

Case NO.

6598

Application

Transcripts

Small Exhibits

ETC.



BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

April 3, 1980

Gulf Oil Corporation
P. O. Box 670
Hobbs, New Mexico 88240

Re: Apache Federal #8
D-8-24N-5W

Case 6598

Gentlemen:

As per Order R-6076, the percentage split of the commingled production has been determined after test to be as follows:

60% Oil to the Gallup interval
40% Oil to the Dakota interval

0% Gas to the Gallup interval
100% Gas to the Dakota interval

These percentages will be in effect until further notice.

If you have any questions, please contact this office.

Yours truly,

Frank T. Chavez
District Supervisor

FTC:dh

XC: OCD, Santa Fe
U S G S Durango
Henry's Production

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
State Land Office Building
Santa Fe, New Mexico
25 July 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Gulf Oil Corporation for) CASE
downhole commingling, Rio Arriba County,) 6598
New Mexico.)

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Ernest L. Padilla, Esq.
Legal Counsel for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

For the Applicant: Terry I. Cross, Esq.
The Gulf Companies
P. O. Box 1150
Midland, Texas 79702

Registered in this transcript

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ENERGY AND MINERALS DEPARTMENT
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Santa Fe, New Mexico 87501

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICOHearing Date JULY 25, 1979 Time: 9:00 A.M.

NAME	REPRESENTING	LOCATION
William J. San	Campbell and Black P.A.	Santa Fe
H. L. Keedwell	El Paso Natural Gas Co.	El Paso
W. T. Thimmon	Getty Oil Co.	Midland
H. W. Long	Getty Oil Co.	Hobbs, N.M.
J. D. Murray	Getty Oil Co.	Hobbs, N.M.
Samuel T. Jackson	El Paso Natural Gas Co.	El Paso, TX
R. C. Carroll	"	"
Terry Cress	Conly Oil Corp.	Midland, TX
George Alan Jackson	Mesa Petroleum Co.	Midland, TX
Joseph M. Jeffers	"	"
James D. Q. D.	Hinkley Petroleum	Woodward, Texas
R. F. Huber	Capital Observer	Santa Fe
R. L. Heensack	H & S Oil	Artesia
Joel Carson	Losee Cameron & Anderson	Artesia
PT HUGHES JR	NAPCO INC	HOUSTON
Joe V. Treacoch	Phillips Petr. Co.	Odessa
R. J. Stringer	Phillips Petr. Co.	Odessa
W. J. Mueller	Phillips Petr.	Odessa, TX
Don Weickhardt	Phillips Petr.	Odessa, TX

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date JULY 25, 1979 Time: 9:00 A.M.

NAME	REPRESENTING	LOCATION
W. F. Kelblin	Kelblin & Kelblin	Santa Fe
Curtis Anderson	MAHECO , INC	Midland
H. W. Benischek	Independent	Albuquerque
LEONARD KERSTH	ENSERCH	Midland
T. E. BROWN	ENSERCH EXPLORATION INC	MIDLAND

I N D E X

BETHEL S. STRAWSER

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1 MR. NUTTER: We'll next call Case Number
2 6598.

3 MR. PADILLA: Application of Gulf Oil
4 Corporation for downhole commingling, Rio Arriba County,
5 New Mexico.

6 MR. CROSS: Terry Cross for Gulf Oil.
7 I believe Mr. Sperling of Albuquerque has entered a letter
8 of appearance on behalf of Gulf.

9 MR. NUTTER: We have that appearance.

10 MR. CROSS: I have one witness.

11
12 (Witness sworn.)

13
14 BETHEL S. STRAWSER
15 being called as a witness and having been duly sworn upon
16 her oath, testified as follows, to-wit:

17
18 DIRECT EXAMINATION

19 BY MR. CROSS:

20 Q Please state your name, your employer,
21 your position, and location.

22 A My name is Bethel Strawser. I'm employed
23 by Gulf Oil Corporation in Midland, Texas, as a petroleum
24 engineer.

25 Q Have you previously qualified to testify

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2 A. No, I have not.

3 Q. Would you please briefly summarize your
4 educational background and work experience as a petroleum
5 engineer?

6 A. I receive a Bachelor of Science in engin-
7 eering from Duke University. I've been employed with Gulf
8 now for a year and a half as a petroleum engineer.

9 MR. CROSS: Mr. Examiner, is this witness
10 qualified to testify?

11 MR. NUTTER: Yes, she is.

12 Q. Would you please restate what Gulf is
13 seeking in this application?

14 A. Gulf is seeking authority to downhole
15 commingle the production from the Otero Gallup Oil Pool
16 and the Basin Dakota Gas Pool in the wellbores of our Apache
17 Federal Wells No. 8 and 9.

18 These are located respectively in Unit D
19 of Section 8, and Unit D of Section 17, in Township 24 North,
20 Range 5 West in Rio Arriba County, New Mexico.

21 Q. Would you please explain for the Examiner
22 your Exhibit Number One?

23 A. Okay, the Exhibit Number One is a location
24 plat. You'll see that the Apache Federal Lease covers four
25 sections and is outlined in sort of a dotted line or hachure.

1 The two wells which we propose to downhole
2 commingle are colored pink or red, however you want to look
3 at it.

4 Q Do you have exhibits depicting the down-
5 hole particulars of these wells?

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7 are diagrammatic sketches showing the present downhole
8 equipment and completion and the equipment which we propose
9 to use after downhole commingling.

10 Q Would you please give the history of the
11 wells for which you're requesting downhole commingling
12 authority?

13 A The Well No. 8 was spudded April 1st, 1959,
14 and drilled to a total depth of 7045 feet. 5-1/2 inch
15 production casing was set at that depth. The well was
16 dually completed in the Otero Gallardo and the Basin Dakota
17 Pools. There are the present pool designations.

18 The Dakota was perforated from 6922 to
19 6968 and treated with 1000 gallons of acid. A bridge plug
20 was set at 6876 and additional Dakota was perforated at
21 6783 to 6856.

22 This zone was fracture treated with 30,912
23 gallons of oil and 30,000 pounds of sand.

24 Initially the Dakota zone flowed with an
25 absolute open flow of 2775 Mcf per day.

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1 The Gallup zone was perforated from 5976
2 to 5744. It was treated with 750 gallons of acid, 30,000
3 gallons of oil, and 30,000 pounds of sand.

4 Absolute open flow was 2150 Mcf per day.
5 The last production from this zone was in December of 1964.

6 The Well No. 9 was spudded September 4th
7 of 1960 and drilled to total depth of 6838. The 5-1/2
8 inch casing was cemented at 6821 feet. The well was dually
9 completed in the Basin Dakota and Otero Gallup Pools.

10 Dakota zone was perforated 6638 to 6692
11 and fracture treated with 56,000 gallons of water and 50,000
12 pounds of sand. Open flow potential was 4000 Mcf per day.

13 The Gallup zone was perforated from 5514
14 to 5626 and fracture treated with 20,000 gallons of water
15 and 20,000 pounds of sand. It pumps 12 barrels of oil, a
16 trace of water, and 40 Mcf gas on 24-hour potential test.

17 This zone last produced in June of 1964.
18 We do expect that by the commingling of the Dakota gas with
19 the Gallup production that we would be able to lift the
20 liquids in the Gallup and prevent the loading up that killed
21 these -- this zone in both wells.

22 Q Do you have exhibits showing the production
23 from each of these wells?

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1 show you are the relative quantities of gas from the two
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4 Exhibits Five-A and Five-B tabulate the
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7 daily rates from the latest production on each of these
8 wells are approximately as follows: The Well No. 8, the
9 Gallup last produced an average of 17 Mcf of gas per day.
10 The Dakota produced an average of 147 Mcf gas and half a
11 barrel of condensate.

12 In the Well No. 9 the Gallup produced
13 approximately 43 Mcf gas per day and 1.4 barrels of oil per
14 day.

15 The Dakota produced an average of 156 Mcf
16 gas per day and .3 barrels condensate.

17 Q Have precedents been set in the immediate
18 area to downhole commingle the Gallup and Dakota Pools?

19 A Yes, under Order Number R-5205, dated
20 April 27th, 1976, Continental Oil Company was authorized
21 to downhole commingle the two subject pools in eight wells
22 on their Northwest Haynes Lease. This lies immediately to
23 the east of Gulf's Apache Federal Lease, and I have outlined
24 it in orange on your first exhibit, the location plat.

25 Q Would it be practical to dually complete

1 the two subject wells?

2 A No, they were both dually completed at one
3 time; however, this was only possible because both zones
4 were flowing.

5 The Gallup zone now requires pumping, which
6 would necessitate a string of tubing large enough to have
7 7/8ths inch rods and this is not possible as a second
8 string in 5-1/2 inch casing.

9 Alternatively we would be required to put
10 in complete crossover equipment and this is not practical
11 either in 5-1/2 inch casing.

12 Q Do you have any pressure data on these
13 wells?

14 A Our 1978 packer leakage test shows in the
15 Well No. 8 shut-in tubing pressure in the Gallup of 999 psi;
16 shut-in tubing pressure in the Dakota of 898 psi.

17 In the Well No. 9 Gallup showed 1249 and
18 the Dakota 859.

19 We expect that once the Gallup zone is on
20 production again the pressures will become more equivalent.

21 Q What are your views with regard to possible
22 crossflow between the zones?

23 A We do not anticipate any crossflow problems
24 because we do expect these pressures to become more equiva-
25 lent once we bleed off the Gallup again.

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1 Q Do you have any evidence to indicate that
2 the fluids from these two pools will be compatible?

3 A Yes. Continental has been downhole com-
4 mingling its production from the Otero Gallup and the Basin
5 Dakota since 1976 and they have reported no incompatibility.

6 Q What is your proposal regarding the allo-
7 cation of production between the Otero Gallup and Basin
8 Dakota Pools?

9 A We would propose to allocate by the sub-
10 traction method. Since the production from the Gallup is
11 very difficult to predict, we propose to predetermine the
12 amount of production to be allocated to the Dakota and
13 permit the remainder to be assigned to the Gallup.

14 We would suggest that this matter be worked
15 out between the District Supervisor of the New Mexico Oil
16 Conservation Division and Gulf personnel after the authority
17 to downhole commingle has been granted.

18 Q What would Gulf propose to do in the event
19 secondary recovery operations are undertaken in this area
20 in these pools?

21 A We will recommend separation of zones as
22 deemed necessary for efficient secondary recovery operations.

23 Q What do you anticipate regarding the pro-
24 duction capabilities of these wells under commingled condi-
25 tions?

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1 A Based on the latest year of production from
2 each zone, we would anticipate that stabilized production
3 for each well will average not more than 200 Mcf gas per
4 day with less than 3 barrels of oil.

5 It is possible, however, that an initial
6 rate from the Gallup zone may cause those figures to be
7 temporarily exceeded.

8 Q Will the value of the commingled production
9 be adversely affected?

10 A No, the addition of the Gallup production
11 to the Dakota will not affect the value of the Dakota pro-
12 duction. The value of the Gallup production cannot be ad-
13 versely affected since it cannot be commercially produced
14 except by downhole commingling with the Dakota.

15 Q Will you summarize again what Gulf is
16 seeking in this application?

17 A In order to prevent waste and maximize the
18 recovery of hydrocarbons under this lease, Gulf is requesting
19 authority to downhole commingle the Otero Gallup and the
20 Basin Dakota Pool production in our Apache Federal Lease
21 Well Nos. 8 and 9, located respectively in Unit D of Section
22 8 and Unit D of Section 17, Township 24 North, Range 5 West,
23 in Rio Arriba County, New Mexico.

24 Q Were these exhibits prepared by you or
25 under your supervision?

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1 A Yes, they were.

2 MR. CROSS: I move that these exhibits be
3 admitted in evidence.

4 MR. NUTTER: The exhibits will be admitted
5 in evidence.

6 MR. CROSS: I have no further questions.

7
8 CROSS EXAMINATION

9 BY MR. NUTTER:

10 Q The No. 8 Well never did produce any
11 liquids from the Gallup?

12 A None recorded, sir.

13 Q Why did it quit producing, then? You
14 were talking about they would need to be on artificial
15 lift.

16 A I would have to suppose that the pressure
17 down there was apparently not sufficient to lift whatever
18 mist there might have been and whatever there might have
19 been, apparently, dropped back without ever being produced.

20 Q On this Exhibit Five-A you've shown no
21 production of liquids whatsoever from the Gallup in the
22 No. 8 Well.

23 A That is correct.

24 I have seen this happen before, where a
25 well has been killed due to loading up and yet you don't

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1 see excessive liquids in the production.

2 Q Now, the No. 9 has produced a small amount
3 of liquids from the -- or did produce a small amount of
4 liquids from the Gallup, and it also has produced conden-
5 sate from the Dakota consistently throughout its life.

6 A That is correct.

7 MR. NUTTER: Are there any further ques-
8 tions of the witness? She may be excused.

9 Do you have anything further, Mr. Cross?

10 MR. CROSS: No, sir, I don't.

11 MR. NUTTER: Does anyone have anything
12 they wish to offer in Case Number 6598?

13 We'll take the case under advisement.

14
15 (Hearing concluded.)
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REPORTER'S CERTIFICATE

I, SALLY WALTON BOYD, a Court Reporter, DO HEREBY CERTIFY that the foregoing and attached Transcript of Hearing before the Oil Conservation Division was reported by me; that said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability, knowledge, and skill, from my notes taken at the time of the hearing.

Sally W. Boyd C.S.R.
Sally W. Boyd, C.S.R.

SALLY VIALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (905) 471-3462
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I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6598 heard by me on 7/25-1979.
[Signature] Examiner
Oil Conservation Division

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EXHIBITS

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Applicant Exhibit Two B, Sketch

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3 A Yes. Continental has been downhole com-
4 mingling its production from the Otero Gallup and the Basin
5 Dakota since 1976 and they have reported no incompatibility.

6 Q What is your proposal regarding the allo-
7 cation of production between the Otero Gallup and Basin
8 Dakota Pools?

9 A We would propose to allocate by the sub-
10 traction method. Since the production from the Gallup is
11 very difficult to predict, we propose to predetermine the
12 amount of production to be allocated to the Dakota and
13 permit the remainder to be assigned to the Gallup.

14 We would suggest that this matter be worked
15 out between the District Supervisor of the New Mexico Oil
16 Conservation Division and Gulf personnel after the authority
17 to downhole commingle has been granted.

18 Q What would Gulf propose to do in the event
19 secondary recovery operations are undertaken in this area
20 in these pools?

21 A We will recommend separation of zones as
22 deemed necessary for efficient secondary recovery operations.

23 Q What do you anticipate regarding the pro-
24 duction capabilities of these wells under commingled condi-
25 tions?

1 A Based on the latest year of production from
2 each zone, we would anticipate that stabilized production
3 for each well will average not more than 200 Mcf gas per
4 day with less than 3 barrels of oil.

5 It is possible, however, that an initial
6 rate from the Gallup zone may cause those figures to be
7 temporarily exceeded.

8 Q Will the value of the commingled production
9 be adversely affected?

10 A No, the addition of the Gallup production
11 to the Dakota will not affect the value of the Dakota pro-
12 duction. The value of the Gallup production cannot be ad-
13 versely affected since it cannot be commercially produced
14 except by downhole commingling with the Dakota.

15 Q Will you summarize again what Gulf is
16 seeking in this application?

17 A In order to prevent waste and maximize the
18 recovery of hydrocarbons under this lease, Gulf is requesting
19 authority to downhole commingle the Otero Gallup and the
20 Basin Dakota Pool production in our Apache Federal Lease
21 Well Nos. 8 and 9, located respectively in Unit D of Section
22 8 and Unit D of Section 17, Township 24 North, Range 5 West,
23 in Rio Arriba County, New Mexico.

24 Q Were these exhibits prepared by you or
25 under your supervision?

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (SOS) 471-2462
Santa Fe, New Mexico 87501

1 A Yes, they were.

2 MR. CROSS: I move that these exhibits be
3 admitted in evidence.

4 MR. NUTTER: The exhibits will be admitted
5 in evidence.

6 MR. CROSS: I have no further questions.

7

8 CROSS EXAMINATION

9 BY MR. NUTTER:

10 Q The No. 8 Well never did produce any
11 liquids from the Gallup?

12 A None recorded, sir.

13 Q Why did it quit producing, then? You
14 were talking about they would need to be on artificial
15 lift.

16 A I would have to suppose that the pressure
17 down there was apparently not sufficient to lift whatever
18 mist there might have been and whatever there might have
19 been, apparently, dropped back without ever being produced.

20 Q On this Exhibit Five-A you've shown no
21 production of liquids whatsoever from the Gallup in the
22 No. 8 Well.

23 A That is correct.

24 I have seen this happen before, where a
25 well has been killed due to loading up and yet you don't

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3020 Plaza Blanca (666) 471-4463
Santa Fe, New Mexico 87501

1 see excessive liquids in the production.

2
3 Q Now, the No. 9 has produced a small amount
4 of liquids from the -- or did produce a small amount of
5 liquids from the Gallup, and it also has produced conden-
6 sate from the Dakota consistently throughout its life.

7 A That is correct.

8 MR. NUTTER: Are there any further ques-
9 tions of the witness? She may be excused.

10 Do you have anything further, Mr. Cross?

11 MR. CROSS: No, sir, I don't.

12 MR. NUTTER: Does anyone have anything
13 they wish to offer in Case Number 6598?

14 We'll take the case under advisement.

15
16 (Hearing concluded.)
17
18
19
20
21
22
23
24
25


SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
302 Plaza Blanca (908) 471-2402
Santa Fe, New Mexico 87501

REPORTER'S CERTIFICATE

I, SALLY WALTON BOYD, a Court Reporter, DO HEREBY CERTIFY that the foregoing and attached Transcript of Hearing before the Oil Conservation Division was reported by me; that said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability, knowledge, and skill, from my notes taken at the time of the hearing.

Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6570 heard by me on 2/25 1979.

 Examiner
Oil Conservation Division

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (305) 471-9452
Santa Fe, New Mexico 87501



BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

August 17, 1979

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

Mr. Terry Cross, Attorney
Gulf Oil Corporation
Box 1150
Midland, Texas 79702

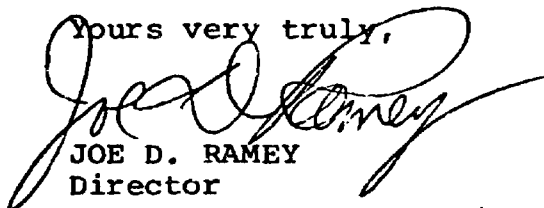
Re: CASE NO. 6598
ORDER NO. R-6076

Applicant:

Dear Sir:

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

Yours very truly,


JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD x
Artesia OCD x
Aztec OCD x

Other _____

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6598
Order No. R-6076

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

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 25, 1979,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 16th day of August, 1979, the Division
Director, 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 Division has jurisdiction of this cause and the
subject matter thereof.
- (2) That the applicant, Gulf Oil Corporation, is the
owner and operator of the Apache Federal Wells No. 8 located
in Unit D of Section 8 and No. 9 located in Unit D of Section
17, both in Township 24 North, Range 5 West, NMPM, Rio Arriba
County, New Mexico.
- (3) That the applicant seeks authority to commingle
Otero-Gallup and Basin-Dakota production within the wellbores
of the above-described wells.
- (4) That from the Otero-Gallup zone, the subject well is
capable of low marginal production only.
- (5) That from the Basin-Dakota zone, the subject well is
capable of low marginal production only.
- (6) That the proposed commingling may result in the re-
covery of additional hydrocarbons from each of the subject pools,
thereby preventing waste, and will not violate correlative rights.

-2-

Case No. 6598
Order No. R-6076

(7) 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 wells are not shut-in for an extended period.

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

(9) That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the Aztec district office of the Division and determine an allocation formula for each of the production zones.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to commingle Otero-Gallup and Basin-Dakota production within the wellbores of the Apache Federal Wells No. 8, located in Unit D of Section 8 and No. 9 located in Unit D of Section 17, both in Township 24 North, Range 5 West, NMPM, Rio Arriba County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in each of the subject wells.

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

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

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

S E
fd/

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Joe D. Ramey
JOE D. RAMEY
Director

Dockets Nos. 29-79 and 31-79 are tentatively set for hearing on August 8 and 22, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - TUESDAY - JULY 24, 1979

OIL CONSERVATION COMMISSION - 9 A.M. - ROOM 205
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 6596: Application of Harvey E. Yates Company for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Upper Pennsylvanian gas pool to be designated as the Southeast Indian Basin-Upper Pennsylvanian Gas Pool for its Southeast Indian Basin Well No. 1 located in Unit A of Section 23, Township 22 South, Range 23 East, and special pool rules therefor including 320-acre gas well spacing.

CASE 6597: Application of Harvey E. Yates 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 Southeast Indian Basin Well No. 2, an Upper Pennsylvanian well to be drilled 660 feet from the North and West lines of Section 24, Township 22 South, Range 23 East, with the N/2 or all of said Section 24 to be dedicated to the well, depending on the outcome of Case No. 6596.

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 25, 1979

9 A.M. - OIL CONSERVATION DIVISION 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 6545: (Continued from June 27, 1979, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Corinne Grace, Travelers Indemnity Company, and all other interested parties to appear and show cause why the Kuklah Baby Well No. 1 located in Unit G of Section 24, Township 22 South, Range 26 East, Eddy County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 6598: Application of Gulf Oil Corporation for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Otero-Gallup and Basin-Dakota production in the wellbores of its Apache Federal Wells No. 8 located in Unit C of Section 8 and No. 9 located in Unit D of Section 17, both in Township 24 North, Range 5 West.

CASE 6599: Application of Gulf Oil Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Fusselman and Montoya production, North Justis Field, in the wellbore of its W. A. Ramsay Well No. 4 located in Unit M of Section 36, Township 24 South, Range 37 East.

CASE 6600: Application of Mesa Petroleum Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the E/2 of Section 10, Township 16 South, Range 27 East, to be dedicated to a well to be drilled at a standard location thereon. 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 6601: Application of Harvey E. Yates Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp through Mississippian formations underlying the E/2 of Section 8, Township 14 South, Range 36 East, to be dedicated to a well to be drilled at a standard location thereon. 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 6602: Application of Tenneco Oil Company for an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Federal 33 C No. 2 Well 1010 feet from the North line and 1710 feet from the West line of Section 33, Township 17 South, Range 29 East, South Empire-Wolfcamp Pool, the E/2 NW/4 of said Section 33 to be dedicated to the well.

CASE 6603: (This case will be continued to the August 8 hearing.)

Application of Conoco Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Penrose Skelly and Eumont production in the wellbore of its Hawk B-1 Well No. 12 located in Unit O of Section 8, Township 21 South, Range 37 East.

CASE 6604: Application of Cities Service Company for rescission of Division Order No. R-5921, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the rescission of Order No. R-5921 which order provided for the compulsory pooling of all of the mineral interests in the Pennsylvanian formation underlying the S/2 of Section 8, Township 23 South, Range 28 East.

CASE 6605: Application of Esteril Producing Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the W/2 of Section 15, Township 20 South, Range 34 East, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the North and West lines of said Section 15. 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 6564: (Continued and Readvertised)

Application of Herndon Oil & Gas Co. for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its O. A. Woody Well No. 1 to be drilled 2310 feet from the North line and 330 feet from the West line of Section 35, Township 16 South, Range 38 East, Knowles-Devonian Pool.

CASE 6606: Application of Getty Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Yates formation in the open-hole interval from 3810 feet to 4169 feet in its State "AA" Well No. 1 located in Unit I of Section 35, Township 21 South, Range 34 East.

CASE 6607: Application of Getty Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Getty 36 State Well No. 1 located in Unit F of Section 36, Township 21 South, Range 34 East, to produce oil from the Wolfcamp formation and gas from the Morrow formation through parallel strings of tubing.

CASE 6608: Application of Getty Oil Company for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Wolfcamp oil pool for its Getty 36 State Well No. 1 located in Unit F of Section 36, Township 21 South, Range 34 East, and special rules therefor, including 160-acre oil well spacing.

CASE 6609: Application of Napeco Inc. for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Strawn oil pool for its Benson Deep Unit Well No. 1 located in Unit O of Section 33, Township 18 South, Range 30 East, and special rules therefor, including 160-acre spacing and standard well locations.

CASE 6610: Application of Koch Industries, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Rustler formation through the perforated interval from 1190 feet to 1210 feet in its Wills "A" Well No. 7 located in Unit E of Section 35, Township 26 South, Range 37 East, Rhodes Field.

CASE 6611: Application of Cabot Corp. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the disposal of produced salt water in the Devonian formation through the perforated interval from 12,156 feet to 12,574 feet in its Reed Well No. 1 located in Unit H of Section 35, Township 13 South, Range 37 East, King Field.

CASE 6487: (Continued from May 23, 1979, Examiner Hearing)

Application of El Paso Natural Gas Company for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Shell E State Com Well No. 2 located in Unit N of Section 6, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6471: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Freeman Well No. 1-A to be located in Unit C of Section 11, Township 31 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6472: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Jenny Well No. 1-A to be located in Unit F of Section 13, Township 26 North, Range 4 West, Basin-Dakota Pool, Rio Arriba County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6473: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its McIntyre Well No. 1-A to be located in Unit K of Section 11, Township 26 North, Range 4 West, Basin-Dakota Pool, Rio Arriba County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6474: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Williams Well No. 1-A to be located in Unit C of Section 24, Township 31 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6475: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Montoya Well No. 1-A to be located in Unit I of Section 35, Township 32 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6535: (Continued from June 13, 1979, Examiner Hearing)

Application of Torreon Oil Company for a waterflood project, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the San Luis-Mesaverde Pool by the injection of water into the Menefee formation through two wells located in Section 21, Township 18 North, Range 3 West, Sandoval County, New Mexico.

CASE 6579: (Continued from June 27, 1979, Examiner Hearing)

Application of R. N. Hillin for an unorthodox well location and approval of infill drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well spacing requirements and a finding that the drilling of a Morrow gas well at an unorthodox location 800 feet from the South line and 2000 feet from the East line of Section 34, Township 19 South, Range 28 East, is necessary to effectively and efficiently drain that portion of the E/2 of said Section 34 which cannot be so drained by the existing well.

CASE 6580: (Continued from June 27, 1979, Examiner Hearing) (This case will be continued to the August 22 hearing.)

Application of Continental Oil Company for a carbon dioxide injection project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to initiate a pilot carbon dioxide injection project in the Grayburg-San Andres formation in Units H and I of Section 20, Township 17 South, Range 32 East, Maljamar Pool, for tertiary recovery purposes.

CASE 6270: (Continued from July 11, 1979, Examiner Hearing)

In the matter of Case 6270 being reopened pursuant to the provisions of Order No. R-5771 which order created the South Peterson-Fusselman Pool, Roosevelt County, New Mexico, and provided for 80-acre spacing. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 6590: (Continued from July 11, 1979, Examiner Hearing)

Application of Grace Petroleum Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying Lots 9, 10, 15, and 16 and the SE/4 of Section 6, Township 21 South, Range 32 East, to be dedicated to a well to be drilled at an unorthodox location 4650 feet from the South line and 660 feet from the East line of said Section 6. Also to be considered will be the cost of drilling and completing said well and the allocation of the costs 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.

JAMES E. SPERLING
JOSEPH E. ROEHL
GEORGE T. HARRIS, JR.
DANIEL A. SISK
LELAND B. SEDBERRY, JR.
ALLEN C. DEWEY, JR.
FRANK H. ALLEN, JR.
JAMES A. PARKER
JOHN R. COONEY
KENNETH L. HARRIGAN
PETER J. ADAMS
DALE W. EK
DENNIS J. FALK
JOE R. O. FULCHER
ARTHUR O. MELENDRES
JAMES P. HOUGHTON

LAW OFFICES
MODRALL, SPERLING, ROEHL, HARRIS & SISK

PUBLIC SERVICE BUILDING
P. O. BOX 2166
ALBUQUERQUE, NEW MEXICO 87103

505-243-4511

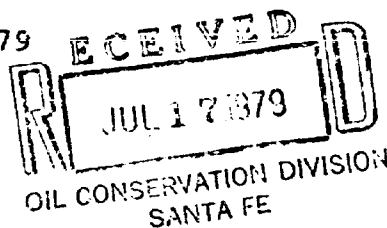
JOHN F. SIMMS
(1955-1954)

J. R. MODRALL
(1902-1977)

AUGUSTUS T. SEYMOUR
(1907-1969)

JUDY A. FRY
PAUL M. FISH
MARK B. THOMPSON II
GEORGE J. HOPKINS
JEFFREY W. LOUBET
RUTH M. SCHIFANI
THOMAS L. JOHNSON
LYNN H. SLADE
ALAN KONRAD
ZACHARY L. MCCORMICK
THURMAN W. MOORE II
CLIFFORD K. ATKINSON
DOUGLAS A. BAKER
DEBORAH J. HERZBERG
SUSAN R. STOCKSTILL

July 16, 1979



Mr. Joe D. Ramey
Secretary-Director
Oil Conservation Division
Department of Energy & Minerals
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Application of Gulf Oil Corporation for
Downhole Commingling, Rio Arriba
County, New Mexico
Case No. 6598

Application of Gulf Oil Corporation for
Downhole Commingling, Lea County, New
Mexico
Case No. 6599

Dear Mr. Ramey:

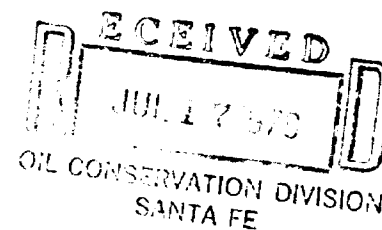
We are enclosing an Entry of Appearance on behalf of Gulf
Oil Corporation in Case Nos. 6598 and 6599, both of which
have been docketed for Examiner's Hearing on July 25,
1979.

Very truly yours,

James E. Sperling
James E. Sperling

/jev
Enclosures

cc: Mr. Morgan L. Copeland, w/encl.
Mr. Terry I. Cross, w/encl.



BEFORE THE OIL CONSERVATION DIVISION
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF GULF OIL CORPORATION FOR APPROVAL
OF DOWNHOLE COMMINGLING, RIO ARRIBA
COUNTY, NEW MEXICO

Case No. 6598

ENTRY OF APPEARANCE

The undersigned, Modrall, Sperling, Roehl, Harris & Sisk,
of Albuquerque, New Mexico, hereby enter their appearance on
behalf of 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

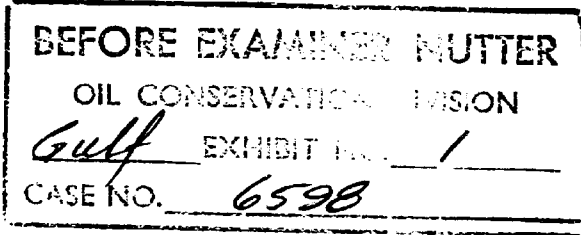


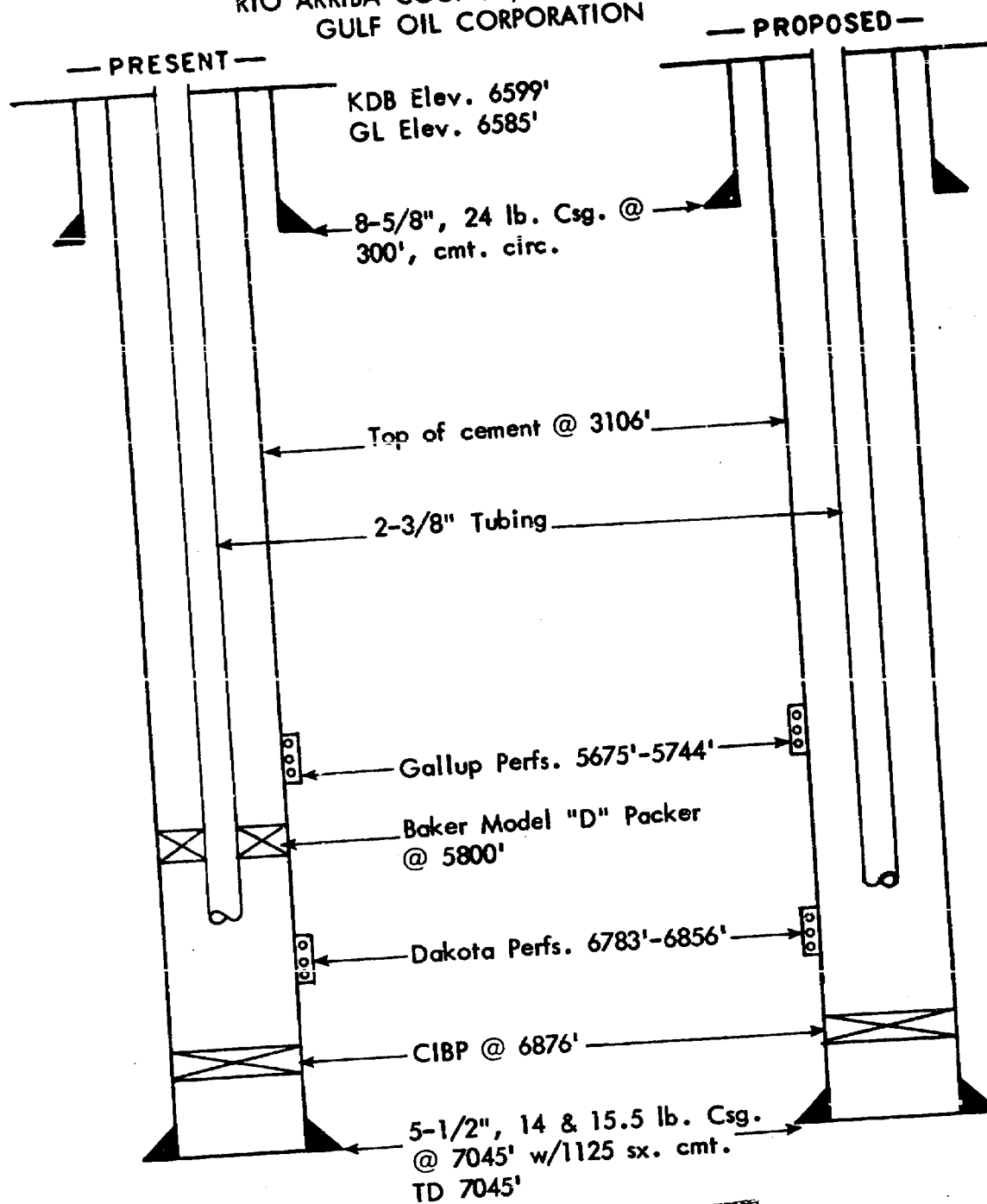
Exhibit No. 1
Case No. 6598
Date: 7-25-77
Gulf Oil Corporation
Apache Federal Lease
T-24-N, R-5-W Rio Arriba Co. N. M.

 Wells proposed for downhole commingling

Diagrammatic Sketch Showing

PRESENT & PROPOSED INSTALLATION

APACHE FEDERAL WELL NO. 8
UNIT D. SEC. 8, T-24-N, R-5-W
RIO ARriba COUNTY, NEW MEXICO
GULF OIL CORPORATION



BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

Gulf EXHIBIT NO. 2-A

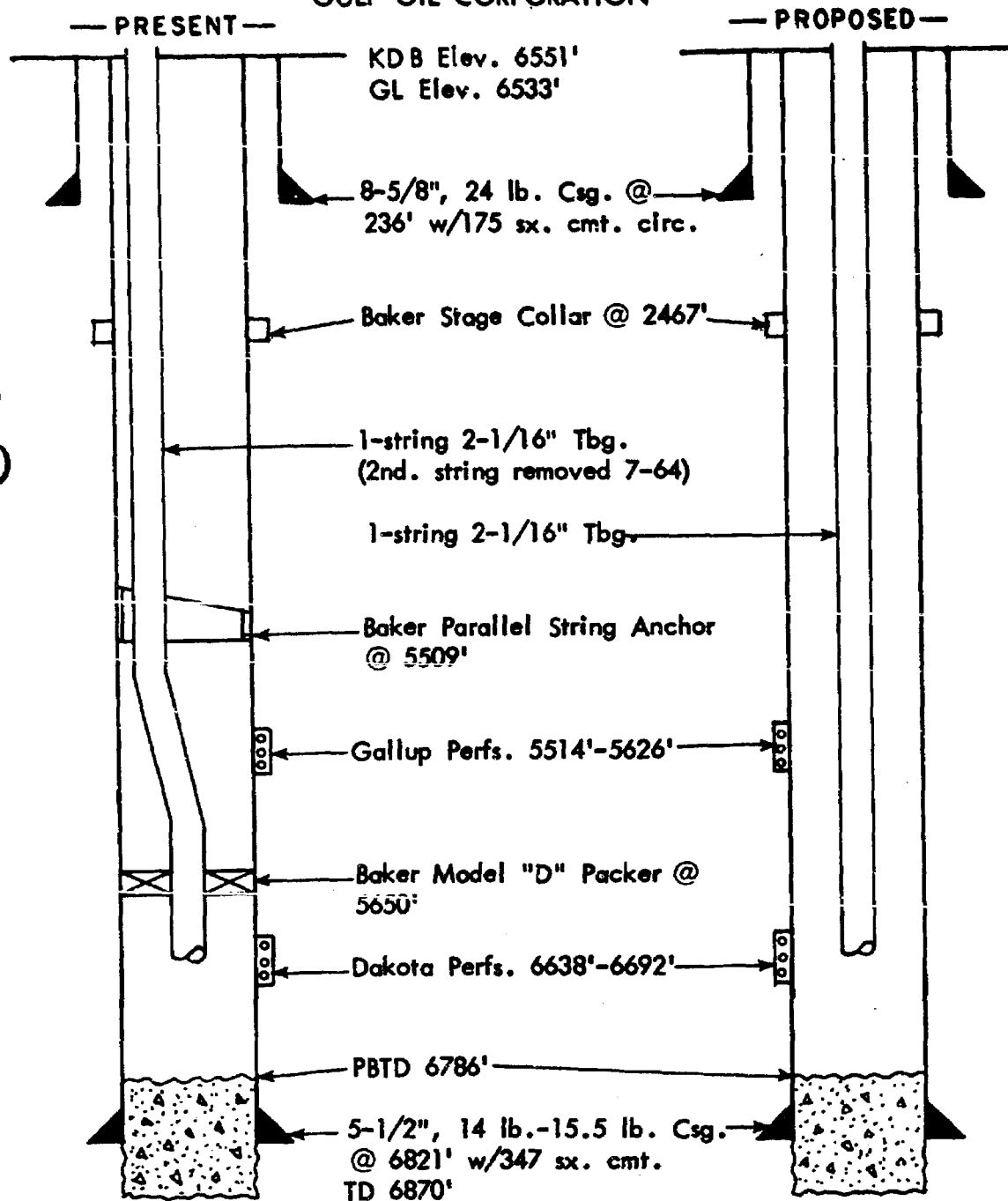
CASE NO. 6598

EXHIBIT NO. 2-A
CASE NO. 6598
DATE 7-25-79

Diagrammatic Sketch Showing

PRESENT & PROPOSED INSTALLATION

APACHE FEDERAL WELL NO. 9
UNIT D, SEC. 17, T-24-N, R-5-W
RIO ARriba COUNTY, NEW MEXICO
GULF OIL CORPORATION



Drilled in 1960

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

Gulf EXHIBIT NO. 2-B
CASE NO. 6598

EXHIBIT NO. 2-B
CASE NO. 6598
DATE 7-25-79

EXHIBIT NO. 3
CASE NO. 6589
DATE: 7-25-79
GULF OIL CORPORATION
WELL DATA

(1) Operator: Gulf Oil Corporation
Post Office Box 670
Hobbs, New Mexico 88240

(2) Well Name & Location:

Apache Federal Lease Well No. 8
990' FNL and 990' FWL of Section 8, T-24-N, R-5-W
Rio Arriba County, New Mexico

Apache Federal Lease Well No. 9
990' FNL and 990' FWL of Section 17, T-24-N, R-5-W
Rio Arriba County, New Mexico

See Exhibit 1 for map.

(3) Pools: Otero Gallup (Oil) (5514'-5744')
Basin Dakota (Gas) (6638'-6856')

Well No. 8 dualled under Order R-1660.
Well No. 9 dualled under Order DC-1014.

(4) Current Production: Twenty-four hour tests unavailable. See Production Decline Curves and Tables.

(5) Production Decline and Well History: See attached curves for decline.

Well No. 8 was spudded April 1, 1959 and drilled to a total depth of 7,045'; 5½" production casing was set at that depth. The well was dually completed in the Otero-Gallup and Basin Dakota Pools (present pool designations). The Dakota was perforated 6922'-6968' and treated with 1000 gallons of mud acid. A bridge plug was set at 6876' and additional Dakota was perforated at 6783'-6856'. This zone was fracture treated with 30,912 gallons of oil and 30,000 lbs. of 20-40 mesh sand. Initially, the Dakota zone flowed with an Absolute Open Flow of 2,775 MCF per day.

The Gallup zone was perforated 5676'-5744' and treated with 750 gallons of acid, 30,000 gallons of oil, 22,000 lbs. of 20-40 mesh sand, and 8,000 lbs. of 10-20 mesh sand. Absolute Open Flow was 2,150 MCF per day. Last production from this zone was in December of 1964.

Well No. 9 was spudded September 4, 1960 and drilled to a total depth of 6838'. The 5½" casing was cemented at 6821'. The well was dually completed in the Basin Dakota and Otero-Gallup Pools. The Dakota zone

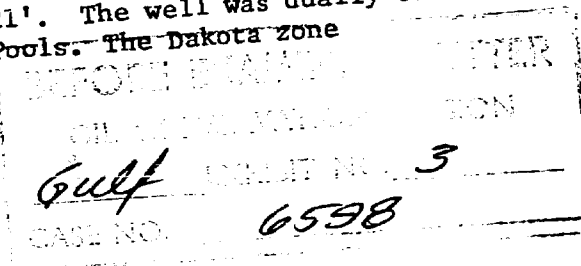


EXHIBIT NO. 3
CASE NO. 6598
DATE: 7-25-79
GULF OIL CORPORATION
WELL DATA
PAGE TWO

was perforated 6638'-6692' and fracture treated with 56,000 gallons of water and 50,000 lbs. of 20-40 mesh sand. The open flow potential was 4,000 MCF per day.

The Gallup zone was perforated 5514'-5626' and fracture treated with 20,000 gallons of water and 20,000 lbs. of 10-20 mesh sand. It pumped 12 barrels of oil, a trace of water, and 40 MCF gas on 24 hour potential test. This zone last produced in June of 1964.

- (6) Bottom Hole Pressure:
From the 1978 Packer Leakage Test, the following data is available:

	<u>Well No. 8</u>	<u>Well No. 9</u>
<u>Gallup</u>	999 psi CITP	1249 psi CITP
<u>Dakota</u>	898 psi CITP	859 psi CITP

It would appear that once the Gallup zone is on production again, bottom hole pressures for the two zones will be equivalent, causing no cross-flow problems.

- (7) Fluid Characteristics:

Over the past year, the Basin Dakota gas zone in each well has averaged approximately 140 MCF per day, with between 1.0 and 1.6 barrels per day of condensate. This constitutes a fairly dry gas.

The last year of production from the Gallup zone (1964) averaged 16 MCFPD with no produced condensate in the Well No. 8, and 55 MCFPD with 2 barrels of condensate per day in the Well No. 9. Both wells tended to load up with liquids, which ultimately necessitated temporary abandonment. It is felt that commingling of the two pays in each well will provide sufficient gas to lift the liquids and prevent the wells from loading up.

The experience of Continental Oil Company on their Northeast Haynes Lease to the east is sufficient evidence that the fluids from these two pay zones are compatible. Continental has been commingling the same two pays since April, 1976.

- (8) Value of Commingled Production: No adverse change in the value of production is anticipated. The Gallup zone cannot be economically produced except by down-hole commingling with the Dakota zone.
- (9) All offset operators were notified of this application by copy of our letter of June 28, 1979 requesting that the matter be set for hearing. A list of those offset operators is attached.

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

Gulf EXHIBIT NO. 5-A
65.98

EXHIBIT NO. 5-A

CASE NO. 6598

DATE: 7-25-79

PRODUCTION HISTORY - OTERO-GALLUP POOL

APACHE FEDERAL LEASE, WELL NOS. 8 AND 9

RIO ARriba COUNTY, NEW MEXICO

GULF OIL CORPORATION

	Well No. 8		Well No. 9				
	GAS (MCF)	DAILY AVERAGE GAS (MCFPD)	GAS (MCF)	OIL (BBLS)	WATER (BBLS)	DAILY AVERAGE GAS (MCFPD)	OIL (BOPD)
<u>1960</u>							
OCT	66	2	- - -	- - -	- - -	- -	- -
NOV	1,793	60	840	138	112	28	4.6
DEC	501	16	1,550	167	- - -	50	5.4
ANNUAL	2,860	31	2,390	305	112	39	5.0
<u>1961</u>							
JAN	115	4	1,550	139	- - -	50	4.5
FEB	2,734	98	1,550	116	- - -	55	4.1
MAR	1,812	58	1,550	123	- - -	50	4.0
APR	2,676	89	1,200	92	- - -	40	3.1
MAY	882	28	1,200	93	- - -	39	3.0
JUN	593	20	1,200	102	- - -	40	3.4
JUL	535	17	1,200	89	2	39	2.9
AUG	153	5	1,200	96	- - -	39	3.1
SEPT	- - -	- -	1,200	87	- - -	40	2.9
OCT	- - -	- -	1,200	86	- - -	39	2.8
NOV	769	26	1,200	90	- - -	40	3.0
DEC	299	10	1,200	90	- - -	39	2.9
ANNUAL	10,568	29	15,450	1,203	2	42	3.3
<u>1962</u>							
JAN	83	3	1,200	68	- - -	39	2.2
FEB	343	12	1,200	69	8	43	2.5
MAR	280	9	1,200	82	10	39	2.6
APR	564	19	1,200	57	7	40	1.9
MAY	370	12	1,200	93	12	39	3.0
JUN	324	11	- - -	89	12	- -	3.0
JUL	198	6	- - -	110	12	- -	3.5
AUG	231	7	1,440	75	12	46	2.4

EXHIBIT NO. 5-A
CASE NO. 6598
DATE: 7-25-79

PRODUCTION HISTORY - OTERO-GALLUP POOL
APACHE FEDERAL LEASE, WELL NOS. 8 AND 9
RIO ARriba COUNTY, NEW MEXICO
GULF OIL CORPORATION
PAGE TWO

	Well No. 8			Well No. 9			
	GAS (MCF)	DAILY AVERAGE GAS (MCFPD)	GAS (MCF)	OIL (BBLs)	WATER (BBLs)	DAILY AVERAGE GAS (MCFPD)	OIL (BOPD)
SEPT	330	11	1,052	57	10	35	1.9
OCT	875	28	1,661	90	20	54	2.9
NOV	904	30	1,144	62	20	38	2.1
DEC	687	22	1,163	63	25	38	2.0
ANNUAL	5,189	14	12,460	915	148	34	2.5
<u>1963</u>							
JAN	308	10	1,551	86	- -	50	2.8
FEB	549	20	1,107	60	- -	40	2.1
MAR	815	26	794	43	- -	26	1.4
APR	580	19	276	15	- -	9	0.5
MAY	1,019	33	1,551	82	- -	50	2.6
JUN	829	28	1,366	74	- -	46	2.5
JUL	818	26	1,458	76	- -	47	2.5
AUG	733	24	1,514	82	- -	49	2.6
SEPT	452	15	1,144	62	- -	38	2.1
OCT	751	24	2,040	67	- -	66	2.2
NOV	811	27	1,290	43	- -	43	1.4
DEC	733	24	1,110	37	- -	36	1.2
ANNUAL	8,398	23	15,201	727	- -	42	2.0
<u>1964</u>							
JAN	867	28	2,130	74	- -	69	2.4
FEB	471	16	2,550	85	- -	91	3.0
MAR	409	13	1,140	38	- -	37	1.2
APR	901	30	1,290	43	- -	43	1.4
MAY	522	17	- - -	- -	- -	- -	- -

EXHIBIT NO. 5A
CASE NO. 6598
DATE: 7-25-79
PRODUCTION HISTORY - OTERO-GALLUP POOL
APACHE FEDERAL LEASE, WELL NOS. 8 AND 9
RIO ARRIBA COUNTY, NEW MEXICO
GULF OIL CORPORATION
PAGE THREE

	Well No. 8		Well No. 9				DAILY AVERAGE	
	GAS (MCF)	DAILY AVERAGE GAS (MCFPD)	GAS (MCF)	OIL (BBLS)	WATER (BBLS)		GAS (MCFPD)	OIL (BOPD)
JUN	363	12	1,200	40	- -		40	1.3
JUL	553	18	- - -	- -	- -		- -	- -
AUG	390	13	- - -	- -	- -		- -	- -
SEPT	386	13	- - -	- -	- -		- -	- -
OCT	754	24	- - -	- -	- -		- -	- -
NOV	655	22	- - -	- -	- -		- -	- -
DEC	496	16	- - -	- -	- -		- -	- -
ANNUAL	6,767	19	8,310	280	- -		55	1.9

CORE EXAMINER NUTTER
 L CONSERVATION DIVISION
 Gulf EXHIBIT NO. 5-8
 E NO. 6598

EXHIBIT NO. 5-8
 CASE NO. 6598
 DATE: 7-25-79
 PRODUCTION HISTORY - BASIN DAKOTA POOL
 APACHE FEDERAL LEASE, WELL NOS. 8 AND 9
 RIO ARriba COUNTY, NEW MEXICO
 GULF OIL CORPORATION

Well No. 8

	GAS (MCF)	OIL (BBLs)	DAILY AVERAGE		GAS (MCF)	OIL (BBLs)	DAILY AVERAGE	
			GAS (MCFPD)	OIL (BOPD)			GAS (MCFPD)	OIL (BOPD)
1960	32,061	763	356*	8.5*	- - -	- - -	- - -	- - -
1961	73,960	1,622	203	4.4	62,062	507	170	1.4
1962	71,111	1,451	195	4.0	99,653	739	273	2.0
1963	59,352	651	163	1.8	65,347	511	179	1.4
1964	90,964	1,318	249	3.6	99,933	586	274	1.6
1965	87,248	1,545	239	4.2	124,015	733	340	2.0
1966	75,294	1,195	206	3.3	101,785	581	279	1.6
1967	81,178	1,352	222	3.7	103,168	457	283	1.3
1968	69,415	1,242	190	3.4	97,338	561	267	1.5
1969	69,898	970	192	2.7	87,216	431	239	1.2
1970	62,260	995	171	2.7	78,255	413	214	1.1
1971	65,878	862	160	2.4	85,589	234	234	0.6
1972	65,156	895	179	2.5	75,647	403	207	1.1
1973	63,001	866	173	2.4	72,003	329	197	0.9
1974	61,357	830	168	2.3	68,326	334	187	0.9
1975	56,030	663	154	1.8	65,307	323	179	0.9
1976	55,664	702	153	1.9	61,631	272	169	0.7
1977								

Well No. 9

	GAS (MCF)	OIL (BBLs)	DAILY AVERAGE		GAS (MCF)	OIL (BBLs)	DAILY AVERAGE	
			GAS (MCFPD)	OIL (BOPD)			GAS (MCFPD)	OIL (BOPD)
JAN	4,599	45	148	1.4	5,417	30	175	1.0
FEB	2,985	45	107	1.6	4,237	20	151	0.7
MAR	4,238	45	137	1.4	5,446	17	176	0.5
APR	5,054	62	168	2.1	5,037	8	168	0.3
MAY	4,489	59	145	1.9	4,507	12	145	0.4
JUN	2,627	42	88	1.4	3,837	20	128	0.7
JUL	5,027	32	162	1.0	5,609	25	161	0.8
AUG	4,775	26	154	0.8	4,752	12	153	0.4
SEPT	4,936	39	165	1.3	5,086	20	170	0.7
OCT	4,471	35	144	1.1	4,647	18	150	0.6
NOV	3,191	88	106	2.9	3,789	17	126	0.6
DEC	5,138	81	166	2.6	4,761	18	154	0.6
ANNUAL	51,530	599	141	1.6	57,125	217	151	0.6

EXHIBIT NO. 5-B
CASE NO. 6598
DATE: 7-25-79
PRODUCTION HISTORY - BASIN DAKOTA POOL
APACHE FEDERAL LEASE, WELL NOS. 8 AND 9
RIO ARRIBA COUNTY, NEW MEXICO
GULF OIL CORPORATION
PAGE TWO

Well No. 8				Well No. 9					
D A I L Y A V E R A G E				D A I L Y A V E R A G E					
	<u>GAS (MCF)</u>	<u>OIL (BBL'S)</u>	<u>GAS (MCFPD) **</u>	<u>OIL (BOPD) **</u>		<u>GAS (MCF)</u>	<u>OIL (BBL'S)</u>	<u>GAS (MCFPD) **</u>	<u>OIL (BOPD) **</u>
<u>1978</u>									
JAN	4,377	40	151	1.4		4,695	25	151	0.8
FEB	4,445	38	159	1.4		4,722	18	157	0.6
MAR	4,379	47	190	2.0		4,580	45	148	2.0
APR	3,775	65	126	2.2		4,157	25	139	0.8
MAY	4,582	43	148	1.4		4,264	18	138	0.6
JUN	4,100	38	137	1.3		3,955	17	132	0.6
JUL	4,839	54	156	1.7		4,358	23	141	0.7
AUG	4,876	59	157	1.9		4,432	22	143	0.7
SEPT	4,028	34	183	1.5		3,549	19	118	0.9
OCT	4,706	63	152	2.0		4,319	31	139	1.0
NOV	3,196	50	107	1.7		3,330	24	111	0.8
DEC	3,797	44	141	1.6		3,846	18	124	0.7
ANNUAL	51,100	575	149	1.7		50,207	285	146	0.8
<u>1979</u>									
JAN	4,271	14	147	0.5		4,380	8	156	0.3

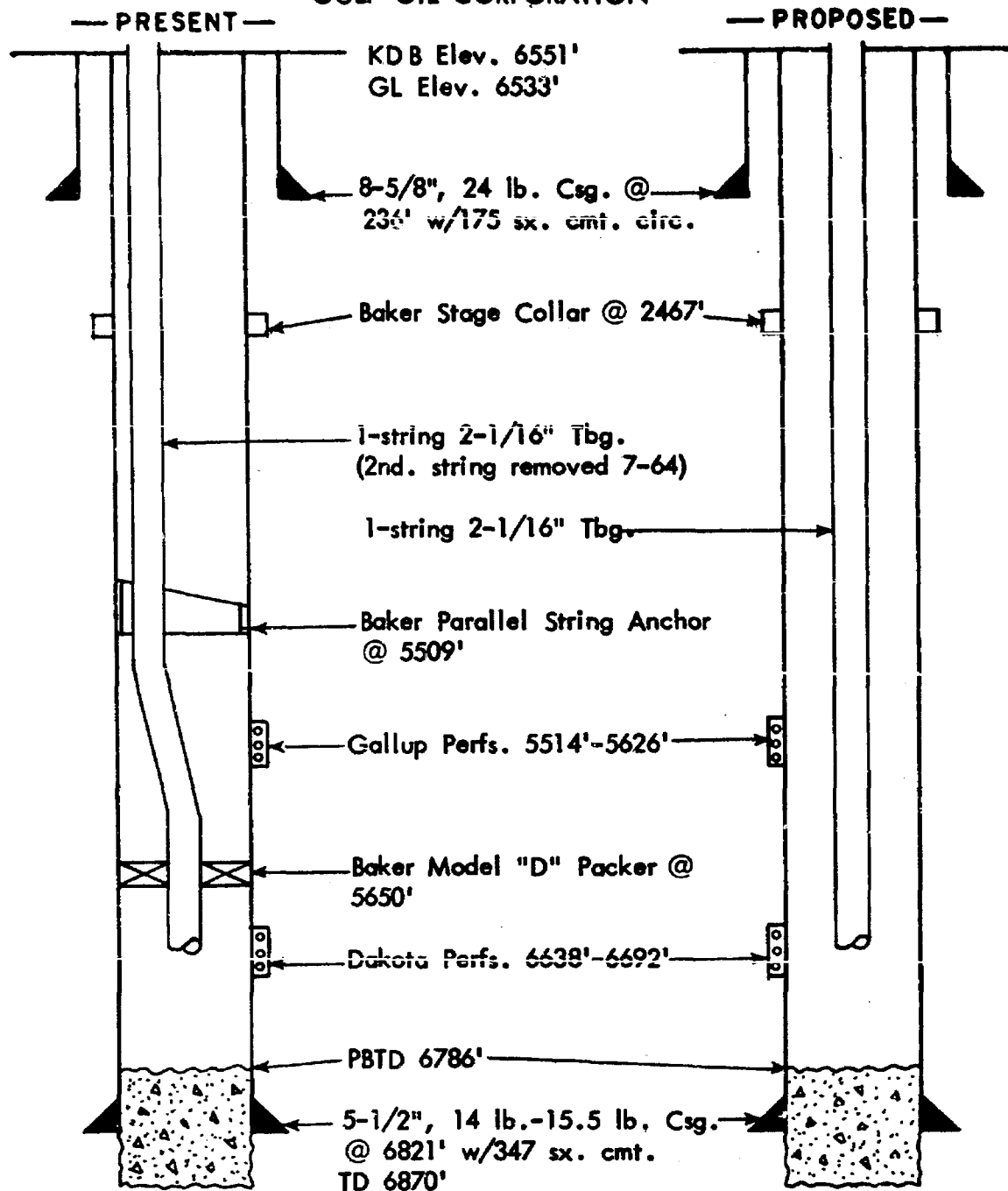
* 90 Days.

** Number of producing days varies .. not always full month.

Diagrammatic Sketch Showing

PRESENT & PROPOSED INSTALLATION

APACHE FEDERAL WELL NO. 9
UNIT D, SEC. 17, T-24-N, R-5-W
RIO ARriba COUNTY, NEW MEXICO
GULF OIL CORPORATION



DEPT. OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Gulf Oil Corp. 2-B
6598

EXHIBIT NO. 2-B
CASE NO. 6598
DATE 7-25-79

EXHIBIT NO. 3
CASE NO. 6598
DATE: 7-25-79
GULF OIL CORPORATION
WELL DATA

(1) Operator: Gulf Oil Corporation
Post Office Box 670
Hobbs, New Mexico 88240

(2) Well Name & Location:

Apache Federal Lease Well No. 8
990' FNL and 990' FWL of Section 8, T-24-N, R-5-W
Rio Arriba County, New Mexico

Apache Federal Lease Well No. 9
990' FNL and 990' FWL of Section 17, T-24-N, R-5-W
Rio Arriba County, New Mexico

See Exhibit 1 for map.

(3) Pools: Otero Gallup (Oil) (5514'-5744')
Basin Dakota (Gas) (6638'-6856')

Well No. 8 dualled under Order R-1660.
Well No. 9 dualled under Order DC-1014.

(4) Current Production: Twenty-four hour tests unavailable. See Production Decline Curves and Tables.

(5) Production Decline and Well History: See attached curves for decline.

Well No. 8 was spudded April 1, 1959 and drilled to a total depth of 7,045'; 5½" production casing was set at that depth. The well was dually completed in the Otero-Gallup and Basin Dakota Pools (present pool designations). The Dakota was perforated 6922'-6968' and treated with 1000 gallons of mud acid. A bridge plug was set at 6876' and additional Dakota was perforated at 6783'-6856'. This zone was fracture treated with 30,912 gallons of oil and 30,000 lbs. of 20-40 mesh sand. Initially, the Dakota zone flowed with an Absolute Open Flow of 2,775 MCF per day.

The Gallup zone was perforated 5676'-5744' and treated with 750 gallons of acid, 30,000 gallons of oil, 22,000 lbs. of 20-40 mesh sand, and 8,000 lbs. of 10-20 mesh sand. Absolute Open Flow was 2,150 MCF per day. Last production from this zone was in December of 1964.

Well No. 9 was spudded September 4, 1960 and drilled to a total depth of 6838'. The 5½" casing was cemented at 6821'. The well was dually completed in the Basin Dakota and Otero-Gallup Pools. The Dakota zone

Gulf

6598

3

EXHIBIT NO. 3
CASE NO. 6598
DATE: 7-25-79
GULF OIL CORPORATION
WELL DATA
PAGE TWO

was perforated 6638'-6692' and fracture treated with 56,000 gallons of water and 50,000 lbs. of 20-40 mesh sand. The open flow potential was 4,000 MCF per day.

The Gallup zone was perforated 5514'-5626' and fracture treated with 20,000 gallons of water and 20,000 lbs. of 10-20 mesh sand. It pumped 12 barrels of oil, a trace of water, and 40 MCF gas on 24 hour potential test. This zone last produced in June of 1964.

- (6) Bottom Hole Pressure:
From the 1978 Packer Leakage Test, the following data is available:

	<u>Well No. 8</u>	<u>Well No. 9</u>
<u>Gallup</u>	999 psi CITP	1249 psi CITP
<u>Dakota</u>	898 psi CITP	859 psi CITP

It would appear that once the Gallup zone is on production again, bottom hole pressures for the two zones will be equivalent, causing no cross-flow problems.

- (7) Fluid Characteristics:

Over the past year, the Basin Dakota gas zone in each well has averaged approximately 140 MCF per day, with between 1.0 and 1.6 barrels per day of condensate. This constitutes a fairly dry gas.

The last year of production from the Gallup zone (1964) averaged 16 MCFPD with no produced condensate in the Well No. 8, and 55 MCFPD with 2 barrels of condensate per day in the Well No. 9. Both wells tended to load up with liquids, which ultimately necessitated temporary abandonment. It is felt that commingling of the two pays in each well will provide sufficient gas to lift the liquids and prevent the wells from loading up.

The experience of Continental Oil Company on their Northeast Haynes Lease to the east is sufficient evidence that the fluids from these two pay zones are compatible. Continental has been commingling the same two pays since April, 1976.

- (8) Value of Commingled Production: No adverse change in the value of production is anticipated. The Gallup zone cannot be economically produced except by down-hole commingling with the Dakota zone.
- (9) All offset operators were notified of this application by copy of our letter of June 28, 1979 requesting that the matter be set for hearing. A list of those offset operators is attached.

EXHIBIT NO. 5-B
CASE NO. 6598
DATE: 7-25-79
PRODUCTION HISTORY - BASIN DAKOTA POOL
APACHE FEDERAL LEASE, WELL NOS. 8 AND 9
RIO ARriba COUNTY, NEW MEXICO
GULF OIL CORPORATION

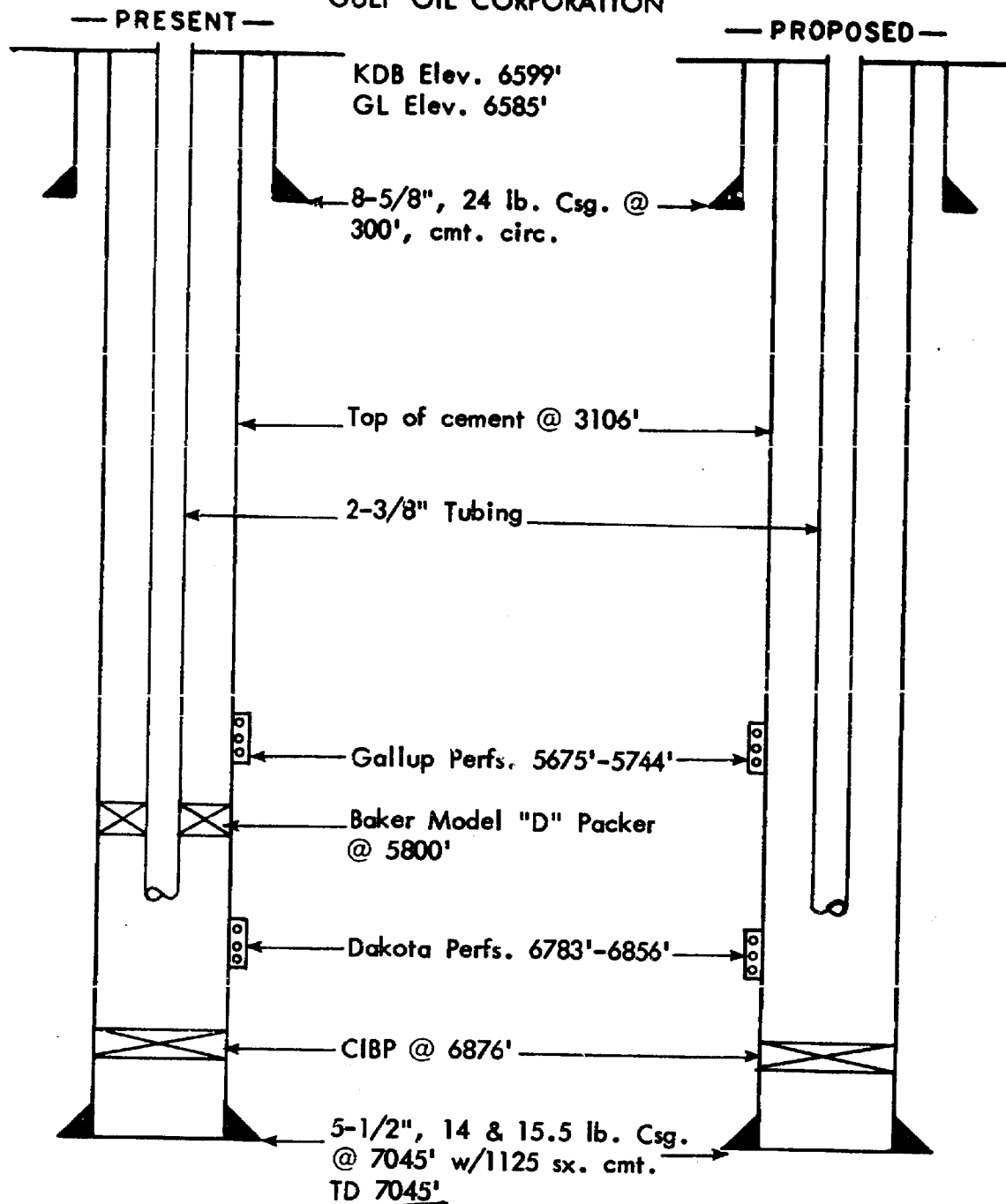
EXHIBIT NO. 5-B
CASE NO. 6598

Well No. 8				Well No. 9			
	GAS (MCF)	OIL (BBL'S)	DAILY AVERAGE	GAS (MCF)	OIL (BBL'S)	GAS (MCF)	OIL (BBL'S)
			GAS (MCF/D)				
1960	32,061	763	356*	8.5*	-	-	-
1961	73,960	1,622	203	4.4	62,062	507	170
1962	71,111	1,451	195	4.0	99,653	739	273
1963	59,352	651	163	1.8	65,347	511	179
1964	90,964	1,318	249	3.6	99,933	586	274
1965	87,248	1,545	239	4.2	124,015	733	340
1966	75,294	1,195	206	3.3	101,785	581	279
1967	81,178	1,352	222	3.7	103,168	457	283
1968	69,415	1,242	190	3.4	97,338	561	267
1969	69,898	970	192	2.7	87,216	431	239
1970	62,260	995	171	2.7	78,255	413	214
1971	65,878	802	180	2.4	85,589	234	234
1972	65,156	895	179	2.5	75,647	403	207
1973	63,001	866	173	2.4	72,003	329	197
1974	61,357	830	168	2.3	68,326	334	187
1975	56,030	663	154	1.8	65,307	323	179
1976	55,664	702	153	1.9	61,631	272	169
1977							
JAN	4,599	45	148	1.4	5,417	30	175
FEB	2,985	45	107	1.6	4,237	20	151
MAR	4,238	45	137	1.4	5,446	17	176
APR	5,054	62	168	2.1	5,037	8	168
MAY	4,489	59	145	1.9	4,507	12	145
JUN	2,527	42	88	1.4	3,837	20	128
JUL	5,027	32	162	1.0	5,609	25	181
AUG	4,775	26	154	0.8	4,752	12	153
SEPT	4,936	39	165	1.3	5,086	20	170
OCT	4,471	35	144	1.1	4,647	18	150
NOV	3,191	88	106	2.9	3,789	17	126
DEC	5,138	81	166	2.6	4,761	18	154
ANNUAL	51,530	599	141	1.6	57,125	217	151
							0.6

Diagrammatic Sketch Showing

PRESENT & PROPOSED INSTALLATION

APACHE FEDERAL WELL NO. 8
UNIT D. SEC. 8, T-24-N, R-5-W
RIO ARriba COUNTY, NEW MEXICO
GULF OIL CORPORATION



*Spl in 1959
Comp 1*

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

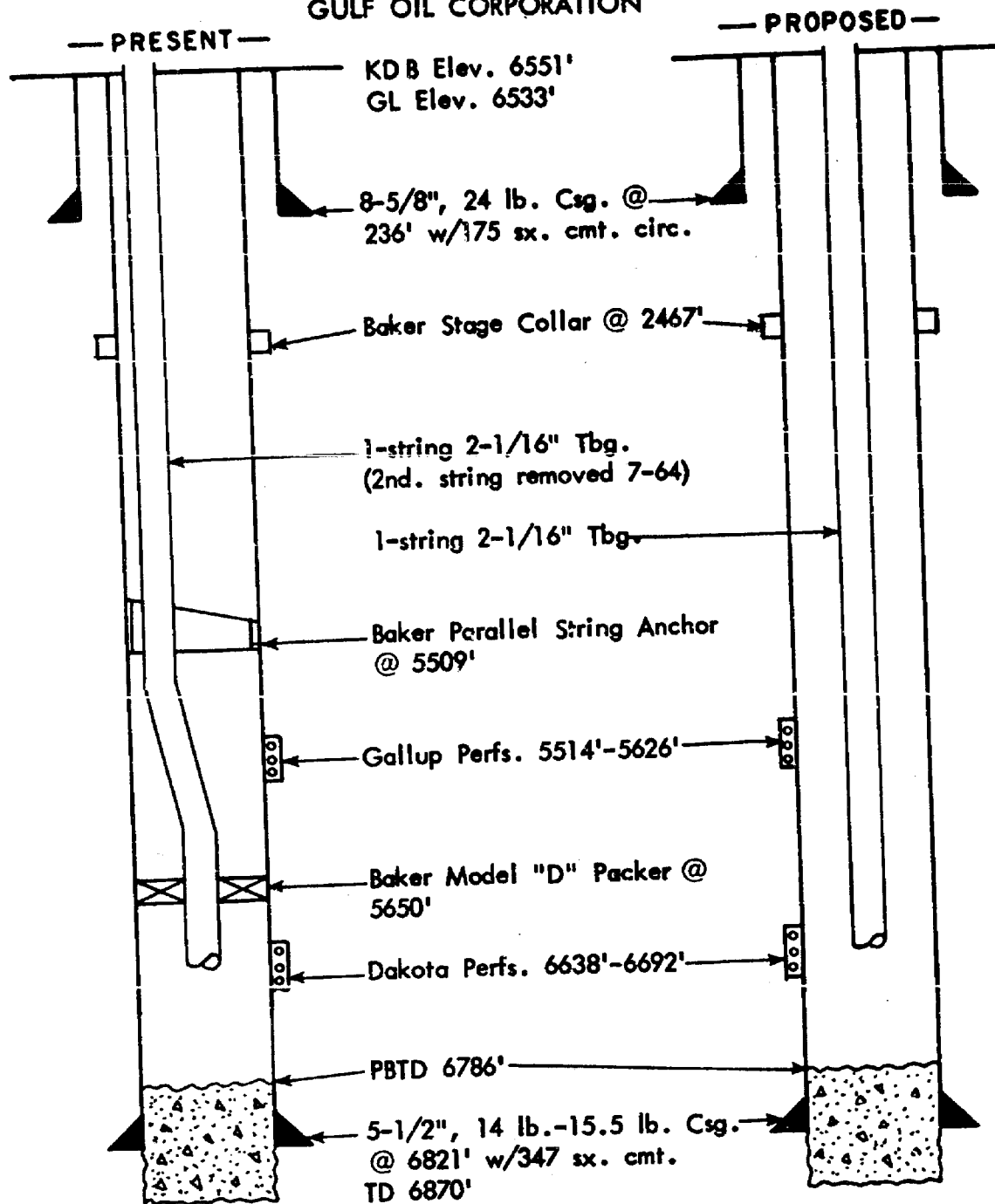
Gulf EXHIBIT NO. *2-A*
CASE NO. *6598*

EXHIBIT NO. *2-A*
CASE NO. *6598*
DATE *7-25-79*

Diagrammatic Sketch Showing

PRESENT & PROPOSED INSTALLATION

APACHE FEDERAL WELL NO. 9
UNIT D, SEC. 17, T-24-N, R-5-W
RIO ARriba COUNTY, NEW MEXICO
GULF OIL CORPORATION



BEFORE DRAMMER MUTTER

OIL & GAS DIVISION

Gulf WELL NO. 2-B

CASE NO. 6598

EXHIBIT NO. 2-B

CASE NO. 6598

DATE 7-25-79

BEFORE EXAMINER NUTTER

Average Daily Oil Production - BBL

OIL CONSERVATION DIVISION

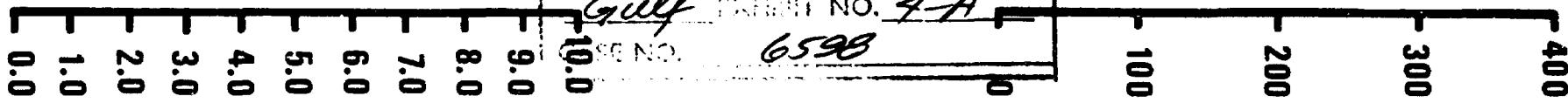
Average Daily Gas Production - MCF

Gulf

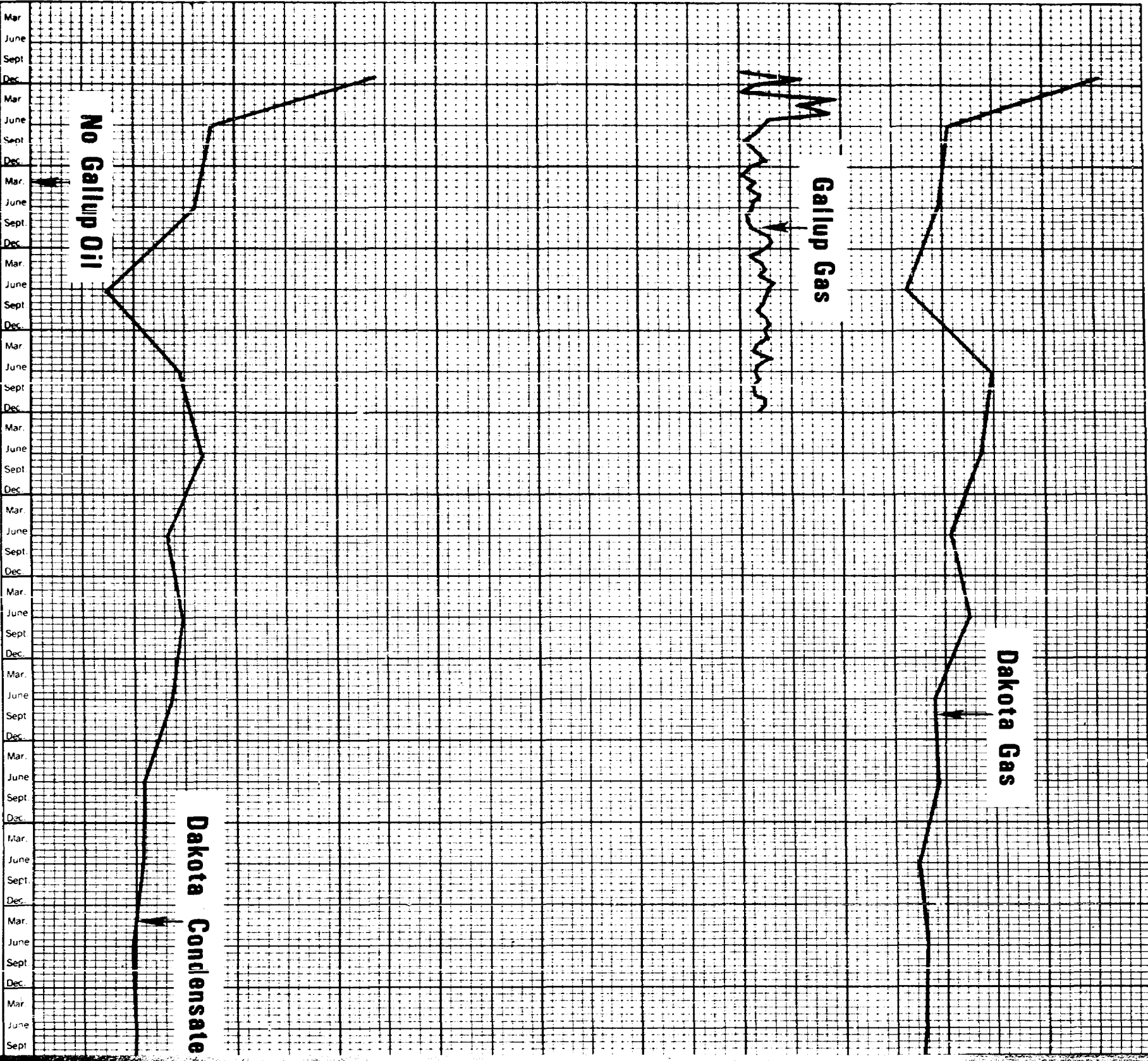
EXHIBIT NO. *7-A*

SEC NO.

6598



1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972



Production History
Apache Federal Lease Well No. 8
Rio Arriba County, New Mexico
Gulf Oil Corporation
Exhibit No. 4-A
Case No. 6598
Date 7-25-79

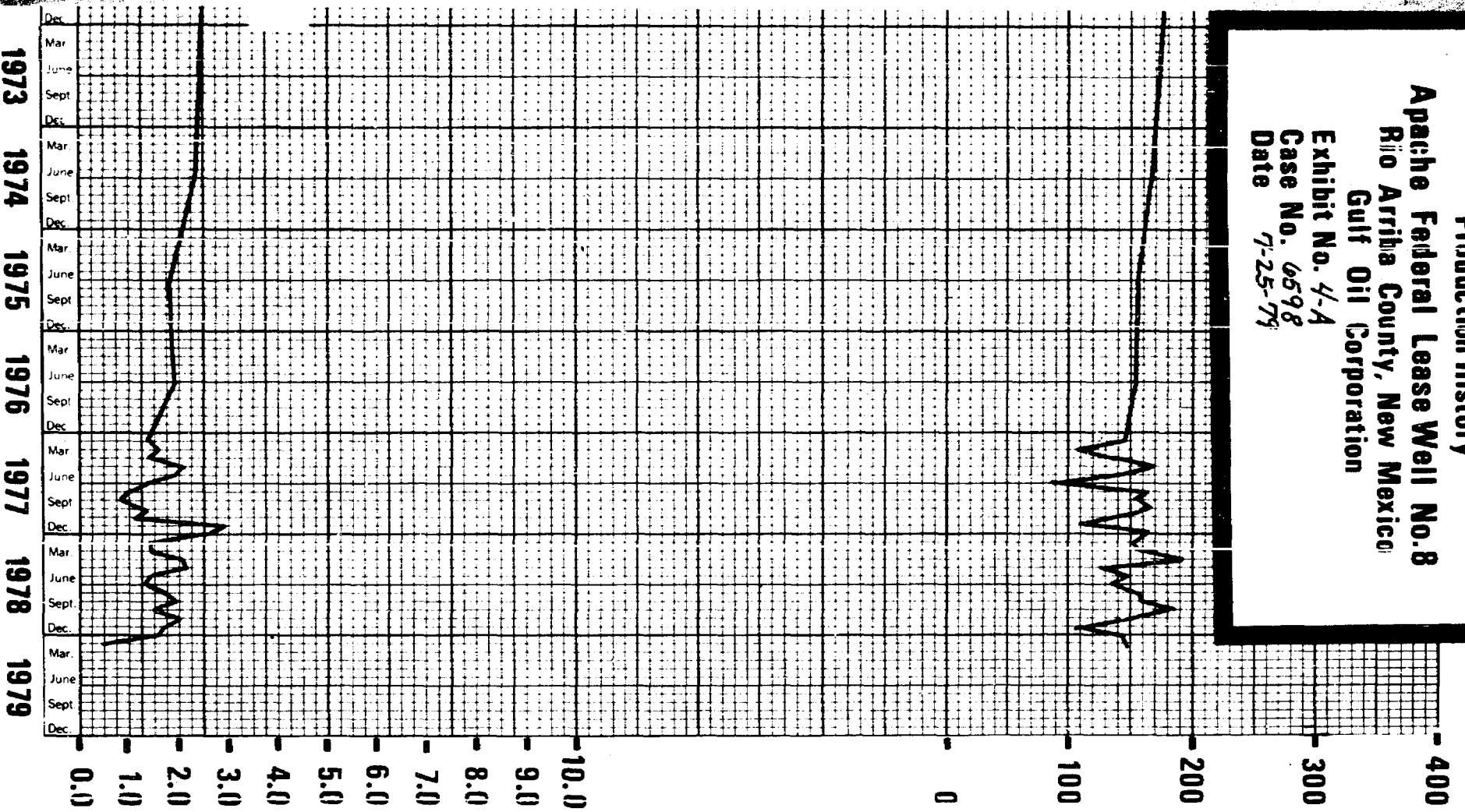


EXHIBIT NO. 3
CASE NO. 6598
DATE: 7-25-79
GULF OIL CORPORATION
WELL DATA

(1) Operator: Gulf Oil Corporation
Post Office Box 670
Hobbs, New Mexico 88240

(2) Well Name & Location:

Apache Federal Lease Well No. 8
990' FNL and 990' FWL of Section 8, T-24-N, R-5-W
Rio Arriba County, New Mexico

Apache Federal Lease Well No. 9
990' FNL and 990' FWL of Section 17, T-24-N, R-5-W
Rio Arriba County, New Mexico

See Exhibit 1 for map.

(3) Pools: Otero Gallup (Oil) (5514'-5744')
Basin Dakota (Gas) (6638'-6856')

Well No. 8 dualled under Order R-1660.
Well No. 9 dualled under Order DC-1014.

(4) Current Production: Twenty-four hour tests unavailable. See Production Decline Curves and Tables.

(5) Production Decline and Well History: See attached curves for decline.

Well No. 8 was spudded April 1, 1959 and drilled to a total depth of 7,045'; 5½" production casing was set at that depth. The well was dually completed in the Otero-Gallup and Basin Dakota Pools (present pool designations). The Dakota was perforated 6922'-6968' and treated with 1000 gallons of mud acid. A bridge plug was set at 6876' and additional Dakota was perforated at 6783'-6856'. This zone was fracture treated with 30,912 gallons of oil and 30,000 lbs. of 20-40 mesh sand. Initially, the Dakota zone flowed with an Absolute Open Flow of 2,775 MCF per day.

The Gallup zone was perforated 5676'-5744' and treated with 750 gallons of acid, 30,000 gallons of oil, 22,000 lbs. of 20-40 mesh sand, and 8,000 lbs. of 10-20 mesh sand. Absolute Open Flow was 2,150 MCF per day. Last production from this zone was in December of 1964.

Well No. 9 was spudded September 4, 1960 and drilled to a total depth of 6838'. The 5½" casing was cemented at 6821'. The well was dually completed in the Basin Dakota and Otero-Gallup Pools. The Dakota zone

BEFORE EXAMINED BY MUTTER	
OIL CONSERVATION DIVISION	
<i>Gulf</i>	EXHIBIT NO. <u>3</u>
CASE NO.	<u>6598</u>

BEFORE THE HONORABLE JUDGE
 OF THE DISTRICT COURT
 OF THE COUNTY OF RIO ARriba
 STATE OF NEW MEXICO
 GULF OIL CORPORATION
 CASE NO. 6598

EXHIBIT NO. 5-A
 CASE NO. 6598
 DATE: 7-25-79
 PRODUCTION HISTORY - OTERO-GALLUP POOL
 APACHE FEDERAL LEASE, WELL NOS. 8 AND 9
 RIO ARriba COUNTY, NEW MEXICO
 GULF OIL CORPORATION

Well No. 8			Well No. 9				
	GAS (MCF)	DAILY AVERAGE GAS (MCFPD)	GAS (MCF)	OIL (BBLS)	WATER (BBLS)	DAILY AVERAGE GAS (MCFPD)	OIL (BOFD)
1960							
OCT	66	2	- - -	- - -	- - -	- -	- -
NOV	1,793	60	840	138	112	28	4.6
DEC	501	16	1,550	167	- - -	50	5.4
ANNUAL	2,860	31	2,390	305	112	39	5.0
1961							
JAN	115	4	1,550	139	- - -	50	4.5
FEB	2,734	98	1,550	116	- - -	55	4.1
MAR	1,812	58	1,550	123	- - -	50	4.0
APR	2,676	89	1,200	92	- - -	40	3.1
MAY	882	28	1,200	93	- - -	39	3.0
JUN	593	20	1,200	102	- - -	40	3.4
JUL	535	17	1,200	89	2	39	2.9
AUG	153	5	1,200	96	- - -	39	3.1
SEPT	- - -	- -	1,200	87	- - -	40	2.9
OCT	- - -	- -	1,200	86	- - -	39	2.8
NOV	769	26	1,200	90	- - -	40	3.0
DEC	299	10	1,200	90	- - -	39	2.9
ANNUAL	10,568	29	15,450	1,203	2	42	3.3
1962							
JAN	83	3	1,200	68	- - -	39	2.2
FEB	343	12	1,200	69	8	43	2.5
MAR	280	9	1,200	82	10	39	2.6
APR	564	19	1,200	57	7	40	1.9
MAY	370	12	1,200	93	12	39	3.0
JUN	324	11	- - -	89	12	- -	3.0
JUL	198	6	- - -	110	12	- -	3.5
AUG	231	7	1,440	75	12	46	2.4

EXHIBIT NO. 5-ACASE NO. 6598DATE: 7-25-79

PRODUCTION HISTORY - OTERO-GALLUP POOL
 APACHE FEDERAL LEASE, WELL NOS. 8 AND 9
 RIO ARriba COUNTY, NEW MEXICO
 GULF OIL CORPORATION
 PAGE TWO

	Well No. 8		Well No. 9				
	GAS (MCF)	DAILY AVERAGE GAS (MCFPD)	GAS (MCF)	OIL (BBLS)	WATER (BBLS)	DAILY AVERAGE GAS (MCFPD)	OIL (BOPD)
SEPT	330	11	1,052	57	10	35	1.9
OCT	875	28	1,661	90	20	54	2.9
NOV	904	30	1,144	62	20	38	2.1
DEC	687	22	1,163	63	25	38	2.0
ANNUAL	5,189	14	12,460	915	148	34	2.5
<u>1963</u>							
JAN	308	10	1,551	86	- -	50	2.8
FEB	549	20	1,107	60	- -	40	2.1
MAR	815	26	794	43	- -	26	1.4
APR	580	19	276	15	- -	9	0.5
MAY	1,019	33	1,551	82	- -	50	2.6
JUN	829	28	1,366	74	- -	46	2.5
JUL	818	26	1,458	76	- -	47	2.5
AUG	733	24	1,514	82	- -	49	2.6
SEPT	452	15	1,144	62	- -	38	2.1
OCT	751	24	2,040	67	- -	66	2.2
NOV	811	27	1,290	43	- -	43	1.4
DEC	733	24	1,110	37	- -	36	1.2
ANNUAL	8,398	23	15,201	727	- -	42	2.0
<u>1964</u>							
JAN	867	28	2,130	74	- -	69	2.4
FEB	471	16	2,550	85	- -	91	3.0
MAR	409	13	1,140	38	- -	37	1.2
APR	901	30	1,290	43	- -	43	1.4
MAY	522	17	- - -	- -	- -	- -	- -

EXHIBIT NO. 5-A
CASE NO. 6598
DATE: 7-25-79

PRODUCTION HISTORY - OTERO-GALLUP POOL
APACHE FEDERAL LEASE, WELL NOS. 8 AND 9
RIO ARriba COUNTY, NEW MEXICO
GULF OIL CORPORATION
PAGE THREE

	Well No. 8		Well No. 9				
	<u>GAS (MCF)</u>	<u>DAILY AVERAGE GAS (MCFFD)</u>	<u>GAS (MCF)</u>	<u>OIL (BBLS)</u>	<u>WATER (BBLS)</u>	<u>DAILY AVERAGE GAS (MCFFD)</u>	<u>OIL (BOID)</u>
JUN	363	12	1,200	40	- -	40	1.3
JUL	553	18	- - -	- -	- -	- -	- -
AUG	390	13	- - -	- -	- -	- -	- -
SEPT	386	13	- - -	- -	- -	- -	- -
OCT	754	24	- - -	- -	- -	- -	- -
NOV	655	22	- - -	- -	- -	- -	- -
DEC	496	16	- - -	- -	- -	- -	- -
ANNUAL	6,767	19	8,310	280	- -	55	1.9

would correct w/ Dist super
probably not known
Dak prod from
total and allocate
diff to Gp.

REPORT EXAMINED BUTTER
 CASE NO. 6598
 DATE: 7-25-79
 PRODUCTION HISTORY - BASIN DAKOTA POOL
 APACHE FEDERAL LEASE, WELL NOS. 8 AND 9
 RIO ARriba COUNTY, NEW MEXICO
 GULF OIL CORPORATION

EXHIBIT NO. 5-B
 CASE NO. 6598
 DATE: 7-25-79
 PRODUCTION HISTORY - BASIN DAKOTA POOL
 APACHE FEDERAL LEASE, WELL NOS. 8 AND 9
 RIO ARriba COUNTY, NEW MEXICO
 GULF OIL CORPORATION

Well No. 8				Well No. 9			
		DAILY AVERAGE				DAILY AVERAGE	
		GAS (MCF)	OIL (BBL)	GAS (MCF)	OIL (BBL)	GAS (MCF)	OIL (BBL)
1960	32,061	763	356*	62,062	507	170	1.4
1961	73,960	1,622	203	99,653	739	273	2.0
1962	71,111	1,451	195	65,347	511	179	1.4
1963	54,352	651	163	99,933	586	274	1.6
1964	90,964	1,318	249	124,015	733	340	2.0
1965	87,248	1,545	239	101,785	581	279	1.6
1966	75,294	1,195	206	103,168	457	283	1.3
1967	81,178	1,352	222	97,338	561	267	1.5
1968	69,415	1,242	190	87,216	431	239	1.2
1969	69,898	970	192	78,255	413	214	1.1
1970	62,260	995	171	85,589	234	234	0.6
1971	65,878	862	180	75,647	403	207	1.1
1972	65,156	895	179	72,003	329	197	0.9
1973	63,001	866	173	68,326	334	187	0.9
1974	61,357	830	168	65,307	323	179	0.9
1975	56,030	663	154	61,631	272	169	0.7
1976	55,664	702	153				
1977							
JAN	4,599	45	148	5,417	30	175	1.0
FEB	2,985	45	107	4,237	20	151	0.7
MAR	4,238	45	137	5,446	17	176	0.5
APR	5,054	62	168	5,037	8	168	0.3
MAY	4,489	59	145	4,507	12	145	0.4
JUN	2,627	42	38	3,837	20	128	0.7
JUL	5,027	32	162	5,609	25	181	0.8
AUG	4,775	26	154	4,752	12	153	0.4
SEPT	4,936	39	165	5,086	20	170	0.7
OCT	4,471	35	144	4,647	18	150	0.6
NOV	3,191	88	106	3,789	17	126	0.6
DEC	5,138	81	136	4,761	18	154	0.6
ANNUAL	51,530	599	141	57,125	217	151	0.6

EXHIBIT NO. 5-8
CASE NO. 6598
DATE: 7-25-79
PRODUCTION HISTORY - BASIN DAKOTA POOL
APACHE FEDERAL LEASE, WELL NOS. 8 AND 9
RIO ARriba COUNTY, NEW MEXICO
GULF OIL CORPORATION
PAGE TWO

Well No. 8				Well No. 9			
D A I L Y A V E R A G E				D A I L Y A V E R A G E			
GAS (MCF)	OIL (BBLs)	GAS (MCFPD) **	OIL (BOPD) **	GAS (MCF)	OIL (BBLs)	GAS (MCFPD) **	OIL (BOPD) **
1978							
JAN	4,377	151.	1.4	4,695	25	151	0.8
FEB	4,445	159	1.4	4,722	18	157	0.6
MAR	4,379	190	2.0	4,580	45	148	2.0
APR	3,775	126	2.2	4,157	25	139	0.8
MAY	4,582	148	1.4	4,264	18	138	0.6
JUN	4,100	137	1.3	3,955	17	132	0.6
JUL	4,839	156	1.7	4,358	23	141	0.7
AUG	4,876	157	1.9	4,432	22	143	0.7
SEPT	4,028	183	1.5	3,549	19	118	0.9
OCT	4,706	152	2.0	4,319	31	139	1.0
NOV	3,196	107	1.7	3,330	24	111	0.8
DEC	3,797	141	1.6	3,846	18	124	0.7
ANNUAL	51,100	149	1.7	50,207	285	146	0.8
1979							
JAN	4,271	147	0.5	4,380	8	156	0.3

* 90 Days.

** Number of producing days varies - not always full month.

EXHIBIT NO. 5-B
CASE NO. 6598
DATE: 7-25-79
PRODUCTION HISTORY - BASIN DAKOTA POOL
APACHE FEDERAL LEASE, WELL NOS. 8 AND 9
RIO ARriba COUNTY, NEW MEXICO
GULF OIL CORPORATION
PAGE TWO

Well No. 8					Well No. 9				
	GAS (MCF)	OIL (BBL'S)	DAILY AVERAGE		GAS (MCF)	OIL (BBL'S)	DAILY AVERAGE		
			GAS (MCFPD)**	OIL (BOPD)**			GAS (MCFPD)**	OIL (FOPD)**	
1978									
JAN	4,377	40	151	1.4	4,695	25	151	0.8	
FEB	4,445	38	159	1.4	4,722	18	157	0.6	
MAR	4,379	47	190	2.0	4,580	45	148	2.0	
APR	3,775	65	126	2.2	4,157	25	139	0.8	
MAY	4,582	43	148	1.4	4,264	18	138	0.6	
JUN	4,100	38	137	1.3	3,955	17	132	0.6	
JUL	4,839	54	156	1.7	4,358	23	141	0.7	
AUG	4,876	59	157	1.9	4,432	22	143	0.7	
SEPT	4,028	34	183	1.5	3,549	19	118	0.9	
OCT	4,706	63	152	2.0	4,319	31	139	1.0	
NOV	3,196	50	107	1.7	3,330	24	111	0.8	
DEC	3,797	44	141	1.6	3,846	18	124	0.7	
ANNUAL	51,100	575	149	1.7	50,207	285	146	0.8	
1979									
JAN	4,271	14	147	0.5	4,380	8	156	0.3	

* 90 Days.

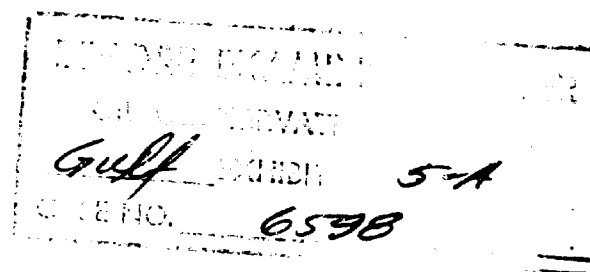
** Number of producing days varies - not always full month.

EXHIBIT NO. 5-A
CASE NO. 6598
DATE: 7-25-79
PRODUCTION HISTORY - OTERO-GALLUP POOL
APACHE FEDERAL LEASE, WELL NOS. 8 AND 9
RIO ARriba COUNTY, NEW MEXICO
GULF OIL CORPORATION
PAGE THREE

	Well No. 8		Well No. 9			DAILY AVERAGE	
	GAS (MCF)	DAILY AVERAGE GAS (MCFPD)	GAS (MCF)	OIL (BBLs)	WATER (BBLs)	GAS (MCFPD)	OIL (BOPD)
JUN	363	12	1,200	40	- -	40	1.3
JUL	553	18	- - -	- -	- -	- -	- -
AUG	390	13	- - -	- -	- -	- -	- -
SEPT	386	13	- - -	- -	- -	- -	- -
OCT	754	24	- - -	- -	- -	- -	- -
NOV	655	22	- - -	- -	- -	- -	- -
DEC	496	16	- - -	- -	- -	- -	- -
ANNUAL	6,767	19	8,310	280	- -	55	1.9

EXHIBIT NO. 5-A
CASE NO. 6598
DATE: 7-25-79

PRODUCTION HISTORY - OTERO-GALLUP POOL
APACHE FEDERAL LEASE, WELL NOS. 8 AND 9
RIO ARriba COUNTY, NEW MEXICO
GULF OIL CORPORATION
PAGE TWO



	Well No. 8			Well No. 9			
	GAS (MCF)	DAILY AVERAGE GAS (MCFPD)	GAS (MCF)	OIL (BBLs)	WATER (BBLs)	DAILY AVERAGE GAS (MCFPD)	OIL (BOPD)
SEPT	330	11	1,052	57	10	35	1.9
OCT	875	28	1,661	90	20	54	2.9
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DEC	687	22	1,163	63	25	38	2.0
ANNUAL	5,189	14	12,460	915	148	34	2.5
<u>1963</u>							
JAN	308	10	1,551	86	- -	50	2.8
FEB	549	20	1,107	60	- -	40	2.1
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APR	580	19	276	15	- -	9	0.5
MAY	1,019	33	1,551	82	- -	50	2.6
JUN	829	28	1,366	74	- -	46	2.5
JUL	818	26	1,458	76	- -	47	2.5
AUG	733	24	1,514	82	- -	49	2.6
SEPT	452	15	1,144	62	- -	38	2.1
OCT	751	24	2,040	67	- -	66	2.2
NOV	811	27	1,290	43	- -	43	1.4
DEC	733	24	1,110	37	- -	36	1.2
ANNUAL	8,398	23	15,201	727	- -	42	2.0
<u>1964</u>							
JAN	867	28	2,130	74	- -	69	2.4
FEB	471	16	2,550	35	- -	91	3.0
MAR	409	13	1,140	38	- -	37	1.2
APR	901	30	1,290	43	- -	43	1.4
MAY	522	17	- - -	- -	- -	- -	- -

OFFSET OPERATORS
to Apache Federal Lease

Amerada - Hess Corporation
Post Office Drawer 840
Seminole, Texas 79360
ATTN: Mr. Grant Miller

Continental Oil Company
Post Office Box 460
Hobbs, New Mexico 88240
ATTN: Mrs. Katie Jiminez

Supron Energy Corporation
Building 5, Fifth Floor
10,300 N. Central Expressway
Dallas, Texas 75231
ATTN: Mr. Haskell Fleetwood

Getty Oil Company
Post Office Box 1231
Midland, Texas 79702
ATTN: Mr. Joe King

American Petrofina Company
Post Office Box 1311
Big Spring, Texas 79720
ATTN: Mr. R. C. Bott

El Paso Natural Gas Company
Post Office Box 1492
El Paso, Texas 79978
ATTN: Mr. Bob Manning

Merrion & Bayless
Post Office Box 1541
Farmington, New Mexico 87401

R & G Drilling Company, Inc.
c/o Walsh Engineering & Production
Post Office Box 254
Farmington, New Mexico 87401
ATTN: Mr. Ewell Walsh

United States Geological Survey
Federal Building
701 Camino Del Rio
Durango, Colorado 81301

OFFSET OPERATORS
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OFFSET OPERATORS
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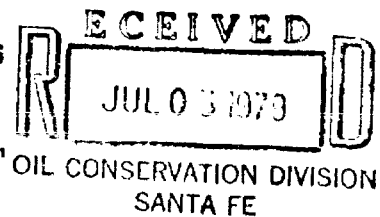
El Paso Natural Gas Company
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United States Geological Survey
Federal Building
701 Camino Del Rio
Durango, Colorado 81301

ROBERT L. BAYLESS
PETROLEUM CLUB PLAZA BUILDING
P. O. BOX 1541
FARMINGTON, NEW MEXICO 87401



July 2, 1979

Case 6598

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

ATTN: Mr. Joe D. Ramey

RE: Exception to Rule 303A,
Downhole Commingling
Request. OCD - Dist. 3

Gentlemen:

Regarding the June 28 letter from Gulf Oil Exploration and Production Company to you requesting a hearing to be set to consider an exception to the above referred to Rule on their Apache Federal Lease well nos. 8 & 9, Merrion & Bayless has no objection to this downhole commingling.

Yours truly,

MERRION & BAYLESS


ROBERT L. BAYLESS

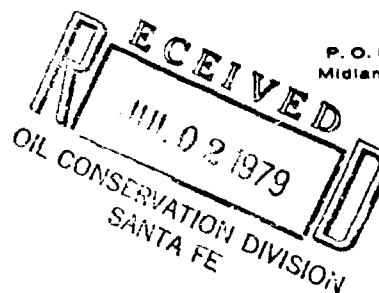
RLB/pb

xc: Gulf Oil

Gulf Oil Exploration and Production Company

J. M. Thacker
GENERAL MANAGER PRODUCTION
SOUTHWEST DISTRICT

June 28, 1979



P. O. Drawer 1150
Midland, TX 79702

New Mexico Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87501

ATTENTION: Mr. Joe D. Ramey

Case 6598

RE: Exception to Rule 303A, Downhole
Commingling Request. OCD - District 3.

Gentlemen:

Gulf Oil Corporation proposes to downhole commingle production from the Otero Gallup oil zone and the Basin Dakota gas zone in our Apache Federal Lease (Jicarilla Tribe Contract No. 69) Well Nos. 8 and 9, located in Sections 8 and 17 of T-24-N, R-5-W in Rio Arriba County, New Mexico.

Gulf respectfully requests that a hearing be set at the earliest possible time to consider an exception to Statewide Rule 303A which would grant authority to downhole commingle the two subject zones in our Apache Federal Well Nos. 8 and 9. Offset operators and the USGS are being notified by copy of this letter.

Yours very truly,

R. H. PEACOCK
Manager-Operations

BSS:kag

cc: NMOC - District 3

USGS

Offset Operators (9)



A DIVISION OF GULF OIL CORPORATION

OFFSET OPERATORS
to Apache Federal Lease

Amerada - Hess Corporation
Post Office Drawer 840
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Supron Energy Corporation
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Farmington, New Mexico 87401

United States Geological Survey
Federal Building
701 Camino Del Rio
Durango, Colorado 81301

RECEIVED
JUL 9 2 1979
OIL CONSERVATION DIVISION
SANDOZ
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Hobbs, New Mexico 88240
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Getty Oil Company
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c/o Walsh Engineering & Production
Post Office Box 254
Farmington, New Mexico 87401
ATTN: Mr. Ewell Walsh

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6598

Order No. R-6076

APPLICATION OF GULF OIL CORPORATION

FOR DOWNHOLE COMMINGLING, RIO ARRIBA

COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 25
19 79, at Santa Fe, New Mexico, before Examiner Daniel S.
Nutter.

NOW, on this August day of 19 79, the
Division Director, 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 Division has jurisdiction of this cause and the
subject matter thereof.

(2) That the applicant, Gulf Oil Corporation, is
the owner and operator of the Apache Federal Wells No. 8
and No. 9 located in Unit D of Section 17, both in
located in Unit D of Section 8, Township 24 North
Range 5 West, NMPM, Rio Arriba County, New Mexico.

(3) That the applicant seeks authority to commingle
Otero-Gallup and Basin Dakota production
within the wellbores of the above-described wells.

(4) That from the Otero-Gallup zone, the subject well is capable of low marginal production only.

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

(6) 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.

(7) 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.

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

~~(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, _____ percent of the commingled _____ production should be allocated to the Otero-Gallup zone, and _____ percent of the commingled _____ production to the Basin-Dakota zone.~~

(ALTERNATE)

(9) That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the Aztec district office of the Division and determine an allocation formula for each of the production zones.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to commingle Otero-Gallup and Basin-Dakota production within the wellbore of the Apache Federal Wells No. 8, located in Unit D of and No. 9 located in Unit D of Section 17, both in Section 8/ , Township 24 North, Range 5 West, NMPM, Rio Arriba County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in each of the subject wells.

~~(ALTERNATE)~~

~~(2) That _____ percent of the commingled production shall be allocated to the Otero-Gallup zone and _____ percent of the commingled production shall be allocated to the Basin-Dakota zone.~~

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

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

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