

Case Number

4797

Application

Transcripts

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
CONFERENCE HALL, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
AUGUST 9, 1972

EXAMINER HEARING

IN THE MATTER OF:

Application of Michael P. Grace II
and Corinne Grace for a dual completion,
Eddy County, New Mexico.

CASE NO. 4797

BOFORE: Daniel S. Nutter
Examiner

TRANSCRIPT OF HEARING

1 MR. NUTTER: The meeting will now come to
2 order. Call Case 4797.

3 MR. HATCH: Case 4797: Application of Michael
4 P. Brace II and Corinne Grace for a dual completion, Eddy
5 County, New Mexico.

6 MR. COOLEY: William J. Booley, of Burr and
7 Cooley, Farmington, New Mexico, appearing on behalf
8 of the Applicant.

9 We have one witness we'd like to have sworn.

10 * * * * *

11 RICHARD STEINHORST,
12 appeared as a witness and, having been duly sworn according
13 to law, testified as follows:

14 DIRECT EXAMINATION

15 BY MR. COOLEY:

16 Q Would you state your full name for the record, please,
17 and the spelling thereof?

18 A Richard Steinhorst, and that is, S-t-e-i-n-h-o-r-s-t.

19 Q Mr. Steinhorst, how are you employed?

20 A I am employed by the Graces as consultant and petroleum
21 engineer.

22 Q In particular, has Mr. Grace retained you with respect
23 to the dual completion of the Humble-Grace Number 1
24 well in Section 2, Township 23 South, Range 26 East,
25 in Eddy County, New Mexico?

1 A They have.

2 Q Have you previously testified before this Commission
3 and are your qualifications a matter of record here?

4 A I have.

5 MR. COOLEY: Mr. Examiner, are the witness'
6 qualifications acceptable?

7 MR. NUTTER: Yes, he's qualified.

8 Q (By Mr. Cooley) Now, Mr. Steinhorst, have you
9 prepared a well location plat showing the location
10 of the Humble-Grace Well and offset leases and wells?

11 A Well, I have. This was prepared by John W. West
12 Engineering Company, who is a recognized engineer in
13 Hobbs.

14 Q At your request?

15 A At my request, right.

16 Q And the one that has been marked Exhibit 1, is that
17 the one you refer to now?

18 A Yes.

19 Q Would you please explain to the Examiner what you
20 intend to set forth here?

21 A Well, Unit 1 merely shows the locations of all the
22 wells regarding the various sections and the operators
23 and the operators' address.

24 Q Now, is this Humble-Grace Number 1 Well presently
25 completed in any formation?

1 A It is presently completed as a Morrow completion.

2 Q Single completion?

3 A Single completion.

4 Q And would you describe it at present, please?

5 A Well, may I refer to an Exhibit which will come up
6 later?

7 If the Commission will refer to either Exhibit
8 2, or 3, this shows how the well has been drilled and
9 completed. The 13 and 3/8 inch 48# is at 352 feet
10 and the 9 and 5/8 inch 36 and 40# was set at 5,400
11 feet. A 7 inch OD, 23, 26 and 29# was set at 11,196
12 feet and then the 4 and 1/2 inch OD 13.50# was set at
13 11,110 feet, to 11,984 feet.

14 Q Have any problems been encountered with the production
15 of this well to date?

16 A Yes, very recently the well just went dead suddenly,
17 began making a lot of water.

18 Q Was this a gradual encroachment of water or was it
19 sudden?

20 A Very sudden.

21 Q What does this suggest to you?

22 A It suggests to me that there has been some kind of a
23 failure of something which has allowed extraneous
24 material to enter the wellbore.

25 Q You do not consider this as being a watering out of the

1 well or an encroachment of water of the field?

2 A No, I do not.

3 Q What do you propose to do on behalf of Mr. Grace in
4 connection with remedial work in the Morrow completion?

5 A Well, we have made a recommendation to reenter the
6 well and make sure that the Packer is holding in at
7 the Morrow if isolated from the rest of the well and
8 then determine whether or not the water is coming
9 from the perforated interval, or whether it's coming
10 from an extraneous source.

11 Q Is there a possibility of a casing leak
12 in this well?

13 A Yes, I believe there is.

14 Q But at the time that you do remedial work on the
15 Morrow completion, you intend to simultaneously perform
16 the dual completion that is subject to this application?
17 A In conjunction with this work, it is intended to
18 dually complete the well.

19 Q Have you prepared diagramatic sketches of two different
20 types of completion that might possibly be used in
21 connection with this dual completion?

22 A I have.

23 Q I hand you what has been marked as Exhibits 2 and 3
24 and ask you if those are the diagramatic sketches to
25 which you refer?

dearnley, meier & mc cormick reporting services, inc.

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-8891 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

- 1 A Yes.
- 2 Q Would you please explain Exhibit 2 for us?
- 3 A Well, Exhibit 2 is a diagramatic sketch of the well
- 4 as it was completed and shows the well would be then
- 5 dually completed as the tubing annular dual, the tubing
- 6 side being Morrow and the annular side being Strawn.
- 7 Q What cementing practices and other completion methods
- 8 would be utilized in connection with that?
- 9 A Well, first thing that would be done would be to
- 10 determine whether or not there is an actual leak in
- 11 the casing.
- 12 Q Well, assuming that the Morrow remedial work has been
- 13 completed and you are now in the process of performing
- 14 your dual completion?
- 15 A Well, in this particular instance, the cementing jobs,
- 16 as performed in completion of the well and as shown
- 17 on the illustration, should be adequate to protect and
- 18 separate the zone. Therefore, we would have no
- 19 particular cementing techniques in this dual completion.
- 20 Q What type of Packer installation would be made in the
- 21 tubing annular type of dual completion?
- 22 A We were recommending and probably it will be a
- 23 permanent type Packer to seal off the Morrow from the
- 24 Strawn.
- 25 Q And, in your opinion, would this be the more desirable

1 and most effective Packer mechanism to assure
2 separation of the zones?

3 A It would.

4 Q Calling your attention, then, to Exhibit 3, would
5 describe to the Examiner what you intend to portray here?

6 A Well, the intent here is to show a two tubing string
7 dual in which two Packers are used and a Packer between
8 the Morrow and the Strawn. And a Packer would be
9 above the Strawn to shut off the casing annulus.

10 Q What type of Packers would you install in this
11 particular section?

12 A As before, we would recommend a permanent type Packer
13 in the 4 and 1/2 liner and probably a Packer Model K
14 as the dual Packer in the 7 inch.

15 Q In your opinion, would these two Packer installations
16 be the most effective methods of separating the two
17 zones in a twin tubing type completion as you portrayed
18 here?

19 A It would be.

20 Q Am I correct that at this time you are asking the
21 Commission to permit you to utilize either of the
22 two proposed mechanical methods as are described
23 on Exhibits 2 and 3?

24 A This is correct.

25 Q Now, in the event that you encounter any substantial

1 amount of fluid production out of either zone, what
2 type of installation would you propose to be used in this
3 action?

4 A I would suggest the dual tubing string rather than
5 the tubing and dual.

6 Q And prior to installation of either of these proposed
7 mechanical methods of dual completion, would it be
8 your suggestion to notify the Commission by telegram
9 or otherwise of which of the two methods is to be
10 utilized?

11 A Right. This is correct.

12 Q Is there any decision as to which of the two methods
13 to utilize, in some parts determined by the uncertainty
14 as to what you will find with respect to the Morrow
15 formation?

16 A That is correct.

17 Q In your opinion, will either of the installations you
18 have proposed here prevent waste and protect correlative
19 rights of the correlative operators in the area?

20 A Properly executed, they would.

21 Q And you would propose to perform all of the tests
22 subsequent to dual completion to prove separation,
23 would you not?

24 A Right, correct.

25 MR. COOLEY: Mr. Examiner, I have no further

1 questions and I offer into evidence Exhibits 1, 2 and 3.

2 MR. NUTTER: Without objection, Exhibits 1, 2 and
3 3 will be entered into the record in this case.

4 (Whereupon, Applicant's Exhibits 1, 2 and 3
5 were marked and entered for identification.)

6 * * * * *

7 CROSS-EXAMINATION

8 BY MR. NUTTER:

9 Q Mr. Steinhorst, obviously you are of the opinion that
10 the Strawn might be productive in this well?

11 A We have evidence that it should be, yes.

12 Q Any DST?

13 A There was a DST made and unfortunately I can't recall
14 at what interval it was, but I do remember it made
15 gas.

16 Q Does the Strawn have considerable liquids in that
17 formation in this area?

18 A I don't believe we can give you an exact answer to
19 that. We do know that further north it does have,
20 but it doesn't have too much water. It has quite a
21 bit of condensate, but at this point I don't think we
22 have enough tests to say that it is going to be like
23 the rest of it. We expect it, yes.

24 Q You are speaking of the Strawn north?

25 A Right.

1 Q What kind of a GOR liquid per billion would you
2 consider to necessitate a shut tubing?

3 A I believe it would not be so much the fluid or gas
4 fluid shown as it would be the types of fluid. If
5 its condensate which we would expect to have a reasonable
6 amount, I don't believe this would enter into it. I
7 think what we're more looking at is the possibility of
8 making some water production and continuing water
9 production would be more the criteria as to which way
10 you went because you are going to get some fluid in
11 the Strawn, at least we anticipate that.

12 Q Well, then if you just got liquid anticarbons, do
13 you think that an annular would be all right?

14 A I think the annular would be okay.

15 MR. NUTTER: Are there any other questions of
16 the witness?

17 * * * * *

18 CROSS-EXAMINATION

19 BY MR. PORTER:

20 Q If it's condensate, it would be a liquid in the
21 reservoir, wouldn't it?

22 A It would not be, necessarily.

23 Q Until you get to the surface?

24 A Until we got it back to, or at least somewhere up the
25 hole.

dearnley, meier & mc cormick

209 SIMAS BLDG. • P.O. BOX 1092 • PHONE 243-8691 • ALBUQUERQUE, NEW MEXICO 87103
1214 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 Q Where it's released by the pressure and the temperature
2 and so forth?
3 A Right. In other words, normal condensate consideration.
4 Q What about other Strawn wells in the area there?
5 I believe you answered that question as to whether you
6 experienced water in the formation.
7 A I think I'm not aware at this particular moment of
8 any Strawn well being particularly, or making a
9 particular amount of water. The only Strawn that I
10 am familiar with does not make any water, but I have
11 not heard of anybody in the field having any problems
12 with water in the Strawn zone.
13 Q Well, if you did have problems with water and the gas
14 potential is there, in all probability you would go
15 into the two strings?
16 A Right, two strings.
17 As a matter of fact, Mr. Antweil right now is
18 in the process of doing something very similar to this
19 and he's running a string to keep liquids unloading.
20 Q Right.
21 A But I can't see this being a string to keep hydrocarbons
22 unloaded, but rather to keep water. And I think he
23 would have the same problem here, or I would certainly
24 think he would be better off to put a Packer in there
25 so he could better control what he is doing.

dearnley, meier & mc cormick reporting service

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1215 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 Q As to the Morrow formation there, about what was your
2 production at the time this well quit?

3 A Well, I think I told Mr. Utz this over the phone. It
4 was flowing at the rate of 1,700,000.

5 Q Per day?

6 A Per day.

7 Q Did it quit overnight?

8 A No, it didn't quit overnight. It had been flowing
9 this rate very steadily and about 10:00 o'clock Friday
10 evening it started declining, just like somebody had
11 started pinching the valve down. And about 8:00 o'clock
12 Saturday morning it took a very sudden drop, just like
13 somebody had closed the choke down maybe, and then from
14 there on it went back down and by 9:00 o'clock Monday
15 morning, that's 9:10, the well was dead.

16 Q Do you think that that is an indication that it's
17 entering the wellbore from some other area than the
18 formation?

19 A Well, I can't positively say there. There's not
20 formation water, but it's my opinion that a well of this
21 type and a well that has demonstrated this capacity to
22 produce as this well has in the past, doesn't just die
23 overnight. I mean, you would get a little bit of water
24 and a little bit more water and a bit more for about
25 two or three weeks. But to have it happen just like

1 that, you might say, relatively speaking, I feel like
2 that it has to be extraneous.

3 Q Yes, sir. Well, I was just asking these questions
4 out of curiosity because of the behavior of the well.

5 A Right. Well, there's been quite a controversy over
6 this thing and this has been my opinion from day one.
7 I haven't changed it yet.

8 MR. PORTER: That's all I have.

9 MR. NUTTER: Are there any other questions?

10 * * * * *

11 REDIRECT EXAMINATION

12 BY MR. COOLEY:

13 Q Mr. Steinhorst, is it true that the well produced mud
14 after the water started coming in?

15 A Yes, we had some. In other words, we've got something
16 besides just plain salt water. Unfortunately, we
17 didn't take a sample of it, but I was there when it
18 kicked out on the ground and in the presence of two
19 or three of us standing there, it was mud. And this
20 is another convincing factor. Now, whether it's
21 coming in from the perforations or not, I cannot say.
22 But we did see some material fluids coming out of the
23 well that were not salt water.

24 Q Well, you've got problems either way, but I certainly
25 hope that you find that it is not the formation.

1 A I do too. I hope I'm right.

2 MR. NUTTER: Are there any other questions?

3 MR. COOLEY: No further questions.

4 MR. NUTTER: The witness may be excused.

5 (Witness excused.)

6 MR. NUTTER: Are there any statements in the
7 Case?

8 MR. COOLEY: Yes, Mr. Examiner. If, in the
9 opinion of the Commission, the Application here for the
10 tubing annular type of completion is unwise, we would then
11 press for permission to complete as a twin tubing type of
12 dual completion. We would like to have the option, if the
13 one type of completion is undesirable, then we would like
14 to complete with and proceed with the other type completion.

15 MR. PORTER: A point of clarification. Mr.
16 Cooley, you would like for the order to give you the option
17 in the order itself, rather than just writing it for either
18 one or the other?

19 MR. COOLEY: We would like to have the option to
20 complete in either manner that is here described.

21 MR. PORTER: Depending on the condition you find?

22 MR. COOLEY: Yes, sir.

23 MR. PORTER: Thank you.

24 MR. NUTTER: Okay, the Case will be taken under
25 advisement.

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

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

11 John De La Rosa
12 COURT REPORTER
13
14
15
16
17
18
19
20
21
22
23
24
25

8/9 4797
New Mexico

1	<u>I N D E X</u>		
2	<u>WITNESS:</u>	<u>PAGE</u>	
3	<u>RICHARD STEINHORST</u>		
4	Direct Examination by Mr. Cooley	3	
5	Cross-Examination by Mr. Nutter	10	
6	Cross-Examination by Mr. Porter	11	
7	Redirect Examination by Mr. Cooley	14	
8			
9	<u>E X H I B I T S</u>		
10	<u>APPLICANT'S</u>	<u>OFFERED</u>	<u>ADMITTED</u>
11	Michael P. Grace II		
12	Exhibit Number 1	4	10
13	Exhibit Number 2	6	10
14	Exhibit Number 3	6	10
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			



OIL CONSERVATION COMMISSION

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

GOVERNOR
BRUCE KING
CHAIRMAN
LAND COMMISSIONER
ALEX J. ARMJO
MEMBER
STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

August 29, 1972

Mr. Jack Cooley
Burr & Cooley
Attorneys at Law
152 Petroleum Center Building
Farmington, New Mexico 87401

Re: Case No. 4797
Order No. R-4376
Applicant:
Michael P. & 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 _____

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. 4797
Order No. R-4376

APPLICATION OF MICHAEL P. GRACE II
AND CORINNE GRACE FOR A DUAL COMPLE-
TION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on August 9, 1972, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 28th day of August, 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 applicants, Michael P. Grace II and Corinne Grace, seek authority to complete their Humble-Grace Well No. 1, located 990 feet from the South line and 660 feet from the East line of Section 2, Township 23 South, Range 26 East, NMPM, Eddy County, New Mexico, as a dual completion (conventional) to produce gas from the South Carlsbad Strawn and Morrow Gas Pools through parallel strings of 2 3/8-inch tubing with separation of zones by a packer set at approximately 11,230 feet, or to produce gas from the Morrow formation through 2 3/8-inch tubing and gas from the Strawn formation through the casing-tubing annulus with separation of zones by a packer set at approximately 11,230 feet.

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

(4) That approval of the subject application will prevent waste and protect correlative rights.

-2-
CASE NO. 4797
Order No. R-4376

IT IS THEREFORE ORDERED:

(1) That the applicants, Michael P. Grace II and Corinne Grace, are hereby authorized to complete their Humble-Grace Well No. 1, located 990 feet from the South line and 660 feet from the East line of Section 2, Township 23 South, Range 26 East, NMPM, Eddy County, New Mexico, as a dual completion (conventional) to produce gas from the South Carlsbad Strawn and Morrow Gas Pools through parallel strings of 2 3/8-inch tubing with separation of zones by a packer set at approximately 11,110 feet or to produce gas from the Morrow formation through 2 3/8-inch tubing and gas from the Strawn formation through the casing-tubing annulus with separation of zones by a packer set at approximately 11,230 feet;

PROVIDED HOWEVER, that the above-described dual completion utilizing one string of tubing and the casing-tubing annulus shall be resorted to only if there is no danger of the Strawn zone being logged-off by liquids.

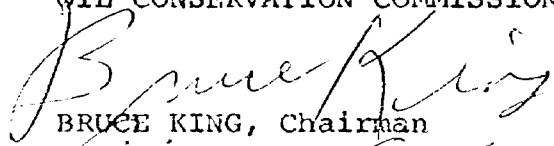
PROVIDED FURTHER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

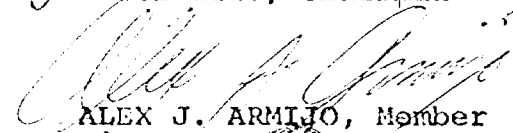
PROVIDED FURTHER, that the applicant shall take packer-leakage tests upon completion and annually thereafter during the Annual Shut-in Pressure Test Period for the South Carlsbad-Morrow Gas Pool.

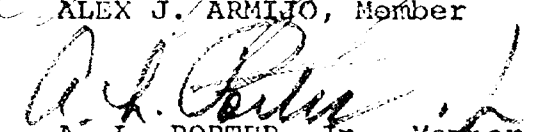
(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

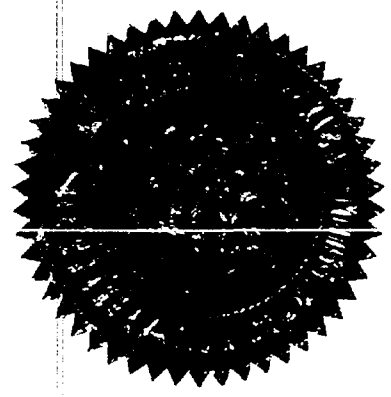
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


BRUCE KING, Chairman


ALEX J. ARMIJO, Member


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


S E A L

dr/

Case 4797

Recd 8-9-72

Rec. 9-11-72

Grant Corinne & Michael Grace.
permission to dual their - Humble
Truss # 1, 990/S + 660/E 2-23-26.

Grant permission to dual
using 2 strings of 2 $\frac{3}{8}$ Hydral
w/ packer above & below the
straw or the alternate
using 1 string of 2 $\frac{3}{8}$ EUE w/
packer between the straw & Morrow.
The later to be used only in the
event the gas-liquid ratio
is lower enough to prevent
liquid logging of the straw
perm.

— [Signature]

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 9, 1972

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 4785: Application of Gulf Oil Corporation for rededication of acreage and a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the consolidation of a 40-acre non-standard proration unit comprising the SE/4 NW/4 of Section 28 and an 80-acre non-standard proration unit comprising the W/2 NE/4 of Section 28; Township 21 South, Range 37 East, Blinbry Gas Pool, Lea County, New Mexico, to form a 120-acre non-standard proration unit. Applicant also seeks permission to produce the allowable assigned to said 120-acre unit from its Eunice King Wells Nos. 5 and 9 located, respectively, in Units F and G of said Section 28 in any proportion.
- CASE 4786: Application of Highland Production Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware formation in the open-hole interval from 4378 feet to 4418 feet in its Russell Federal Well No. 6 located in Unit K of Section 20, Township 26 South, Range 32 East, East Mason-Delaware Pool, Lea County, New Mexico.
- CASE 4787: Application of Superior Oil Company for an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a gas well to test the Morrow and other formations at an unorthodox location 660 feet from the North line and 990 feet from the West line of Section 5, Township 23 South, Range 27 East, South Carlsbad Field, Eddy County, New Mexico, with the N/2 of said Section 5 to be dedicated to the well.
- CASE 4788: Application of Murphy H. Baxter for an unorthodox well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a producing well approximately in the center of the SW/4 of Section 18, Township 17 South, Range 33 East, Maljamar (Grayburg-San Andres) Pool, Lea County, New Mexico. Said well to be within the area of a waterflood project approved by Order No. R-2156.
- CASE 4789: Application of Fumble Oil & Refining Company for special pool rules, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the Many Gates-Abo Pool, Chaves County, New Mexico, including provisions for 80-acre spacing units and wells to be located in the approximate center of the NE/4 or SW/4 of each quarter section.
- CASE 4790: Application of The Petroleum Corporation for special pool rules and a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules

(Case 4790 continued from Page 1)

for the Dublin-Ellenburger Gas Pool, Lea County, New Mexico, including a provision for 640-acre spacing units. Applicant further seeks approval of a 480-acre non-standard unit in said pool comprising the S/2, S/2 of NE/4 and E/2NW/4 of Section 12, Township 26 South, Range 37 East, to be dedicated to its Tenneco Federal Well No. 1 located in Unit N of said Section 12.

CASE 4791: Application of Monsanto Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Burton Flat Deep Unit Area comprising 5,808 acres, more or less, of Federal, State, and Fee lands in Township 20 South, Range 28 East, and Township 21 South, Range 27 East, Eddy County, New Mexico.

CASE 4792: Application of David Fasken for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Walker Draw Unit Area comprising 7,040 acres, more or less, of Federal, State, and Fee lands in Sections 8, 9, 10, 15, 16, 17, 20, 21, 22, 28, and 29, Township 23 South, Range 23 East, Eddy County, New Mexico.

CASE 4793: Application of Tenneco Oil Company for a pressure maintenance project and unorthodox locations, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project in the South Hospah-Lower Sand Pool by the injection of water and gas into the Lower Hospah formation through three wells located at orthodox and unorthodox locations in Section 12, Township 17 North, Range 9 West, McKinley County, New Mexico.

Applicant further seeks a procedure whereby additional injection wells and expansion of the project area may be approved without the necessity of notice and hearing.

CASE 4794: Application of Green & Michaelson Producing Company 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 Devonian formation underlying the N/2 of Section 2, Township 19 South, Range 23 East, Eddy County, New Mexico, to be dedicated to a wildcat Devonian well to be drilled at a standard location in the NE/4 of said Section 2.

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 4760: (Readvertised)

Application of Anadarko Production Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to institute a waterflood project by the injection of water into the

(Case 4760 continued from Page 2)

Grayburg and Queen formations through its R. E. Cole Well No. 3 located in the SW/4 SW/4 of Section 16 and its E. W. Walden Well No. 6 located in the SE/4 SW/4 of Section 15, Township 22 South, Range 37 East, Penrose Skelly Pool, Lea County, New Mexico.

Applicant further seeks establishment of a procedure whereby the conversion of additional wells to injection may be approved without notice and hearing. In the absence of objection, an order will issue based upon evidence received in this case on July 12, 1972.

CASE 4795: (THIS CASE WILL BE CONTINUED TO AUGUST 16, 1972, AND WILL BE HEARD BY A QUORUM OF THE COMMISSION.)

Application of Michael P. Grace II and Corinne Grace for pool contraction and creation of two new gas pools, Eddy County, New Mexico. Applicants, in the above-styled cause, seek the contraction of the horizontal limits of the South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico by the deletion therefrom of the following:

TOWNSHIP 22 SOUTH, RANGE 26 EAST
Section 25: S/2

TOWNSHIP 23 SOUTH, RANGE 26 EAST
Section 2: All
Section 11: All

Applicants further seek the creation of two new pools for the production of gas from the Strawn and Morrow formations with the horizontal limits of each pool to comprise the following:

TOWNSHIP 22 SOUTH, RANGE 26 EAST
Section 24: All
Section 25: All
Section 35: All
Section 36: W/2

TOWNSHIP 23 SOUTH, RANGE 26 EAST
Section 2: All
Section 11: All

CASE 4796: (THIS CASE WILL BE CONTINUED TO AUGUST 16, 1972, AND WILL BE HEARD BY A QUORUM OF THE COMMISSION.)

Application of Michael P. Grace II and Corinne Grace for capacity allowable, Eddy County, New Mexico. Applicants, in the above-styled cause, seek an exception to the General Rules and Regulations governing the prorated gas pools of Southeast New Mexico, promulgated by Order No. R-1670, as amended, to produce their City of Carlsbad "COM"

Examiner Hearing - Wednesday, August 9, 1972

Docket No. 17-72

-4-

(Case 4796 continued from Page 3)

Well No. 1 located in Unit 0 of Section 25, Township 22 South, Range 26 East, South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico, at full capacity.

CASE 4797: Application of Michael P. Grace II and Corinne Grace for a dual completion, Eddy County, New Mexico. Applicants, in the above-styled cause, seek approval for the dual completion of their Humble-Grace Well No. 1 located 990 feet from the South line and 660 feet from the East line of Section 2, Township 23 South, Range 26 East, Eddy County, New Mexico, in such a manner as to produce gas from the Strawn and Morrow formations. Said well being presently designated as a South Carlsbad-Morrow gas well.

BEFORE EXAMINER UTZ
 OIL CONSERVATION COMMISSION
 Grace EXHIBIT NO. 2
4797

17" Hole
 352'

500 Sx Class H

13 ³/₈" 48#

2500 Sx Class C Circulated

12 ¹/₄" Hole

5400'

9 ⁵/₈" 36 & 40#

TUBING:
 1 String of 2 ³/₈" OD
 EUE 8 RT

9590'
 8 ³/₄" Hole

Top of Cement
 325 Sx Class H

10,540-50'

Perforations

4 ¹/₂" OD 13.50# Liner Top
 7" OD 23, 26 & 29#

11,110'
 11,196'

4 ¹/₂" OD Packer


11,230'
 6 ¹/₈" Hole
 Perforations

11,680-90

11,984'

4 ¹/₂" 13.50#
 Liner

PBTD 11,945'
 TD 12,011'

	
P. O. BOX 51795 OCS LAFAYETTE, LOUISIANA 70501	
CORINNE GRACE HUMBLE GRACE NO. 1 SEC. 2 T23S R26E EDDY COUNTY, NEW MEXICO	
Date: 8-7-72	Scale: NONE
Draw No. CG-1 Sheet 1 of 1	

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION

Grace EXHIBIT NO. 3

TR. 4797

500 SX CLASS H CIRCULATED

DN

17-1/2" HOLE

352'

13-3/8" - 48#/FT.

12-1/4" HOLE

2500 SX CLASS C CIRCULATED

5400'

9 5/8" - 36 & 40#/FT.

TUBING:

2 STRINGS - 2 3/8"

CS HYDRIL N-80

9,590'

TOP OF CEMENT

8 3/4" HOLE

325 SX CLASS H

10,440'

PROPOSED 7" PACKER

10,540' - 10,556'

PROPOSED PERFORATIONS

11,110'

4 1/2" - 13.5#/FT. LINER TOP

11,196'

7" - 23, 26 & 29 #/FT.

11,230'

4 1/2" PACKER

6-1/8" HOLE

100 SX CLASS H

11,680' - 11,690'

PERFORATIONS

11,945'

P.B.T.D.

11,984'

4 1/2" LINER

12,011'

T.D.



TEINHORST



PERATING



SYSTEMS, INC.

P. O. BOX 51795 OCS, LAFAYETTE, LOUISIANA 70501

CORINNE GRACE

HUMBLE GRACE NO. 1

SEC. 2 T23S R26E

EDDY COUNTY, NEW MEXICO

Date: 8-6-72

Scale: NONE

Drawg. No. CG-1

Sheet 1 of 1

DRAFT

GMH/dr

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 4797

Order No. R-4376

APPLICATION OF MICHAEL P. GRACE II AND CORINNE GRACE
FOR A DUAL COMPLETION, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
August 9, 1962, at Santa Fe, New Mexico, before Examiner
Elvis A. Utz.

NOW, on this day of August, 1962, 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 applicants, Michael P. Grace II and Corinne Grace
seeks authority to complete ~~xxx~~ their Humble-Grace
Well No. 1, located 990 feet from the South line and 660 feet from
in Unit of Section 2, Township

23 South, Range 26 East, NMPM, Eddy County, New
MOZZA ~~West~~
Mexico, as a dual completion (conventional) to produce gas xxxx
(combination)
(tubingless)

South Carbide Gas Pools
from the Strawn and Morrow Formations ~~xxxxxx~~ through
parallel strings of 2 3/8-inch tubing with separation
of zones by a packer set at approximately 11,230 feet,
or to produce gas from the Morrow formation
through 2 3/8 inch tubing and the gas from the
Strawn formation through the casing-tubing
annulus with separation of zones by a packer set at
approximately 11,230 feet.

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

(4) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicants, Michael P. Grace II and Corinne Grace ~~are~~ hereby authorized to complete ~~xxx~~ their Humble-Grace Well No. 1, located ~~in Unit~~ 990 feet from the South line and 660 feet from the East of Section 2, Township line of

23 ~~South~~ ^{South} Range 26 East, NMPM, Eddy County, New ~~West~~

Mexico, as a dual completion (conventional) ~~xxx~~ to produce gas (combination) (tubingless)

South Central Gas Pool
from the Strawn and Morrow formations ~~Pool~~ through through parallel strings of 2 3/8-inch tubing with separation zones by a packer set at approximately 11,110 feet or to produce gas from the Morrow gas formation through 2 3/8-inch tubing; and gas from the Strawn formation through the casing - tubing annulus with separation zones by a packer set at approximately 11,230 feet;

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer-leakage tests upon completion and annually thereafter during the Annual ~~Shut-in Pressure~~ Gas-Oil-Ratio Test Period for the South Central - Morrow No. 1 Pool. ~~Deliverability~~

However,
Provided ~~that~~, that the above-described dual completion utilizing one string of tubing and the casing-tubing annulus shall be resorted to only if there is no danger of the Strawn gas being lost by liquids.

Humble - Houston

5/2 - Sec. 2 - 235-26E

Deal mallow - Strawn

- S. Coilsbad - Pool -

Unit P SE/

990 FSL 666 FEL