

CASE 4563: Application of CORINNE
GRACE FOR SPECIAL GAS-OIL RATIO
LIMITATION & PRESSURE MAINTENANCE.

Continued to Corinne, Tex

3-1-72

*10-1-72
to
Corinne, Tex*

To Mr. Galt

DOCKET MAILED
Date 2/18/71

DOCKET MAILED

Date 12-21-71

for Jan 5th

Mr. Galt

DOCKET MAILED
Date 7-30-71

To Hon. Stevens
+
Hon. H. H. H.

O.O. Box 2062
Santa Fe, N.M.

DOCKET MAILED
Date 9-17-71

for Sept 29th by

DOCKET MAILED

Date 10-14-71
for Oct 27th

DOCKET MAILED

Date 1-20-72

DOCKET MAILED
Date 10-28-71

To Mrs. H. H. H.
O.O. Box 1418
Carlsbad, N.M.

dearnley-meier reporting services

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG., P.O. BOX 10925 PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87105
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
CONFERENCE ROOM, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

March 1, 1972

EXAMINER HEARING

IN THE MATTER OF:

Application of Corinne Grace for
special gas-oil ratio limitation and
pressure maintenance project, Chaves
County, New Mexico.

Case No. 4563

BEFORE: Richard L. Stamets
Examiner

TRANSCRIPT OF HEARING

1 MR. STAMETS: We will now call Case 4563.

2 MR. HATCH: Case Number 4563 is the application
3 of Corinne Grace for special gas-oil ratio limitation and
4 pressure maintenance project, Chaves County, New
5 Mexico.

6 MR. STAMETS: I will call for appearances in
7 Case 4563.

8 MR. SPERLING: James E. Sperling, appearing for
9 the applicant; George Huuber, co-counsel.

10 MR. HINKLE: Clarence E. Hinkle of Roswell
11 appearing for the Humble Oil and Refining Company.

12 MR. STAMETS: Are there any other appearances
13 in this case?

14 (No response.)

15 MR. STAMETS: You may proceed, Mr. Sperling.

16 MR. SPERLING: We have Mr. LeMay as our first
17 witness.

18 (Whereupon William LeMay was sworn by Mr. Hatch.)

19 WILLIAM J. LeMAY,
20 appeared as a witness and having already been duly sworn,
21 testified as follows:

22 MR. SPERLING: Mr. Examiner, there are a couple
23 of preliminary matters that I would like to call to the
24 Commission's attention. The Case was advertised seeking
25 authority to produce Corinne Grace State Well Number One,

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
 208 SIMMS BLDG., P.O. BOX 1092, PHONE 243-1681 • ALBUQUERQUE, NEW MEXICO 87103
 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 located in Unit A of Section 1, Township 15 South, Range
 2 29 East, Double L-Queen Pool, Chaves County, New Mexico;
 3 and to seek authority to strip the liquids. We wish to
 4 delete that from the application, requesting authority to
 5 strip the liquids in the proposed area.

6 The applicant simply seeks to use conventional
 7 separation, gas separation procedures, insofar as the
 8 produced gas is concerned.

9 The second matter which we wish to delete
 10 from the application is that portion of it which seeks
 11 to transfer an oil allowable from Well Number Two to Well
 12 Number One. There has never been an allowable assigned
 13 to the Number Two Well, and therefore it is requested that
 14 it not be mentioned.

15 We request permission of the Examiner to
 16 amend the application in those respects.

17 MR. STAMETS: I think that will be fine, Mr.
 18 Sperling. I am sure that the equipment that will be used
 19 will be determined during the course of your testimony.

20 MR. SPERLING: Yes, sir.

21 DIRECT EXAMINATION

22 BY MR. SPERLING

23 Q Would you state your name, please?

24 A William J. LeMay.

25 Q Where is your place of residence and what is your

1 profession, Mr. LeMay?

2 A Consulting geologist in Santa Fe, New Mexico.

3 Q Would you give us a very brief resume of your professional

4 qualifications?

5 A Yes. These are a matter of public record in the

6 past and my qualifications have been accepted as an

7 expert witness.

8 Q Before this Commission?

9 A Yes, sir.

10 Q Now, are you familiar with the Double-L Queen Pool

11 in Chaves County, New Mexico? And specifically the

12 area in which the two wells which are the subject

13 of this application are located?

14 A Yes, I have made studies of the Double-L Queen and

15 have been involved over the course of the past two

16 years with various studies and I am sure the

17 Commission is aware of the cases that have come

18 before it involving the Double-L field and I do have

19 a background in that area.

20 Q In that connection, would you please refer to what

21 has been marked Exhibit #1 and explain the information

22 which appears there?

23 A Yes, sir. Exhibit 1 is a structure map and a reservoir

24 map of that portion of the Double-L Queen Pool and in

25 general show the dip to the east. This map is in

1 close agreement with other maps of the same area and
2 I don't think there is any problem as far as
3 structural configuration is concerned. The map shows
4 the area where the Queen sand is at this time and the
5 reservoirs also where Queen sand has produced gas.

6 The third area, the green area on the map, is
7 the oil rim down dip from the up dip gas. I think
8 it is important to note that the Double-L field is
9 a straight graphic trap with associated up dip gas
10 and as it was pointed out in Case Number 4352, both
11 the initial and the reviewed cases, that by withdrawing
12 oil from the oil rim, that gas and oil contact have
13 migrated down dip.

14 This was established in previous testimony in
15 Case 4352.

16 The fact that the pool now is classified by
17 Order Number R-3981 as an associated pool whereby
18 the withdrawal of the gas or oil is according to
19 Commission formula. The important thing to note on
20 this Exhibit #1 is the fact, and Exhibits #2 and #3,
21 likewise bring this out, the fact that initially the
22 Corinne Grace #1 Well, located in Unit A of Section 1
23 was established as an allowable well and a good well
24 and it did go to gas.

25 The other wells along the gas-oil contact are

1 within the zone and have a similar history. So, I
2 think it can be pointed out with certainty that this
3 gas cap has migrated down dip.

4 This Queen sand advance, and there are more
5 than one even though I only show one, because of its
6 relationship to this area that we are talking about,
7 had effectively separated. The trend runs basically
8 north-south and at this time, the Queen rock that
9 forms an effective barrier to both fluid and gas
10 migration has separated these various Queen trends.

11 This can be pointed out by the fact that within
12 two miles of the western edge of my map there is
13 water recovery from the Queen formation indicating
14 the separate occurrence of water and oil-gas
15 relationship.

16 In the same token to the east, approximately
17 within two miles of these Queen gas wells and down
18 dip from this, there is a relationship of oil and
19 gas indicating another trend.

20 Q Now, will you refer to Exhibits #2 and #3 and give
21 us whatever explanation they require?

22 A Exhibit #2 is a production map of the oil recovery
23 from the area of the Double-I field, it is brought
24 up to date as of 6/1/71. Subsequently, the production
25 there, which is not shown on the Exhibit, but the

deanley-meier reporting services

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
200 SIMMS BLDG., P.O. BOX 1082, PHONE 243-8891 ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

1 point to be made is the higher recoveries from the
2 wells, namely in Sections 6, 15, 30, 31, 14, and 30.

3 The quality relationship is shown on Exhibit #2
4 and would not be affected by the additional
5 production that has taken place in the last six months.

6 Exhibit #3 reinforces my previous statement that
7 the well was a good well when it was initially drilled
8 and completed in December of 1969. December of 1969
9 production, shown on the bottom of Exhibit #3, and
10 the 1970 production is shown on the top. From
11 January through, roughly, October, the well produced
12 approximately 12,000 barrels of accumulative production
13 until October when you might say the gas hit and it
14 had a very high ratio, approximately sixty thousand
15 cubic feet of gas per barrel.

16 The well has not been producing since that point
17 and I think it is important to note the fact that the
18 well was an excellent quality well up to that point.

19 Q Were changes in the gas-oil ratio with reference to
20 these wells and the other wells similarly located
21 structurally, has there been a change in the chemical
22 composition or quality of the gas produced?

23 A In general, as was shown in the previous case, 4352,
24 there is an increase as you approach the oil rim and
25 the casing head gas within the oil rim is of a higher

1 volume than the gas further away from the oil rim.

2 Q Do you have anything further with reference to these
3 Exhibits, or with reference to any other matters
4 relating to your knowledge of the Double-L field?

5 A No, I think that's all I have.

6 MR. SPERLING: That is all I have from this
7 witness.

8 MR. STAMETS: Are there any questions of this
9 witness?

10 CROSS-EXAMINATION

11 BY MR. HINKLE

12 Q Mr. LeMay, referring to Exhibit #3, does that show
13 that your last production was in September of 1970?

14 A Correct.

15 Q And the gas-oil ratio at that time was what?

16 A Actually that's when the gas-oil ratio increased
17 radically. In September, it jumped from approximately
18 4,000 to 38,000 and then in October the GOR test was
19 taken and it was approximately 80,000.

20 Q You are familiar with the present rules governing this
21 pool?

22 A Yes.

23 Q And under the present rules, would this well be
24 classified an oil well or a gas well?

25 A Barring any further tests, from the October date and

1 considering the 60,000 to 1 GOR, that would classify
2 the well as a gas well because of the 30,000 to 1
3 Commission ruling as to whether it be classified gas
4 or oil.

5 Q That rule provides for 30,000 to 1?

6 A That is correct.

7 Q Referring to your Exhibit #1, this shows the Humble
8 Oil and Refining Company's acreage to the east of
9 the Grace acreage; is that right?

10 A That is correct.

11 Q And you indicated that the brown area there by the
12 Humble Well is located in the northwest of northwest of
13 Section 8?

14 A Well, I would like to explain that a little. It has
15 to do with the geology of the Queen reservoir and
16 the Queen sand producing trend. Occasionally you
17 will get a tight spot in the Queen reservoir that is
18 usually quite small and there is no evidence of this
19 particular tight spot there because you did produce
20 a good well.

21 There is evidence in the brown section of Section
22 36, so outside of the original pinch-out in both the
23 East and the West, any brown spots just show the
24 reservoir.

25 Q The brown spot in connection with the Humble Well

1 does not indicate it is not a good well?

2 A Not at all. The brown spots I could have put anywhere,
3 but it had to do with the fact that the reservoir
4 is not completely porous throughout the trend.

5 Q The Humble Well is a pretty good well?

6 A An excellent well, yes.

7 MR. HINKLE: That's all I have.

8 MR. STAMETS: Are there any other questions?

9 (No response.)

10 CROSS-EXAMINATION

11 BY MR. STAMETS

12 Q Is it your testimony that when the well was initially
13 completed, it stood below the gas-oil contact?

14 A Yes, that's my understanding.

15 Q I believe you stated that the reason that the gas
16 has migrated down dip and this well no longer could
17 be classified an oil well was because there was no
18 market for gas, or a limited market for gas or it
19 had not been determined and therefore the oil was
20 withdrawing faster than the gas migrated down dip;
21 is that correct?

22 A The reasons are multiple for the lack of development
23 of gas, I think a combination of factors are involved.

24 One, of course, was a market was not developed
25 satisfactorily and the price paid in the area was

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 quite low. Numerous contacts have been made to
2 develop this gas market when this was classified a
3 seaparate pool.

4 The only market that I am cognizant of in the
5 field is casings head market which is working close
6 to capacity and is not a good economic market for
7 gas. Whether this particular gas in this rather large
8 area could be developed economically, I think most
9 operators at the present time will agree that it is
10 not economical to develop the gas cap.

11 Q Will later witnesses develop some testimony as to
12 the current capacity of the well and the effect what
13 has been proposed will have on the reservoir?

14 A Yes, sir.

15 MR. STAMETS: I believe that is all I have. Are
16 there any further questions of this witness?

17 (No response)

18 MR. STAMETS: If not, the witness will be excused.

19 (Witness excused.)

20 CHARLES E. MILLER,
21 was called as a witness and having already been duly sworn,
22 testified as follows:
23
24
25

DIRECT EXAMINATION

BY MR. SPERLING

Q Please state your name, residence and profession?

A Charles E. Miller, Hobbs, New Mexico. I am a professional engineer and a Certified Petroleum Geologist.

Q Have you on prior occasions testified before the Commission so that your qualifications are a matter of record?

A I have testified on several occasions.

MR. SPERLING: Are Mr. Miller's qualifications accepted?

MR. STAMETS: They are.

Q (By Mr. Sperling) Mr. Miller, would you please refer to what has been marked Exhibit #4 in this matter and please explain what is portrayed on that Exhibit?

A Well, it primarily shows the top of the Queen sand with a contour interval of twenty-five feet.

Q Was that map prepared by you?

A Yes, sir.

Q Give us a brief statement of your experience and familiarity with the Double-L Queen pool; the work you have done there?

A I was called in by Mr. and Mrs. Grace to supervise the drilling of the well and I saw it from beginning

1 to completion.

2 Q Which well?

3 A State Number 1.

4 Q And its location?

5 A The northeast corner of Section 1, Township 15 South,
6 Range 29 East.

7 Q And you were consulted in connection with the initial
8 drilling of that well?

9 A Yes, sir.

10 Q Have you done work in connection with the reservoir
11 of the Double-L Queen so that you have some professional
12 familiarity with the nature of the Queen sand and
13 other pertinent geological information?

14 A I have.

15 Q Would you give us a general history of Well Number 1,
16 State Well Number 1?

17 A This well was started in the latter part of 1969 and
18 drilled to -- I thought I had the total up here, but
19 I don't have it. We drilled --

20 Q This well was drilled when?

21 A In the very latter part of 1969, December.

22 Q Was the well cored?

23 A Yes, it was cored.

24 Q Tell us about the result of the drilling of the well.
25 Was substantial production encountered?

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-8691 • ALBUQUERQUE, NEW MEXICO 87108
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 A Yes, it was.

2 Q At what intervals was it cored?

3 A I have it here. The beginning coring was at 1,926
4 feet and it was cored to a depth of 1,956 feet.

5 Q And give us the result of that core analysis?

6 A Well, I can read the entire thing.

7 Q I don't think that is necessary, give us the pertinent
8 material.

9 A The best part of the pay section according to the
10 core is from 1,930 feet to 1,931 feet. There was a
11 permeability of 1,400 milidarcie and a porosity of
12 40.6 percent.

13 From 1,931 to 1,932, there was a permeability
14 of 124 milidarcie and a porosity of 26.4 percent.

15 From 1,932 to 1,933, it was 150 milidarcie with
16 a porosity of 27 percent.

17 From 1,933 to 1,934, a permeability of 34
18 milidarcie and a porosity of 29 percent.

19 From 1,934 to 1,935, which would be the break
20 in the section, it was less than one-tenth of one
21 percent milidarcie and 7.7 percent porosity.

22 From 1,935 to 1,936, there was fifteen percent
23 permeability and 9.2 percent porosity.

24 From 1,936 to 1,938, there was six-tenths of
25 one percent permeability and 9.9 percent porosity.

1 From 1,937 to 1,938, there was 57 percent milidarcie
2 permeability and 20.6 percent porosity.

3 From 1,938 to 1,939, there was 17 milidarcie
4 and 25.3 percent permeability.

5 From 1,939 to 1,940, there/28 milidarcie and
6 the percentage of porosity was 24.5.

7 Q Would you classify the permeability and porosity as
8 quite satisfactory?

9 A Very much so. In the upper part where we had high
10 porosity when you picked up the core, it would almost
11 fall apart in your hands.

12 Q What was the first potential of the Number 1 State
13 Well?

14 A I can give it to you from memory, it was in the
15 neighborhood of 160 barrels a day, but part of it was
16 we were getting back frack oil.

17 Q What was the gas-oil ratio at that time?

18 A The gas-oil ratio at that time was 4,454 to 1.

19 Q Now, would you continue with the production history
20 and give us the well's course in chronological order?

21 A Well, I would need to refer to the curve. Here is
22 the curve, I think. I will say there was a gradual
23 decline with a comparative increase in gas throughout
24 the history of the well.

25 Now, I can give you the ratio as of August 1970

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG., P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 which will give you some idea of the production at
2 that time.

3 Q All right.

4 A The test was made at 4,864 and the pressure showed
5 178 pounds. The gas-oil ratio was 88,107 and the
6 well made 10.43 barrels of oil in twenty-four hours.

7 Q What date was that?

8 A September 3rd, 1971.

9 MR. STAMETS: Could I have that date one more
10 time?

11 THE WITNESS: September 3rd, 1971.

12 Q (By Mr. Sperling) Now, on Exhibit #4 which you have
13 previously identified, there is shown a green line
14 and a red line which I take it to be lines illustrating
15 the cross sections?

16 A That's right. The green line is drawn primarily in
17 an east-west direction to just support testimony
18 given previously of this whole area having an east dip
19 with minor modulation due to slight fluctuation in
20 contact.

21 Q Have you prepared an exhibit which will illustrate
22 the cross section by reference to dates?

23 A Exhibit #5 is an east-west cross section also. The
24 purpose of this cross section was primarily just
25 another way of showing the general east dip.

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

- 1 If you will notice the top of the Queen sand
- 2 shows almost a constant east dip without any
- 3 interruption -- that is an east-west dip.
- 4 Q And your reference point for the purpose of this
- 5 illustration is what?
- 6 A The top of the Queen sand.
- 7 Q Referring you to Exhibit #6 now?
- 8 A This cross section runs in a north-northeasterly, east
- 9 southwesterly direction and you will see by looking
- 10 at the point I have chosen, 2,000 feet above sea
- 11 level, the top of the Queen sand at this interval
- 12 varies very little from northwest to southeast.
- 13 Q Does that verify or confirm the conclusions you have
- 14 drawn and which are indicated by the contour lines
- 15 on both Exhibit #1, which was testified to by Mr.
- 16 LeMay, and your Exhibit #4?
- 17 A Yes. The dip is primarily to the east with a few
- 18 irregularities on the top of the Queen sand, but that
- 19 is normal. It does bear out the east-west dip
- 20 dipping from west to the east.
- 21 Q And you have prepared Exhibit #7, would you please
- 22 refer to that and give us your explanation of what
- 23 it shows?
- 24 A Well, it was drawn primarily to show the decline of
- 25 the Corinne Grace Number 1, and the adjacent Humble

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG., P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 Well and also their Number 2 which is southeast
2 diagonally.

3 Q Just for the record, would you please identify the
4 location of the two Humble Wells to which you have
5 referred?

6 A The Humble Number 1 is in the northwest corner of
7 the northwest corner of Section 6; Humble Number 2
8 is in the southwest corner of the northwest corner
9 of Section 6. Both are 15 south, Range 30 East.

10 One thing I would like to point out on this
11 is the decline of Corinne Grace State Number 1 in
12 October in terms of production --

13 Q October of what year?

14 A 1970. The Humble Wells, Number 1 and Number 2, each
15 rose and they did not decline in proportion to State
16 Number 1.

17 Q So what you have done is prepare a graph to simply
18 project the decline, or the theoretical decline
19 for even though there was no production for State
20 Number 1 Well from the shut in time in October of
21 1970, so you could measure production in September
22 of 1971; is that correct?

23 A That is correct.

24 Q Whereas the production line as indicated for the
25 two Humble Wells represent actual production; is

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
 209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 that correct?

2 A Yes, and that information was taken from Commission
 3 records.

4 Q What does that indicate to you, Mr. Miller, what
 5 professional conclusion do you draw from the
 6 information that you have collected there, keeping in
 7 mind, of course, what you have already explained
 8 concerning the dip, the down dip to the east?

9 What are your conclusions as an engineer as to
 10 the production that might have been obtained from the
 11 Grace Well if it had continued production as
 12 distinguished from the production that might have
 13 been anticipated from the two Humble Wells?

14 A If we can assume that the State Number 1 should have
 15 been allowed to produce all the time from October
 16 to the time it was shut in, I would say that the
 17 additional oil would have been possibly half of this
 18 figure in September of 1971 and the figure in October
 19 which would be a difference of about between 28
 20 barrels a day and 10.4 barrels a day.

21 Q So striking an average of that --

22 A We have lost some production there somewhere.

23 Q Now, in your opinion, has the gas cap which is
 24 illustrated on a previous exhibit actually migrated
 25 to the east?

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG., P.O. BOX 1092, PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 A Yes, that is the natural direction for the expansion
2 of the gas. It would not move to the west because
3 it would be closed off by the stratigraphic pinch
4 and the only direction it could move in would be to
5 the east.

6 Q And in your opinion, that has occurred?

7 A I believe it has.

8 Q Now, would you refer to what has been marked Exhibit
9 #8, Mr. Miller, and tell us what that is?

10 A These are production figures from the Humble Oil and
11 Refining Company Wells 1, 2, 3, and 4, and from the
12 Delport-Robb wells 3, 5, and 8; do you wish me to read
13 them?

14 Q I don't think it is necessary, but do they show,
15 insofar as the two wells which are illustrated on
16 Exhibit #7 --

17 MR. HINKLE: Are you referring to Exhibit #8?

18 MR. SPERLING: Yes.

19 MR. HINKLE: I don't think we have a copy of
20 that.

21 MR. SPERLING: I'm sorry.

22 A If I may take a few minutes, there are several things
23 I would like to point out?

24 Q Go ahead.

25 A If you will follow me, you will note that on the

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
 209 SIMMS BLDG., P.O. BOX 1092 • PHONE 243-0691 • ALBUQUERQUE, NEW MEXICO 87103
 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87106

1 Humble Well Number 1 production held up relatively
 2 well from January of 1971 through August of 1971.

3 Likewise, Well Number 2 didn't show any appreciable
 4 drop during that same period. This was also true of
 5 Number 3 and Well Number 4.

6 In January of 1971, there was a production of
 7 825 barrels and at the end of August, 1971, there
 8 was a production of 481 barrels.

9 The Delport-Robb in January of 1971 showed a
 10 production of 797 barrels and in August, 1971, 531
 11 barrels. The Number 2 in January showed 266 barrels
 12 and then in August 177 barrels.

13 Now, the Delport-Robb Number 3, which is down
 14 in the southeast corner of Section 1, showed a production
 15 of 1,889 barrels in January and a production of 2,170
 16 barrels in August, but that is not an exactly true
 17 figure because in July it showed only 1,484 barrels,
 18 so I am assuming part of August's figure was leftover
 19 from the previous month.

20 In other words, I think it is safe to say that
 21 the Delport-Robb Number 3 showed a decline of 1,809
 22 barrels to approximately a little less than 1,500
 23 barrels during that time.

24 Q Are all the wells identified on Exhibit #8 shown on
 25 Exhibit #4, your Exhibit #4?

dearnley-meier reporting services

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG., P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87108
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 A Yes, they are.

2 Q Mr. Miller, have you concluded there has been drainage
3 from the land upon which the Grace Wells Number 1
4 and 2 are located?

5 A Yes. After October of 1970, the Grace Well was not
6 in position to protect itself and the oil went where
7 the point of least resistance was to a point where
8 it was being withdrawn and that was down structure.

9 Q Now, you have been employed by Mrs. Grace in connection
10 with the proposed installation that is really the
11 subject matter of this application; have you not?

12 A We have discussed it, it has to be a contract job.

13 Q Will you explain to us what is proposed?

14 A The proposal there is to produce the Number 1 well,
15 take the gas production through a compressor and
16 put that gas back into the Number 2 with none of the
17 gas being exposed.

18 In other words, we are not dissipating any gas,
19 just simply putting back all the gas we take into
20 the formation.

21 Q In the course of doing that, what type of separation
22 is proposed?

23 A What is proposed is to simply take such oil that may
24 come with the gas out of Number 2, run it through a
25 separator, the oil will go into a tank and the gas

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG., P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

- 1 will be circulated back into the Number 2 well.
- 2 Q In your opinion, will that result in any damage to
- 3 the reservoir?
- 4 A I have given a great deal of thought to that, and I
- 5 can't see, if you put back the same amount of gas you
- 6 take out, I don't see from where you are going to
- 7 damage the reservoir.
- 8 Q Would it also allow Mrs. Grace to cover at least a
- 9 portion of her fair share of the common source of
- 10 supply?
- 11 A It should.
- 12 Q Would it result in any damage to the correlative
- 13 rights of the offset operators?
- 14 A I can't see why it should. My answer would be no.
- 15 Q Do you have any information, any current information,
- 16 Mr. Miller, on the gas market situation in the area?
- 17 A No, to be real honest, I don't have any recent
- 18 information. We have gone through several phases in
- 19 trying to get a market for gas and we usually wind up
- 20 at the same place we started.
- 21 Q Do you mean you simply have not found a market?
- 22 A There is some gas being taken out, but that is
- 23 primarily to extract nitrogen.
- 24 Q Does the nitrogen content increase with increased
- 25 gas-oil ratio?

dearnley-meier reporting services

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG., P.O. BOX 1092, PHONE 243-6691, ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST, ALBUQUERQUE, NEW MEXICO 87108

1 A Well, I assume that it might, but that I can't answer
2 because I haven't had an analysis of the gas recently.

3 I have an analysis taken some time ago, but I
4 haven't had a recent analysis, I have no statistical
5 basis on which I can answer that question.

6 Q At that time, what was the nitrogen content? And
7 you might give us the date?

8 A March 2nd, 1970, and it was run by Conoco Oil Company
9 and the nitrogen content was 48.28; methane was 35.08;
10 ethane was 8.53; propane was 4.40; iso-butane was .70;
11 normal butane was 1.55; iso-pentane was .52; normal
12 pentane was .57; hexane was .37; making a total of
13 100 percent.

14 Q At the time of the initial production of gas in State
15 Number 1 Well, what was the gravity of oil?

16 A I took that myself and I believe I remember it to be
17 36.8.

18 MR. PORTER: Would you repeat the ethane content?

19 THE WITNESS: 8.53. If you wish, I will give you
20 a gas per thousand content.

21 MR. PORTER: No, that's fine.

22 MR. SPERLING: I believe that is all I have.

23 MR. STAMETS: Mr. Hinkle, do you anticipate
24 some rather lengthy cross-examination?

25 MR. HINKLE: No, I don't think I have too many

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG., P.O. BOX 1092 • PHONE 243-0391 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 questions.

2 (Whereupon a recess was taken.)

3 (Case Number 4563 continues.)

4 MR. STAMETS: The hearing will come to order,
5 please.

6 MR. SPERLING: Mr. Examiner, before we proceed
7 with cross-examination, as is usually the case when there
8 is a recess, a lawyer thinks of something, so I would like
9 to ask a few further questions.

10 MR. STAMETS: You may proceed.

11 Q (By Mr. Sperling) I believe we neglected to put the
12 core analysis of the Number 2 Well, which might be
13 of value on the record.

14 You gave us the core analysis for the State
15 Number 1 Well, and I do not believe we covered the
16 Number 2 Well. I understand you do have core
17 information concerning the Number 2 Well.

18 A I have.

19 Q Would you please review that information for us now,
20 much in the same manner you did with the Number 1
21 Well?

22 A The report shows the core was started from 21 to 22
23 and the permeability was 76 milidarcie with a porosity
24 of 26.6 percent.

25

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
 209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 From 22 to 23, 48 milidarcie with a porosity
 2 of 24.8 percent.

3 From 23 to 24, 196 milidarcie with a porosity
 4 of 26.4 percent.

5 From 24 to 25, a milidarcie of 1.3 and a porosity
 6 of 13.4 percent.

7 From 25 to 26, a permeability of 40 milidarcie
 8 and a porosity of 10.7 percent.

9 From 26 to 27, a permeability of 4 and a porosity
 10 of 10.4.

11 From 27 to 28, a permeability of 202 milidarcie
 12 and a porosity of 23.2 percent.

13 From 28 to 29, a permeability of 29 milidarcie
 14 and a porosity of 24.5 percent.

15 From 1,929 to 1,930, a milidarcie of 17 and a
 16 porosity of 23.1.

17 From 30 to 31, a permeability of 264 milidarcie
 18 and a porosity of 21.6.

19 The core was lost from 31 to 32 and from that
 20 point on, the permeability and porosity was quite
 21 low.

22 Q What is the current status of the Number 2 Well?

23 A It is standing shut-in.

24 Q And I believe you explained before the proposal
 25 with reference to the injection of gas from the Number

dearnley-meier reporting services

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 1 into the Number 2; is that what you meant?

2 A That is what I meant. I have been told, I wasn't
3 aware of the fact, but I was told I had these reversed.
4 It is the Number 2 Well that we propose to put the
5 gas in, take it from the Number 1 Well and put it
6 into the Number 2 Well.

7 But, let us not forget the old saying: "To err
8 is human, to forgive is divine."

9 MR. SPERLING: I would like to offer Exhibits
10 #1 through #8 at this time.

11 MR. STAMETS: Without objection, Applicant
12 Exhibits #1 through #8 will be admitted into evidence.

13 Are there any questions for this witness?

14 MR. HINKLE: Yes.

15 CROSS-EXAMINATION

16 BY MR. HINKLE

17 Q You just testified as to the status of the Number 2
18 Well; has it been treated?

19 A Yes, it was treated.

20 Q Was there a potential test made of the Well?

21 A No, sir.

22 Q So, you don't know whether it is classified an oil
23 well or a gas well?

24 A No, it just stands shut in.

25 Q Was there gas when it was drilled in?

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
 209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

- 1 A Yes, sir. Now, I was not on that well, I was on a
 2 job over in Carlsbad at the time, so I cannot tell
 3 you from personal knowledge, but just from the reports
 4 and from what I have been told by the driller, they
 5 did core a small amount of oil sand.
- 6 Q Did you make any oil when they were drilling it; was
 7 there any indication of oil?
- 8 A From the report I got from the driller, they cut so
 9 much sand and it looked like gas, and then they cut
 10 a couple of more feet and it looked like oil sand,
 11 but that's just the driller's statement.
- 12 Q It is my understanding that the applicant has amended
 13 the application to delete the transfer of allowables
 14 from the Number 2 Well to the Number 1 Well; that is
 15 the oil allowable if it is capable of making oil?
- 16 A Well, we have no capability.
- 17 Q So that is not involved?
- 18 A No.
- 19 Q The present oil allowable is 160 barrels; isn't it?
- 20 A Yes.
- 21 Q This means that you would attempt to produce the
 22 Number 1 Well to 80 barrels or unlimited; what is
 23 the unlimited allowable for oil as far as the Number
 24 1 Well is concerned?
- 25 A Well, my reaction to your question is we should produce

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
 209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-9691 • ALBUQUERQUE, NEW MEXICO 87103
 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 enough gas to at least produce oil at 10.43 barrels
 2 in twenty-four hours.

3 Q Well, are you going to keep it to the allowable, the
 4 produced allowable, regardless of the amount of gas
 5 that would be produced?

6 A Well, I think it would be reasonable because there
 7 would be no waste of gas, so the amount of gas we
 8 make is immaterial.

9 Q The point I am trying to make is what you are proposing
 10 to do as far as the oil allowable is concerned on
 11 the Number 1 Well. In other words, if it is capable
 12 of making 160 barrels, do you want to produce 160
 13 barrels, or are you going to reduce it to 80 barrels?

14 A That's really a hypothetical question because we are
 15 not capable of producing 160 barrels.

16 Q Do you think it is capable of producing 80 barrels?

17 A No, I do not because tests taken prior to the last one
 18 showed 28 barrels and the last one showed 10. So we
 19 were satisfied that we lost quite a bit of oil from
 20 drainage and we wouldn't get it back, but we would
 21 like to get back what we have left.

22 Q In other words, if you produced all the oil it will
 23 make in a day, it is not likely to be much more than
 24 28 barrels?

25 A With wishful thinking, it would be 28 barrels.

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG., P.O. BOX 1092, PHONE 243-6691, ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

- 1 Q Whatever the gas-oil ratio is you will inject gas
- 2 back into Number 2?
- 3 A Yes, sir.
- 4 Q And have you made a study to determine how much power
- 5 capacity and so forth would be necessary?
- 6 A I made a preliminary study, Mr. Hinkle, but it is my
- 7 understanding that Mr. and Mrs. Grace want to lease
- 8 a compressor.
- 9 Q Do you think it is practical to do what you are
- 10 requesting?
- 11 A Well, that is really beside the point as far as my
- 12 testimony is concerned, I think.
- 13 Q In your opinion, will the injection of gas into the
- 14 Number 2 Well be an effective pressure maintenance
- 15 project?
- 16 A It might be, but that's not its intended purpose. I
- 17 can't see really why it would if we don't put any
- 18 more gas in than we take out.
- 19 Q Do you have any idea or an informed opinion as to the
- 20 pressure required to inject gas into the Number 2
- 21 Well?
- 22 A I have some bottom hole pressure we took just a week
- 23 ago. The bottom hole pressures were taken on February
- 24 22nd, 1972, and the pressure on the Number 1 Well,
- 25 taken at a depth of 1,925 feet, we believe was plus

1 1,936 and the bottom hole pressure was 273 pounds.

2 We took a test on the Number 2 Well at a depth
3 of 1,925 feet and we believe it was plus 1,938 and
4 the bottom hole pressure was 321 pounds.

5 Q That it would take?

6 A It might exceed that, but not by too much.

7 MR. HINKLE: That's all I have.

8 CROSS-EXAMINATION

9 BY MR. STAMETS

10 Q Mr. Miller, based on the Commission's last order on
11 this pool, to your knowledge were some of the wells
12 in there reclassified from oil to gas?

13 A I'm sorry, but I missed the last hearing and I am not
14 familiar with it.

15 Q In other words, if any wells were classified as gas
16 wells, you would have no knowledge of what is being
17 done with the gas?

18 A Well, the last time I made a trip to the field, there
19 wasn't very much being done with it. There was one
20 line in there, but we are tied in.

21 Q Could you tell me what attempts have been made to get
22 gas connections for the Number 1 Well?

23 A No, I don't believe I can. I know there have been
24 several attempts to get a line, one line in --

25 MR. PORTER: In connection with that, have there

dearnley-meier reporting services

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
 209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87106

1 been concerted efforts by the various producers, if a pool
 2 was dry to get purchasers in there in a cooperative
 3 effort?

4 THE WITNESS: Not to my knowledge. I know Mr.
 5 McCellan has made considerable effort, concerted efforts,
 6 but as far as all of them are concerned, I don't have any
 7 knowledge.

8 Q (By Mr. Stamets) Mr. Miller, if your records reflected
 9 that gas from the offset well was being sold to a
 10 purchaser, would that indicate that the market was
 11 available in the area?

12 A I think perhaps a very limited market. I don't know
 13 whether they have room for any additional gas to go
 14 out of there or not, I know a line does go up north.

15 Q Assuming that for the time being there was a market
 16 for this gas and under the pool rules, 160 acres may
 17 be assigned to gas wells in this pool, and assuming
 18 here again that 160 acres could be assigned to this
 19 well, would the gas allowable that would be assigned
 20 in that case and if that allowable was 640 MCF per
 21 day, would that be a sufficient amount of gas to
 22 allow you to produce all the oil this well would
 23 make?

24 A I believe that's right -- no, no, it wouldn't take
 25 care of it all.

1 Q How much would it take care of approximately?

2 A Well, I showed a little over 900,000 cubic feet
3 on the last test and with 600,000, that would take
4 about two-thirds of it; wouldn't it?

5 Q Does Mrs. Grace have enough acreage in the area to
6 assign 160 acres units?

7 A Altogether, there are 640 acres. Let's see, in the
8 east half of the southeast and the southeast of the
9 northeast is Delport and figuring real quickly, there
10 are 40 acres in the southeast of the southwest, so
11 that leaves 160 acres.

12 Q It would require nonstandard use?

13 A Yes, it would leave 460 acres in the unit.

14 Q I believe it has been testified to by yourself and
15 the previous witness that the gas has migrated from
16 west to east in this field; isn't that the normal
17 process in an expanding gas type reservoir?

18 A Yes, we didn't say it wasn't; we think it is.

19 Q If this installation was put into effect, would you
20 anticipate there would be any oil migrating up dip
21 toward the Number 1 Well?

22 A That would depend quite a bit upon the differential
23 of your pressures. If we have enough injection in
24 there, and the pressure holds the oil from migrating
25 back by gravity, it would seek its natural level.

1 I think the bottom hole pressures of some of the
2 set wells are not much higher right now than ours.

3 Q You don't feel there would be any significant
4 migration of oil up dip?

5 A Not with pressure. When it is injected, it would
6 seem logical that it would hold the oil down in place.

7 Q What volume of gas do you anticipate on a daily basis?

8 A I can't answer that because I haven't talked to the
9 contractor. I don't know what size compressor he is
10 going to move in.

11 Q Do you anticipate measuring gas at all?

12 A Well, we can if you want us to, but I didn't see any
13 reason to as long as we were just circulating it.

14 Q Do you anticipate any effect whatsoever on the offset
15 wells as a result of this operation?

16 A No. Frankly, that is not the purpose of circulating
17 the gas, what we are trying to do is reclaim what
18 oil there is left under our lease which we think is
19 rightfully ours.

20 MR. STAMETS: Are there any additional questions
21 of this witness?

22 (No response.)

23 MR. STAMETS: If not, he will be excused.

24 (Witness excused.)

25 MR. SPERLING: Mr. Commissioner, Mr. Miller has

1 testified concerning recent bottom hole pressure tests,
2 these have been marked and the graphs have been marked,
3 and they might be helpful if we put them in as an exhibit.

4 They have been marked as Exhibits #9 and 9a.

5 MR. STAMETS: Are there any objections to
6 Applicant's Exhibits #9 and #9a?

7 (No response.)

8 MR. STAMETS: If not, they will be made part of
9 the record. Mr. Sperling, do you have any additional
10 testimony?

11 MR. SPERLING: Yes.

12 JOHN C. BYERS,
13 was called as a witness and having already been duly sworn,
14 testified as follows:

15 DIRECT EXAMINATION

16 BY MR. SPERLING

17 Q Will you please state your name, your place of
18 residence, and your profession?

19 A John C. Byers, I am a resident of Lubbock, Texas,
20 and a professional engineer.

21 Q Have you on previous occasions testified before the
22 New Mexico Oil Conservation Commission?

23 A Yes, sir, we have.

24 Q And are your professional qualifications a matter of
25 record?

dearnley-meier reporting services, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG., P.O. BOX 1092, PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG., EAST • ALBUQUERQUE, NEW MEXICO 87108

1 A They are.

2 MR. SPERLING: Are Mr. Byers qualifications
3 satisfactory?

4 MR. STAMETS: Are you a petroleum engineer?

5 THE WITNESS: Yes.

6 MR. STAMETS: They are acceptable, thank you.

7 Q (By Mr. Sperling) Mr. Byers, have you had an
8 opportunity to be present during the testimony presented
9 on behalf of the applicant in this matter?

10 A Yes, we have.

11 Q Have you reviewed the exhibits which have been
12 presented in support of this application?

13 A Yes.

14 Q Have you reached any professional conclusion based
15 upon -- let me strike that and let me ask you this:
16 Have you made any studies other than the information
17 which is contained in the exhibits and the testimony
18 presented to the Commission on the Double-L Queen
19 Pool in Chaves County?

20 A We have utilized only material prepared by others.

21 Q In your opinion, has that information been sufficient
22 for you to form an expert opinion as to the matters
23 which have been testified to here?

24 A I think so.

25 Q Let me refer you to what has been marked Exhibit #7

1 in this matter, and introduced into evidence; you
2 say that you have previously examined this exhibit?

3 A Yes.

4 Q And you are familiar with the location of the wells
5 with regard to one to the other as shown in Exhibit
6 #4 for the Applicant?

7 A Yes, sir.

8 Q Now, based upon the information and testimony that
9 you have heard, and the information as shown in these
10 exhibits which you have reviewed, what conclusions
11 have you drawn with reference to this pool and
12 particularly with reference to what has occurred
13 insofar as the Corinne Grace State Well Number 1 is
14 concerned?

15 A The gas-oil contact as shown in the structural map
16 is certainly based on top of the sand. I think you
17 can also notice from the core analysis that mobility
18 of fluid in the uppermost of these two sections is
19 substantially greater than those in the lower section.

20 I think what we have experienced in this is a
21 substantial expansion of the gas cap particularly
22 along the upper member resulting in a progressively
23 higher gas-oil ratio.

24 In the Number 1 Well, there is diminished pressure
25 evident from the bottom hole pressure and the Number 2

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
 209 SIMMS BLDG., P.O. BOX 1092 • PHONE 243-5691 • ALBUQUERQUE, NEW MEXICO 87103
 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 Well has certainly evidenced that also. The two are
 2 in communication within the reservoir by some
 3 mechanism.

4 If the mobility is that high in the upper zone,
 5 then there is in all likelihood an oil column.
 6 Therefore, if we inject gas into the Number 2 Well, I
 7 think we can develop mobility of this gas through both
 8 the upper and the lower members.

9 Certainly we should have some substantial recovery
 10 from the Number 1 Well area.

11 Q Now, have you reached any conclusion based upon the
 12 information made available to you as to what the
 13 effect, the adverse effect, if any, would be upon the
 14 reservoir by following the procedures which have been
 15 outlined?

16 A I think the effects will be strictly local and I
 17 think we may well introduce ourselves to the process
 18 of cycling gas along the up dip edge of the reservoir
 19 which may eventually serve to improve recovery from
 20 the total reservoir.

21 I think what we are doing here is introducing a
 22 really important project into the reservoir for the
 23 recovery of oil. If it is successful here, the same
 24 process would be applicable to the remaining reservoir.

25 Q Do you anticipate any adverse effects by the procedure

1 proposed to the offset operators' drill rights'?

2 A Not so long as we do not diminish the pressure in
3 the Number 1 Well to substantially below that pressure
4 to the east offset.

5 We do not anticipate this likelihood because we
6 are dealing with a uniform withdrawal from the two
7 wells.

8 Q You understand this proposed system to be a closed
9 system; do you not, utilizing all the gas?

10 A Yes. And I would like to interject my own opinion
11 here, I strongly feel that if we are to know what we
12 are doing, all the gas cycled must be metered.

13 Q Do you have any further observations on this problem?

14 A Probably a lot, but they might be lengthy and
15 irrelevant.

16 MR. SPERLING: That is all I have of this witness.

17 MR. HINKLE: I have no questions.

18 MR. STAMETS: Are there any questions?

19 (No response.)

20 CROSS-EXAMINATION

21 BY MR. STAMETS

22 Q Mr. Byers, in your opinion, should any precaution
23 be taken on the Number 2 Well to insure that the gas
24 will not escape to any other zone?

25 A I think certainly normal completion requirement

1 practices have got to be taken. Other than that, we
2 assume we have a good cement job, properly tested
3 prior to the completion of the well and certainly
4 these should be verified.

5 I think the Commission records will indicate that
6 we did have a good cement job.

7 Q Do you feel that a gauge or a casing tuck would be
8 in order in this case?

9 A I think a gauge certainly, and I assume we are going
10 to inject through a tuck and under a packer.

11 Q I don't believe that has been testified to.

12 A I mean those are our thoughts, what we are thinking
13 in terms of.

14 MR. STAMETS: Are there any other questions of
15 this witness?

16 (No response.)

17 MR. STAMETS: If not, he can be excused.

18 (Witness excused.)

19 MR. STAMETS: Mr. Sperling, I would like to direct
20 a question to someone, I'm not sure who you can call back
21 on it. It is concerning injection under a packer and
22 through a tuck.

23 MR. SPERLING: Mr. Miller, I would assume, would
24 be best qualified at this point to answer that question.

25

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
208 SIMMS BLDG., P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87102
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 CHARLES MILLER,
2 was recalled as a witness and having already been duly sworn,
3 testified as follows:

4 THE WITNESS: I can't see why it is necessary
5 unless we prove we have a leaking casing job or something
6 like that.

7 MR. STAMETS: Does anyone else have any questions
8 at this point?

9 (No response.)

10 (Witness excused.)

11 MR. STAMETS: Do you have any further witnesses,
12 Mr. Sperling?

13 MR. SPERLING: Yes, sir.

14 RICHARD STEINHORST,
15 was called as a witness and having already been duly sworn,
16 testified as follows:

17 DIRECT EXAMINATION

18 BY MR. SPERLING

19 Q Would you state your name, please?

20 A Richard Steinhorst.

21 Q What is your profession?

22 A I am a graduate petroleum engineer and a practicing
23 consultant out of Lafayette, Louisiana.

24 Q Have you on prior occasions testified before this
25 Commission?

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG., P.O. BOX 1092, PHONE 243-6691, ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

1 A I have not.

2 Q Would you give us a brief resume of your educational
3 background and experience with reference to your
4 profession?

5 A I was graduated from Oklahoma University with a
6 Bachelor of Science Degree in Petroleum Engineering.
7 I subsequently worked with a Texas company as a field
8 engineer, a district engineer and a senior division
9 petroleum engineer; and as an assistant drilling
10 production superintendent throughout the mid-continent
11 area.

12 I went to work for a British-American oil producing
13 company as an assistant general superintendent;
14 subsequently, a drilling superintendent in southern
15 Louisiana in offshore operations.

16 For the past thirteen years, I have been an active
17 consultant in the Gulf Coast and throughout the Texas
18 and mid-continent and eastern areas.

19 Q Thank you.

20 MR. SPERLING: Are Mr. Steinhorst's qualifications
21 accepted?

22 MR. STAMETS: He is qualified, yes.

23 Q (By Mr. Sperling) Have you had an opportunity to
24 review the exhibits that have been presented in
25 support of the application here today as well as to

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG., P.O. BOX 1092 • PHONE 243-6651 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 be present while testimony was presented?

2 A I have.

3 Q Now, without going through each one of these, Mr.
4 Steinhorst, would you please advise us as to whether
5 or not you have reached any conclusions as to what
6 the past history has been insofar as what has occurred
7 in the reservoir in which the Corinne Grace State
8 Lease, and specifically Corinne Grace Well Number 1,
9 is located?

10 A I believe evidence is already in the record indicating
11 that the well originally was either a gas-oil contact
12 or below the gas-oil contact at the top of the sand.
13 There has been a definite migration or expansion of
14 the gas cap across the well and down dip and,
15 subsequently, oil has migrated down dip and this well
16 has not produced the amount of oil that was in place
17 at the location at the time it was drilled.

18 Q You have heard outlined the procedure proposed consisting
19 of producing gas from the Number 1 Well and injecting
20 that same gas, the same quantity, into the Number 2
21 Well?

22 A I have.

23 Q Is it your opinion that such a procedure will be in
24 the interest of the recovery of oil from the location
25 in question?

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
 209 SIMMS BLDG., P.O. BOX 1092 • PHONE 243-9691 • ALBUQUERQUE, NEW MEXICO 87103
 FIRST NATIONAL BANK BLDG., EAST • ALBUQUERQUE, NEW MEXICO 87108

1 A This particular reservoir, I understand from
 2 geological data furnished to me and from examining
 3 production information, it appears that the particular
 4 reservoir at this particular location will probably
 5 not be completely produced under the present method
 6 of production and the injection of gas up dip stands
 7 to recover all which would not otherwise be recovered,
 8 even though the reservoir is classified a gas reservoir
 9 and is so produced.

10 Q Would the proposed procedure in your opinion result
 11 in any damage to the correlative rights of any offset
 12 properties?

13 A I think the only possibility would be if it was
 14 excessive and this would be above what the Commission
 15 has already determined as having been practical. Any
 16 excessive removal of hydrocarbon from the Number 1
 17 Well possibly could, but this is not too common.

18 In this particular instance, you are looking at
 19 something which is commonly referred to in the
 20 profession as attic oil recovery, up dip of oil which
 21 cannot be recovered by any other means.

22 Q So it is your conclusion that it would not adversely
 23 affect the correlative rights of the adjoining
 24 operators?

25 A It would not.

1 MR. SPERLING: I think that is all.

2 MR. STAMETS: Are there any questions of this
3 witness?

4 (No response.)

5 CROSS-EXAMINATION

6 BY MR. STAMETS

7 Q Could this procedure actually benefit the offset
8 operator?

9 A Actually, it could, whether it would is something that
10 would have to be determined. But as long as they are
11 injecting up dip, it is going to pass the point of
12 the State Number 1 and it might be of immeasurable
13 benefit because any time you are moving something
14 down dip, you are not going to stop all at one point.

15 MR. STAMETS: Any other questions?

16 (No response.)

17 MR. STAMETS: If not, this witness may be excused.

18 (Witness excused.)

19 MR. SPERLING: That is all I have.

20 MR. STAMETS: Are you going to put in any
21 testimony, Mr. Hinkle?

22 MR. HINKLE: No testimony.

23 MR. STAMETS: Are there any other appearances
24 in Case Number 4563?

25 (No response.)

dearnley-meier reporting services, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 MR. STAMETS: Is there any correspondence, Mr.
2 Hatch?
3 MR. HATCH: No.
4 MR. HINKLE: I have a brief statement.
5 MR. STAMETS: Proceed.
6 MR. HINKLE: Humble does not object to bonafide
7 pressure projection by gas injection provided no undue
8 advantage is given to any operator and providing gas is
9 not injected into a producing formation. Humble is quite
10 doubtful at this stage of depletion that gas injection
11 will enhance recovery in the pool with only two wells being
12 involved.
13 Humble has no objection to the transfer of
14 oil and gas from one well to another as long as it does
15 not exceed the amount which the well would be allowed to
16 produce under the applicable rules.
17 Furthermore, Humble has no objection to
18 permitting the operator to exceed the gas-oil ratio
19 limitations so long as it puts the excessive gas produced
20 back into the reservoir.
21 In this case, if the Commission permits the
22 transfer of the allowable of the Number 2 Well, the Number
23 2 Well should be tested in the presence of Commission
24 representatives to show its capability of producing both
25 oil and gas, or either of them.

dearnley-meier reporting services, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 The Commission should request the operator
2 make monthly reports with respect to the measured production
3 of the Number 1 Well and the reports should also show the
4 measured amount of gas injected into the Number 2 Well.

5 That's all, thank you.

6 MR. STAMETS: Do you have a statement, Mr.
7 Sperling?

8 MR. SPERLING: No, sir.

9 MR. STAMETS: Is there anything else in Case
10 Number 4563?

11 (No response.)

12 MR. STAMETS: If not, Case Number 4563 will be
13 taken under advisement.

14
15
16
17
18
19
20
21
22
23
24
25

1 STATE OF NEW MEXICO)
) ss
 2 COUNTY OF BERNALILLO)

3 I, RICHARD E. McCORMICK, a Certified Shorthand Reporter,
 4 in and for the County of Bernalillo, State of New Mexico do
 5 hereby certify that the foregoing and attached Transcript of
 6 Hearing before the New Mexico Oil Conservation Commission was
 7 reported by me; and that the same is a true and correct record
 8 of the said proceedings to the best of my knowledge, skill and
 9 ability.

10
 11 Richard E. McCormick
 CERTIFIED SHORTHAND REPORTER

dearnley-meier reporting services

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
 209 SIMMS BLDG., P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87106

22 I do hereby certify that the foregoing is
 23 a complete record of the proceedings in
 24 the Bernalillo hearing of Case No. 4563
 25 heard by me on March 1, 1972
Richard L. Hunt, Examiner
 New Mexico Oil Conservation Commission

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

200 SIMMS BLDG. P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108I N D E XWITNESS

WILLIAM J. LeMAY

Direct Examination by Mr. Sperling 4

Cross-Examination by Mr. Hinkle 9

Cross-Examination by Mr. Stamets 11

CHARLES E. MILLER

Direct Examination by Mr. Sperling 13

Cross-Examination by Mr. Hinkle 28

Cross-Examination by Mr. Stamets 32

JOHN C. BYERS

Direct Examination by Mr. Sperling 36

Cross-Examination by Mr. Stamets 40

CHARLES MILLER

Cross-Examination by Mr. Stamets (Recalled) 42

RICHARD STEINHORST

Direct Examination by Mr. Sperling 42

Cross-Examination by Mr. Stamets 46

dearnley-meier reporting services

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
 209 SIMMS BLDG., P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
 FIRST NATIONAL BANK BLDG., EAST • ALBUQUERQUE, NEW MEXICO 87108

1	<u>E X H I B I T S</u>		
	<u>APPLICANT'S</u>	<u>ADMITTED</u>	<u>OFFERED</u>
2			
3	Exhibit #1	28	5
4	Exhibits #2 and #3	28	6
5	Exhibit #4	28	13
6	Exhibit #5	28	17
7	Exhibit #6	28	18
8	Exhibit #7	28	18
9	Exhibit #8	28	21
10	Exhibit #9 and #9a	36	36
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-8691 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
CONFERENCE ROOM, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
February 2, 1972

EXAMINER HEARING

IN THE MATTER OF:)
Application of Corrine Grace)
for special gas-oil ratio)
limitation and pressure)
maintenance project, Chaves)
County, New Mexico.)

Case No. 4563

BEFORE: Elvis A. Utz,
Alternate Examiner.

TRANSCRIPT OF HEARING

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
209 SIMMS BLDG. • P.O. BOX 1082 • PHONE 243-8691 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

MR. UTZ: Case 4620 and Case 4563.

MR. HATCH: Case 4563: Application of Corinne Grace
for special gas-oil ratio limitation and pressure maintenance
project, Chaves County, New Mexico.

The applicant has requested each of these cases be
continued until March 1st, 1972.

MR. UTZ: The cases just mentioned will be continued
to March 6th--what is it?

MR. HATCH: March 1st.

MR. UTZ: March 1st, 1972 Examiner Hearing.

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
 209 SIMMS BLDG. P.O. BOX 1092, PHONE 243-6691, ALBUQUERQUE, NEW MEXICO 87103
 FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

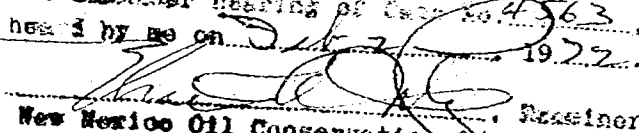
1 STATE OF NEW MEXICO)

) ss.

2 COUNTY OF BERNALILLO)

3 I, RICHARD STURGES, a Certified Shorthand Reporter, in and
 4 for the County of Bernalillo, State of New Mexico, do hereby
 5 certify that the foregoing and attached Transcript of Hearing
 6 before the New Mexico Oil Conservation Commission was reported
 7 by me; and that the same is a true and correct record of the
 8 said proceedings to the best of my knowledge, skill and ability.

9
 10 
 11 CERTIFIED SHORTHAND REPORTER

12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22 I do hereby certify that the foregoing is
 23 a complete record of the proceedings in
 24 the Examiner hearing of Case No. 4563
 25 heard by me on July 2, 1972.

 Examiner
 New Mexico Oil Conservation Commission

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
January 5, 1972

EXAMINER HEARING

IN THE MATTER OF:

Application of Corinne Grace for
special gas-oil ratio limitation
and pressure maintenance project,
Chaves County, New Mexico.

Case No. 4563

and

IN THE MATTER OF:

Application of Corinne Grace for
compulsory pooling, Eddy County,
New Mexico.

Case No. 4620

BEFORE: Daniel Nutter, Examiner

TRANSCRIPT OF HEARING

1 MR. NUTTER: Case 4563.

2 MR. HATCH: Case 4563, Application of Corinne Grace
3 for special gas-oil ratio limitation and pressure maintenance
4 project, Chaves County, New Mexico.

5 The applicant has requested the case be continued to
6 February 2nd, 1972.

7 MR. NUTTER: In Case 4563, the Application of
8 Corinne Grace, and Case 4620, in each of those cases, the
9 Applicant has requested it be continued to February 2nd, and
10 those cases will be continued to the Examined Hearing
11 scheduled for 9 o'clock February 2nd.

12 The Hearing is adjourned.
13
14
15
16
17
18
19
20
21
22
23
24
25

dearnley-meier reporting service, inc.

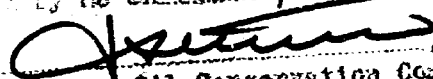
SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
200 SIMMS BLDG., P.O. BOX 1092, PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

PAGE 4

1 STATE OF NEW MEXICO)
2) ss
3 COUNTY OF BERNALILLO)

4 I, RICHARD STURGES, a Certified Shorthand Reporter, do
5 hereby certify that the foregoing and attached Transcript of
6 Hearing before the New Mexico Oil Conservation Commission was
7 reported by me; and that the same is a true and correct
8 record of the said proceedings to the best of my knowledge,
9 skill and ability.

10 
11 CERTIFIED SHORTHAND REPORTER

12
13
14
15
16
17
18
19
20
21
22
23 I do hereby certify that the foregoing is
24 a complete record of the proceedings
25 the hearing of Case No. 4563-4620
held by me on 1/5 1972

New Mexico Oil Conservation Commission

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
December 1, 1971

EXAMINER HEARING

IN THE MATTER OF:

Application of Corinne Grace
for special gas-oil ratio,
Chavez County, New Mexico

Case No. 4563

Application of Corinne Grace
for compulsory pooling,
Eddy County, New Mexico

Case No. 4619

Application of Corinne Grace
for compulsory pooling,
Eddy County, New Mexico

Case No. 4620

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: We would like to call Case No. 4563 which is the Application of Corinne Grace for special gas-oil ratio, Chavez, County, New Mexico; Case No. 4619, the Application of Corinne Grace for compulsory pooling, Eddy County, New Mexico; and Case No. 4620, Application for Corinne Grace for compulsory pooling, Eddy County, New Mexico.

MR. HATCH: Mr. Commissioner, I have received a request from the Applicant that these three cases be continued to January 5th, 1972.

MR. NUTTER: Cases 4563, 4619 and 4620 will be continued to the Examiner Hearing to be held at this same place at 9:00 o'clock A.M., January 5th, 1972.

The Hearing is adjourned.

STATE OF NEW MEXICO)
) SS.
 COUNTY OF SANTA FE)

I, RICHARD L. NYE, Court Reporter, do hereby
 certify that the foregoing and attached Transcript of
 Hearing before the New Mexico Oil Conservation
 Commission was reported by me, and the same is a true
 and correct record of the said proceedings, to the best
 of my knowledge, skill and ability.

Richard L. Nye
 COURT REPORTER

My commission expires March 25, 1975.

I do hereby certify that the foregoing is
 a true and correct record of the proceedings in
 and before hearing of Case No. 4563-4619-4620
 heard by me on 12/1 1971
Richard L. Nye Executive
 New Mexico Oil Conservation Commission

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6697 • ALBUQUERQUE, NEW MEXICO

November 10, 1971
Examiner Hearing

IN THE MATTER OF:

Application of Corinne Grace
for compulsory pooling, Eddy
County, New Mexico.

Case No. 4619

and

Application of Corinne Grace
for compulsory pooling, Eddy
County, New Mexico.

Case No. 4620

and

Application of Corinne Grace
for special gas-oil ratio
limitation and pressure
maintenance project, Chaves
County, New Mexico.

Case No. 4563

BEFORE: DANIEL S. NUTTER, EXAMINER

TRANSCRIPT OF HEARING

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

MR. NUTTER: Call Case No. 4619.

MR. HATCH: Case 4619. Application of Corinne Grace for compulsory pooling, Eddy County, New Mexico.

It is my understanding that the Applicant would like this case to be continued to December 1, 1971.

MR. NUTTER: Well, we will call also Case No. 4620.

MR. HATCH: Case 4620. Application of Corinne Grace for compulsory pooling, Eddy County, New Mexico.

MR. NUTTER: And we will call also Case No. 4563.

MR. HATCH: Case 4563. Application of Corinne Grace for special gas-oil ratio limitation and pressure maintenance project, Chaves County, New Mexico.

And the Applicants desire that each of these cases be continued to December 1, 1971.

MR. NUTTER: Cases No. 4619, 4620, and Case No. 4563 will all be continued to the Examiner Hearing scheduled to be held at this same place at 9:00 o'clock A.M., December 1, 1971.

dearnley-meier reporting service, inc.

1 STATE OF NEW MEXICO)
2)
3 COUNTY OF BERNALILLO)

4 I, LINDA MALONE, Court Reporter, do hereby certify that
5 the foregoing and attached Transcript of Hearing before the
6 New Mexico Oil Conservation Commission was reported by me;
7 that the same is a true and correct record of the said
8 proceedings, to the best of my knowledge, skill and ability.
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Linda Malone
Court Reporter

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 4619, 4620, 4563
heard by me on Nov 10 19 71.

[Signature], Examiner
New Mexico Oil Conservation Commission

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



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

October 27, 1971
Examiner Hearing

IN THE MATTER OF:)

Application of Corinne Grace for)
special gas-oil ratio limitation)
and pressure maintenance project,)
Chaves County, New Mexico.)

Case No. 4563

BEFORE: ELVIS A. UTZ, EXAMINER

TRANSCRIPT OF HEARING

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

MR. UTZ: Case 4563.

MR. HATCH: Case 4563. Application of Corinne Grace for special gas-oil ratio limitation and pressure maintenance project, Chaves County, New Mexico.

The Commission has received a request from the applicant to continue the case to November 10, which is the date the applicant has some other cases set for.

MR. UTZ: Case 4563 will be continued to 11/10.

dearnley-meier reporting services, inc.

1 STATE OF NEW MEXICO)

2)
COUNTY OF BERNALILLO)

3 I, LINDA MALONE, Court Reporter, do hereby certify that
 4 the foregoing and attached Transcript of Hearing before the
 5 New Mexico Oil Conservation Commission was reported by me; that
 6 the same is a true and correct record of the said proceedings,
 7 to the best of my knowledge, skill and ability.

8
 9
 10
 11 *Linda Malone*
 12 Court Reporter

13
 14
 15
 16
 17
 18
 19
 20
 21
 22 I do hereby certify that the foregoing is
 23 a complete record of the proceedings in
 24 the Examiner hearing of Case No. 563
 25 held by me on 6/27/77 1977
 Examiner
 New Mexico Oil Conservation Commission

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

209 SIMMS BLDG. • P.O. BOX 1097 • PHONE 243-4491 • ALBUQUERQUE, NEW MEXICO

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

September 29, 1971
Examiner Hearing

IN THE MATTER OF:

Application of Corinne Grace
for special gas-oil ratio
limitation and pressure
maintenance project, Chaves
County, New Mexico.

Case No. 4563

BEFORE: ELVIS A. UTZ, EXAMINER

TRANSCRIPT OF HEARING

1 MR. UTZ: The hearing will come to order, please.
2 We have one continued case. We will call Case 4563 at this
3 time.

4 MR. HATCH: Case 4563. Application of Corinne Grace
5 for special gas-oil ratio limitation and pressure maintenance
6 project, Chaves County, New Mexico.

7 If the Examiner please, I think Mr. Bateman would
8 like to make an appearance in this case.

9 MR. BATEMAN: Ken Bateman of White, Gilbert, Koch
10 and Kelly, appearing on behalf of the applicants, request
11 that the case be continued to the hearing set for October 27.

12 MR. UTZ: Case 4563 will be continued till the
13 October 7 hearing. This is an Examiner hearing.

14 MR. BATEMAN: Thank you.
15
16
17
18
19
20
21
22
23
24
25

[illegible]

16
17
18
19
20
21
22
23
24
25

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
August 11, 1971

Examiner Hearing

----->
IN THE MATTER OF:)

Application of Corinne Grace)
for special gas/oil ratio)
limitation and pressure)
maintenance project, Chaves)
County, New Mexico.)
----->

Case No. 4563

BEFORE: DANIEL S. NUTTER, EXAMINER

TRANSCRIPT OF HEARING

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICO

Hearing Date AUGUST 11, 1971 TIME: 9 A.M.

NAME	REPRESENTING	LOCATION
HARLEY BEAVIS	HUMBLE	MIDLAND TEX
Clarence Hinkle	"	Rosewell
Jason Kellahin	Kellahin & Fox	Santa Fe
R. I. Kepke	Anadarko Prod. Co.	Ft Worth, Tex.
C. W. Stumhoffer	Anadarko Prod. Co.	Fort Worth
Bill Kastle	Gulf Oil Co.	Midland
E. O. Bobo	Gulf Oil Co.	Midland
J. M. Welch	Northern Natural Gas Co.	Hobbs, New Mex
V. T. Lyon	Continental Oil Co	Hobbs
William J. LeMay	Grace & Shenandoah	Santa Fe
Nina S. Duthaine	R. W. Byrnum & Co.	Santa Fe
R. M. Richardson	S. C. Hobbs	Rosewell, NM
James D. Janning	Jimmy Charles & Opple	Rosewell NM
Al Webbster	SHENANDOAH OIL CORP.	FT. WORTH

1 MR. NUTTER: Call the next case number 4563.

2 MR. HATCH: Case 4563. Application of Corinne
3 Grace for special gas/oil ratio limitation and pressure
4 maintenance project, Chaves County, New Mexico.

5 MR. STEVENS: Mr. Examiner, I am Don Stevens of
6 McDermott, Connelly and Stevens, appearing for the
7 applicant Corinne Grace.

8 With me is Mr. Harold Roberts appearing for Mr. Blake
9 Grace who has an interest in the well.

10 He joins me at this time in asking the indulgence of the
11 commission one more time for extension, continuance
12 on this case until September 1.

13 Reason for the request is that previously it was felt that
14 it was unnecessary to have a new gas/oil ratio run on the
15 well in question, in that they felt that the project was
16 feasible.

17 However, in view of recent information that the gas cap
18 is advancing in the field from the West to the East beyond
19 this well, it could well be that in the opinion of the
20 applicant, that this well no longer is capable of producing
21 sufficient to make the project feasible.

22 As a consequence of this, by granting an extension until
23 September 1, it would give the applicant time to run the
24 gas/oil ratio test, make a possible determination of whether
25 the well will produce sufficient oil to be feasible.

1 It could well be that it will not be feasible, and under
2 the circumstances, those circumstances, they would
3 normally go in with the rest of the field and hook up
4 with Phillips Petroleum, seal their casing head gas and
5 what little oil the well might make, but at this time,
6 they would like to have it on September 1, which is,
7 I understand, within the time that is within a proper time
8 for notice on the hearing, in order that they would start
9 the project as soon as possible, if it is feasible.
10 Now, we know we have asked for extensions twice before
11 in this case for various reasons, and time has passed,
12 but if it is not feasible, then some two to three months
13 would necessarily expire before a hook up could be made
14 with Phillips, a beneficial use be made of the well, and
15 the economic gain there from.

16 The economic factor is the principle reason for our request.

17 MR. NUTTER: Does anyone have any remarks to make
18 concerning the motion for continuance?

19 MR. HINKLE: Clarence Hinkle, Hinkle, Bondurant, Cox
20 and Eaton, appearing on behalf of Humble Oil and Refining
21 Company.

22 As he has indicated, this case has already been extended
23 twice, and Humble's representative and myself have been
24 up here twice on the case, and Humble is interested in
25 opposing the applicants.

1 Now, in talking with Don Stevens, we offer to agree to
2 extend this case until October 6.

3 Now, the reason that we suggested that date was that I
4 am going to be away from August 20 until September 6,
5 and I have reservations and everything made and other
6 people are involved and I can't very well get out of it.
7 Now, if there is going to be an Examiner hearing the
8 latter part of September, we would not object to being
9 set at that time, but we would prefer that it be set on
10 October 6, and that would suit the representative of
11 Humble better too, at that time.

12 MR. NUTTER: On October 6?

13 MR. HINKLE: October 6.

14 MR. NUTTER: Does the Commission have a tentative
15 hearing set for that date?

16 MR. HINKLE: That is what Don told me. I don't know.

17 MR. STEVENS: It is only a date I checked by, and
18 it is not specifically set for that day, but she thinks
19 it will be that date or within a week thereof.

20 MR. NUTTER: And you will be gone from August 20 until
21 September 6?

22 MR. HINKLE: Yes. Get back September 6.

23 MR. STEVENS: One is set for September 15.

24 MR. NUTTER: Let me check, just a few seconds delay
25 here while I check some dates.

1 Well, I have had a couple of firm dates here. There
2 wouldn't be a hearing on October 6, but there will be
3 one on September 29. How is that?

4 MR. HINKLE: That is all right.

5 MR. STEVENS: Of course, we would still like to have
6 it September 1.

7 MR. NUTTER: Well, I think we have to give some
8 consideration to the opposition here, to, and he has got
9 his reservations and everything.

10 Would the 29th be agreeable, then?

11 MR. STEVENS: Yes, sir.

12 MR. HINKLE: Yes.

13 MR. NUTTER: Case 4563, then, will be continued
14 to an Examiner hearing scheduled to be held at this place
15 at this same place, at 9:00 o'clock A. M. on September 29
16 1971, so the case will be continued to that date.

17 The hearing is adjourned.
18
19
20
21
22
23
24
25

1 STATE OF NEW MEXICO)
2)
3 COUNTY OF BERNALILLO)

4 I, LINDA MALONE, Court Reporter, do hereby certify that
5 the foregoing and attached Transcript of Hearing before the
6 New Mexico Oil Conservation Commission was reported by me; and
7 that the same is a true and correct record of the said
8 proceedings, to the best of my knowledge, skill, and ability.
9

10 Linda Malone
11 Court Reporter
12
13
14
15
16
17
18
19
20
21

22 I do hereby certify that the foregoing is
23 a complete record of the proceedings in
24 the Examiner hearing of Case No. 4563
25 heard by me on 8/11 1971.

[Signature] Examiner
New Mexico Oil Conservation Commission

dearnley-meier reporting service

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

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

July 28, 1971

EXAMINER HEARING

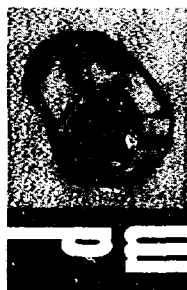
IN THE MATTER OF:)

Application of Corrine Grace for)
a special gas oil ratio limitations)
and pressure maintenance project,)
Chaves County, New Mexico.)

Case No. 4563

BEFORE: ELVIS A. UTZ, EXAMINER

TRANSCRIPT OF HEARING



1 MR. UTZ: Case 4563.

2 MR. HATCH: Case 4563. Application of Corinne Grace
3 for special gas-oil ratio limitation and pressure maintenance
4 project, Chaves County, New Mexico.

5 And the applicant has requested that this case be
6 continued to August 11, 1971.

7 MR. UTZ: Case 4563 will be continued to 8/11/71.
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

1 STATE OF NEW MEXICO)
2)
3 COUNTY OF BERNALILLO)

4 I, LINDA MALONE, Court Reporter do hereby certify that
5 the foregoing and attached Transcript of Hearing before the
6 New Mexico Oil Conservation Commission was reported by me; and
7 that the same is a true and correct record of the said
8 proceedings, to the best of my knowledge, skill and ability.
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Linda Malone
Court Reporter

I do hereby certify that the foregoing is
a complete record of the proceedings in
the hearing of Case No. 4563
heard by me on July 28, 1971.
[Signature]
New Mexico Oil Conservation Commission

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
June 30, 1971

EXAMINER HEARING

IN THE MATTER OF:

Application of Corinne Grace for
special gas-oil ratio limitation
and pressure maintenance project,
Chaves County, New Mexico.

Case No. 4563

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

1 MR. UTZ: Case 4563.

2 MR. HATCH: Application of Corinne Grace for
3 special gas-oil ratio limitation and pressure maintenance
4 project, Chaves County, New Mexico.

5 The Applicant has requested that this case be
6 continued to the last Examiner Hearing in July.

7 MR. UTZ: Case 4563 will be continued to the 7-28
8 hearing.

9 MR. HATCH: Excuse me just a moment. May I ask,
10 is there any objection to that one being continued?

11 MR. CHRISTY: Passed until July 28th.

12 MR. UTZ: Right.

13 MR. CHRISTY: Thank you.

14

15

16

17

18

19

20

21

22

23

24

25

1 STATE OF NEW MEXICO)
2) ss
3 COUNTY OF BERNALILLO)

4 I, BRENDA BURKS, Court Reporter in and for the County
5 of Bernalillo, State of New Mexico, do hereby certify that
6 the foregoing and attached Transcript of Hearing before the
7 New Mexico Oil Conservation Commission was reported by me;
8 and that the same is a true and correct record of the said
9 proceedings to the best of my knowledge, skill and ability.

10 Brenda Burks
11 Court Reporter

12
13
14
15
16
17
18
19
20
21
22 I do hereby certify that the foregoing is
23 a complete record of the proceedings in
24 the Examiner hearing of Case No. 4563,
25 heard by me on 6-30-71, 19

James O. R. Examiner
New Mexico Oil Conservation Commission

J. R. MODRALL
JAMES E. SPERLING
JOSEPH E. ROEHL
GEORGE T. HARRIS, JR.
DANIEL A. SISK
LELAND S. SEDBERRY, JR.
ALLEN C. DEWEY, JR.
FRANK H. ALLEN, JR.
JAMES P. SAUNDERS, JR.
JAMES A. PARKER
JOHN R. COONEY
KENNETH L. HARRIGAN

PETER J. ADAMS
DALE W. EK
CAMERON R. GRAHAM
DENNIS J. FALK
FARRELL L. LINES

LAW OFFICES OF
MODRALL, SPERLING, ROEHL, HARRIS & SISK
PUBLIC SERVICE BUILDING
P. O. BOX 2168
ALBUQUERQUE, NEW MEXICO 87103

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

TELEPHONE 243-4511
AREA CODE 505

January 26, 1972

RECEIVED

JAN 27 1972

CONSERVATION COMM.

Mrs. Ida Rodriguez
Secretary to Director
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Ida:

Thank you very much for sending me the transcript
of hearing in Case No. 4563, Corinne Grace. It
has served my purposes and I am returning it to
you herewith.

Thanks again.

Best regards,


James E. Sperling

JES:jv

Enclosure



OIL CONSERVATION COMMISSION

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

GOVERNOR
BRUCE KING
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

March 21, 1972

Mr. James E. Sperling
Modrall, Seymour, Sperling,
Roehl & Harris
Attorneys at Law
Post Office Box 2168
Public Service Building
Albuquerque, New Mexico 87103

Re: Case No. 4563
Order No. R-4276-A
Applicant:
Corinne Grace

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x
Artesia OCC x
Aztec OCC _____

Other Mr. Clarence Hinkle

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

CASE No. 4563
Order No. R-4276-A

IN THE MATTER OF THE APPLICATION OF
CORINNE GRACE FOR SPECIAL GAS-OIL
RATIO LIMITATION AND PRESSURE MAINTENANCE PROJECT, CHAVES COUNTY, NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE COMMISSION:

It appearing to the Commission that due to clerical error, Order No. R-4276, dated March 15, 1972, does not correctly state the intended order of the Commission,

IT IS THEREFORE ORDERED:

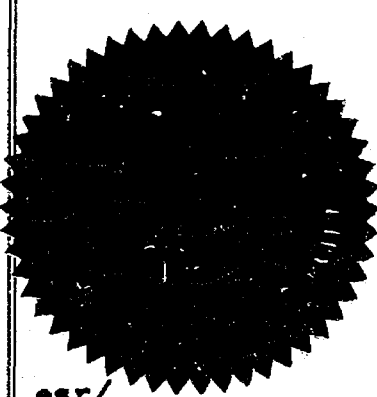
(1) That Paragraph (c) of Order (1) of Commission Order No. R-4276 is hereby corrected to read in its entirety as follows:

"(c) That injection of gas into the Grace State Well No. 2 shall be accomplished through 5 1/2-inch casing; that the wellhead shall be equipped with a pressure gauge properly maintained in working order."

(2) That the correction set forth above shall be effective nunc pro tunc as of March 15, 1972.

DONE at Santa Fe, New Mexico, on this 21st day of March, 1972.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


Bruce King
BRUCE KING, Chairman

Alex J. Armiijo
ALEX J. ARMIJO, Member

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

esr/



OIL CONSERVATION COMMISSION

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

March 15, 1972

GOVERNOR
BRUCE KING
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

Mr. James E. Sperling
Modrall, Seymour, Sperling,
Roehl & Harris
Attorneys at Law
Post Office Box 2168
Public Service Building
Albuquerque, New Mexico 87103

Re: Case No. 4563
Order No. R-4276
Applicant:
CORINNE GRACE

Dear Sir:

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

Very truly yours,

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director *ll*

ALP/ir

Copy of order also sent to:

Hobbs OCC x
Artesia OCC x
Aztec OCC

Other Mr. Clarence Hinkle

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. 4563
Order No. R-4276

APPLICATION OF CORINNE GRACE FOR
SPECIAL GAS-OIL RATIO LIMITATION
AND PRESSURE MAINTENANCE PROJECT,
CHAVES COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 1, 1972,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 15th day of March, 1972, 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, Corinne Grace, is the owner and
operator of the Grace State Wells Nos. 1 and 2 located in Units
A and B, respectively, of Section 1, Township 15 South, Range 29
East, NMPM, Double L-Queen Associated Pool, Chaves County, New
Mexico.

(3) That the Special Rules and Regulations for the Double L-
Queen Associated Pool provide that a well shall be classified as
a gas well if it has a gas-liquid ratio of 30,000 or more cubic
feet of gas per barrel of liquid hydrocarbons and shall be
classified as an oil well if it has a gas-liquid ratio of less
than 30,000 cubic feet of gas per barrel of liquid hydrocarbons.

-2-

CASE No. 4563

Order No. R-4276

(4) That said rules provide that the limiting gas-oil ratio for the pool shall be 2000 cubic feet of gas for each barrel of oil produced.

(5) That said Special Rules and Regulations limit the total amount of gas that can be produced by either an oil well or a gas well.

(6) That the applicant seeks authority, as an exception to the Special Rules and Regulations for the Double L-Queen Associated Pool, to produce the Grace State Well No. 1 as an oil well with no limitation upon gas production from said well, separate the gas from the liquids by ordinary separation methods, and institute a pressure maintenance project by injecting all of said gas back into the producing formation through the Grace State Well No. 2.

(7) That unlimited gas production from the Grace State Well No. 1 will not cause waste nor violate correlative rights, provided said well produces no more than a 40-acre oil allowable for the pool and provided further that all gas produced by said well is reinjected into the producing formation through the Grace State Well No. 2.

(8) That the proposed pressure maintenance project is in the interest of conservation and should result in greater ultimate recovery of oil, thereby preventing waste.

(9) That for the purposes of the proposed pressure maintenance project, the Grace State Well No. 1 should be classified as a producing oil well with a 40-acre oil allowable and that the Grace State Well No. 2 should be classified as a gas injection well with no allowable.

(10) That all gas produced by said Well No. 1 should be measured and all gas injected through said Well No. 2 should be measured.

(11) That the subject application should be approved and the pressure maintenance project should be governed by the provisions of Rules 701, 702, 703, and 704 of the Commission Rules and Regulations insofar as said rules are not inconsistent with this order.

-3-

CASE No. 4563

Order No. R-4276

IT IS THEREFORE ORDERED:

(1) That the applicant, Corinne Grace, is hereby authorized to institute a pressure maintenance project in the Double L-Queen Associated Pool, Chaves County, New Mexico, designated as the Grace Double L-Pressure Maintenance Project, by the injection of gas into the Queen formation in accordance with the following terms and conditions:

(a) The producing oil well for the project, the Grace State Well No. 1 located in Unit A of Section 1, Township 15 South, Range 29 East, NMPM, may produce up to a 40-acre top unit oil allowable with no limitation upon the amount of gas produced.

(b) That all gas produced by said Grace State Well No. 1 shall be injected into the producing formation of the Double L-Queen Associated Pool through the Grace State Well No. 2 located in Unit B of Section 1, Township 15 South, Range 29 East, NMPM.

(c) That injection of gas into the Grace State Well No. 2 shall be accomplished through 8 5/8-inch casing; that the wellhead shall be equipped with a pressure gauge properly maintained in working order.

(d) That all gas produced by the Grace State Well No. 1 and all gas injected through the Grace State Well No. 2 shall be measured by use of meters.

(e) That the applicant shall notify the Artesia District Office of the Commission of the commencement of injection within seven days of the date of first injection.

(f) That the project shall be governed by the provisions of Rules 701, 702, 703, and 704 of the Commission Rules and Regulations insofar as said rules are not inconsistent with this order.

(g) That monthly progress reports of the pressure maintenance project shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

-4-

CASE No. 4563

Order No. R-4276

(2) 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



Bruce King
BRUCE KING, Chairman

Alex J. Armijo
ALEX J. ARMILLO, Member

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

esr/

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. 4588
Order No. R-4197

APPLICATION OF V. H. WESTBROOK
FOR A PRESSURE MAINTENANCE PROJECT,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 15, 1971, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 5th day of October, 1971, 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, V. H. Westbrook, is the owner and operator of the Guy A. Reed Well No. 2, located in Unit L of Section 24, Township 24 South, Range 28 East, NMPM, Malaga-Delaware Pool, Eddy County, New Mexico.

(3) That the applicant proposes to utilize said well to inject produced salt water into the Delaware formation, with injection into the perforated interval from approximately 2681 feet to 2683 feet.

(4) That the subject well should be classified as a pressure maintenance project injection well.

-2-

CASE NO. 4588
Order No. R-4197

(5) That the subject pressure maintenance project is in the interest of conservation and should result in greater ultimate recovery of oil, thereby preventing waste.

(6) That the injection should be accomplished through 2-inch tubing installed in a packer set at approximately 2669 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer; and that the produced salt water shall be continuously treated to inhibit corrosion prior to injection and coupon corrosion tests shall be conducted continuously on said well and the results thereof filed semi-annually with the Commission until further notice from the Secretary-Director of the Commission.

(7) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, V. H. Westbrook, is hereby authorized to institute a pressure maintenance project in the Malaga-Delaware Pool, Eddy County, New Mexico, by the injection of water into the Delaware formation through his Guy A. Reed Well No. 2, located in Unit L of Section 24, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico.

(2) That said injection should be accomplished through 2-inch tubing installed in a packer set at approximately 2669 feet, and into the perforated interval from 2681 feet to 2683 feet.

PROVIDED HOWEVER, that the casing-tubing annulus shall be filled with an inert fluid and that a pressure gauge shall be attached to the annulus in order to determine leakage in the tubing, casing, or packer.

PROVIDED FURTHER, that the produced salt water shall be continuously treated prior to injection and coupon corrosion tests shall be conducted continuously on said well and the results thereof filed semi-annually with the Commission until further notice from the Secretary-Director of the Commission.

-3-

CASE NO. 4588

Order No. R-4197

(3) That the subject pressure maintenance project is hereby designated the Westbrook Malaga Pressure Maintenance Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(4) That monthly progress reports of the pressure maintenance project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

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

S E A L

dr/

K AYB081 SZ PDF CARLSBAD NMEX 25 214P MST
GEORGE HATCH OIL CONSERVATION COM
SANTA FE NMEX

1971 JAN 26 AM 7 17

REQUEST A CONTINUANCE ON ALL THREE CASES WE ARE
INVOLVED IN BEFORE THE OIL COMMISSION FROM FEB 2 TO
MAR 1 1972

CORINNE GRACE

AM

827-2434

TELEPHONED	
S	TIME
S	TO
E	BY
	TO LE

18
19
20
21
22
23

WESTERN
western union

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 1, 1972

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. Nutter, Alternate Examiner:

CASE 4668: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider instituting gas prorationing in the South Carlsbad-Morrow and South Carlsbad-Strawn Gas Pools, Eddy County, New Mexico. The Commission will consider limiting gas production from the South Carlsbad-Morrow and South Carlsbad-Strawn Gas Pools in Eddy County, New Mexico, to reasonable market demand and to the capacity of gas transportation facilities. The Commission will also consider methods for allocating the allowable production among the gas wells in the pools.

CASE 4563: (Continued from the February 2, 1972 Examiner Hearing) Application of Corinne Grace for special gas-oil ratio limitation and pressure maintenance project, Chaves County, New Mexico. Applicant, in the above-styled cause seeks authority to produce her State Well No. 1 located in Unit A of Section 1, Township 15 South, Range 29 East, Double L-Queen Pool, Chaves County, New Mexico, with no gas-oil ratio limitation, strip the liquids, and institute a pressure maintenance project by the injection of all said gas back into the producing formation through her State Well No. 2 located in Unit B of said Section 1. Applicant further seeks to transfer an oil allowable from said Well No. 2 to said Well No. 1.

CASE 4619: (Continued from the February 2, 1972, Examiner Hearing) Application of Corinne Grace for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying the N/2 of Section 25, Township 22 South, Range 26 East, which acreage is within one mile of the South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico. Said acreage to be dedicated to a well to be drilled to the Morrow formation at a location 1980 feet from the North and East lines of said Section 25. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges of supervision of said well.

CASE 4620: (Continued from the February 2, 1972, Examiner Hearing) Application of Corinne Grace for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface of the ground down to and including the

(Case 4620 continued)

Morrow formation underlying the N/2 of Section 24, Township 22 South, Range 26 East, which acreage is in the vicinity of the South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico. Said acreage to be dedicated to a well to be drilled to the Morrow formation at a location 1960 feet from the North and East lines of said Section 24. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges of supervision of said well.

CASE 3709: (Continued from the January 5, 1972, Examiner Hearing)
(Reopened)

In the matter of Case 3709 being reopened pursuant to the provisions of Order No. R-3366-B, which order continued 80-acre spacing for the Akah Nez-Devonian Oil Pool, San Juan County, New Mexico, for an additional one-year period. All interested persons may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 4669: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit El Paso Natural Gas Company to appear and show cause why it should not take immediate action to repair each of the five following dual completions in such a manner as to prevent communication between zones in the well-bores:

San Juan 27-4 Unit #30
N-32-27N-4W, Rio Arriba

San Juan 27-5 Unit #31
A-24-27N-5W, Rio Arriba

Bolack C #14
B-30-27N-8W, San Juan

Huerfano Unit #60
M-4-26N-9W, San Juan

Allison Unit #17
K-24-32N-7W, San Juan

- CASE 4674: Application of Hanagan Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location for its Millman Deep Well No. 1 located 660 feet from the North line and 1924 feet from the East line of Section 4, Township 19 South, Range 28 East, undesignated Morrow gas pool, Eddy County, New Mexico, with the E/2 of said Section 4, to be dedicated to the well.
- CASE 4670: Application of BTA Oil Producers for a special gas-oil ratio limitation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks as an exception to Rule 506 of the Commission Rules and Regulations, a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil for the Vada-Pennsylvanian Pool, Lea County, New Mexico.
- CASE 4671: Application of V. F. Vasicek and J. M. Fullinwider, dba V-F Petroleum for compulsory pooling, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order pooling all mineral interests from the surface of the ground down to and including the Wolfcamp formation underlying the SE/4 SW/4 of Section 1, Township 15 South, Range 36 East, Lea County, New Mexico, to form a standard oil proration unit to be dedicated to a well to be drilled at a standard location on said unit. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.
- CASE 4672: Application of Paul M. Mershon, Jr., and Vincent Shryack for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying the W/2 of Section 15, Township 17 South, Range 29 East, Grayburg-Morrow Gas Pool, Eddy County, New Mexico, to form a standard 320-acre unit for the production of gas to be dedicated to a well to be drilled at a standard location for said unit. Also to be considered will be the costs of drilling said well, a charge for the risk

(Case 4672 continued)

involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4508: (Reopened)

In the matter of Case 4508 being reopened pursuant to the provisions of Order No. R-4117, which order established special rules and regulations for the Warren-Devonian Pool, Lea County, New Mexico, including a provision for 80-acre spacing units. All interested persons may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 4673: Application of Fluid Power Pump Company for two non-standard oil proration units, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks approval for two 160-acre non-standard oil proration units in Township 19 North, Range 3 West, Media-Entrada Oil Pool, Sandoval County, New Mexico, said units comprising acreage as follows:

1. S/2 NW/4 and N/2 SW/4 of Section 14
2. S/2 NE/4 and N/2 SE/4 of Section 15

CLARENCE E. HINKLE
W. E. BONDURANT, JR.
LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
STUART D. SHANOR

C. D. MARTIN
PAUL J. KELLY, JR.
J. M. LITTLE

LAW OFFICES
HINKLE, BONDURANT, COX & EATON
600 HINKLE BUILDING
POST OFFICE BOX 10
ROSWELL, NEW MEXICO 88201

July 23, 1971

TELEPHONE (505) 622-8510

MIDLAND, TEXAS OFFICE
521 MIDLAND TOWER
(915) 683-4691

[Handwritten signature]

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Our client, Humble Oil & Refining Company, is interested in Case No. 4563 which appears on the examiner's docket for July 28. This is the application of Corrine Grace for special gas/oil ratio limitations and other matters. Humble has been informed that a request has been or will be made by Mrs. Grace to have the case continued to a later date. In order to avoid an unnecessary trip in connection with this matter, if such a request has been made I would appreciate your calling me collect Monday, if possible, so that we will know whether or not the case has been or will be continued.

Yours sincerely,

HINKLE, BONDURANT, COX & EATON

By Clarence E. Hinkle
[Signature]

CEH:cs

DOCKET MAILED

Date 1-20-72

DOCKET MAILED

Date 11-18-71

DOCKET MAILED

Date 7-30-71

Charge - I have advised
Mr. Hinkle that this case
is being continued to August 11th

DOCKET MAILED

Date 9-17-71

[Handwritten signature]

Docket No. 1-72

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 5, 1972

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

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

- CASE 4621: (Continued from the November 10, 1971 Examiner Hearing)
Application of Jack L. McClellan for a dual completion, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of his Bar-J Federal Well No. 1 located in Unit E of Section 15, Township 6 South, Range 27 East, Chaves County, New Mexico, in such a manner as to produce oil from an undesignated Siluro-Devonian pool through tubing and gas from the Haystack-Cisco Gas Pool through the casing-tubing annulus.
- CASE 4609: (Continued from the November 17, 1971 Examiner Hearing)
Application of Jack L. McClellan for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Sulimar-Queen Unit Area comprising 1520 acres, more or less, of Federal lands in Sections 13, 23, 24, 25, and 26 of Township 15 South, Range 29 East, and Sections 18 and 19 of Township 15 South, Range 30 East, Chaves County, New Mexico.
- CASE 4482: (Reopened):
In the matter of Case 4482 being reopened pursuant to the provisions of Order No. R-4093, which order established 160-acre spacing units and established a maximum gas-oil ratio limitation of 3,000 cubic feet of gas for each barrel of oil produced for the Parkway-Strawn Pool, Eddy County, New Mexico. All interested parties may appear and show cause why said pool should not be developed on 40-acre or 80-acre spacing units and why the limiting gas-oil ratio should not revert to the statewide limit of 2,000 to one.
- CASE 3709 (Reopened):
In the matter of Case 3709 being reopened pursuant to the provisions of Order No. R-3366-B, which order continued 80-acre spacing for the Akah Nez-Devonian Oil Pool, San Juan County, New Mexico, for an additional one-year period. All interested persons may appear and show cause why said pool should not be developed on 40-acre spacing units.
- CASE 4638: Application of Holder Petroleum Corporation for downhole

(Case 4638 continued)

and surface commingling, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Todd Lower-San Andres Pool and the Todd Upper-San Andres Gas Pool in the well-bores of its BA Wells Nos. 1 and 2, located respectively, in Units A and H of Section 34, Township 7 South, Range 35 East, Roosevelt County, New Mexico. Applicant further seeks authority to commingle, on the surface, production from said wells prior to measurement.

- CASE 4639: Application of Great Western Drilling Company to directionally drill, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill out its State Well No. 1, having a surface location 330 feet from the North and East lines of Section 17, Township 16 South, Range 35 East, Townsend-Morrow Gas Pool, Lea County, New Mexico, to a depth of approximately 8,000 feet and whipstock the well in a southwesterly direction to a bottom-hole location within the NE/4 of said Section 17 at a depth of approximately 11,800 feet.
- CASE 4640: Application of Amoco Production Company for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the East Gem-Yates Pool, Lea County, New Mexico, including a provision for 80-acre spacing and proration units.
- CASE 4641: Application of Reserve Oil and Gas Company for a waterflood expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its South Langlie Jal Unit Jalmat Waterflood Project, Jalmat Oil Pool, by the conversion of water injection of its Unit Well No. 23, located 2310 feet from the South and West lines of Section 17, Township 25 South, Range 37 East, Lea County, New Mexico.
- CASE 4642: Application of Fluid Power Pump Company for special pool rules and a pressure maintenance project, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the Media-Entrada Pool, including a provision for 160-acre spacing and proration units. Applicant further seeks authority to institute a pressure maintenance project in said pool by the injection of water into the Entrada formation through various wells located in Sections 10, 11, 22, and 23 of Township 19 North, Range 3 West, Sandoval County, New Mexico, and promulgation of rules for said project including a procedure whereby additional injection or production wells at orthodox or un-orthodox locations may be approved administratively.

CASE 4643: Application of Cities Service Oil Company for compulsory pooling and unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the N/2 of Section 19, Township 22 South, Range 27 East, South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico, to form a standard 320-acre proration unit for the production of gas from the Morrow formation with said unit to be dedicated to a well to be drilled at an unorthodox location 2173 feet from the North line and 1200 feet from the East line of said Section 19.

CASE 4644: Application of Continental Oil Company for four non-standard gas proration units and rededication of acreage, Lea County New Mexico. Applicant, in the above-styled cause, seeks the rededication of acreage and the establishment of the following-described non-standard gas proration units for wells on its Meyer A-29 Lease in Section 29, Township 22 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico.

1. A 240-acre unit comprising the SE/4 and E/2 SW/4 to be dedicated to Well No. 3 in Unit N;
2. An 80-acre unit comprising the W/2 SW/4 to be dedicated to Well No. 4 in Unit L;
3. An 80-acre unit comprising the E/2 NE/4 to be dedicated to Well No. 5 in Unit A;
4. A 240-acre unit comprising the NW/4 and W/2 NE/4 to be dedicated to Well No. 9 in Unit E.

CASE 4563: (Continued from the December 1, 1971, Examiner Hearing) Application of Corrinne Grace for special gas-oil ratio limitation and pressure maintenance project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to produce her State Well No. 1 located in Unit A of Section 1, Township 15 South, Range 29 East, Double L-Queen Pool, Chaves County, New Mexico, with no gas-oil ratio limitation, strip the liquids, and institute a pressure maintenance project by the injection of all said gas back into the producing formation through her State Well No. 2 located in Unit B of said Section 1, Applicant further seeks to transfer an oil allowable from said Well No. 2 to said Well No. 1.

CASE 4619: (Continued from the December 1, 1971, Examiner Hearing)

Application of Corinne Grace for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying the N/2 of Section 25, Township 22 South, Range 26 East, which acreage is within one mile of the South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico. Said acreage to be dedicated to a well to be drilled to the Morrow formation at a location 1980 feet from the North and East lines of said Section 25. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges of supervision of said well.

CASE 4620: (Continued from the December 1, 1971, Examiner Hearing)

Application of Corinne Grace for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying the N/2 of Section 24, Township 22 South, Range 26 East, which acreage is in the vicinity of the South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico. Said acreage to be dedicated to a well to be drilled to the Morrow formation at a location 1980 feet from the North and East lines of said Section 24. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.



western union

Telegram

KA058 LC205 KC388

K AYA171 DJ PDF=CARLSBAD NMEX 29 1100A MST=

1971 DEC 29 PM 6 05

GEORGE HATCH=

SOIL CONSERVATION COMMISSION SANTA FE NMEX=

WE REQUEST A CONTINUANCE OF ALL THREE CASES WE ARE
INVOLVED IN BEFORE THE OIL CONSERVATION COMMISSION FROM
1-5-72 UNTIL 2-2-72=

CORRINE GRACE=

RECEIVED

JAN 03 1972

OIL CONSERVATION COMM.
SANTA FE

1-5-72 2-2-72.

DOCKET: EXAMINER HEARING - WEDNESDAY - DECEMBER 1, 1971

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

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

- CASE 4629: Application of El Paso Natural Gas Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Rocky Arroyo Well No. 1 located in Unit J of Section 8, Township 22 South, Range 22 East, in such a manner as to permit the production of gas from an undesignated Morrow gas pool through tubing and an undesignated Wolfcamp gas pool through the casing-tubing annulus.
- CASE 4630: Application of C. W. Trainer for a non-standard gas unit, Lea County, New Mexico. Applicant, in the above-styled cause, seek approval of a 316.15-acre non-standard gas spacing unit comprising Lots 1 and 2 and E/2 W/2 of Section 31, Township 24 South, Range 37 East, and Lots 2 and 3 of Section 6, Township 25 South, Range 37 East, Custer-Ellenburger Gas Pool, Lea County, New Mexico, to be dedicated to a well to be drilled 660 feet from the South line and 1590 feet from the West line of said Section 31.
- CASE 4631: Application of Gulf Oil Corporation for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Learcy McBuffington Well No. 7 located in Unit M of Section 13, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Justis-Tubb-Drinkard Oil Pool and gas from the Justis-Glorieta Gas Pool through parallel strings of tubing.
- CASE 4632: Application of Mobil Oil Corporation for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dedicate the W/2 of Section 14, Township 17 South, Range 34 East, to its Bridges State Well No. 133, situate at an unorthodox location for said unit in the North Vacuum-Morrow Gas Pool, Lea County, New Mexico.

CASE 4563: Continued from the November 10, 1971, Examiner Hearing

Application of Corinne Grace for special gas-oil ratio limitation and pressure maintenance project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to produce her State Well No. 1 located in Unit A of Section 1, Township 15 South, Range 29 East, Double L-Queen Pool, Chaves County, New Mexico, with no gas-oil ratio limitation, strip the liquids, and institute a pressure maintenance project by the injection of all said gas back into the producing formation through her State Well No. 2 located in Unit B of said Section 1. Applicant further seeks to transfer an oil allowable from said Well No. 2 to said Well No. 1.

CASE 4619: Continued from the November 10, 1971, Examiner Hearing

Application of Corinne Grace for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying the N/2 of Section 25, Township 22 South, Range 26 East, which acreage is within one mile of the South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico. Said acreage to be dedicated to a well to be drilled to the Morrow formation at a location 1980 feet from the North and East lines of said Section 25. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges of supervision of said well.

CASE 4620: Continued from the November 10, 1971, Examiner Hearing

Application of Corinne Grace for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying the N/2 of Section 24, Township 22 South, Range 26 East, which

-3-

Examiner Hearing - December 1, 1971

Docket No. 27-71

(Case 4620 continued)

acreage is in the vicinity of the South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico. Said acreage to be dedicated to a well to be drilled to the Morrow formation at a location 1980 feet from the North and East lines of said Section 24. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.



Telegram

KA035

1971 NOV 9 PM 1 12

(108)

K SNA038 GR PDF=SANTA FE NMEX 9 102P MST=
NEW MEXICO OIL CONSERVATION COMMISSION, DLY 75,
ATTN GEORGE HATCH ATTORNEY=

STATE LAND OFFICE BLDG SANTA FE NMEX 87501=
RE CASE NO. 4563. THIS WILL CONFIRM OUR REQUEST FOR A
CONTINUANCE UNTIL DECEMBER 1, 1971. RE ABOVE CASE FOR
OIL AND GAS LIMITATION AND PRESSURE MAINTENANCE PROJECT
IN CHAVES COUNTY=

CORINNE GRACE.=

-Box 100
Grants, N.M.

DOCKET MAILED

4563 1 1971.

Date 11-18-71

WU 1201 (R 5-69)



Telegram

KA049

(310)

K SNA048 MS PD=SANTA FE NMEX 29 300P MST=
N MEX OIL CONSERVATION COMMISSION=

ATTN GEORGE HATCH, ATTORNEY STATE LAND OFFICE
BLDG SANTA FE NMEX=i

THIS WILL CONFIRM OUR REQUEST FOR CONTINUANCE OF HEARING
TO JANUARY 5, 1972, IN REGARD TO DOUBLE L FIELD IN
CHAVES COUNTY, NEW MEX CO=

CORINNE GRACE.

OIL CONSERVATION COM.
SANTA FE

11-30-71

RECEIVED

WU 1201 (R 5-69)

CASE 4602: Application of Tenneco Oil Company for an unorthodox oil well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks as an exception to Rule 104 B II, approval of an unorthodox Pennsylvanian oil well location for its Pah Well No. 1 located 1500 feet from the South line and 990 feet from the East line of Section 3, Township 25 North, Range 11 West, San Juan County, New Mexico.

CASE 4603: Application of Tenneco Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Sand Springs Unit Area comprising 2999 acres, more or less, of State lands in Townships 10 and 11 South, Ranges 34 and 35 East, Lea County, New Mexico.

CASE 4563: Continued from the August 11, 1971 Examiner Hearing
Application of Corinne Grace for special gas-oil ratio limitation and pressure maintenance project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to produce her State Well No. 1 located in Unit A of Section 1, Township 15 South, Range 29 East, Double L-Queen Pool, Chaves County, New Mexico, with no gas-oil ratio limitation, strip the liquids, and institute a pressure maintenance project by the injection of all said gas back into the producing formation through her State Well No. 2 located in Unit B of said Section 1. Applicant further seeks to transfer an oil allowable from said Well No. 2 to said Well No. 1.

CASE 4592: Continued from the September 15, 1971 Examiner Hearing
Application of Gulf Oil Corporation for amendment of order permitting commingling of production, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4079, which order authorized the applicant to commingle production from the Hobbs (Grayburg-San Andres) and Hobbs-Blinbry Pools on its W. D. Grimes NCT-B Lease and to commingle production from said lease with the Hobbs (Grayburg-San Andres) Pool on its W. D. Grimes NCT-A lease, located in Sections 32 and 33, Township 18 South, Range 38 East, Lea County, New Mexico. Applicant seeks to allocate production to each lease and pool on the basis of by-monthly tests rather than monthly tests.

Docket No. 21-71

DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 29, 1971

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

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

- CASE 4604: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to consider the consolidation of the Eunice and Monument areas of the Eunice Monument Pool (Grayburg-San Andres), Lea County, New Mexico, and the ascertainment of a common efficient gas-oil ratio limitation for the consolidated area.
- CASE 4598: Application of Continental Oil Company for an exception to Order No. R-2408, and for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its Meyer B-4 Well No. 28 in Unit R of Section 4, Township 21 South, Range 36 East, as the second well on an 80-acre proration unit in the Oil Center-Blinebry Pool and to complete said well as a dual completion (conventional) to produce oil from said Oil Center-Blinebry Pool and the Eunice Grayburg-San Andres Pool through parallel strings of tubing.
- CASE 4599: Application of Continental Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its SEMU Well No. 61 located in Unit P of Section 15, Township 20 South, Range 37 East, as a dual completion to produce gas from the Weir-Drinkard Pool through tubing and gas from the Weir-Blinebry Pool through the casing-tubing annulus.
- CASE 4600: Application of El Paso Natural Gas Company for a non-standard gas proration unit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard gas proration unit comprising the NW/4, N/2 SW/4, SW/4 SW/4, and NW/4 NE/4 of Section 22, Township 17 South, Range 29 East, Grayburg-Morrow Gas Pool, Eddy County, New Mexico, to be dedicated to its Leonard State "Com" Well No. 1 located in Unit E of said section.
- CASE 4601: Application of Humble Oil & Refining Company for the re-dedication of acreage, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3700, to permit the simultaneous dedication of the standard 640-acre Eumont gas proration unit authorized therein to its New Mexico "G" State Wells 2 and 6 located in Units P and M respectively of Section 26, Township 21 South, Range 36 East, Lea County, New Mexico rather than Wells 2 and 4 as at present.

CASE 4563: Continued from the October 27, 1971, Examiner Hearing

Application of Corinne Grace for special gas-oil ratio limitation and pressure maintenance project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to produce her State Well No. 1 located in Unit A of Section 1, Township 15 South, Range 29 East, Double L-Queen Pool, Chaves County, New Mexico, with no gas-oil ratio limitation, strip the liquids, and institute a pressure maintenance project by the injection of all said gas back into the producing formation through her State Well No. 2 located in Unit B of said Section 1. Applicant further seeks to transfer an oil allowable from said Well No. 2 to said Well No. 1.

CASE 4621: Application of Jack L. McClellan for a dual completion, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of his Bar-J Federal Well No. 1 located in Unit E of Section 15, Township 6 South, Range 27 East, Chaves County, New Mexico, in such a manner as to produce oil from an undesignated Siluro-Devonian pool through tubing and gas from the Haystack-Cisco Gas Pool through the casing-tubing annulus.

CASE 4622: Application of Jake L. Hamon for a non-standard unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre non-standard oil proration unit comprising the NE/4 SE/4 and SE/4 NE/4 of Section 30, Township 16 South, Range 36 East, East Shoe Bar-Devonian Pool, Lea County, New Mexico, to be dedicated to a well to be drilled 1830 feet from the South line and 660 feet from the East line of said Section 30.

CASE 4623: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to consider the amendment of the definition of a gas well as it appears in its Rules and Regulations to read as follows:

"Gas well shall mean a well producing gas or natural gas from a gas pool or a well with a gas-oil ratio in excess of 100,000 cubic feet of gas per barrel of oil producing from an oil pool."

Docket No. 24-71

DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 10, 1971

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

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

CASE 4617: Application of Tenneco Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a unit area comprising 520 acres, more or less, of Federal lands in Section 3, Township 19 South, Range 32 East, Lusk-Seven Rivers Pool, Lea County, New Mexico.

CASE 4618: Application of Tenneco Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Lusk-Seven Rivers Pool by the injection of water through one well located in the SE/4 NW/4 of Section 3, Township 19 South, Range 32 East, Lea County, New Mexico.

CASE 4619: Application of Corinne Grace for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying the N/2 of Section 25, Township 22 South, Range 26 East, which acreage is within one mile of the South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico. Said acreage to be dedicated to a well to be drilled to the Morrow formation at a location 1980 feet from the North and East lines of said Section 25. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges of supervision of said well.

CASE 4620: Application of Corinne Grace for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying the N/2 of Section 24, Township 22 South, Range 26 East, which acreage is in the vicinity of the South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico. Said acreage to be dedicated to a well to be drilled to the Morrow formation at a location 1980 feet from the North and East lines of said Section 24. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

-2-

Docket No. 23-71 - Examiner Hearing
October 27, 1971

(Case 4616 continued)

cause, seeks authority to institute a waterflood project in the South Eunice Seven Rivers-Queen Pool, by the injection of water through eight wells located in Sections 24, 25, and 26, Township 22 South, Range 36 East, Lea County, New Mexico.

CASE 4563: Continued from the September 29, 1971, Examiner Hearing

Application of Corinne Grace for special gas-oil ratio limitation and pressure maintenance project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to produce her State Well No. 1 located in Unit A of Section 1, Township 15 South, Range 29 East, Double L-Queen Pool, Chaves County, New Mexico, with no gas-oil ratio limitation, strip the liquids, and institute a pressure maintenance project by the injection of all said gas back into the producing formation through her State Well No. 2 located in Unit B of said Section 1. Applicant further seeks to transfer an oil allowable from said Well No. 2 to said Well No. 1.

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 27, 1971

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

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

- CASE 4613: Application of Scoggins Petroleum Corporation for creation of a new gas pool and special rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Morrow gas pool for its State BI Well No. 1 located in Unit F of Section 33, Township 18 South, Range 25 East, Eddy County, New Mexico, and the promulgation of special rules therefor, including a provision for 640-acre spacing units.
- CASE 4614: Application of Cities Service Oil Company for an unorthodox well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill an oil well as an infill well in its Southeast Maljamar Grayburg-San Andres Unit Area at an unorthodox location 1395 feet from the South line and 2615 feet from the East line of Section 29, Township 17 South, Range 33 East, Maljamar Pool, Lea County, New Mexico.
- CASE 4612: Application of Meadco Properties for creation of a new pool and special rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of oil from the Bough "C" zone of the Pennsylvanian formation for its well located 2130 feet from the West line and 660 feet from the South line of Section 25, Township 10 South, Range 32 East, Lea County, New Mexico, and for the promulgation of special rules therefor, including a provision for 160-acre spacing units.
- CASE 4615: Application of Marathon Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the South Eunice (Seven Rivers, Queen) Unit Area comprising 1840 acres, more or less, of state and fee lands in Sections 23, 24, 25, 26, 35, and 36, Township 22 South, Range 36 East, South Eunice Seven Rivers-Queen Pool, Lea County, New Mexico.
- CASE 4616: Application of Marathon Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled

Applying Carrene Phase for
unlimited gas GOR limitation and
gas injection project -

Units A + B of Section 1, T, 15, R29

wants to produce one well at
a parity - strip all liquids, inject
the gas into the formation through the
other well.

Transfer of allowable →
= Compression will be necessary =

4276

4412

Wicket to Bill Le May -

Docket No. 13-71

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 30, 1971

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

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

CASE 4352: (Reopened) (Continued from April 14, April 28, and May 19, 1971, Examiner Hearings)

In the matter of Case 4352 being reopened by the Oil Conservation Commission upon its own motion to give all interested persons an opportunity to appear and present evidence to whether the Double L-Queen and Suble-Queen Pools, Chaves County, New Mexico, are in fact separate reservoirs or one common reservoir. Further, in the event it is found that the two pools comprise one common reservoir, the Commission will consider the adoption of special rules and regulations to provide for the classification of oil and gas wells, spacing and well location requirements for oil and gas wells, and an allocation formula for withdrawals from the gas wells and oil wells.

CASE 4539: (Continued from the May 19, 1971, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Doanbuy Lease & Company, Inc., and all other interested persons to appear and show cause why its following described wells in Section 27, Township 14 South, Range 33 East, Saunders Pool, Lea County, New Mexico, should not be plugged and abandoned, in accordance with a Commission-approved plugging program:

Atlantic State AC - 1	Well No. 1	Unit N
Atlantic State AC - 2	Well No. 2	Unit M
Atlantic State AC - 2	Well No. 3	Unit O
Atlantic State AC - 3	Well No. 4	Unit L
Atlantic State AC - 3	Well No. 5	Unit J
Atlantic State AC - 4	Well No. 6	Unit P
Atlantic State AC - 4	Well No. 7	Unit I

CASE 4556: Application of Tenneco Oil Company for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Queen formation in the perforated interval from 3154 feet to 3159 feet in its USA-Reno Well No. 1 located in Unit L of Section 3, Township 15 South, Range 31 East, Caprock-Queen Pool, Chaves County, New Mexico.

CASE 4557: Application of Continental Oil Company for transfer of allowable, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to transfer allowable across the boundaries of the participating area and the leases outside said area but within the Maljamar Cooperative Area, MCA Unit Area, Maljamar Grayburg-San Andres Pool, Lea County, New Mexico.

CASE 4535: (Continued from the April 28, and the May 19, 1971, Examiner Hearings)

Application of Continental Oil Company for down-hole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Monument-Tubb and Weir Drinkard oil production in the well-bore of its SEMU Well No. 70, located in Unit I of Section 15, Township 20 South, Range 37 East, Lea County, New Mexico.

CASE 4558: Application of Midwest Oil Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Little Inbe (Bough "C") Unit Area comprising 2,240 acres, more or less, of state lands in Sections 10, 11, 14 and 15 of Township 10 South, Range 33 East, Inbe Permo-Pennsylvanian Pool, Lea County, New Mexico.

CASE 4559: Application of Midwest Oil Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its Little Inbe (Bough "C") Unit Area, Inbe Permo-Pennsylvanian Pool, Lea County, New Mexico, by the injection of water through three wells located in Sections 11 and 14 of Township 10 South, Range 33 East, Lea County, New Mexico.

CASE 4560: Application of Rijan Oil Company, Inc. for a pressure maintenance project, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pilot pressure maintenance project in the Slick Rock-Dakota Pool by the injection of water into the Dakota formation through its Rijan Wells Nos. 10, 12, and 14 located, respectively, in Units F, L and K of Section 31, Township 30 North, Range 16 West, San Juan County, New Mexico.

CASE 4561: Application of Great Plains Land Company for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seek an exception to

(Case 4561 continued)

Order No. R-3221, as amended, to dispose of water produced by its well located in the NW/4 NW/4 of Section 31, Township 18 South, Range 30 East, Shugart Field, Eddy County, New Mexico.

CASE 4562: Application of Texas Oil and Gas Corporation, for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the special rules and regulations governing the Indian Basin-Upper Pennsylvanian Gas Pool to permit the drilling of a well at an unorthodox gas well location 990 feet from the North and West lines of Section 22, Township 22 South, Range 23 East, Eddy County, New Mexico.

CASE 4563: Application of Corinne Grace for special gas-oil ratio limitation and pressure maintenance project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to produce her State Well No. 1 located in Unit A of Section 1, Township 15 South, Range 29 East, Double L-Queen Pool, Chaves County, New Mexico, with no gas-oil ratio limitation, strip the liquids, and institute a pressure maintenance project by the injection of all said gas back into the producing formation through her State Well No. 2 located in Unit B of said Section 1. Applicant further seeks to transfer an oil allowable from said Well No. 2 to said Well No. 1.

CASE 4564: Application of Penroc Oil Corporation for a non-standard oil proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre non-standard oil proration unit comprising the SW/4 NE/4 and NW/4 SE/4 of Section 33, Township 18 South, Range 38 East, Hobbs-Drinkard Pool, Lea County, New Mexico, to be dedicated to its Conoco-State Well No. 1 located 1980 feet from the North line and 2130 feet from the East line of said Section 33.

CASE 4549: (Continued from the June 16, 1971, Examiner Hearing)

Application of Tom L. Ingram for unorthodox gas well location, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location for his Light Well No. 1 located 1980 feet from the South line and 660 feet from the East line of Section 15, Township 8 South, Range 37 East, Bluit-San Andres Associated Pool, Roosevelt County, New Mexico, the S/2 of said Section 15 to be dedicated to the well.

Docket No. 17-71

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 11, 1971

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

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

CASE 4563: (Continued from the July 28, 1971, Examiner Hearing)

Application of Corinne Grace for special gas-oil ratio limitation and pressure maintenance project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to produce her State Well No. 1 located in Unit A of Section 1, Township 15 South, Range 29 East, Double L-Queen Pool, Chaves County, New Mexico, with no gas-oil ratio limitation, strip the liquids, and institute a pressure maintenance project by the injection of all said gas back into the producing formation through her State Well No. 2 located in Unit B of said Section 1. Applicant further seeks to transfer an oil allowable from said Well No. 2 to said Well No. 1.

CASE 4575: Application of Anadarko Production Company for the creation of a new gas pool, or, in the alternative, the amendment of the special pool rules for an existing pool and pool commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new San Andres gas pool for its Lou Wortham Well No. 6 located in Unit E of Section 11, Township 22 South, Range 37 East, or, in the alternative, the amendment of the special rules and regulations governing the South Eunice-San Andres Pool to provide for the classification of oil and gas wells, spacing and well location requirements, and an allocation formula for withdrawals by oil and gas wells. In the event the Commission creates the above-requested gas pool, applicant further seeks authority to commingle on the surface the liquid hydrocarbons from the above-described Well No. 6 and its Wortham Well No. 5, a South Eunice-San Andres Pool well, located in Unit C of said Section 11.

CASE 4576: Application of Continental Oil Company for unorthodox oil well locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill two oil wells as infill wells in its Eumont Hardy Unit Area, Eumont Pool, Lea County, New Mexico, at unorthodox locations as follows:

Examiner Hearing - Wednesday
August 11, 1971

Docket No. 17-71

-2-

(Case 4576 continued)

TOWNSHIP 21 SOUTH, RANGE 37 EAST
Eumont Hardy Unit Well No. 48 to
be located 1492 feet from the
North line and 560 feet from the
East line of Section 6;

Eumont Hardy Unit Well No. 49 to
be located 3660 feet from the South
line and 1980 feet from the West
line of Section 6.

- CASE 4577: Application of Petroleum Corporation for the creation of a new pool, special rules therefor, and discovery allowable, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Wolf-camp oil pool for its Petco State Well No. 2 located in Unit N of Section 26, Township 19 South, Range 29 East, Eddy County, New Mexico, and the promulgation of special rules therefor, including a provision for 160-acre spacing and proration units. Applicant further seeks the assignment of an oil discovery allowable in the amount of approximately 48,110 barrels to said well.
- CASE 4578: Application of Harvey E. Yates Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Empire South Deep Unit Area comprising 4968 acres, more or less, of Federal, State and Fee lands in Townships 17 and 18 South, Ranges 28 and 29 East, Eddy County, New Mexico.
- CASE 4579: Application of Stephen C. Helbing for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Juniper Canyon Unit Area comprising 6,880 acres, more or less, of Federal, State and Fee lands in Township 24 South, Range 25 East, Eddy County, New Mexico.
- CASE 4580: Application of Gulf Oil Corporation for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Harry Leonard (NCT-C) Well No. 12 located in Unit A of Section 36, Township 21 South, Range 36 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Arrowhead-Grayburg and Blinbry Pools through parallel strings of tubing.

Examiner Hearing - Wednesday
August 11, 1971

-3-

Docket No. 17-71

(Continued from the July 28, 1971, Examiner Hearing)
CASE 4570: Application of Shenandoah Oil Corporation for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the interval from 1760 feet to 1840 feet by injection down the annulus of its Read & Stevens "M" Federal Well No. 1 located in Unit K of Section 28, Township 6 South, Range 27 East, Haystack-Cisco Gas Pool, Chaves County, New Mexico.

Docket No. 16-71

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 28, 1971

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

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

CASE 4539: (Continued from the June 30, 1971, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Doanbuy Lease & Company, Inc., and all other interested persons to appear and show cause why its following described wells in Section 27, Township 14 South, Range 33 East, Saunders Pool, Lea County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

Atlantic State AC-1	Well No. 1	Unit N
Atlantic State AC-2	Well No. 2	Unit M
Atlantic State AC-2	Well No. 3	Unit O
Atlantic State AC-3	Well No. 4	Unit L
Atlantic State AC-3	Well No. 5	Unit J
Atlantic State AC-4	Well No. 6	Unit P
Atlantic State AC-4	Well No. 7	Unit I

CASE 4558: (Continued from the June 30, 1971, Examiner Hearing)

Application of Midwest Oil Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Little Inbe (Bough "C") Unit Area comprising 2,240 acres, more or less, of state lands in Sections 10, 11, 14 and 15 of Township 10 South, Range 33 East, Inbe Permo-Pennsylvanian Pool, Lea County, New Mexico.

CASE 4559: (Continued from the June 30, 1971, Examiner Hearing)

Application of Midwest Oil Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its Little Inbe (Bough "C") Unit Area, Inbe Permo-Pennsylvanian Pool, Lea County, New Mexico, by the injection of water through three wells located in Sections 11 and 14 of Township 10 South, Range 33 East, Lea County, New Mexico.

CASE 4563: (Continued from the June 30, 1971, Examiner Hearing)

Application of Corinne Grace for special gas-oil ratio limitation and pressure maintenance project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to produce her State Well No. 1 located in Unit A of Section 1, Township 15 South, Range 29 East, Double L-Queen Pool, Chaves County, New Mexico, with no gas-oil ratio limitation, strip the liquids, and institute a pressure maintenance project by the injection of all said gas back into the producing formation through her State Well No. 2 located in Unit B of said Section 1. Applicant further seeks to transfer an oil allowable from said Well No. 2 to said Well No. 1.

CASE 4561: (Continued and readvertised from the June 30, 1971, Examiner Hearing)

Application of Great Plains Land Company for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, to dispose of water produced by its well located in the NW/4 NW/4 of Section 31, Township 18 South, Range 31 East, Shugart Field, Eddy County, New Mexico.

CASE 4570: Application of Shenandoah Oil Corporation for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the interval from 1760 feet to 1840 feet by injection down the annulus of its Read & Stevens "M" Federal Well No. 1 located in Unit K of Section 28, Township 6 South, Range 27 East, Haystack-Cisco Gas Pool, Chaves County, New Mexico.

CASE 4571: Application of Read & Stevens for an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the special rules and regulations governing the Buffalo Valley-Pennsylvanian Gas Pool to permit the drilling of a well at an unorthodox gas well location 990 feet from the South and West lines of Section 5, Township 15 South, Range 28 East, Chaves County, New Mexico, the S/2 of said Section 5 to be dedicated to the well.

- CASE 4572: Application of Franklin, Aston & Fair, Inc., for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the "B" zone of the Slaughter section of the San Andres formation in its Cook State Well No. 1 located in Unit L of Section 32, Township 7 South, Range 36 East, Todd-San Andres Field, Roosevelt County, New Mexico.
- CASE 4573: Application of Tenneco Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Sand Springs South Unit Area comprising 2536 acres, more or less, of state lands in Township 11 South, Ranges 34 and 35 East, Lea County, New Mexico.
- CASE 4574: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Tenneco Oil Company to appear and show cause why it should not take immediate action to repair the production casing in its Bolack "B" Well No. 5 located in Unit J of Section 31, Township 27 North, Range 8 West, Basin-Dakota Pool, San Juan County, New Mexico.
- CASE 4569: (Continued from the July 14, 1971, Examiner Hearing)
Application of Barber Oil, Inc., for an unorthodox oil well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a producing oil well at an unorthodox location 1326 feet from the South line and 5 feet from the West line of Section 13, Township 20 South, Range 28 East, as an infill well in its waterflood project in the Russell (Yates) Pool, Eddy County, New Mexico.

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

and
4563

January 28, 1972

C
O
P
Y

Mrs. Corinne Grace
P. O. Box 1418
Carlsbad, New Mexico

Re: Cases Nos. 4563,
4619, and 4620

Dear Mrs. Grace:

At the request of the applicant the above
numbered cases will be continued to March 1,
1972. A copy of the docket will be mailed to
you at a later date.

Very truly yours,

GEORGE M. HATCH
Attorney

GMH/dr

cc: Mr. Clarence Hinkle
Mr. James Sperling

Corinne Grace
P.O. Box 1418
Carlsbad, N.M.

Re: Cases Nos.
4563, 4619,
and 4620 ~~not~~

at the request of the applicant the
above numbered cases will be
continued to March 1, 1972

Copy to Laurence Hendley
James Sperling

Albuquerque
Box 2168

87103



Case No. 4563

Exhibit No. 1

DOUBLE "L" STRUCTURE - RESERVOIR MAP

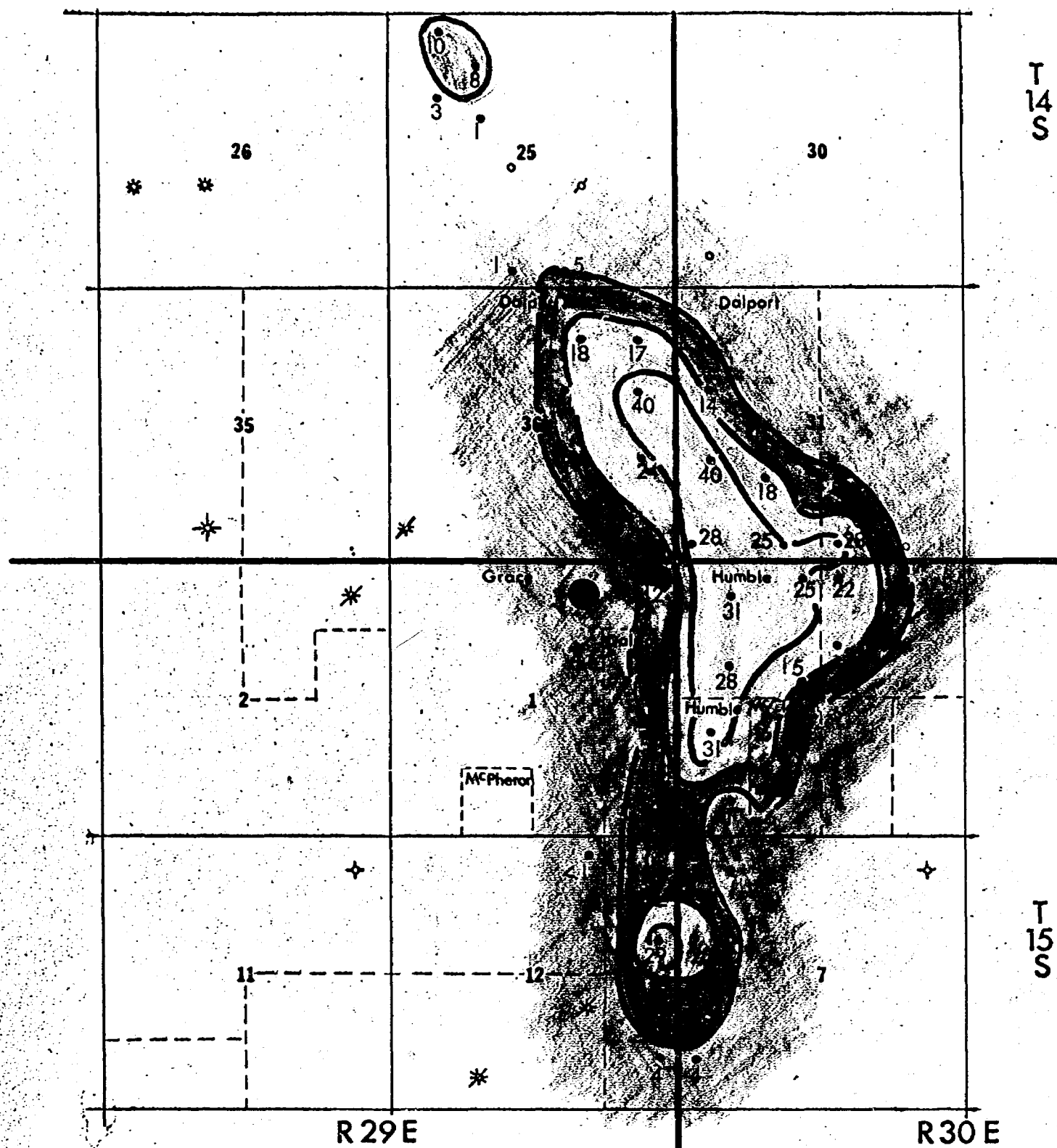
Datum: Top Queen Sand Pay

C.I.: 20 Feet

● Proposed Production Well
● Proposed Injection Well

--- Gas-Oil Contact
Gas In Queen
Oil in Queen
Tight Queen

William J. LeMay - Geologist



Case No. 4563

DOUBLE "L" ISO-PRODUCTION MAP

Exhibit No. 2

- | | |
|----|--|
| 10 | Production in thousands of bbls of oil to 6-1-71 |
| | Less than 5,000 bbls of oil - Cumulative Production to 6-1-71 |
| | 5,000 to 15,000 bbls of oil - Cumulative Production to 6-1-71 |
| | 15,000 to 25,000 bbls of oil - Cumulative Production to 6-1-71 |
| | Over 25,000 bbls of oil - Cumulative Production to 6-1-71 |

- Proposed Injection Well
- Proposed Production Well

William J. LeMay - Geologist

WELL	Grace No 1 State Sec. 1, T-15-S, R-29-E			
UNIT NO.	A			
FIELD	Double "L"			
COM. PROD.				
YEAR				
MONTH	BBLS OIL	BBLS WATER	MCF GAS	GOR
1970 JANUARY	2306	none	10271	4454
" FEBRUARY	964	"	4267	4426
" MARCH	1211	"	5394	4454
" APRIL	1017	"	4530	4454
" MAY	1057	"	4708	4454
" JUNE	909	"	4049	4454
" JULY	944	"	4206	4455
" AUGUST	942	"	4196	4454
" SEPTEMBER	851	"	33112	38909
OCTOBER				60000
NOVEMBER				
1969 DECEMBER	1770	"	1115	630
JANUARY				
TOTAL				

GOR
 9.3-71
 48/4 VP
 176
 GOR 88107
 10.43

Case No. 4563

Exhibit No. 3

PRODUCTION HISTORY
 ON THE GRACE NO. 1 STATE

PRODUCTION - CERTAIN WELLS - DOUBLE "U" FIELD 1971

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total-1971
HOR Co. Lusk No. 1 Sec. 6	2178	1897	2136	1866	2213	1714	1841	1924	757	832	513	775	18646
2	2284	2000	2252	1967	2333	1807	1956	2044	1747	1921	1889	1798	23998
3	2357	2051	2079	1815	1795	1390	1726	1803	1455	1600	1368	1302	20741
4	825	718	808	840	837	649	460	481	466	512	432	496	7524
Dalport(McPherrin)	797	796	732	821	586	623	626	531	399	256	189	496	6849
Rob	266	265	244	273	195	207	208	177	133	90	67	186	2311
3	1839	1885	1736	1940	1389	1469	1484	2170	945	1157	856	2232	19152
3	260	211	194	168	129	79	146	113	133	145	102	310	1990
Spurck State	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-
8	130	106	97	84	65	39	182	85	26	-	-	-	1614

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION

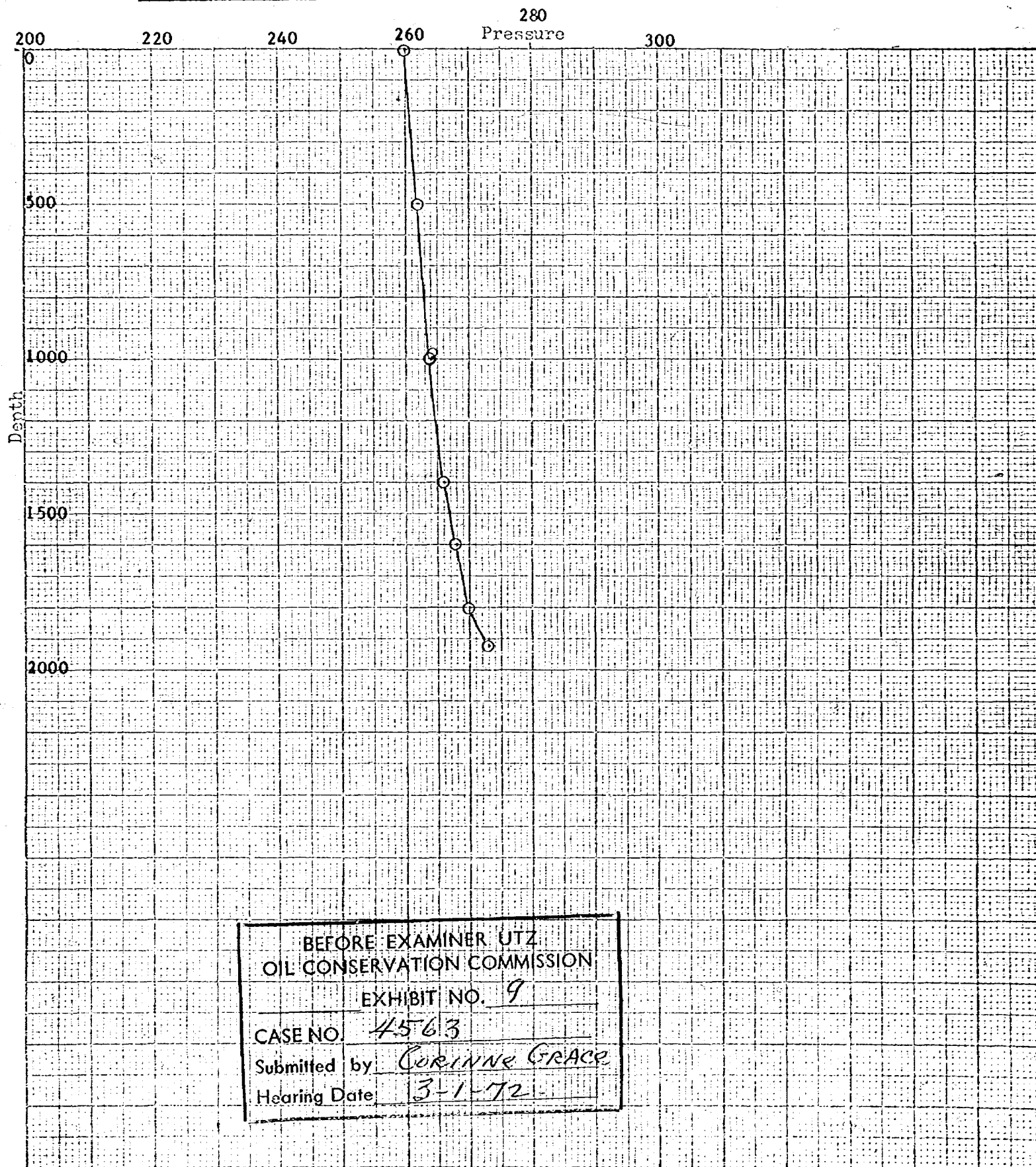
CASE NO. 4563
EXHIBIT NO. 8

Submitted by Corelaine Grace
Hearing Date 5-1-72

Exhibit No. 8

BOTTOM HOLE PRESSURE SURVEY REPORT

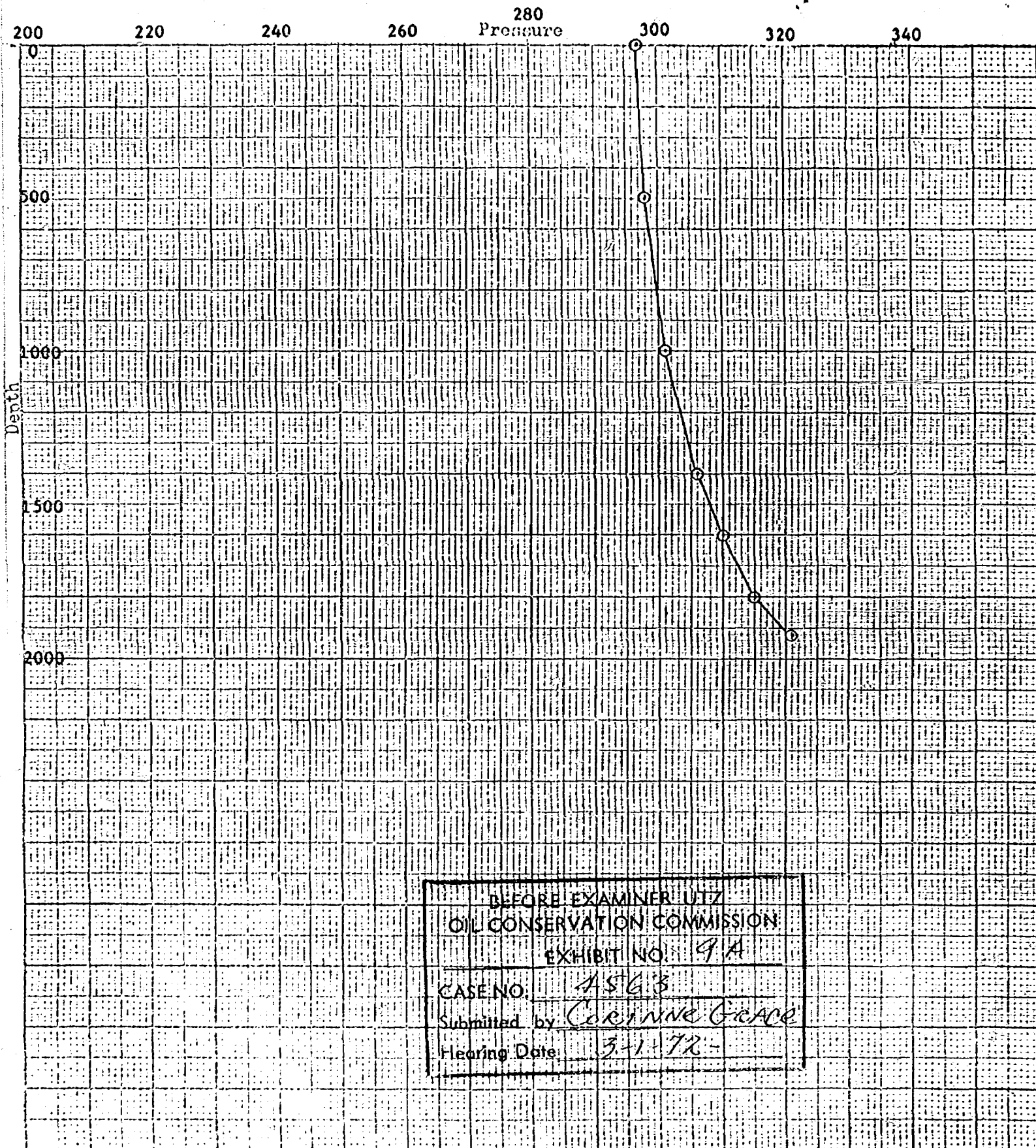
	Depth	Pressure	Gradient
Operator <u>Corinne Grace</u>	0	260	
Lease <u>State</u>	500	262	.004
Well No. <u>1</u>	1000	264	.004
Field <u>Double L Queen</u>	1400	266	.005
Date <u>February 22, 1972</u>	1600	268	.010
Status <u>Shut In</u>	1800	270	.010
Time S. I. <u>Unknown</u>	1925	273	.024
Cas. Pres. <u>-</u>			
Tub. Pres. <u>260</u>			
Elev. <u>3851 DF</u>			
Temp. <u>-</u>			
Clock No. <u>-</u>			
Element No. <u>-</u>			
	Test Depth <u>1925</u>		
	Last Test Date <u>Initial</u>		
	BHP Last Test <u>-</u>		
	BHP Change <u>-</u>		
	Fluid Top <u>-</u>		
	Run By <u>Ralph E. Erwin</u>		
	Gauge No. <u>-</u>		



BOTTOM HOLE PRESSURE SURVEY REPORT

Operator Corinne Grace
Lease State
Well No 2
Field Double L Queen
Date February 22, 1972 Time
Status Shut In Test Depth 1925
Time S. I. Unknown Last Test Date Initial
Cas. Pres. - BHP Last Test
Tub. Pres. 297 BHP Change
Elev. 3862 DF Fluid Top
Temp. Run By Ralph E. Erwin
Clock No. Gauge No.
Element No.

Depth	Pressure	Gradient
0	297	
500	298	.002
1000	301	.006
1400	306	.013
1600	310	.020
1800	315	.025
1925	321	.048



BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

RECEIVED

JUN 1 1970

OIL CONSERVATION COMMISSION

IN THE MATTER OF THE APPLICATION OF)
CORINNE GRACE FOR PRESSURE)
MAINTENANCE PROJECT, DOUBLE "L")
FIELD, CHAVES COUNTY, NEW MEXICO)

Case No. 4563

APPLICATION

HW

COMES NOW Corinne Grace, whose address is P.O. Box 2062, Santa Fe, New Mexico, and respectfully presents this application to the Oil Conservation Commission of the State of New Mexico for an Order permitting her to produce gas and associated liquids from her No. 1 State, located in Unit A, Section 1, T-15-5, R-29-E, Chaves County, New Mexico; said gas to be stripped of its liquid hydrocarbon content and reinjected back into the same producing Queen sand pay in her No. 2 State, located in Unit B, Section 1, T-15-5, R-29-E, Chaves County, New Mexico. This application further requests that the Commission issue an order which would exempt the Corinne Grace No. 1 State from the limiting G.O.R. in the Double "L" Field which is currently 2,000 to 1 and provide for the transfer of oil allowables from her No. 2 State to her No. 1 State. The above described pressure maintenance project would allow Corinne Grace to produce part of the oil in place under her acreage, not to exceed the wells' allowables, without significant depletion of reservoir energy and would protect correlative rights and prevent waste.

IT IS THEREFORE RESPECTFULLY SUBMITTED that this application be set for an examiner's hearing, and upon such hearing that permission be granted to conduct said pressure maintenance project.

Respectfully submitted,

William J. LeMay
William J. LeMay
Agent for Applicant

DOCKET MAILED

Date 9-17-71

DOCKET MAILED

Date 7-30-71

DOCKET MAILED

Date 7-16-71

DOCKET MAILED

Date 6-15-71

DRAFT

GMH/esr
3-8-72

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. 4563

Order No. R- 4276

APPLICATION OF CORINNE GRACE FOR
SPECIAL GAS-OIL RATIO LIMITATION
AND PRESSURE MAINTENANCE PROJECT,
CHAVES COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 1, 1972,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this day of March, 1972, 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, Corinne Grace, is the owner and
operator of the Grace State Wells Nos. 1 and 2 located in Units
A and B, respectively, of Section 1, Township 15 South, Range 29
East, NMPM, Double L-Queen Associated Pool, Chaves County, New
Mexico.

(3) That the Special Rules and Regulations for the Double L-
Queen Associated Pool provide that a well shall be classified
as a gas well if it has a gas-liquid ratio of 30,000 or more
cubic feet of gas per barrel of liquid hydrocarbons and shall

be classified as an oil well if it has a gas-liquid ratio of less than 30,000 cubic feet of gas per barrel of liquid hydrocarbons.

(4) That said rules provide that the limiting gas-oil ratio for the pool shall be 2000 cubic feet of gas for each barrel of oil produced.

(5) That said Special Rules and Regulations limit the total amount of gas that can be produced by either an oil well or a gas well.

(6) That the applicant seeks authority, as an exception to the Special Rules and Regulations for the Double L-Queen Associated Pool, to produce the Grace State Well No. 1 as an oil well with no limitation upon gas production from said well, separate the gas from the liquids by ordinary separation methods, and institute a pressure maintenance project by injecting all of said gas back into the producing formation through the Grace State Well No. 2.

(7) That unlimited gas production from the Grace State Well No. 1 will not cause waste nor violate correlative rights, provided said well produces no more than a 40-acre oil allowable for the pool and provided further that all gas produced by said well is reinjected into the producing formation through the Grace State Well No. 2.

(8) That the proposed pressure maintenance project is in the interest of conservation and should result in greater ultimate recovery of oil, thereby preventing waste.

(9) That for the purposes of the proposed pressure maintenance project, the Grace State Well No. 1 should be classified as a producing oil well with a 40-acre oil allowable and that the Grace State Well No. 2 should be classified as a gas injection well with no allowable.

(10) That all gas produced by said Well No. 1 should be measured and all gas injected through said Well No. 2 should be measured.

(11) That the subject application should be approved and the pressure maintenance project should be governed by the provisions of Rules 701, 702, 703, and 704 of the Commission Rules and Regulations insofar as said rules are not inconsistent with this order.

IT IS THEREFORE ORDERED:

(1) That the applicant, Corinne Grace, is hereby authorized to institute a pressure maintenance project in the Double L-Queen Associated Pool, Chaves County, New Mexico, designated as the Grace Double L-Pressure Maintenance Project, by the injection of gas into the Queen formation in accordance with the following terms and conditions:

(a) The producing oil well for the project, the Grace State Well No. 1 located in Unit A of Section 1, Township 15 South, Range 29 East, NMPM, may produce up to a ~~40~~ ^{40-acre} ~~top~~ ^{top} unit oil allowable with no limitation upon the amount of gas produced.

(b) That all gas produced by said Grace State Well No. 1 shall be injected into the producing formation of the Double L-Queen Associated Pool through the Grace State Well No. 2 located in Unit B of Section 1, Township 15 South, Range 29 East, NMPM.

(c) That injection of gas into the Grace State Well No. 2 shall be accomplished through 8 5/8-inch casing; that the wellhead shall be equipped with a pressure gauge properly maintained in working order.

(d) That all gas produced by the Grace State Well No. 1 and all gas injected through the Grace State Well No. 2 shall be measured by use of meters, ~~or such other method as may be approved by the Secretary-Director of the Commission.~~

(e) That the applicant shall notify the Artesia District Office of the Commission of the commencement of injection within seven days of the date of first injection.

(f) That the project shall be governed by the provisions of Rules 701, 702, 703, and 704 of the Commission Rules and Regulations insofar as said rules are not inconsistent with this order.

(g) That monthly progress reports of the pressure maintenance project shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(2) 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.

~~Month~~

4563 Grace Double L-Queen
Pressure Maintenance

Finds

1. Notice as required
2. Applicant is owner and operator of ~~the~~ State Wells No 1 and 2 located in units A and B respectively of Section 1-T155-R30E, Double L-Queen Pool, Cheves County, New Mexico.
3. Applicant proposes to produce Well No 1 with no gas-oil ratio, separate the production and ~~inject all gas produced~~ return all gas produced to the ~~the~~ Double L-Queen producing zone by ~~separate~~ injection into Well No 2.
4. That State Well No 2 should be classified as a pressure maintenance project injection well.
5. That the subject pressure maintenance project is in the interest of conservation and should result in greater ultimate recovery of oil, thereby preventing waste.
6. That production of the State No 1 well with an unlimited gas-oil ratio, at ~~no~~ oil production rates up to 6 b/d

not in excess of the top unit allowable for the Double L-Queen Pool, and with subsequent reinjection of the produced gas will not harm correlative rights.

7. That the injection should be accomplished through 8 5/8-inch casing ~~equipped~~ ~~with~~ equipped with a pressure gauge.
8. Gas production from State Well No 1 and gas injection into ~~well No~~ State Well No 2 should be metered. (measured)
9. That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

Therefore

(1) That the applicant, Corinne Grace, is hereby authorized to produce her State Well No 1 located in unit A of Section 1-T15S-R29E, ~~Chaves~~ Double County, New Mexico L-Queen Pool, Chaves County, New Mexico, with no gas-oil ratio limitation. Provided, however, that oil production shall be limited to the top unit allowable for the pool and, provided further, that all gas produced shall be reinjected into the ~~Queen Formation~~ Queen producing ~~so~~ Double L-Queen producing horizon in the State Well No 2, located in unit B of the same section.

(2) Injection ~~into~~ into State Well No 2 should be accomplished through 8 5/8 casing. The wellhead shall be equipped with a pressure gauge and said pressure gauge maintained in proper working order.

(3) All gas production and all gas injection shall be measured by use of meters or such other devices as may be approved by the Commission.

(3) Upon the completion of installation of equipment necessary to operate that the subject pressure maintenance project is hereby designated the Grace Double L Pressure Maintenance Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

~~(4) That within 30 days after following installation of the equipment necessary to operate the Grace Double L Pressure Maintenance Project, the applicant shall file a diagrammatic sketch of~~

~~(3)~~ That ~~within 7 days~~ the applicant shall notify the Artesia District Office of the Commission of the commencement of pressure maintenance within 7 days of the date of first injection.

(5) That monthly progress reports of the etc etc

like R4197.

DRAFT

GMH/esr

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

CASE No. 4563
Order No. R-4276-A

IN THE MATTER OF THE APPLICATION OF
CORINNE GRACE FOR SPECIAL GAS-OIL
RATIO LIMITATION AND PRESSURE MAINTENANCE PROJECT, CHAVES COUNTY, NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE COMMISSION:

It appearing to the Commission that due to clerical error, Order No. R-4276, dated March 15, 1972, does not correctly state the intended order of the Commission,

IT IS THEREFORE ORDERED:

(1) That Paragraph (c) of Order (1) of Commission Order No. R-4276 is hereby corrected to read in its entirety as follows:

"(c) That injection of gas into the Grace State Well No. 2 shall be accomplished through 5 1/2-inch casing; that the wellhead shall be equipped with a pressure gauge properly maintained in working order."

(2) That the correction set forth above shall be effective nunc pro tunc as of March 15, 1972.

DONE at Santa Fe, New Mexico, on this _____ day of March, 1972.

CASE 4564: Application of PENROC
FOR A NON-STANDARD OIL PRORATION
UNIT, LEA COUNTY, NEW MEXICO