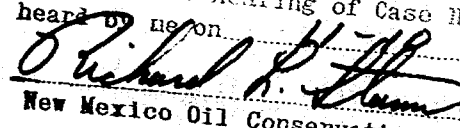
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REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand 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, C.S.R.

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 5809
heard by me on 11-19-76
, Examiner
New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

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

DIRECTOR
JOE D. RAMEY

LAND COMMISSIONER
PHIL R. LUCERO
December 6, 1976



STATE GEOLOGIST
EMERY C. ARNOLD

Mr. Jeff Shrader
Attorney
Gulf Oil Corporation
Box 1150
Midland, Texas 79701

Re: CASE NO. 5809
ORDER NO. R-5329

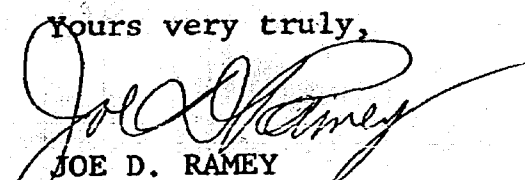
Applicant:

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 X
Aztec OCC

Other James Sperling

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. 5809
Order No. R-5329

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 November 10, 1976, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 30th day of November, 1976, 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 Manda "B" Well No. 1, located in Unit C of Section 28, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That the applicant seeks authority to commingle Blinebry, Tubb, and Drinkard production within the wellbore of the above-described well.

(4) That from each of the Blinebry, Tubb, and Drinkard zones, the subject well is capable of low rates of production only.

(5) 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.

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

-2-

Case No. 5809

Order No. R-5329

(7) 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 the subject well is shut-in for 7 consecutive days.

(8) That in order to allocate the commingled production to each of the commingled zones in the subject well, applicant should consult with the supervisor of the Hobbs district office of the Commission after completion of the well to determine an allocation formula for Blinebry, Tubb, and Drinkard production.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to commingle Blinebry, Tubb, and Drinkard production within the wellbore of the Manda "B" Well No. 1, located in Unit C of Section 28, Township 22 South, Range 37 East, NMFM, Lea County, New Mexico.

(2) That upon completion of the well, applicant shall consult with the supervisor of the Hobbs district office of the Commission and determine an allocation formula for each of the commingled zones.

(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 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

PHIL B. LUCERO, Chairman

EMERY C. ARNOLD, Member

JOE D. RAMEY, Member & Secretary

S E A L

dr/

"SCHEMATIC OF PROPOSED DOWNHOLE COMMINGLING"

MANDA "B", TRACT C, WELL No. 1

BLINEBRY OIL & GAS, TUBB OIL AND DRINKARD POOLS
LOCATION: 430' FNL & 1980' FWL, SEC. 28-22S-37E, LEA COUNTY, NEW MEXICO

8-5/8" OD 24# K-55 CSG.
CMTD w/500 SAX., CIRC.

• 1165'

2-3/8" OD 4-70 BUE 8 RT J-55
TBG, OPEN-ENDED, TO BE LANDED
@APPROX. 6600', SN ON BOTTOM.
ALL THREE ZONES TO BE PUMPED
TOGETHER.

DV TOOL @ 2556'

LYNES EXTERNAL CSG PKR @ 2602'

5462'

BLINEBRY OIL 3rd
AND GAS POOL

5782' 9-25 P 57 B0-126 BW
11-13 30 B0 51 BW
76760R

6005'

TUBB OIL POOL 2nd

6265' 8-30 P 70 B0-54 BW
9-13 P 9 B0-16 BW
60A556

6402'

DRINKARD POOL F34

6561'

@ 6699'
TD @ 6700'

6677'

BEFORE EXAMINER STAMEN'S
OIL CONSERVATION COMMISSION

GULF'S EXHIBIT NO. 2

CASE NO. 5809

Submitted by Kalfeyer

Hearing Date 11-10-76

5-1/2" OD 15.5# LT&C CSG.
CMTD 1st STAGE AROUND SHOE
WITH 850 SAX. CIRC. OUT 75
SAX THRU DV TOOL WITH 1450
SAX. CIRC. OUT 220 SAX.

EXHIBIT 2
CASE NO. 5809
DATE 11-10-76

6-25
28 B0 51 BW
2856 GOR

Aug 7 B0
17W

5-21-76 in Drink
6-8 2104 B0 96 BW
962/64R

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF GULF OIL CORPORATION FOR
DOWNHOLE COMMINGLING, LEA
COUNTY, NEW MEXICO

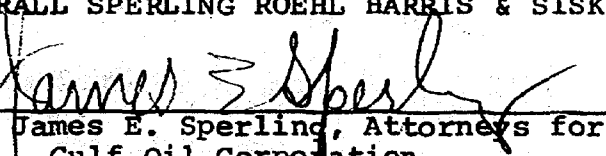
Case No. 5809

ENTRY OF APPEARANCE

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

MODRALL SPERLING ROEHL HARRIS & SISK

By:


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

Docket No. 31-76

Dockets Nos. 32-76 and 33-76 are tentatively set for hearing on November 23 and December 15, 1976. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 10, 1976

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

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Mutter, Alternate Examiner:

ALLOWABLE: (1) Consideration of the allowable production of gas for December, 1976, from seventeen prorated pools in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico.

(2) Consideration of the allowable production of gas for December, 1976, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

CASE 5796: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Exxon Development Company, National Surety Corporation, and all other interested parties to appear and show cause why the Central Dist. Unit Wells Nos. 41, 46, 47, 49 and 50 located in Units D, I, K, M, and O, respectively, of Section 16, Township 25 North, Range 12 West, Bisti-Lower Gallup Pool, San Juan County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5798: Application of Exxon Corporation for a unit agreement, Sierra and Dona Ana Counties, New Mexico. Applicant, in the above-styled cause, seeks approval for the Prisor Unit Area comprising 24,910 acres, more or less, of State, Federal, and fee lands in Townships 16 and 17 South, Ranges 1 East and 1 West, Sierra and Dona Ana Counties, New Mexico.

CASE 5799: Application of Gulf Oil Corporation for an unorthodox gas well location and a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 160-acre non-standard proration unit comprising the NE/4 SW/4 and W/2 SE/4 of Section 28 and the NW/4 NE/4 of Section 33, Township 21 South, Range 37 East, Tubb Gas Pool, Lea County, New Mexico, to be dedicated to applicant's J. N. Carson Well No. 9 located at an unorthodox location 1874 feet from the South line and 2086 feet from the West line of said Section 28.

CASE 5809: Application of Gulf Oil Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Drinkard, Tubb, and Blinberry production in the wellbore of its Manda "B" Well No. 1, located in Unit C of Section 28, Township 22 South, Range 37 East, Lea County, New Mexico.

CASE 5800: Application of Yates Petroleum Corporation for salt water disposal well, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Morrow formation through the perforated interval from 8983 feet to 9129 feet in its Bob Gushwa Well No. 1 located in Unit J of Section 21, Township 18 South, Range 26 East, Atoka-Pennsylvanian Gas Pool, Eddy County, New Mexico.

CASE 5801: Application of Atlantic Richfield Company for a non-standard proration unit and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 275-acre non-standard gas proration unit comprising the W/2 E/2, N/2 NW/4, and SE/4 NW/4 of Section 19, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to applicant's State 176 Wells Nos. 3 and 6 located, at unorthodox locations in Units J and C, respectively, of said Section 19.

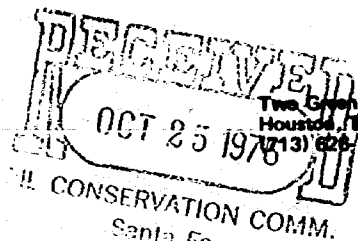
CASE 5802: Application of El Paso Natural Gas Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle South Blanco-Pictured Cliffs and Blanco Mesaverde production in the wellbore of its San Juan 28-7 Unit Well No. 75 located in Unit L of Section 15, Township 28 North, Range 7 West, Rio Arriba County, New Mexico.

CASE 5803: Application of El Paso Natural Gas Company for downhole commingling and simultaneous dedication, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Fruitland and Pictured Cliffs gas production in the wellbore of its Valdez "A" Well No. 1, located in Unit P of Section 24, Township 29 North, Range 11 West, San Juan County, New Mexico. Applicant further seeks approval for the simultaneous dedication of the SE/4 of said Section 24 to said well and its Valdez Well No. 1 located in Unit I of said Section 24.

CASE 5804: Application of Stevens Oil Company for a dual completion, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its O'Brien "C" Well No. 2 located in Unit D of Section 1, Township 9 South, Range 28 East, Chaves County, New Mexico, to produce oil from the San Andres and Devonian formations through parallel strings of tubing.

- CASE 5805: Application of Morris R. Antwell for compulsory pooling and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Morrow formations underlying the N/2 of Section 3, Township 22 South, Range 26 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at an unorthodox location in Unit G of said Section 3. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 5806: Application of Anadarko Production Company for two unorthodox well locations, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox locations of its Artesia State Unit Well No. 9-5 to be drilled 1270 feet from the North line and 50 feet from the East line of Section 23 and its Artesia State Unit Well No. 2-3 to be drilled 160 feet from the South line and 1270 feet from the West line of Section 13, both in Township 22 South, Range 27 East, Artesia Queen-Grayburg-San Andres Pool, Eddy County, New Mexico.
- CASE 5797: Application of C&K Petroleum, Inc. for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Dallas March Unit Area comprising 5746 acres, more or less, of State, Federal, and fee lands in Township 9 South, Range 26 East, Chaves County, New Mexico.
- CASE 5807: Application of C&K Petroleum, Inc., for compulsory pooling and a non-standard unit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the N/2 of Section 13, Township 22 South, Range 26 East, South Carlsbad Field, Eddy County, New Mexico, to form a non-standard 336.6-acre unit to be dedicated to a well located 1680 feet from the North line and 1980 feet from the East line of said Section 13. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 5808: Application of C&K Petroleum, Inc., for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface down to and including the Pennsylvanian formation underlying the SE/4 SE/4, NE/4 SE/4, NW/4 SE/4, and SW/4 SE/4 of Section 21, Township 16 South, Range 37 East, Lea County, New Mexico, to form four 40-acre oil proration units, the first to be dedicated to a well to be drilled at a point 660 feet from the South and East line of said Section 21 to test the Strawn formation and each of the others to a well subsequently drilled thereon. Also to be considered will be the cost of drilling and completing said wells and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the wells and a charge for risk involved in drilling said wells.
- CASE 5785: (Continued from October 27, 1976 Examiner Hearing)
Application of Doyle Hartman for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Seven Rivers-Queen formation underlying the NE/4 NE/4, NW/4 NE/4, SW/4 NE/4, and SE/4 NE/4 of Section 19, Township 24 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico, to form four 40-acre proration units to be dedicated to four oil wells to be drilled at standard locations on said tracts. Also to be considered will be the cost of drilling and completing said wells and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the wells and a charge for risk involved in drilling said wells.
- CASE 5790: Application of Dome Petroleum Corporation for pool creation and assignment of a discovery allowable, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Entrada production and the assignment of approximately 58,770 barrels of oil discovery allowable to the discovery well, being the Federal 21 Well No. 1 located in Unit K of Section 21, Township 20 North, Range 5 West, McKinley County, New Mexico.
- CASE 5776: (Continued from October 27, 1976, Examiner Hearing)
Application of Continental Oil Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its James Ranch Unit Well No. 8 to be drilled at a point 1980 feet from the North line and 660 feet from the West line of Section 31, Township 22 South, Range 31 East, Los Medanos-Morrow Gas Pool, Eddy County, New Mexico, the N/2 of said Section 31 to be dedicated to the well.

ANADARKO PRODUCTION COMPANY
A Panhandle Eastern Pipe Line Company Subsidiary



Two Greenway Plaza East, Suite 410
Houston, Texas 77046
(713) 628-7610

October 22, 1976

Case 5839

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

Dear Sir:

Anadarko Production Company has no objection to the down-hole commingling of production from the Drinkard, Tubb and Blinebry pools in Gulf's Manda "B", Tract C No. 1, Unit C, Sec. 28 T22S-R37E, Lea County, New Mexico.

Very truly yours,

A handwritten signature in dark ink, appearing to read "D. G. Kernaghan".

D. G. Kernaghan
Division Evaluation Engineer

DGK/mm

cc: C. D. Borland
Gulf Energy and Minerals Co.

Gulf Energy and Minerals Company - U.S.
PRODUCTION DEPARTMENT
HOBBS AREA

C. D. Borland
AREA PRODUCTION MANAGER

October 14, 1976

Case 5802
OCT 18 1976
NEW MEXICO
CONSERVATION COMM.
Santa Fe
P. O. Box 670
Hobbs, New Mexico 88240

Re: Manda "B", Tract C No. 1,
Unit C, Section 28-22s-37E,
Lea County, New Mexico

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

Dear Sir:

Your administrative approval is requested for an exception to Rule 303-A to permit down-hole commingling of marginal production in the subject well from the Drinkard, Tubb Oil and the Blinebry Oil and Gas pools. Production from the same three pools is presently being commingled in surface storage on Gulf's Mark Owen Lease under Order No. PC-139 and Amended Order No. PC-139. There is no evidence of fluid incompatibility, and we do not expect any waste or reservoir damage due to down-hole commingling in the well bore.

Ownership in the three pools is common, and correlative rights will not be violated. This well cannot be equipped with multiple tubing strings due to the small (5-1/2" OD) oil string casing. Downhole commingling will allow the recovery of additional hydrocarbons from this well due to improved operating efficiency and a lower economic limit. Should secondary recovery operations become practical in the future, the three zones could be separated at that time without damaging any of the reservoirs.

The well was completed in the Drinkard Pool in June, 1976 and produced from the Drinkard through August 15, 1976. The Drinkard zone was temporarily abandoned in August, 1976 and the Tubb Oil zone was opened and evaluated. The Tubb Oil zone was temporarily abandoned in September, 1976, at which time the Blinebry zone was opened and evaluated. The Blinebry zone is still producing. All three zones require artificial lift equipment to produce. If down-hole commingling is permitted, the existing pumping equipment will be utilized to lift the fluids from the three commingled zones.

Pertinent data regarding this application, as outlined in Rule 303-C, are attached for your consideration.

Yours very truly,

C. D. Borland
C. D. BORLAND



Attachments
CRK/dch

A DIVISION OF GULF OIL CORPORATION

Case 5809

October 14, 1976

New Mexico Oil Conservation Commission

-2-

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

C. F. Kalteyer
Gulf Energy and Minerals Co. U.S.
P. O. Box 1150
Midland, TX 79701

Offset Operators:

Continental Oil Company
P. O. Box 460
Hobbs, NM 88240

Atlantic Richfield Company
P. O. Box 1610
Midland, TX 79701

Millard Deck Oil Company
216 Texas Avenue
Eunice, NM 88231

Anadarko Production Company
P. O. Box 247
Eunice, NM 88231

Robert L. Parker Trust
518 National Bank of Tulsa Building
Tulsa, OK 74101

88 - 3030 = 65% 218 and = 90%
Tulsa - 980 = 20% 5 and = 2%
Dn - 7 = 15% 50 = 8%
144 100 243 100

(PB)

Case 5409

MANDA "B", TRACT C, WELL NO. 1

- (1) Operator: Gulf Oil Corporation
P. O. Box 670
Hobbs, NM 88240
- (2) Lease and Well Number: Manda "B", Tract C, Well No. 1
430'FNL & 1980'FWL Section 28, T22S, R37E,
Lea County, New Mexico
- (3) Pools: Drinkard
Tubb Oil
Blinebry Oil and Gas
- (4) Decline Curves: Decline curve on Drinkard Pool attached. This is a new well.
No decline curves available on Blinebry and Tubb Oil Pools.
Stabilized tests shown below.
- (5) Estimated BHP (based on most recent average BHP data within vicinity of this well):

Pool	Datum	Pressure @ Datum
Drinkard	-3050' 5887'	650
Tubb Oil	-2700'	700
Blinebry Oil and Gas	-2400'	600

- (6) Fluid Characteristics: These are all Intermediate crude oils. Production from these same three pools are presently being surface commingled on Gulf's Mark Owen Lease, Order No. PC-139 and Amended Order No. PC-139. There has been no evidence of incompatibility.
- (7) Value of Commingled Fluids:

Pool	BOPD	API Gvty @ 60°F	\$/Bbl.	Revenue/Day
Drinkard	7	35.6	\$12.20	\$ 85.40
Tubb Oil	9	36.6	\$12.22	109.98
Blinebry Oil & Gas	30	37.2	\$12.24	367.20
				\$ 562.58
Commingled	46	36.8	\$12.22	\$ 562.12
Difference				- \$ 0.46

- (8) Current Tests: Drinkard (6-25-76) pumped 28 BOPD, 20 BWPD, 80 MCFPD, GOR 2857. However, production first 15 days in August, 1976 averaged 7 BOPD. Drinkard zone was TA'd 8-16-76 for recompletion in Tubb Oil.
- Tubb Oil (9-13-76) pumped 9 BOPD, 16 BWPD, 5 MCFPD, GOR 556. This was stabilized production rate. Tubb Oil zone was TA'd 9-13-76 for recompletion in Blinebry Oil and Gas Pool.
- Blinebry Oil and Gas (10-13-76) pumped 30 BOPD, 51 BWPD, 218 MCFPD, GOR 7,267. This is latest available production data.
- (9) All offset operators have been notified by copy of attached letter: Continental Oil Company, Atlantic-Richfield Company, Millard Deck Oil Company, Anadarko Production Company and Robert L. Parker Trust.

Case 5809

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator Gulf Oil Corporation		Pool Drinkard, Tubb and Blinebry				County Lea										
Address P. O. Box 670, Hobbs, NM 88240						TYPE OF TEST - (X)		Scheduled <input type="checkbox"/>		Completion <input type="checkbox"/>		Specter <input checked="" type="checkbox"/>				
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU.FT/BSL
		U	S	T	R							WATER BSL.	GRAV. OIL	OIL BSL.	GAS M.C.F.	
Manda "B" (Tr C) Drinkard	1	C	28	22	37	6/25/76	P	2 w/o	25	-	24	20	35.6	28	80.0	2857
Manda "B" (Tr C) Tubb	1	C	28	22	37	9/13/76	P	2 w/o	25	-	24	16	36.6	9	5.0	556
Manda "B" (Tr C) Blinebry	1	C	28	22	37	10/13/76	P	2 w/o	25	59	24	51	37.2	30	218.0	7267
Application to Commingle Down Hole																

No well will be assigned an allowable greater than the amount of oil produced on the official test.


During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15,025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Well original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.


(Signature)

Well Tester

October 14, 1976

Case 5809

KE 10 X 10 TO THE INCH 46 0700
7 X 10 INCHES
KEUFFEL & ESSER CO.

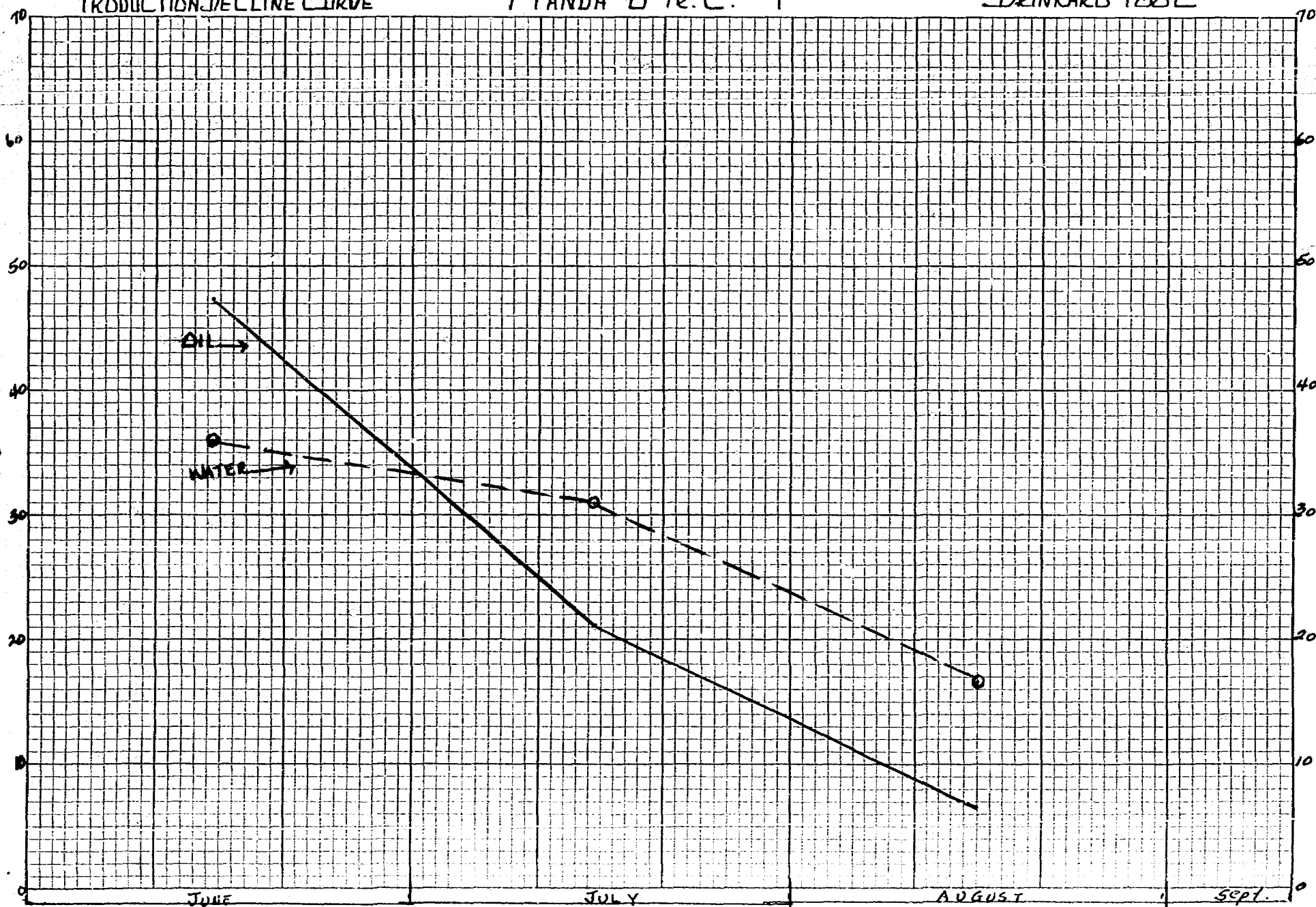
PRODUCTION DECLINE CURVE

MANDA "B" Tr. C. #1

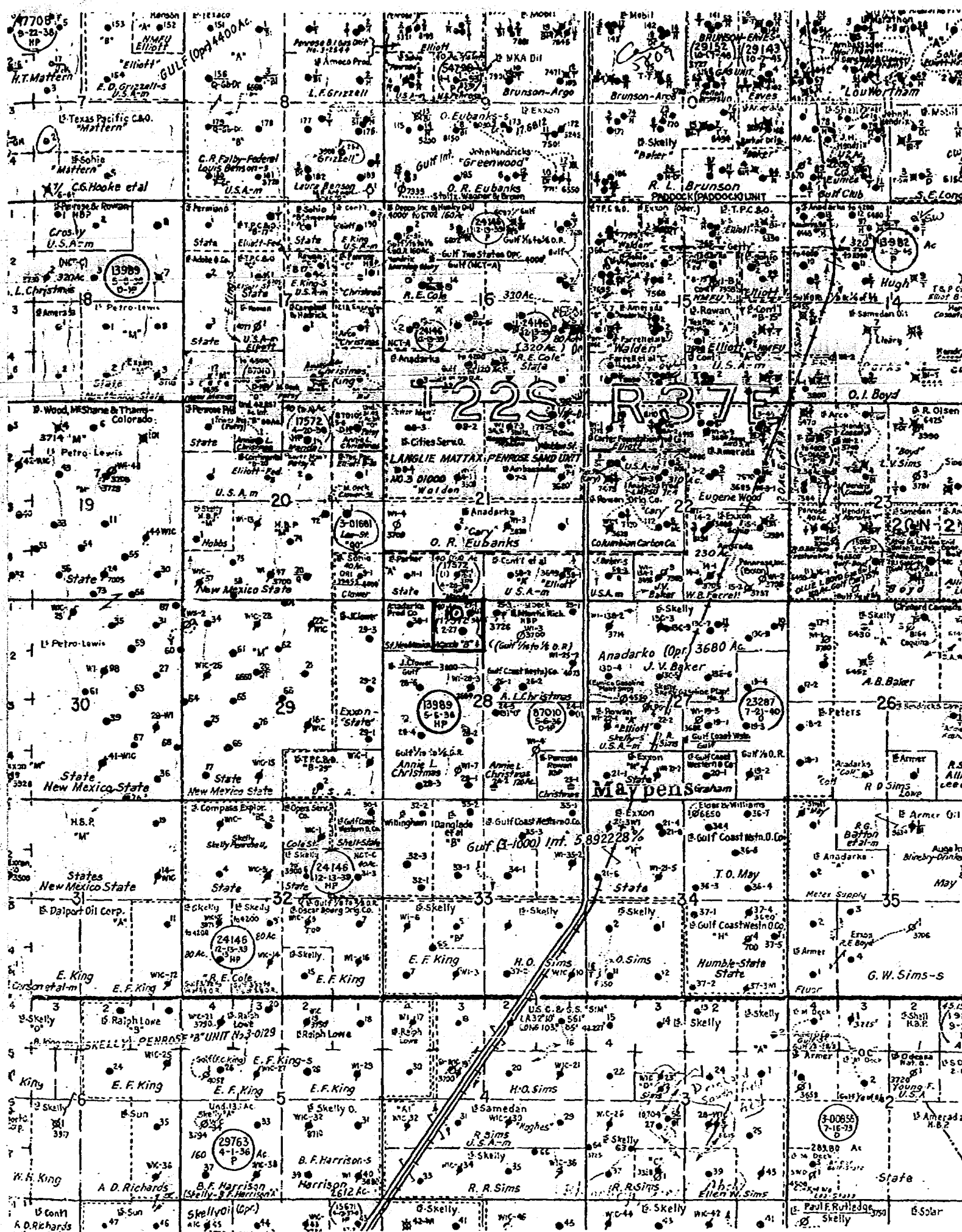
ATILE OIL CORPORATION

DRINKARD POOL

BPD



1976



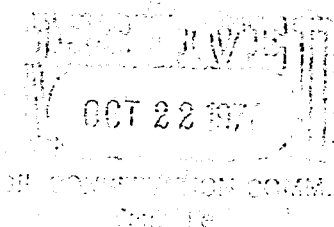
Case
5809

OIL CONSERVATION COMMISSION
Hobbs DISTRICT

OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

DATE Oct. 19, 1976

RE: Proposed MC _____
Proposed DHC X _____
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____



Gentlemen:

I have examined the application dated _____
for the Gulf Oil Corp. Manda B Tr. C #1-C 28-22-37
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

O.K.---J.S.

Yours very truly,

[Signature]

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. 5809

Order No. R- 5329

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 November 10,
19 76, at Santa Fe, New Mexico, before Examiner Richard L. Stamets

NOW, on this day of November, 1976, 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 Manda "B" Well No. 1, located
in Unit C of Section 28, Township 22 South, Range
37 East, NMPM, Lea County, New Mexico.

(3) That the applicant seeks authority to commingle Blinebry, Tubb, and Drinkard
~~Drinkard, Tubb, and Blinebry~~ production

within the wellbore of the above-described well.

(4) That from ^{each of} the Blinebry, Tubb, and Drinkard zone, the
subject well is capable of low ^{rates of} ~~marginal~~ production only.

(5) That from the Tubb zone, the
subject well is capable of low marginal production only.

(6) That from the Blinebry zone, the subject well is capable of
(5) 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.

~~low marginal production only.~~

Case No. _____
Order No. R- _____

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

(7) 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 the subject well is shut-in for 7 consecutive days.

(8) That in order to allocate the commingled production to each of the commingled zones in the subject well, applicant should consult with the supervisor of the ~~Hobbs~~ district office of the Commission after completion of the well to determine an allocation formula for the ~~Mancos-Gallup production and the Greenhorn-Dakota production.~~ Drinkard, Tubb, and Blinebry production.

commingled production to the Tubb zone, and _____ percent of the commingled production should be allocated to the ~~Tub~~ Blinebry zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to commingle Blinebry, Tubb, Drinkard and Blinebry production within the wellbore of the Manda "B" Well No. 1, located in Unit C of Section 28, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) That upon completion of the well, applicant shall consult with the supervisor of the ~~Astec~~ district office of the Commission and determine an allocation formula for the ~~Mancos~~

each of the commingled zones.

#(3)

(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 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.