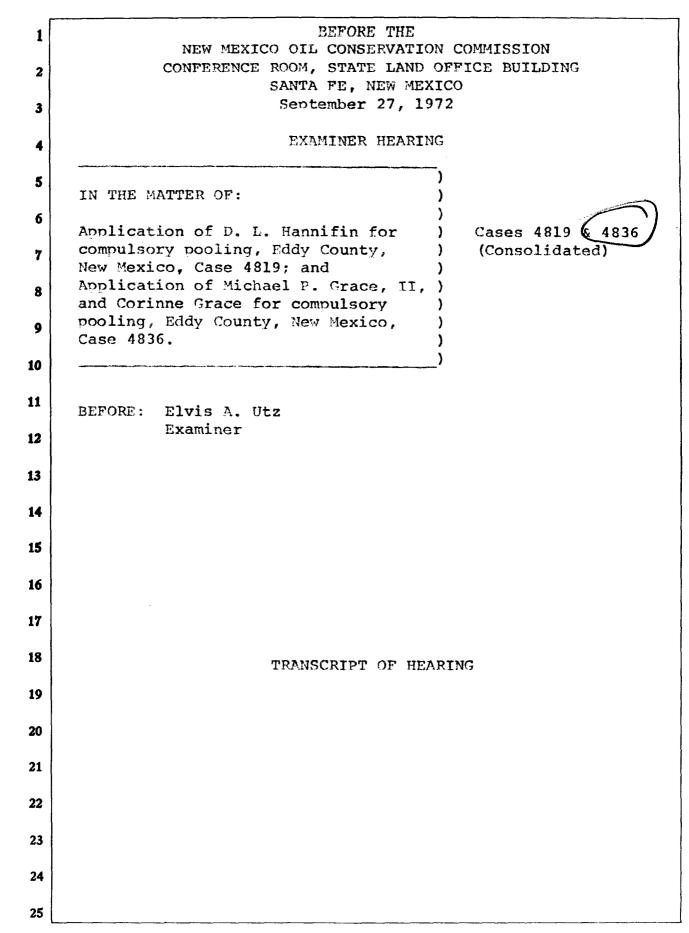
PAGE 2



dearnley, meier & mc cormick we deer verview as

209 SIMMS BLDG.•P.O. BOX 1092•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108 209 SIMMS BLDG.0 P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 First national bank bldg. East0albuquerque, new mexico 87108

The Commission will consolidate the last MR. UTZ: 1 two cases of the hearing today and now hear Cases 4819 and 2 4819 testimony will be heard first since that was the 4836. 3 application that was filed first. 4 MR. HATCH: Cases 4819, Application of D. L. 5 Hannifin for compulsory pooling, Eddy County, New Mexico, and 6 Case 4836, Application of Michael P. Grace, II, and Corinne 7 Grace for compulsory pooling, Eddy County, New Mexico. 8 Tom Kellahin, Kellahin and Fox, MR. KELLAHIN: 9 Santa Fe, New Mexico, appearing for the applicant D. L. 10 Hannifin and I have two witnesses to be sworn. 11 MR. COOLEY: William J. Cooley, Burr & Cooley, 12 Farmington, New Mexico, appearing on behalf of the applicants 13 Michael P. Grace, II, and Corinne Grace. 14 MR. UTZ: Are there any other appearances? 15 Mr. Cooley, do you have some witnesses here to be 16 sworn? 17 We have three witnesses, two of whom MR. COOLEY: 18 are present. 19 (Whereupon, Mr. Bill LeMay was called to the stand 20 and sworn.) 21 22 WILLIAM J. LeMAY, 23 having been first duly sworn according to law, upon his oath, 24 testified as follows: 25

1		DIRECT EXAMINATION
2	BY M	R. KELLAHIN
3	Q	Mr. LeMay, will you please state your name and
4		occupation?
5	A	William J. LeMay, consulting geologist, Santa Fe, New
6		Mexico.
7	Q	What is your involvement with Mr. D. L. Hannifin with
8		regard to this application?
9	A	I was asked by Mr. Hannifin to make a geological study
10		of South Carlsbad Pool, especially in the vicinity of
11		Section 24, Township 22 South, Range 26 East, where
12		he owns acreage.
ž 13	Q	Have you made that study?
2 14	A	Yes, I have.
15	2	Have you previously testified before this Commission
16		and had your qualifications as a geologist accepted and
17		made a matter of record?
18	A	Yes, sir.
i 19		MR. KELLAHIN: Mr. Examiner, are the witness'
20 E	qual	ifications acceptable?
21		MR. UTZ: Yes, sir, they are.
az 22		MR. COOLEY: Mr. Examiner, I have a question at
20 21 22 22 23	this	point as to who the real party in interest is in this
24 24		, whether it be Mr. Hannifin or whether it be some other
25		p. Could I inquire of counsel?

PAGE

4

dearnley, meier & mc cormick receiver and wat with the set of the

209 SIMMS BLDG. P.O. BOX 1092 & PHONE 243-6691 & ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST & ALBUQUERQUE, NEW MEXICO 87108 dearnley, meier & mc cormick www.com/com/ 209 SIMMS BLDG.@P.O. BOX 1092@PHONE 243-6691@ALBUQUERQUE, NEW MEXICO 87103 1216 First national bank bldg. East@albuquerque, new mexico 87108

1 MR. KELLAHIN: Mr. Hannifin desired to be designated the operator of this particular well. 2 MR. UTZ: Does he have controlling interest in the 3 acreage? 4 MR. KELLAHIN: Yes, sir, he does. 5 MR. COOLEY: It was my impression from speaking 6 with Nr. Hannifin this morning that he had in some fashion 7 contractually dealt with this acreage to another company and 8 that he was not the real party at interest. 9 MR. KELLAHIN: Well, his intent is to be the real 10 He has obtained expertise from other party in interest. 11 individuals to assist him in the operation of this well and 12 he intends to rely on those individuals, but he still retains 13 his interest. He still had the right to drill and he retains 14 the right to assign the interest. 15 MR. UTZ: Does he intend to operate the well 16 himself? 17 MR. KELLAHIN: Yes, sir. 18 (By Mr. Kellahin) Mr. LeMay, directing your attention Û, 19 to this particular application, I assume you have 20 prepared some exhibits with regard to this application? 21 Yes, I have. A 22 Will you please refer to what has been marked as 0 23 Applicant's Exhibit Number 1 and identify it and 24 describe what information it contains? 25

А

1

2

3

4

6

7

8

9

10

11

12

13

1216 FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

209 SIMMS BLDG. P.O.

23

24

25

5 of completing. 14 the Morrow formation. 15 Humerous 16 17 18 19 canyon and Atoka also. 20 However, on the basis of the completed wells, this 21 indicates this portion of the field has its main 22

objective for commercial gas production in the Morrow sandstones.

Exhibit Number 2 is a structure map drawn on the

Exhibit 1 is a well location map in the South Carlsbad field area. You will notice the circles around the various completed wells. They are color coded according to the formations that are productive and are being produced within that well.

The area of interest is in the extreme northwest part of the South Carlsbad Pool, between two wells which Grace is currently drilling and I assume in the process

Basically, what this map shows, is the proration unit which would be assigned to a well in the South Carlsbad Pool, being the south half of Section 24, Township 22 South, Range 26 East. To date, the majority of completions are from the Morrow sand within

cases have been brought before the Commission and there is quite a bit of evidence in here in the case files for the type of accumulation in the Morrow sand zones and in the Strawn lime and in the

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

209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-6691 ALBUQUERQUE, NEW MEXICO ( 1216 FIRST NATIONAL BANK BLDG. EAST AALBUQUERQUE, NEW MEXICO 87108

lowermost shale and some operators pick it as the top of the Missippian. It was chosen as a structure datum because it is the lowest marker that has been penetrated by the wells in the South Carlsbad Pool, as well as being a good structural marker and being the lowest marker that geologists draw, and would reflect the maximum structure that is present in the field area. As shown in the South half of the map, I have drawn a fault between two wells with approximately 150 feet I have seen maps which contour this anomaly as of dip. a very steep dip, but I prefer to show it as a fault. You will note that the general trend of production has been in a north-south direction and is probably, at least in the Morrow formation, controlled somewhat by the structural nose coming down in the vicinities of Section 19, 30 and 31, and of course, leading into the close tie adjacent to the fault in the vicinities of Sections 6, east half of Section 1, east half of Section 12. However, the area of interest is to the north in the north end of the field and is between the two wells that Mr. Grace and Mrs. Grace have drilled. The two wells are the Go Po Go Number 1, located 1,980 feet from the north and east lines of Section 25.

top of the Chester shale. Now, the Chester is the

PAGE 7

dearnley, meier & mc cormick agree an assessment a

1

2

3

4

5

б

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

209 SIMMS BLDG.0P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 First national bank bldg. Eastoalbuquerque, new mexico 87108 The Go Po Go Number 1 would be right opposite my numeral A on the cross-section and the Go Po Go Number 2 would be located 1,980 feet from the north and east lines of Section 24, Township 22 South, Range 26 East.

Mr. Hannifin supplied me logs on these two wells and drill stem test data and I have my Exhibit Number 3 which is a cross-section from the Go Po Go Number 1 to the Go Po Go Number 2.

Referring now to Exhibit Number 3, the cross-section this shows, my map datum, the Chester formation colored in blue on the bottom. It shows a predominant shale marker present throughout the field and also a correlation marker colored olive green on Exhibit 3, and it shows the main pay sand in the field as encountered in both the Go Po Go Number 1 and Go Po Go Number 2.

On the basis of drill stem tests, this main pay sand was -- had excellent development -- eighteen feet at twenty to twenty-four percent porosity in the Go Po Go Number 2 and drill stem tested 18,250 MCF, GPD. In the Go Po Go Number 1, however, the sand was basically tight and I drill stem tested that interval and recovered eighty feet of drilling mud.

This is not only pay sand in the field, but by far this development in the Go Po Go Number 2 is one of the best, if not the best development, from that particular 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

209 SIMMS BLDG.0 P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 First National Bank Bldg. Eastgalbuquerque, new mexico 87108

pay sand that I have seen.

There are other pay sands indicated that did test quantities of gas in the Go Po Go Number 2. A large drill stem test, -- I say a large one -- covering more than one sand from 11,412 to 11,503 on a flow rate there, they flowed 2,629.2 MCF, GPD and it shows there is some small porosity present in two sands there.

Correlating the results of this well with the Number 1 with the drill stem tests that are shown, there is some gas present in the Number 1, and in analyzing the log, I found the scattered sections of two to four feet of sand average porosity.

Sometimes you get nineteen percent, but there are real thin sands. There is nothing qualitywise to compare to that beautiful sand development that was present in the Number 2.

I might mention this is the Morrow only. The Go Po Go Number 1 did drill stem test the Strawn and tested at 230 MCF, GPD which is some gas, but it is not substantial. I wouldn't be surprised if the Number 1 didn't make a well, but I would expect it to be a much poorer well, certainly, than the Number 2.

Again referring back to Exhibit 2, my recommended location for a well to be drilled in the proration unit being the south half of Section 4 would be a well

located 1,980 from the south and east lines. This would be a standard unit and a standard location according to the South Carlsbad field rules.

I do this for the reason that I think just good oil field practice, Number 1 dictates crowding the best production, especially with a stratigraphic type of accumulation somewhat controlled by structure, but still the porosity and permeability developments in these sands come and go, so it is expensive and it is risky.

Any of these wells are because they cost over \$200,000 and you want to minimize the risk and this would be the minimal risky location. If you could go over to the southwest quarter, I show a sinclinal dip in there.

I might say I can justify that sinclinal area on the basis of a well which doesn't show on this map, but it is located in Section 22 of 22 South, 26 East. That well only went to the canyon, but projecting the section below the canyon, it is about 250 feet high to the Go Po Go Number 2 well and therefore, somewhere in here you have got to get back a regional dip and that would be back on regional dip.

I have seen some maps which show nothing but west or northwest dip from this structure and it is fine when you are just dealing with the structure itself, but when you look at the map in a regional sense, you have to get

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

209 SIMMS BLDG.0 P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EASTOALBUQUERQUE, NEW MEXICO 87108

back on the regional dip which is dip to the southeast. 1 What is the potential risk of obtaining a noncommercial 0 2 well at your particular location? 3 Well, I think any of these wells are risky. I think this Α 4 is the least risky location and therefore, the risk 5 wouldn't be too great. I have a hard time estimating a б noncommerical well. 7 Probably maybe thirty percent risk factor. 8 Do you have anything else you would like to add, Mr. Ũ. 9 LeMay, at the present time? 10 I might say that in terms of risk, that on a forced A 11 pooling, the Commission always requests that you make a 12 recommendation for a penalty factor, and I would say in 13 this particular case that 125 percent probably would be 14 a good bet. 15 It is certainly a field location, but with the 16 expense involved and the chance for a marginal completion 17 I think 125 percent would be a good average figure. 18 Were Exhibits 1 through 3 prepared by you? 0 19 А Yes, they were. 20 MR. KELLAHIN: I move for the introduction of 21 Exhibits 1 through 3. 22 MR. UTZ: Without objection, Exhibits 1 through 3 23 entered into the record of this case. 24 I have no further questions on MR. KELLAHIN: 25

dearnley, meier & mc cormick 🗧 🖉 👘 🖉 👘

209 SIMMS BLDG.+P.O. BOX 1092+PHONE 243-6691+ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST+ALBUQUERQUE, NEW MEXICO 87108 PAGE 11

1	Dire	ect Examination.
2		CROSS-EXAMINATION
3	BY	AR. UTZ
4	Q	Mr. LeMay, I want to clarify the location of this well.
5		I think I found it in your Application where it is
6		1,980, 1,980 from the south and east, is that correct?
7	А	That is correct.
8		MR. UTZ: Questions of the witness?
9		CROSS-EXAMINATION
10	BY !	IR. COOLEY
11	Q	Mr. LeMay, what geological difference would there be in
12		your opinion if the location were moved from the 1,980,
13		1,980 as proposed to a 1,980 from the east and 660 from
14		the south?
15		In other words, moving the well 1,320 feet south?
16	Α	You are adding to the risk of holding the porosity on
17		that good sand. You are also encountering this optional
18		location. You suggested at a structurally lower position
19		which, there again, I think would increase the riskiness
20		of that location.
21	Q	Do you have any estimate of how much lower it would be?
22	A	According to my map, I show it this is a fifty foot
23		contour. I show it to be approximately twenty-five feet
24		lower on the top of the Chester which is a good mapable
25		horizon.

209 SIMMS BLDG.0 P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 First National Bank Bldg. East0albuquerque, New Mexico 87108

1	Q	Structurally, how would that compare to the Go Po Go
2		Number 1?
3	Α	It would be high to the Go Po Go Number 1.
4	Q	Approximately how much?
5	А	Here again, it would be thirty-five feet high.
6	Q	So that location would be high to the Go Po Go 1, and
7		low to the Go Po Go Number 2?
8	A	That's correct.
9	Q	Is structure the only controlling factor that dictates
10		the location that you have chosen?
11	A	No. I think there are many factors. I think structure
12		does have an influence on the accumulation, possibly
13		influencing the environment of deposition of these sands.
14		You have thicker sands and more porous sands
15		accumulate on the structural nose than on the highs or
16		on the flanks or on the structural highs. I think the
17		thick development of sandstone in the main pay sand
18		encountered in the Go Po Go Number 2 dictates crowding
19		that well as much as legally possible to try and hold
20		that sand.
21		That is the one best pay sand I have seen in the
22		field.
23	Q	So it is a combination of structure and possibly structur
24		might effect even the lithology?
	A	Correct.

209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-6691 ALBUQUERQUE. NEW MEXICO 87103 1216 First national bank blog. East Albuquerque. New Mexico 87108

1	Q	As you pointed out, there is a considerable lithological
2		difference in the two wells?
3	А	The sands come and go.
4	Q	Do you feel that is directly related to structure or
5		incidental to structure?
6	A	I think structure has a part in it. You can't say that
7		it is strictly a matter of structure. I think it is a
8		matter of also the sorting of the sands due to wave
9		action which is a highly unpredictable matter.
10	Q	If the well that is to be drilled on this south half of
11		24 were to be located 660 feet from the south line,
12		instead of 1,980 feet from the south line, it would be
13		exactly equidistant between the Go Po Go 1 and 2, would
14		it not?
15	А	It looks like that is correct, Mr. Cooley.
16	3	The location that you propose is within 1,320 feet of
17		the Go Po Go Number 2?
18	A	Again, I would have to scale it off, but I will scale it
19		off if you wish.
20	Q	The Oil Conservation Commission requires that it be not
21		closer than 1,320, that is why I am inquiring of you.
22	А	It is 1,320. Both those wells, Go Po Go Number 2 and
23		my proposed location are 660 from the east-west division
24		line.
25	Q	Do you feel qualified to testify with respect to
[		

14

PAGE

dearnley, meier & mc cormick regard to the second second

209 SIMMS BLDG.0P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST 0ALBUQUERQUE, NEW MEXICO 87108

1 drainage efficiencies and with respect to the various 2 locations that are available there, or is this an 3 engineering problem rather than a geological one? 4 A We tend to do a little bit of both. Perhaps if you ask me a specific question I could say if I was qualified to 5 б answer or not. That generality leaves me kind of 7 hanging. Do you feel that from a standpoint of efficiency of Ω 8 drainage that the location in the southwest of the 9 southeast or 660 feet from the south, and 1,980 from the 10 east would be a more efficient location from the 11 standpoint of over-all drainage of the pool than the 12 location which you propose? 13 А If you are talking about a uniform reservoir, I think 14 that we could go after it in that respect, but we are not 15 talking about a uniform reservoir. These sands are not 16 continuous as shown. 17 The development in the Number 2 was not present in 18 the Number 1, so as far as field drainage, I don't think 19 you have that kind of concept going for you in the 20 Morrow field, wide drainage from a single reservoir. 21 That is not the distribution of the pay sands within the 22 South Carlsbad Morrow field. 23 Isn't it true that numerous stringers or sands Q

development have occurred in the various Morrow wells

209 SIMMS BLDG.0F.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 1216 FIRST NATIONAL BANK BLDG. EAST0ALBUQUERQUE, NEW MEXICO 87108

24

A

0

209 SIMMS BLDG. P.O. BOX 1092 & PHONE 243-6601 & ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST & ALBUQUERQUE, NEW MEXICO 87108

24

25

That's true.

On a more uniform spacing pattern, aren't you more likely to encounter all those stringers that are present and more efficiently drain them than you would be on a pattern that was not uniform? If they extended over the entire area, I think you are dealing with two hypothetical a question to really get These stringers are not uniform throughout the The chances of encountering a lot of stringers, we will say, in my proposed location as compared to a lot of stringers in a location 660 from the south, I think is a guessing game and that we can't say by splitting the difference between those two wells that we are going to encounter more stringers and therefore have better field drainage because you just don't know how many stringers you are going to encounter. We do have a tie on that main sand which is a good Now, we could, at my proposed location encounter other sands that are not developed in the

that have been drilled in the South Carlsbad area?

Go Po Go Number 2 and therefore have better drainage because we encountered these numerous sands.

I think it is a toss-up whether we would get better sand development, we will say more stringers, in my proposed location or the one you suggested, 660 feet from

	the south line.
Q	Have you been retained by Mr. Hannifin and/or his
	associates to personally supervise the drilling of the
	proposed well?
А	He hasn't contacted me in that regard. We haven't even
	discussed it, sir.
Q	Do you have any personal interest in the well?
A	I have none.
Q	Do you contemplate acquiring any?
A	No.
Q	Do you make it a general practice to do field work such
	as would be required to supervise the drilling of this
	well on wells that you do not own an interest in?
A	Normally, I don't do field work on wells I do not have
	an interest in, no.
Q	Then the matter not having been discussed, do you have
	any assumption as to whether you would or would not be
	supervising this well?
A	I am assuming I would not be, mainly because I haven't
	been contacted and my schedule is full.
Q	Do you have any idea who would be the geologist in
	charge?
A	No, I don't.
Q	Mr. LeMay, you say you were furnished logs on the
	Go Po Go Number 1 and Number 2 wells by Mr. Hannifin?
	А Q A Q A Q А Д Д А

1	A	That's correct.
2	Q	Do you know the source of those?
3	A	No, sir, I don't. I had to have those logs to do the
4		evaluation I told you about.
5		MR. COOLEY: No further questions of this witness.
6		MR. KELLAHIN: No Redirect.
7		MR. UTZ: Further questions?
8		CROSS-EXAMINATION
9	<u>BY</u>	IR. UTZ
10	Q	Mr. LeMay, in accordance with the Carlsbad South Morrow
11		or South Carlsbad Morrow Pool rules, is the Go Po Go
12		Number 2 a standard location?
13	A	I have to say I think it is, sir, because the Number 1
14		appears to be standard.
15	Ω	Is your proposed location a standard location then?
16	A	Yes, sir.
17		MR. UTZ: Other questions of the witness?
18		You may be excused.
19		Do you have another witness?
20		MR. KELLAHIN: Yes, Mr. Examiner. Call Mr.
21	Hann	ifin.
22		(Whereupon Mr. D. L. Hannifin was called to the
23		stand and duly sworn.)
24		* * * *
25		

209 SIMMS BLDG.0P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EASTOALBUQUERQUE, NEW MEXICO 87108

	1		D. L. HANNIFIN
	2	hav	ing been first duly sworn according to law, upon his oath,
	3	tes	tified as follows:
	4		DIRECT EXAMINATION
	5	BY	MR. KELLAHIN
	6	Q	Mr. Hannifin, will you please state your name and
	7		occupation?
	8	A	D. L. Hannifin. I am an independent oil operator in
	9		Roswell, New Mexico.
	10	Q	Have you previously testified before this Commission?
	11	А	No, I haven't.
m	12	Q	Are you the Applicant in this case?
NEW MEXICO 87103 MEXICO 87108	13	A	I am the Applicant.
MEXIC ICO 87	14	Q	What are you seeking by this Application, Mr. Hannifin?
~	15	A	I am seeking to be the operator of the proposed well.
IQUERQUE. Erque, new	16	0	Anything else?
w	17	А	To maintain the operation, to drill, test and completion
E 243-66910 A L B E A S T O A L BU QU	18		thereof.
	19	Q	To force compulsory pooling of those people that haven't
92 • PHONI IK BLDG.	20		joined you?
× "	21	A	That's correct.
С. Р.О. И А ТІОИ	22	Q	On what acreage do you own the operating rights?
BLD IRST	23	А	Southeast quarter of Section 24/22 South, 26 East.
	24	Q	Are you familiar with the lease and the mineral
209	24		ownership and the operator rights on the south half of
	<b></b>		

1		Section 24?
2	A	Yes, I am.
3	Q	Can you describe briefly the ownership that has not
4		joined you with regard to this pooling?
5	А	On the operating?
6	Q	Yes, sir.
7	А	Operating rights are owned under farm-out from Atlantic.
8		I have Atlantic Richfield by Michael P. Grace.
9	Q	Have you contacted all interest owners about pooling
10		and designation of an operator for this?
11	А	I contacted Mr. Grace. I think you have the letter on
12		the date I sent him the registered letter in your file.
13		My registered letter is dated August 21, 1972, and then
14		additionally on August 30, I phoned Mr. Grace's office
15		in Carlsbad and then Mrs. Grace called me back that
16		time.
17	Ŭ	What were the results of your efforts to obtain
18		voluntary pooling of the Grace's interest?
19	A	I was unsuccessful.
20	Ö	What interest does Mr. Grace own in this acreage?
21	A	As I stated before, he has a farm-out from Atlantic
22		Richfield, I believe, with an overriding royalty.
23	Q	On the southwest quarter?
24	A	On the southwest quarter of Section 24, 22/26.
25	Q	Have you had any response from others that have

PAGE

1		ownership with regards to the interest to be pooled
2		here and any indication of what they wish with regard
3		to designation of an operator?
4	A	I have from the Merland and Incorporated, or the mineral
5		owners under the southeast Section of Section 24,
6		requesting that I be appointed the operator of the well.
7		I have contacted two of the mineral owners under the
8		southwest quarter of Section 24, Mr. W. E. Walling of
9		Ropesville, Texas, and Mr. Jack Ingram and his mother,
10		Mrs. Audrey Ingram, of Carlsbad, New Mexico.
11	Q	What were the results of those conversations?
12	A	The Ingrams, both Mr. Jack Ingram and his mother, also
13		requested that I be designated as the operator. Mr.
14		Walling wanted to come down to Carlsbad and consult with
15		Mr. Don McCormick before he made a decision.
16	Q	I show you what has been marked Hannifin Exhibit 4 and
17		ask you to identify that.
18		Is this the letter you received from Mr. Merchant
19		of Merland, Incorporated?
20	A	It is.
21	Q	Mr. Hannifin, you desire to be designated the operator
22		of this unit; is that correct?
23	A	That is correct.
24	Q	What experience have you had in this particular area?
25	A	My experience has been purely limited to the land

209 SIMMS BLDG.+P.O. BOX 1092+PHONE 243-6691+ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST +ALBUQUERQUE, NEW MEXICO 87108

1		experience, the purchase and sale of oil and gas leases
2		over the past few years in this area.
3	Q	How do you intend to compensate for the fact that you
4		do not have experience in this area?
5	A	I made arrangements with Samedan Oil Corporation of
6		Midland, Texas, for the supervision of the drilling
7		completion and operating of the proposed well. I think
8		the Commission is acquainted with Samedan's experience
9		in both New Mexico and Eddy County.
10	Q	With regard to completion of a well on this acreage, what
11		if any proposed well costs have you obtained?
12	А	I obtained an A.F.E. from Moran Production Company of
13		Hobbs, New Mexico, for both the dry hole and successful
14		completion well costs.
15	Q	I show you what has been marked as Exhibit 5 and ask
16		you to identify that.
17		Will you indicate for the Examiner's benefit the
18		total proposed cost at this particular time?
19	A	Their proposed cost or estimated dry hole cost was
20		\$209,100. Their total completed well cost is \$290,725.
20		This is for 11,800 foot Morrow test.
22	Q	Subsequent to receiving that A.F.E. from Moran, have
		you received any other revised estimates on the cost?
23	Α	Yes, I did. I questioned Mr. McPeter with Moran as to
24		his estimated well cementing cost on his pipe.
25		

209 SIMMS BLDG.0P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 First National Bank Bldg. Eastoalbuquerque, new Mexico 87108

1	Q	I show you what has been marked Hannifin Exhibit 6 and
2		ask you to identify that.
3	A	This is the estimated A.F.E. cost with the additional
4		cost of well cementing, showing estimated dry hole cost
5		of \$216,807 and total cost of the completed well
6		\$305,162. This is for the same depth.
7		MR. UTZ: What were the revised figures on Exhibit
8	Numb	er 5?
9		MR. KELLAHIN: I think I might have another set of
10	thos	e, Mr. Utz.
11		MR. UTZ: You may proceed.
12	Q	(By Mr. Kellahin) Have you had an opportunity to
13		obtain any other well costs in this area, Mr. Hannifin?
14	A	Yes, I have. I requested from Cities Service Oil
15		Company, Mr. Tex Hartman, of Midland, Texas, their
16		estimated well costs and they had prepared an estimated
17		A.F.E. on this location, dated 3-12-71.
18	Q	You have then obtained from Cities Services their
19		estimated A.F.E.?
20	А	This was their estimated A.F.E. of 3-12-1971 on this
21		location and they furnished me a copy of it. Their
22		estimate for completed well was \$287,184 and for an
23		estimated dry hole of \$205,692.
24		This you realize was over a year ago. At that time
25		they did, in fact, own the lease on the southeast

dearnley, meier & mc cormick as a second of the second second second second second second second second second

209 SIMMS BLDG. P.O. BOX 1092 & PHONE 243-6601 & ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST #ALBUQUERQUE, NEW MEXICO 87108

quarter of Section 24. 1 MR. KELLAHIN: Cities Service A.F.E. has been marked 2 as Hannifin Exhibit Number 7. 3 O. (By Mr. Kellahin) Now, in attempting to obtain a 4 voluntary pooling agreement with the Graces, did you 5 receive a counter-proposal from them? б No, I did not. A 7 What I am trying to say, Mr. Hannifin, is did they Q 8 forward to you an estimate of their proposed cost for 9 completion of a well on this acreage? 10 I did receive an estimated A.F.E. from them. A Yes. 11 I show you what has been marked Hannifin Exhibit 8 and Õ 12 ask you to identify it. 13 This is identified as an A.F.E. which was prepared Α 14 evidently for the Grandonoco well. I see a date up at 15 the top, date of work to begin, but I don't see when it 16 was dated. It says date of work to begin 6-24-1971. 17 This is one they sent to me. It shows an estimated 18 well cost, completed well cost, of \$404,702.85. I don't 19 find a dry hole cost on here. 20 Q If the Commission designates you as the operator, Mr. 21 Hannifin, would you prefer that the Graces join you in 22 the cost of drilling if they desire? 23 Certainly. They have every right to do that. Å I am not 24 too familiar with the Commission's hearings, but I 25

24

PAGE

dearnley, meier & mc cormick and the set of the

209 SIMMS BLDG.@P.O. BOX 1092@PHONE 243-8691@ALBUQUERQUE, NEW MEXICO 87103 1216 First national bank bldg. East@alerquerque, new Mexico 87108

1		understand that they have a period of time after the
2		hearing to join.
3	Q	Should they refuse to join in and contribute to the cost
4		of the well, do you propose then that their share of the
5		cost be made out of production plus a risk factor and
6		supervision cost?
7	A	Yes, sir.
8	Q	Do you have any understanding at this point as to what
9		can be contemplated as a supervision cost for a well in
10		this area?
11	A	What seems to be reasonable in the area is in the range
12		of \$135 a month. That is for your foreman cost and your
13		operating cost.
14	Ũ	In your opinion, will approval of your Application
15		prevent waste and protect correlative rights of others?
16	A	Yes, sir.
17	Õ	Do you have anything else you would like to add at this
18		time, Mr. Hannifin?
19	A	I can't think of anything further at the moment.
20		MR. KELLAHIN: I move the introduction of Exhibits
21	4 th	rough 8, Mr. Examiner. That is all the questions I have
22	on D	Direct Examination.
23		MR. UTZ: Without objection, Exhibits 4 through 8
24	will	be entered into the record of this case.
25		Any questions of the witness?
	<b>L</b>	

PAGE

25

209 SIMMS BLDG.0 P.O. BOX 10920 PHONE 243-66910 ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST 0ALBUQUERQUE, NEW MEXICO 87108

1		CROSS-EXAMINATION
2	BY	MR. UTZ
3	Q	You mentioned during your testimony that you had received
4		a request or approval or either or both for you as an
5		operator of the well in this unit. Merland, Incorporated
6		was one. What interest do they have?
7	A	They own all the minerals under the southeast quarter
8		of Section 24, 22/26.
9	Q	All the southwest?
10	A	Southeast.
11	Q	Now, by total mineral owner, you mean twelve and a half
12		percent?
13	A	Well, they own all the minerals. My lease is from them.
14	Q	Who else did you mention?
15	Α	I mentioned Mr. Jack Ingram and his mother, Mrs. Audrey
16		Ingram.
17	Q	What interest do they have?
18	A	Mrs. Ingram owns a 16.6 acre interest and Mr. Ingram,
19		I believe, owns a 1 acre interest under the southwest
20		quarter of Section 24, 22/26.
20	Q	Mrs. Ingram owns a one acre interest?
21	A	No. Mrs. Ingram owns a 16.6 acre interest and Mr.
22		Ingram owns a one acre interest, I believe. I talked to
		Mr. Walling, but he was unable to make a decision either
24 25		way at this time. He owns 118 acres under the southwest

26

PAGE

209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-6691 A LBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST A ALBUQUERQUE, NEW MEXICO 87108

1		quarter.			
2	Q	He owns how much again?			
3	A	He owns a 118 acre mineral interest.			
4	Q	Under the southwest?			
5	A	Yes, sir.			
6	Q	And the 16.6 of Ingram's is under the southwest?			
7	A	Yes, sir.			
8	Q	And one acre is under the southwest?			
9	A	Yes, sir.			
10	Q	You have a letter here from Merland in regard to their			
11		request. Do you have anything from the other people?			
12	A	No. I have just talked to them by telephone. That just			
13		has to be under direct testimony.			
14	Q	Verbal, then?			
15	A	Yes, sir.			
16		MR. UTZ: You may proceed, Mr. Cooley.			
17		CROSS-EXAMINATION			
18	BY M	R. COOLEY			
19	Q	Mr, Hannifin, I believe in answer to your counsel's			
20		question, you freely admit that you have no personal			
21		expertise in drilling and completion of wells in the			
22		nature that you propose to drill?			
23	A	That's correct.			
24	Q	You intend to rely entirely upon Samedan. Is that an			
25		oil corporation or what is it?			

209 SIMMS BLDG.0 P.O. BOX 10920PHONE 243-66910A BUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EASTOALBUQUERQUE, NEW MEXICO 87108

1	A	Samedan Oil Corporation.
2	Ω	They will provide this expertise?
3	A	That's correct.
4	Q	Are you familiar with their experience, if any, in the
5		South Carlsbad Morrow area?
6	A	No, I am not, except for their dry hole that they had
7		drilled on the edge of the field.
8	Q	Samedan did drill a dry hole in the Carlsbad area?
9	A	Right, south of the field, I understand.
10	Q	That would the Union State Number 1 well, would it not,
11		in Section 19/23 South, 26 East?
12	A	I have no idea. I don't have my land map with me.
13	0	Do you have any idea of what Samedan's actual cost was
14		in the drilling of that well?
15	A	None at all.
16	Q	Are you aware, for instance, that their mud bill was
17		\$21,700 alone?
18	A	No, I am not.
19	Q	Would you be able to obtain actual cost of that well in
20		order that the Commission might have some idea of
21		Samedan's efficiency?
22	A	That would really have to be a matter of Samedan's, Mr.
23		Cooley.
24	Q	I am asking if you can obtain that from Samedan?
25	Α	I have no idea. I haven't asked them.

209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-6691 ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

1	Q	Would you attempt to?			
2	A	Certainly. I will be glad to ask them.			
3	Q	You would furnish that to the Commission if Samedan will			
4		furnish it to you?			
5	A	Yes.			
6	Q	Isn't it true that that is the only experience that			
7		Samedan has had in the entire South Carlshad area, is			
8		the drilling of one dry hole?			
9	A	I don't know the participation in the other wells in			
10		there, Mr. Cooley.			
11	Ω	Well, you are placing your entire trust in Samedan and			
12		what I am asking you is what basis do you have for doing			
13		so as far as attaining any particular expertise that			
14		they may have in this area?			
15	A	Their general experience in the oil industry for a great			
		many years.			
16	Q	You are aware, are you not, that they are a very large			
17		gas operator?			
18	A	Yes, they are. I understand most of their gas is			
19		intrastate, rather than interstate, and does not bother			
20		their qualifications as a small producer. If that was			
21		your question, sir.			
22	Q	You are aware that there are multiple, peculiar problems			
23		about drilling and completing wells in the South Carlsbad			
24		Morrow Gas Pools, are you not?			
25	L				

1	A	Yes, sir. I have a royalty interest under Mr. Grace's.
2	Q	That general oil field practices elsewhere have in fact
3		proven to be disastrous when applied in certain
4		instances in the South Carlsbad Morrow Gas Pools?
5	A	I am not qualified on that, as far as the certain
6		instances. The wells that I am acquainted with as far
7		as their production, I am a royalty owner under the
8		Cities Service wells and I have not noticed that problem.
9	Q	They haven't been very good wells, have they, these
10		Cities Service?
11	A	They are quite good wells.
12	Q	Compared with other wells in the field, they are far
13		from the best, are they not?
14	A	You mean on the section, or what? I am not qualified.
15	Q	On the basis of productivity?
16	A	You mean as far as the gas production?
17	Q	Yes.
18	A	By your production figures, you can show other wells that
19		are producing more gas, that's true.
20	Q	Mr. Hannifin, you said that to confirm your thoughts
21		about what the proposed well should cost, you consulted
22		Cities Service?
23	A	That's correct.
24	Q	They in fact dropped the lease in question, did they not,
25		the lease that you now hold?

209 SIMMS BLDG.•P.O. BOX 1992•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

1	A	That is correct.
2	Q	You acquired it then directly?
3	А	From Merland, that's correct.
4	Q	So they never had an opportunity to possibly revise that
5		in the light of intention to actually drill?
6	A	That is correct. You will note the date stated on
7		there. That was done over a year ago. That is why I
8		did not rely only upon the A.F.E. by Cities Service.
9	Q	Are you aware that Cities Service brought a forced
10		pooling action before this Commission for a well in the
11		south half of Section 19, 22 South, 27 East?
	A	No.
12	Q	Called the Merland C Number 1?
13	A	No, I wasn't.
14	Q	In connection with that application, Mr. Hannifin,
15		Cities Service filed an estimate on well costs for that
16		well to test the same zone, and I hand you a copy of
17		that and I ask you to read from that exhibit.
18	A	I will try to.
19	Q	It is very vague. I apologize for the reproduction.
20		That estimate of well costs, reflects, does it not,
21		that Cities Service in February of 1972 estimated the
22		complete well to the Morrow to be \$338,442, does it not?
23	А	That's correct.
24	Q	Are you aware that since February of 1972 that there
25		

209 SIMMS BLDG.0P.O. BOX 10920PHONE 243.66910ALBUQUERQUE, NEW MEXICO 87103 1216 First national bank bldg. Eastoalbuquerque, new mexico 87108 209 SIMMS BLDG. P.O. BOX 1092.0 PHONE 243-06910 ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST 0 ALBUQUERQUE, NEW MEXICO 87108

1		have been substantial increases in the cost of the
2		necessary equipment to drill such a well?
3	А	No, I am really not. I have bids from various comapnies.
4		I haven't compared them to your cost sheet. You have
5		just furnished this to me, of course.
6	Q	You would not expect that Moran would complete your
7		well. Samedan would do that, would they not?
8	А	Samedan will supervise the drilling completion and
9		operation.
10	Q	You, in fact, don't anticipate using Moran Drilling
11		Company at all to drill this well?
12	A	As I stated, Samedan would be supervising the operation,
13		so they would take all drilling bids.
14	Q	They would hire the driller?
15	A	They would take the drilling bids, I presume.
16	Q	Does Samedan have any connection, direct or indirect,
17		with the drilling company?
18	Α	I don't know if indirect. I presume you could say that
19		they did. Samedan are the sons of the Noble family and
20		they own the drilling company.
21	Q	They own the drilling company and they own Samedan, don't
22		they?
23	А	I don't know what their corporate structure is at all,
24		Mr. Cooley.
25	Q	Are you aware that Noble Drilling Company has a rig
	L	

1		which is presently drilling on a well for Midwest in
2		Section 3 of Township 23 South, Range 26 East?
3	A	No. You asked me that this morning and I didn't know
4		then either, sir.
5	Q	Do you have any idea how long that particular well has
6		been drilling?
7	A	It has been there quite sometime as they are having, I
8		understand, gas kickout of the Atoka and that seems to
9		be bothering their drilling operations. At the time I
10		was out there last week, or a couple of weeks ago, they
11		were having drilling problems.
12	Q	Do you have any idea whether this well would be
13		turn-keyed or whether it would be on a straight footage
14		rate?
15	A	I presume it would be on a straight footage rate as it
16		is a field well between two wells. I presume a
17		competent operator would be able to ascertain the
18		problems or anticipate the problems they might
19		encounter.
20		I don't know that that also would be under Samedan's
20		supervision.
	Q	That would be under Samedan?
22	A	Under their supervision.
23	Q	Would you tell the Examiner, please, what your exact
24 25		contractual arrangement is with Samedan?

209 SIMMS BLDG. # P.O. BOX 1092 # PHONE 243-6601 # ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST # ALBUQUERQUE, NEW MEXICO 87108

1	А	If the Examiner would care to have that.				
2		MR. UTZ: I think it would be pertinent.				
3		THE WITNESS: My contractual agreement with them				
4	will	be that he will have a seventy percent net revenue				
5	inte	rest until payout, at which time I will convert a five				
6	nerc	ent overriding royalty interest into a fifty percent				
7	work	ing interest. We are talking about a lease interest here,				
8	not	the proration unit, naturally.				
9	Q	(By Mr. Cooley) Now, has this agreement already been				
10		entered into?				
11	A	It has.				
12	Q	Signed, sealed and delivered?				
13	А	Letter of Intent. It is now oral, but we have not signed				
14		a Letter of Intent, but we will.				
15	Q	This is just a proposed contractual arrangement?				
16	A	No, it isn't proposed. We both agreed orally. I don't				
17		consider their word to be bad, nor do they consider mine				
18		to be.				
19	Q	I am not implying that. I am just trying to find out,				
20		Mr. Hannifin, whether you do have a firm deal?				
21	Α	We have a firm contractual arrangement.				
22	Q	That arrangement is that they put up all the money to				
23		drill the well?				
24	Α	That's correct.				
25	Q	You have a backing interest?				

1 That's correct. А 2 0 In that contractual arrangement, do you not assign the 3 operating rights in order that they have the right to drill? 4 5 А No, an operating agreement. 0 They put up all the money and they will be the operator б as far as the Oil Commission is concerned, and if any 7 Federal leases are involved, the U.S.G.S. and so forth--8 There is no Federal. We really didn't get into the Α 9 details of that that much, so I really don't quite 10 understand what your question is. They will take care 11 of the paper work, if that is what you mean. 12 They will take care of the paper work and the 13 supervision through their office by filing the forms, 14 using their secretarial help, if that is what you are 15 referring to, sir. 16 0 The first thing that they are going to have to do is 17 to file a Notice of Intent to Drill with the Oil 18 Conservation Commission; right? 19 That wouldn't especially be necessary because I had Α 20 filed an Intent to Drill with the Conservation 21 Commission and posted bond for this location. They may 22 wish to, at this time, I do not know, but they would not 23 have to. 24 Are they going to drill on the Intent that you filed, or Q

: J

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 8710: 1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

<u> </u>	are they going to submit a new one?
-	
A	I don't know.
Õ	They will be the actual operator of the well, will they
	not?
A	They will be the supervisor of the well.
Q	They will carry on all field operations?
Α	They will carry them on.
Q	They will do all reporting to the State agencies and any
	other agencies?
Α	They have an office set up for that.
Q	You don't know whether they are going to drill with their
	bond or yours?
A	I don't know.
Q	Is this a binding agreement between you and Samedan?
A	Yes, sir.
Q	Then you haven't, in fact, Mr. Hannifin, already granted
	and sent over on to Samedan the right to drill and they
	have assumed the risk of drilling?
А	No. They have acquired a part interest in it. As you
	noticed, I still own an interest in it and still have
	rights under the operator agreement, the same as they
	do.
	They have agreed to put up the money and to do the
	supervision at my request.
Q	Are you retaining a working interest before payout, or
	А Q A Q А Q А Q А

209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-6691 ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

	1		an overriding royalty or how did they get from
	2		eighty-seven and a half down to seventy, or do you have
	3		an eighty-seven and a half interest?
	4	A	I have an eighty-two and a quarter percent lease, or
	5		81.25.
	б	Q	You have an eighty-one and a quarter percent lease from
	7		the landowners?
	8	A	That's correct.
QUERQUE, NEW MEXICO 87103 Rque, new Mexico 87108	9	Q	Now, there is this difference
	10	A.	11.25.
	11	0	11.25. Is that override?
	12	Α	That would be overriding royalty in this particular
	13		arrangement and at payout, five percent of that converts
	14		in half the work. I would still retain a 6.25.
	15	0	All of the working interest in this well will be owned
URRQU QUE.N	16		by Samedan until payout, at which time you have the
្រម	17		option to convert five percent override into fifty
E 243-6691●ALB <sup>1</sup> E AST ●ALBUQU	18		percent working?
ONE 24: 16. EAS	19	Λ	That's correct.
BOX 1092•PHONE 243-6691•ALB .al bank bldg. East•Albuqu	20	Q	Well, the primary, if not the sole controversy here
BOX 10 AL BAI	21		today, is whether you should be designated as operator
. • P.O.	22		under your application, or whether Mr. Grace should be
209 SIMMS BLDG. P.O. BO. 1216 FIRST NATIONAL	23		designated as operator.
12161	24		As it now develops as far as all the practical
20	25		matters are concerned, Samedan is going to be the real

1		operator. Is there anyone here in Samedan that can
2		testify with respect to their qualifications to act as
3		operator?
4	A	Mr. Martin is here with the Samedan. Whether he can
5		testify to their qualifications or wishes to, I have no
б		idea.
7	Q	The cost figures that you received from Mr. Grace with
8		respect to the Grandonoco well were the actual costs of
9		drilling that well, were they not, as reflected on the
10		information that was sent you?
11	А	I don't know.
12	Q	Rather than an A.F.E.?
13	А	I don't know. I really can't tell from this sheet. It
14		says date of completion, so I presume maybe they were.
15	Q	You did receive a communication from Mr. Grace, did you
16		not, in fact, numerous communications requesting that
17		you join him?
18	A	I received two.
19	Q	In voluntary pooling with him as the operator?
20	A	I received two letters on the same day. One letter was
21		dated August 23, '72, and the other September 8. I
22		received them on the same date, September the 12th.
23	Q	Your initial written notice to Mr. Grace was sent after
24		you filed your Application for forced pooling, was it
		not?

209 SIMMS BLDG.0P.O. BOX 10920PHONE 243-65910ALBUQUERQUE, NEW MEXICO 87103 1216 First National Bank Bldg. Eastoalbuquerque, new Mexico 87108

Α

1

date was the 22nd. 2 When you say the pooling, the Application was filed with 0 3 this Commission on the 22nd; is that right? 4 MR. KELLAHIN: I believe that's correct. 5 MR. COOLEY: Mr. Examiner, is there a date of б receipt of the Hannifin Application in the file? 7 MR. KELLAHIN: Mr. Cooley, with all due respect, 8 I don't see how this is really relevant. I don't believe the 9 statute requires we attempt voluntary pooling, either before 10 or after an Application is filed. 11 MR. COOLEY: Mr. Kellahin, as well as the 12 Commission, counsel have heard the pros and cons of that 13 argument for about the last fifteen years. I don't know that 14 it has ever been resolved or ever will be. I am just bringing 15 it out for the record. 16 The Application doesn't seem to have a MR. UTZ: 17 date on it, nor is it stamped in in our office. I have a 18 C-11 which I presume came with it that is dated 8-21. That 19 was stamped in the Artesia office 8-21. 20 MR. KELLAHIN: I filed the Application with the 21 Oil Commission on the 22nd of August. 22 I have no further questions at this MR. COOLEY: 23 time, but I would like to reserve the right to recall Mr. 24

Hannifin at a later point in this hearing if I deem it

PAGE

39

1 necessary. 2 MR. UTZ: I think you do have the right. Are there other questions of Mr. Hannifin? 3 MR. KELLAHIN: I have just one further guestion. 4 REDIRECT EXAMINATION 5 BY MR. KELLAHIN 6 0 We had some discussion about Samedan, Mr. Hannifin, and 7 to the best of your knowledge, what is your opinion of 8 Samedan's reputation as a reliable operator? 9 Well, my personal opinion is that they are very Α 10 competent operators and any business which I have had 11 with them in the past, which has been considerable, their 12 operations have been very smooth and according to normal 13 oil field practices. 14 Naturally, mine is mainly experience in the land 15 end of it. 16 MR. KELLAHIN: I have no further questions. 17 MR. COOLEY: In light of that question, I would 18 like to ask one more. 19 CROSS-EXAMINATION 20 BY MR. COOLEY 21 Conversely, Mr. Hannifin, you are totally aware or 0 22 unaware of any particular expertise that Samedan might 23 have with respect to the South Carlsbad Morrow Gas Pool, 24 are you not? 25

PAGE

40

209 SIMMS BLDG.0 P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EASTOALBUQUERQUE, NEW MEXICO 87108

1	A Yes, I am.
2	Q As far as you know, they have no particular expertise
3	in that area?
4	A I know nothing about their expertise one way or the
5	other, Mr. Cooley.
6	MR. COOLEY: Thank you.
7	MR. UTZ: Mr. Hannifan, does Samedan operate oil
8	wells in southeast New Mexico?
9	THE WITNESS: Yes, sir.
10	MR. UTZ: Do they operate any gas wells?
11	THE WITNESS: Yes, sir, they do.
12	MR. UTZ: Do you have any idea how many?
13	THE WITNESS: I could ask Mr. Martin. No, I don't.
14	I know they operate some.
15	MR. UTZ: In talking about whether they are
16	competent or not, I think maybe it might be good to know.
17	THE WITNESS: Yes, sir, they do operate gas wells.
18	MR. UTZ: You may be excused.
19	MR. COOLEY: May it please the Examiner, at this
20	time, I would like to introduce my co-counsel, Mr. Michael
21	Watkins of Albuquerque, New Mexico.
22	Would you give your address?
23	MR. WATKINS: It is Oldaker & Oldaker law firm,
24	1200 Simms Building, Albuquerque, 87101. Again, sir, I would
25	like to apologize for being late to the hearing. Mr. Grace

209 SIMMS BLDG.0 P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EASTOALBUQUERQUE, NEW MEXICO 87108

2 3 4 5 6 7 8 9 10 11 12 SIMMS BLDG.• P.O. BOX 1092.0 PHONE 243-6691.0 ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST 0 ALBUQUERQUE, NEW MEXICO 87108 0 13 14 15 16 17 18 A 19 20 21 22 Q 23 А 24 209

25

1

and I were out of the building conferring at the time that the hearing started. MR. UTZ: All right, sir. MR. COOLEY: Mr. Examiner, I would like to briefly recall Mr. Hannifin to the stand. (Whereupon, Mr. Hannifan, having already been previously sworn, took the witness stand.) \* D. L. HANNIFIN, Having already been previously sworn, testified as follows: DIRECT EXAMINATION BY MR. COOLEY Mr. Hannifin, with respect to the consents or endorsements that you received and testified to on Direct, from the various parties, would you repeat those again for my benefit? Of course, I have the copy of the letter from Merland. The others were Mr. Jack Ingram and his mother, Audrey Ingram, that I talked to by telephone. Mr. Jack Ingram requested that I be the operator, rather than Mr. Grace for he and his mother. That mother is Audrey? I think it is Audrey. They are of Carlsbad, New Mexico. I talked to Mr. W. E. Walling of Ropesville, Texas. He

		is going to confer with an attorney.
	Ω	You have no indication one way or the other from him?
Ž	A	No. He is going to confer with Mr. John McCormick in
		Carlsbad within the next week.
	Ņ	You were sure you had the support of the Ingrams, Jack
		Ingram and Audrey Ingram?
	A	Yes. He stated so.
9	Q	I hand you what has been marked as Commission's, or as
		Grace Exhibits 4 and 5 in this case and ask if you would
		please read those to the Examiner?
	۸	"We, the undersigned, as owner or owners of the oil and
		gas and other mineral rights in and under the south half
		of Section 24, Township 25, Range 26 East, N.M.P.M., do
		hereby request that Michael P. Grace, II, and Corinne
		Grace be made operators of the proposed well which is
		to be drilled in an orthodox location of Mr. Grace's
		choice. We feel that Mr. Michael P. Grace, II, and
		Corinne Grace have proven their ability in this area
		and that they are best qualified to be operators."
		Mr. and Mrs. Jack L. Ingram, and the other one is signed
		by Audrey Ingram.
	Q	Those are identical letters?
	A	Those are identical letters.
1	Q	Now, did you say that there was a Samedan representative
		here today?

209 SIMMS BLDG.0P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EASTOALBUQUERQUE, NEW MEXICO 87108

. [	A Yes. Mr. Martin is employed by Samedan and he is here.
1	. sow, it survey a sy survey and no to here.
2	MR. COOLEY: I have no further questions at this
3	time. We would still like to reserve the right to call Mr.
4	Hannifin if necessary.
5	CROSS-EXAMINATION
6	BY MR. KELLAHIN
7	Q Mr. Hannifin, when did you talk to Mr. Ingram?
8	A I talked to him yesterday evening or afternoon at his
9	work where he works at the International Mines.
10	Q Grace's Exhibits 4 and 5 you just looked at did not have
11	a date on those letters, did they?
12	A No, they didn't. I don't, of course, know anything
13	about them.
14	Q Thank you.
15	MR. UTZ: You may be excused.
16	MR. COOLEY: At this time, Mr. Examiner, I would
17	like to call Mr. Martin as an adverse witness.
18	MR. UTZ: Is that in order?
19	MR. HATCH: I think so, yes. Hold it, just a
20	minute. Why is he an adverse witness instead of your own
21	witness?
:	MR. COOLEY: Because we consider our position
22	adverse to that of Mr. Hannifin's and I really feel that
23	Samedan is a real party in interest to this thing.
24	MR. KELLAHIN: We would object to the calling of
25	

Mr. Martin. 1 Object to the calling of him at all? MR. COOLEY: 2 MR. KELLAHIN: You can call him as your own 3 witness, obviously. 4 MR. COOLEY: I think it has been made guite clear 5 from the testimony of Mr. Hannifin that Samedan's position 6 is adverse to that of the Grace's. 7 MR. KELLAHIN: Yes, sir, simply because Mr. Martin 8 is employed by Samedan is no indication he is an expert and 9 able to qualify as one with regards to this particular 10 hearing. 11 MR. COOLEY: I will be glad to announce why I am 12 SIMMS BLDG.@P.O. BOX 1092@PHONE 243-6691@ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST@ALBUQUERQUE. NEW MEXICO 87108 I want to know what, if anything, he knows calling him. 13 about the history of his company's operation. 14 MR. HATCH: You can call him as your witness. 15 MR. COOLEY: I call him whatever you want to call 16 I have already requested to call him as an adverse him. 17 You deny that and I will call him as my own witness. 18 witness. 19 (Whereupon, Mr. Mark S. Martin was called to the 20 stand and sworn.) 21 22 MARK S. MARTIN, 23 having been first duly sworn according to law, upon his oath, 209 24 testified as follows: 25

	_		
	1		DIRECT EXAMINATION
	2	BY	MR. COOLEY
	3	Q	Mr. Martin, would you state your full name, please, for
	4		the record, and your address and employment?
	5	А	Mark S. Martin. I am Division Land Man with Samedan
	6		Oil Corporation and our office is in Midland, Texas.
	7	Q	Mr. Martin, are you familiar with how long have you
	8		been with Samedan?
	9	A	Seven years.
	10	Q	Are you, generally speaking, familiar with the areas in
	11		which your company has drilled during that seven-year
	12		period?
87108	13	A	As far as drilling, there is a lot of old producing
	14		areas that Samedan has produced in for years that I am
	15		not all that familiar with because I don't get involved
RQUE, NEW MEXICO 87108	16		in that end of it, unless something comes up that
ut	17		involves the land end of it.
	18	Q	You are, generally speaking, familiar with the various
ש. פי	19		areas, if not the specific wells, that your company has
	20		drilled in the past seven years?
n ⊐ Z	21	A	That we have drilled, right.
	22	Ŏ	Now, has Samedan been the operator of all these wells
INTEL NA TONAL WANN BUDG. FAST AND DO	23		that they have participated in during that period?
	24	A	Oh, no.
	25	Q	What percent of those would you say?

46

PAGE

1	A	I wouldn't have any idea.
2	Q	Do you have any idea how many wells Samedan drilled as
3		operator during that period?
4	A	No.
5	Q	Are you aware of the fact that Samedan drilled a well
б		known as the Union State Number 1 well?
7	Α	Yes, sir.
8	Q	In Section 19, Township 23 South, Range 26 East of Lea
9		County, New Mexico?
10	A	I would have to check the description. I know it was
11		in the west side of that Township you are talking about.
12	Q	Are you aware of the outcome of that drilling activity?
13	А	It was ultimately a dry hole.
14	Q	Are you aware of the cost of that well?
15	A	No.
16	0	Are those costs available to you in your corporate
17		records?
18	λ	I am sure they could be arrived at. We keep good well
19		files on everything.
20	Q	Ordinary prudent oil operator does keep the file on any
21		well he drills, whether he is successful or unsuccessful?
22	A	I don't know how long you keep the dry holes. I assume
23		you keep them for a couple of years afterwards.
24	Q	This well was drilled in 1970?
25	A	That's right.
	······	

209 SIMMS BLDG.0P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EASTOALBUQUERQUE, NEW MEXICO 87108

209

Would you be willing to furnish this Commission the 0 1 complete itemized actual cost of that well? 2 MR. KELLAHIN: Objection, Mr. Examiner. Mr. Martin 3 has not indicated that he is in any position to bind his 4 will corporation with regards to furnishing oil costs. I believe 5 the last question Mr. Cooley asked was premature until he 6 establishes that Mr. Martin is in a position to have access 7 to that and have authority of his corporation to release it. 8 MR. COOLEY: I understood his answer to say that 9 he did have access to them. 10 THE WITNESS: I have access to the well files. Ι 11 don't know whether I have got the authority to divulge the 12 information in the well files. 13 Q (By Mr. Cooley) Would you be willing to seek such 14 authority, and if successful, to forward an affidavit 15 to this Commission with respect to the actual cost of 16 the drilling of the well I just described? 17 А I would have to consult with my superiors on it and also 18 legal counsel. Personally, I can't see any reason not 19 to, but I wouldn't be in a position to commit our 20 company. 21 Would you advise this Commission, say, within the next 0 22 seven days or ten days, whatever is appropriate, as to 23 whether you will or won't submit information so that 24 we have an end to this at some point in time? 25

You will tell us either yes or no that you will or 1 won't supply us, will you not? 2 If it is required by the Commission, I quess I could. Α 3 I would think that it would be in order MR. UTZ: 4 for you to either furnish it or deny it, one or the other, 5 and let us know whether you will or will not. б THE WITNESS: Within seven days? 7 Ten days would be fine. MR. UTZ: 8 MR. COOLEY: You do understand that it is my 9 request that this be submitted in the form of an affidavit 10 or attached to an affidavit and that it is under oath? 11 THE WITNESS: Yes. 12 Mr. Examiner, if the information that MR. COOLEY: 13 I have requested from Mr. Martin is forthcoming from Samedan 14 Oil Corporation, I request that it be incorporated as a part 15 of this record and move to identify it as Grace Exhibit 6, 16 and I would further request that in the event the information 17 is forthcoming, that we have the opportunity to review it. 18 MR. HATCH: Certainly the other side has a right 19 to object to that being introduced as an exhibit in this 20 I don't know if they wish to do that or not. case. 21 MR. KELLAHIN: We reserve the right to object to 22 the exhibit upon seeing it.

MR. COOLEY: If this be the case, we would then, on this particular point, request that Grace Alternative

23

24

dearnley, meier & mc cormick are a served

209 SIMMS BLDG.0 P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST0ALBUQUERQUE, NEW MEXICO 87108

Exhibit 6 be permitted in this record which would be a 1 tabulation of such of the wells costs as we are able to 2 ascertain from independent sources. 3 MR. UTZ: May I ask what your independent sources 4 might be? 5 MR. COOLEY: The mud company that furnished the 6 mud and the drilling company that drilled the wells and there - 7 are many of these records available. 8 MR. HATCH: You have not presented that here today 9 and you do not plan to? 10 MR. COOLEY: It is not available. I presumed that 11 this Commission would require Samedan to produce this. 12 I don't know that it can be accepted MR. HATCH: 13 by the Commission if there is no objection to it. 14 MR. COOLEY: Well, if there is an objection --15 MR. HATCH: If there is an objection, I would say 16 the Commission could not accept something that is sent in 17 here sometime after the hearing, without any authentication 18 here, or without any cross-examination, and it is only to be 19 submitted if something else is not admitted, or --20 MR. COOLEY: Or required. 21 MR. HATCH: Or required. 22 This goes to the --MR. COOLEY: 23 You would be asking the Commission to MR. HATCH: 24 accept something that you are not even offering here in the 25

hearing today?

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. COOLEY: Mr. Graham, I would point out to you that only today, for the first time, were my clients made aware of the fact that Mr. Hannifin was not going to be the actual operator of his well, but in fact, Samedan was going to be and the very thrust of this case goes to one point, who is the better qualified operator and I submit to the Examiner that the track record, so to speak, of the two conflicting Applicants here is possibly the only evidence or competent evidence on which the Commission could make a determination where both Applicants seek identical relief with the one exception, each desires to be the operator.

MR. UTZ: Will the reporter please make the correction that that was Mr. Hatch, rather than Mr. Graham?

MR. COOLEY: I have no further questions of Mr. Martin.

MR. KELLAHIN: We would have no objection to continuance in order to obtain that testimony and have somebody competent from Samedan to provide that information for the Commission's benefit. I will leave it at that, Mr. Cooley.

MR. COOLEY: I have no objection whatsoever to them just submitting it as a late exhibit. It would be the thousandth time that this has happened before this Commission. 1

209 SIMMS BLDG.0 P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 First National Bank Bldg. Eastoalbuquerque, new Mexico 87108

well, if I understand correctly, it did not go just to the 2 3 Morrow, but it also went to the Devonian. Doesn't that create some problems as to its relevancy to this particular 4 Application? 5 You will have to bear with me. I am not б knowledgeable in that area. 7 MR. COOLEY: The Oil Conservation Commission file 8 on that well that I examined earlier did not reflect it was 9 drilled to the Devonian. 10 MR. KELLAHIN: We will defer to the Examiner. 11 MR. HATCH: I think we better understand something 12 I am not saying that the Commission cannot accept here. 13 those. I am saying that as a late exhibit, I am saying that 14 the adversary here cannot be foreclosed from objecting to 15 their receiving them. 16 If you can get a stipulation from the adversary 17 that the Commission can accept it, and use it as part of the 18 evidence in this case, fine. 19 MR. COOLEY: Which are we talking about, well cost 20 supplied by Samedan? 21 MR. HATCH: We are talking about both of these that 22 you are talking about. 23 MR. COOLEY: Let's talk first about the well costs 24 supplied by Samedan. Those well costs are available in the 25

MR. KELLAHIN:

PAGE 52

I realize that the problem with this

offices of Samedan, according to the witness. If they won't furnish them willingly, I presume I will have to subpoena them.

We won't talk in terms of alternative exhibits that we might try to put together in pieces. I wish to offer those well costs presented under oath as Grace Exhibit 6 at this time and if counsel for Mr. Hannifin objects, I think we should have a ruling on that objection now.

MR. KELLAHIN: For purposes of the record, I do object. I am not informed about this particular well to any extent. I believe it was a wildcat.

Naturally, the costs are going to be higher and may not be relevant to the area of operation in question here and we would like to reserve the right to object and cross-examination on the basis of that exhibit.

MR. HATCH: Do you deny the motion to have it submitted?

MR. UTZ: Yes.

MR. KELLAHIN: If the Examiner please, in ruling either way on the objection, I think it would be helpful if the Examiner stated a reason, either a relevancy reason, or some other reason to deny or grant the request of Mr. Cooley, so we will have something on the record.

MR. UTZ: Well, I think it is obvious why the objection was sustained, because you will not have the

dearnley, meier & mc cormick strating statistics and

1

2

3

4

5

б

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

209 SIMMS BLDG.0-P.O. BOX 1092.0-PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST0ALBUQUERQUE, NEW MEXICO 87108

SIMMS BLDG. P.O. BOX 1092. PHONE 243-6691. ALBUQUERQUE. NEW MEXICO ( 1216 FIRST NATIONAL BANK BLDG. EAST. ALBUQUERQUE, NEW MEXICO 87108

209

1 opportunity to cross-examine on it. I think if this is 2 important enough to you, you might continue the case and 3 bring a witness in and introduce it, or have it introduced as you would today. 4 5 MR. COOLEY: As I said, I have no apologies about not inquiring into Samedan's gualifications earlier, because б we only found this out this morning in informal conversations 7 with Mr. Hannifin. 8 MR. UTZ: I think that is understandable. 9 MR. COOLEY: In view of this decision, I recall Mr. 10 Martin to the stand for one question. 11 MR. UTZ: Yes. 12 (Whereupon, Mr. Martin was recalled to the stand.) 13 MARK S. MARTIN, 14 having already been previously sworn, testified as follows: 15 DIRECT EXAMINATION 16 BY MR. COOLEY 17 Have you reviewed the estimate well costs submitted by 0 18 the Applicant Hannifin in this case? 19 Just roughly. I have not studied it in detail by any Ά 20 means. 21 Q It is your understanding, however, that what money cash 22 dollars that will be spent doing this well will be 23 Samedan's under your contractual arrangement with Mr. 24 Hannifin? 25

1	A	Repeat that, please.
2	Q	Well, Mr. Hannifin testified that Samedan would pay the
3		entire cost of drilling this well if he is successful
4		in his Application by virtue of the contractual
5		arrangement between Samedan and himself where he has a
б		reversionary interest and overriding royalty payoff?
7	А	You mean is it correct, that that is what he testified
8		to?
9	Q	I am asking if that is the correct deal. Is that the
10		deal between Samedan and Hannifin, or are you aware or
11		unaware of it?
12	А	I am aware of it. I am aware of our deal.
13	Q	Samedan is going to be putting up all the money to drill
14		the well?
15	A	Yes.
16	Q	Are you, at this time, in a position to authenticate
17		under oath to this Examiner that these are your
18		projected well costs, the ones that were presented by
19		Mr. Hannifin?
20	A	Yes. We feel like they are what we would A.F.E. the
21		well for, yes.
22	Ω	Even though you earlier testified that you had just
23		barely gone through it?
24	Λ	I know that that is our company's position that the
25		A.F.E. that has been presented by Mr. Hannifin is

209 SIMMS BLDG.0P.O. BOX 10920PHONE 243-65910ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EASTOALBUQUERQUE, NEW MEXICO 87108

1		acceptable to us.
2	Q	Do you have any knowledge whether you can actually drill
3		the well for that cost or not?
4	A	Who knows what you can drill a well for? I sure don't.
5		All I know is that you go on your best estimate and make
6		up an A.F.E. and do the best you can.
7	Q	Your company has only drilled one other well in the
8		South Carlsbad area; is that correct?
9	A	To my knowledge, that's right.
10	Ŏ	The Union State Number 1 in 1970?
11	А	That's about ten or twelve miles off the southwest.
12	Ω	Are you prepared to state whether the cost of Union
13		State Number 1 well was in excess of the projected cost
14		here of Mr. Hannifin?
15	A	No, I am not. I have not reviewed the cost of the Union
16		State. It was drilled under entirely different set of
17		circumstances.
18	Q	What are the differences?
19	A	It was a wildcat and I imagine your drilling conditions,
20		one thing and another, changed from area to area.
21	Q	This is in the same immediate area, is it not?
22	A	What do you call immediate?
23	Q	It is in the same Township?
24	А	No, it isn't.
25	Q	It is in the Township to the south, I beg your pardon.

1	λ	Eight or ten or twelve miles. I don't recall exactly.
2	Ω	The proposed depth was identical, wasn't it?
3	A	I don't know.
4	Q	I hand you the Commission file on the well in question.
5		Maybe it will refresh your memory.
6		It was projected to the same depth as the well that
7		you propose here today, is it not?
8	Α	It appears so.
9		MR. UTZ: That is 11,800 feet?
10		MR. COOLEY: Correct.
11	Q	(By Mr. Cooley) Mr. Hannifin indicated that Samedan
12		would be the company which would decide which drilling
13		company would be used.
14		If you are the successful Applicant here today, do
15		you have any idea of what company Samedan would select?
16	A	None, whatsoever.
17	Q	If there any reason to expect that they would favor Noble
18		Drilling Company?
19	A	No reason. As I understand the procedure, we get bids
20		and they are approved out of our Ardmore office and all
21		the wells that we have drilled out here, as far as I
22		know, that is our procedure.
23		As I say, that is not something I have firsthand
24		knowledge of.
μ	Q	You have no firsthand knowledge as to how the drilling

208 SIMMS BLDG., P.O. BOX 1092 PHONE 243-6691 ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

1		contractor will be selected?
2	A	I just said it will be put out by bids and selected in
3		the Ardmore office by Vice President in charge of
4		Production.
5	0	What is his name?
б	А	Bob Layhe.
7	Q	Mr. Martin, what exhibit is this?
8		MR. UTZ: It was not marked. It was offered as an
9	amer	ndment to Exhibit Number 5.
10	Q	(By Mr. Cooley) Are you aware of drilling bids that are
11		being submitted currently in the South Carlsbad Morrow
12		area?
13	А	Am I personally?
14	Q	Yes, sir.
15	Α	No.
16	Q	Do you know whether you can obtain a driller to drill
17		in that area for \$8,90 a foot to 11,800?
18	A	I have already stated that I am unqualified in production
19		matters and I would rather not I don't have any
20		idea.
21	Q	If you are unqualified in production matters, Mr. Martin,
22		are you then not necessarily unqualified to decide
23		whether this proposed A.F.E. is or is not reasonable?
24	A	What I said before was that I know that it is our
25		company's position that the A.F.E. is reasonable, yes.

dearnley, meier & mc cormick 🖅 👘 🦉 👘

209 SIMMS BLDG.• P.O. BOX 1092.0 PHONE 243-6691.0 ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST 0ALBUQUERQUE, NEW MEXICO 87108 ----

209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-9691 ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

1 They are prepared to accept it. 2 MR. UTZ: In other words, someone of authority in 3 your company has let you know that they think this is 4 reasonable. 5 (By Mr. Cooley) Who is that someone, Mr. Martin? 2 Our Division Manager, Mr. Clifford Mathews. б А 7 MR. UTZ: Excuse me a moment, Mr. Cooley. Mr. Kellahin, I believe that it would be in order for you to 8 substitute this amended A.F.E. in place of the original which 9 you stated was in error. 10 MR. KELLAHIN: That's correct. 11 MR. UTZ: Do you wish to do that now? 12 MR. KELLAHIN: Yes, sir, if it is acceptable. 13 MR. UTZ: We will makr that Exhibit 5 then. 14 (By Mr. Cooley) Mr. Martin, you have not compared the  $\odot$ 15 proposed A.F.E. which is now Exhibit 5 with any actual 16 cost on the Union State Number 1, have you? 17 А No, sir. I haven't thought of the Union State Number 1 18 for two years, since it was plugged. 19 0 Do you know whether Mr. Mathews has? 20 Α I don't know of my own knowledge. 21 Do you have any idea on what Mr. Mathews based his Q 22 opinion with respect to this A.F.E.? 23 I am sure it is the same basis that anyone uses in А 24 drawing up an A.F.E. He checked the area and checked 25

1		on prices and drilling. I am not sure exactly what
2		procedures he goes through.
3	Q	Then your answer is you don't know?
4	A	I don't know what basis Mr. Mathews uses.
5		MR. COOLEY: Thank you, Mr. Martin.
6		MR. UTZ: Let the record show that Mr. Martin was
7	excu	nsed.
8		MR. COOLEY: Call Mr. Baldwin to the stand.
9		(Whereupon, Mr. Baldwin was called to the stand and
10		duly sworn.)
11		* * * *
12		THOMAS A. BALDWIN,
13	havi	ing been first duly sworn according to law, upon his oath,
14	test	ified as follows:
15		DIRECT EXAMINATION
16	BY N	IR. COOLEY
17	Q	Mr. Baldwin, state your full name and place of residence
18		and occupation.
19	A	Thomas A. Baldwin. I reside in Pasadena, California. I
20		am a petroleum geologist and petroleum engineer employed
21		by the Tetra-tech Company, Service Organization.
22	Q	Mr. Baldwin, have you previously testified before this
23		Commission and had your qualifications as a consulting
24		geologist and expert witness in that field accepted?
25	A	Yes, I have, sir.

209 SIMMS BLDG. P.O. BOX 1092. PHONE 243-6691. ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST. ALBUQUERQUE, NEW MEXICO 87108

. . . . .

Have you been retained by Mr. Grace to make a study of 1 0 the particular area involved in the South Carlsbad 2 3 Morrow area? I have. A 4 MR. COOLEY: Are the witness's gualifications 5 acceptable? 6 MR. UTZ: Yes, they are. 7 (By Mr. Cooley) Mr. Baldwin, I hand you what has been Q. 8 marked as Commission or Grace Exhibit Number 1 and ask 9 if you would please advise the Examiner as to what you 10 intend to portray thereby. 11 Well, I had intended this as a revision of the Exhibit А 12 furnished to the Commission at an earlier date in which 13 a structural high was shown in the vicinity of the 14 Go Po Go 2 in Section 24. 15 At that time, we were projecting a depth of the 16 Go Po Go 2 of 7,910 feet below sea level and we pointed 17 out that it was unusually high for the area and that it 18 was an anomously high location. Actually, the well came 19 in the top of the Morrow and was minus -- or twenty-two 20 feet higher than we had anticipated and of course it 21 did show as Mr. LeMay has stated an unusual good 22 development of porosity and due to its high structural 23 position, apparently will make an excellent well. 24 Q I hand you what has been marked as Grace Exhibit 2 and 25

1216 FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-6691 ALBUQUERQUE.

NEW MEXICO

ask you what you intended to portray by this exhibit? 1 amplebrug Grace Exhibit 2 is a rather fast sketch aplifying and 2 A 3 enlarging the picture of Grace Exhibit 1 on a scale of an inch equals a thousand so that we may see the 4 structural relationship a little better. 5 We see here the location of the Go Po Go Number 2 б and at the south of 1,320 feet, the suggested location 7 for a third well. The swells shown here is essentially 8 the same anticlinal swell or bow as is shown on Grace 9 Exhibit Number 1. 10 Q The well location which you portray on Exhibit 2 is the 11 same location, is it not, that is portrayed or suggested 12 and requested by the Applicant Hannifin? 13 Þ, Yes, it is. 14 In your opinion, is this the most desirable location Q 15 within the 320 acre drilling unit from a geological 16 standpoint? 17 Strictly from a geological standpoint, I think this is Α 18 the most desirable location that falls within the location 19 1320 peer rules permitting a well to be drilled within -320 feet 20 10 anather LORE to be drilled within another well. 21 It is higher structurally than any other position 22 that can be attained in the section, following that rule, 23 yes. 24 Is there any other location that might be suggested from Q 25

a standpoint of engineering and drainage?
A As Grace Exhibit Number 1 shows, we suggested, at an earlier time, a location in the southwest corner of the southeast quarter of Section 24 as being halfway between Go Po Go Number 2 and Go Po Go Number 1, and establishing a drainage pattern that possibly might be more economic.

I agree with Mr. LeMay, however, that the unusual development, of porosity in the Go Po Go Number 2 truets to move closer to it.
MR. COOLEY: At this point, Mr. Hatch, could I ask

for an interpretation by you of the Commission rules and regulations with respect to the proximity of one well to another in the particular pool involved?

MR. HATCH: I believe you can read them for yourself, Mr. Cooley. They do not speak of the distance between wells. I believe the standard locations are sent out 1,980 from end line and 660 from the side and at least 1,980 and then 330, I believe, from quarter-quarter section line and I don't believe in those rules there is anything specifically of the distance between wells.

MR. COOLEY: Implicit in that, however, is that if you cannot get closer than 660 to a side line with a well, that it must necessarily follow that no two wells can be closer than 1,320 feet.

209 SIMMS BLDG.& P.O. BOX 1092.0 PHONE 243-6691.0 ALBUQUERQUE, NEW MEXICO 67103 1216 FIRST NATIONAL BANK BLDG. EAST 0ALBUQUERQUE, NEW MEXICO 87108

· . . .

dearnley, meier & mc cormick 👦 🕬

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1	MR. HATCH: I am assuming that if you had a
2	nonstandard in one section, that a person could drill a
3	standard location on another section that would be much
4	closer than 660.
5	MR. COOLEY: In any event, it is your opinion that
б	the well location shown on Grace Exhibit 2 and that suggested
7	by Mr. Hannifin are both the same location and is an
8	orthodox location.
9	MR. HATCH: That is my reading from the rules.
10	MR. COOLEY: That is mine, but I wanted to make sure
11	we were playing with the same ground rules.
12	0 (By Mr. Cooley) In view of the superior geological
13	location of the well being 1,980 from the 1,980 from
14	the east, is that the location that you would recommend
15	be drilled irrespective of who is named operator?
16	A That is the location I presently recommend. I recommend
17	it be drilled 1,980 from the east and 1,990 from the
18	south.
19	Q 1,990?
20	A 1,980, I apologize.
21	Q Would this opinion that you have now expressed based
22	upon present information possibly be altered in light
23	of subseqent drilling information?
24	A Yes. There are two pieces of information pending that
25	could alter very sharply, if you wish me to expand upon

209 SIMMS BLDG.0P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST0ALBUQUERQUE, NEW MEXICO 87108

1	them.
2	Q Would you please?
3	A Well, in recent weeks, it would be the first week of
4	September, Mr. Grace, after conferring with me among
5	others, perforated in the Go Po Go Number 1 a small
6	interval in here which is a portion of the Go Po Go
7	Number 2 as correctly shown on Mr. LeMay's cross-section
8	here.
9	MR. UTZ: This is going to be an exhibit that you
10	are going to offer?
11	Well, if you are going to refer to something in
12	relation to the well, please give the depth and don't say
13	just here.
14	THE WITNESS: I do have the depth. I may not have
15	the precise depth of perforation, but approximately 11,463
16	to 11,467. It is a very small interval. I believe that
17	there were two or three intervals perforated after a meeting
18	I had with Mr. Grace on approximately September 2nd or
19	something of that sort and the well is presently being
20	tested now.
21	The results of that testing in this same porous
22	interval, even though it is very small, if it proves
23	substantially to improve its gas production by my
24	recommendation to perforate that interval, then it would
•	quite possibly lead me to think that a well halfway in

209 SIMMS BLDG. P.O. BOX 1092. PHONE 243-6691. ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST. ALBUQUERQUE, NEW MEXICO 87108

between would be more desirable than one only 3020 to the 1 south of Number 2. 2 The second thing that certainly could influence me 3 is a critical wellis being drilled by Midwest, of course, 4 down here at the southwest, which is outside of the 5 structural picture that I have been involved in. If it б should be completed in the Morrow for a very substantial 7 producer, not only I, but I guess everybody in this room, 8 would have to revise their picture geologically. 9 (By Mr. Cooley) Which well was this? Õ. 10 А It doesn't show on this map. 11 MR. UTZ: Since you have mentioned it, do you have 12 a location? 13 THE WITNESS: It is in Section 3 of 23 South, 26 14 East. 15 MR. UTZ: That is a Great Western well? 16 THE WITNESS: Midwest Oil Company. 17 MR. UTZ: Would that be the well to the west of the 18 airport? 19 THE WITNESS: Yes. It is a long way away, but if 20 it should make a substantial well and give us a new point 21 on the Morrow at the same time, as I say, I think all 22 geologists involved in the area would tend to revise their 23 pictures. 24 MR. UTZ: Since you mentioned perforations in the

1	Go Po Go Number 2, would you give us the locations of those		
2	perforations?		
3	THE WITNESS: They are very, very close, at least,		
4	to 11,380 and 11,400.		
5	MR. UTZ: That is the only perforations?		
6	THE WITNESS: No. There are other intervals that		
7	are perforated since I was here and I don't have that record		
8	with me.		
9	MR. COOLEY: Steinhorst can present that at a		
10	later time.		
11	MR. UTZ: That will be fine.		
12	THE WITNESS: I recommended this interval among		
13	others and then they have been perforated by Mr. Steinhorst		
14	since I left.		
15	MR. UTZ: You may proceed.		
16	Q (By Mr. Cooley) Mr. Baldwin, how would you evaluate the		
17	risk factor with respect to drilling the particular well		
18	in question?		
19	In terms of allocation of risk, it has been		
20	recommended by Mr. LeMay that a risk factor of 125		
21	percent be adopted. Do you have any objections to that?		
22	A I am not sufficiently acquainted with custom in the		
23	area. I would think that there is not too much risk in		
24	drilling this well. It will make a gas well of some		
25	sort.		

209 SIMMS BLDG. P.O. BOX 1092 & PHONE 243-6691 & ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST & ALBUQUERQUE, NEW MEXICO 87108

	1	<u>,, , , , , , , , , , , , , , , , , , ,</u>	What your penalty factor would be is more custom
	2		than it is economics.
	3	Q	There is however some risk in drilling any well?
	4	A	Surely. You may have mechanical failure even though the
	5		reservoir is good.
	6		MR. COOLEY: No further questions of this witness.
	7		MR. UTZ: Are there questions of the witness?
	8		MR. KELLAHIN: Just a few points of clarification.
	9		CROSS-EXAMINATION
	10	<u>BY</u> M	R. KELLAHIN
	11	Q	Mr. Baldwin, you have to bear with me. I don't have too
• ©	12		much knowledge of this area. I would like to ask you
NEW MEXICO 87103 MEXICO 87108	13		a question about your Exhibit 1 there and the extension
EW MEX	14		of that south line.
CE. ZE¥ ME	15		What authority do you have for extending the south
JQUERQUE, 1 Erque, new 1	16		line as far as you have, or as high as you have?
ALBL UQUE	17	А	To the north?
13-6691 • AL <sup>E</sup> ST • AL BUQU	18	Q	Yes, sir.
●PHONE 243-6691● BLDG. EAST●ALB	19	A	There would be some geological contention about this,
092 e PF	20		but much of geology is subject to an opinion. I feel
. BOX 1 NAL BA	21		that I had a cut in this fault at a high interval in
SIMMS BLDG. P.O. BOX 1092 1216 FIRST NATIONAL BANK	22		the Go Po Go 2 and canyon section, and in the City 1
15 BLD FIRST	23		Carlsbad Go Po Go Number 1, I had a weak cut.
209 SIMN 1216	24		There were two or three others of this sort. High
N	25		in this section the fault then necessarily would have to

be dipping to the east. You will notice I have dashed it from the City of Carlsbad, or from the Go Po Go Number 1 north.

I have dashed the fault as being subject to interpretation.

Q What are your control points for your contour line there?
A I haven't shown them on here. As I said, this was a rapid sketch. I wanted to enlarge this map so we had some of these to pass around. I have traced from here taking the liberty, however, in revising this map with the new point that we have got on the Go Po Go Number 2.

It had to be done in rather a hurry for this particular hearing and I did not carry out the movement of all the contours westerly as I anticipate they could.

I moved the 7,900 to honor the 7,888 point in Go Po Go Number 2. I moved the 7,950 because I had to and therefore in the 8,000 and 8,050, I did not move thinking there might be an additional datum later on. Would you agree that any location other than your proposed location would unfairly deprive the owners in this particular acreage of recovering the oil or production that they would be entitled to? A I have recommended this location as the best that we know of at this point and I have pointed out that if in testing the Go Po Go Number 1, it should turn out the

dearnley, meier & mc cormick as a loss of service a

1

2

3

4

5

б

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

209

25

1 perforations at this little stretch of the same interval 2 marked increased productivity of the well, it would be entirely possible that we could look at our whole car, 3 so to speak, and recommend a location equidistant 4 between the two. 5 Right now, I most certainly agree with Mr. LeMay's 6 testimony that this particular location is the highest 7 we can get structurally and the closest to the good 8 porous development of the Go Po Go Number 2. 9 MR. KELLAHIN: No further questions. 10 CROSS-EXAMINATION 11 BY MR. UT2 12 Mr. Baldwin, do I recall correctly that Exhibit Number Q 13 2 indicates your choice of location of the well in the 14 south half of Section 24? 15 Α That is correct, sir. I brought alternate locations 16 down here, as you can see, from erasures on these maps 17 and after concurring with others, we have all agreed 18 that the engineering factor of getting that much closer 19 to known porosity has tipped a balance with me and I 20 state that that is my best choice. 21 You mentioned the Midwest well in Section 3 of 23 South, Q 22 26 East. Do you know anything about that well? Does 23 it look like it is going to make a well? 24 Α I understand that they have been having difficulty and

	1	progress has been very, very slow indeed, but somebody
	2	here today said that they had had a substantial gas
	3	show.
	4	Q But that is hearsay?
	5	A We are waiting to get the information.
	6	MR. UTZ: Other questions of the witness? You may
	7	be excused.
	8	Do you have another witness?
	9	MR. COOLEY: Mr. Steinhorst, please.
	10	MR. UTZ: Mr. Cooley, this witness has formerly
	11	been qualified, so you may proceed.
7103	12	(Whereupon, Mr. Steinhorst was called to the stand
XICO 8 87108	13	and sworn.)
NEW MEXICO 87103 MEXICO 87108	14	* * * *
2 2 2 12 2 12 2 12 2 12 2 12 2 12 2 12	15	RICHARD STEINHORST,
BUQUERQUE. JERQUE, NEW_	16	having been first duly sworn according to law, upon his oath,
● A L E	17	testified as follows:
243-6691 .AST •AL	18	DIRECT EXAMINATION
LDG. E	19	BY MR. COOLEY
X 1092.0F Bank B	20	Q State your name, address, and occupation for the record,
P.O. BOX	21	please.
• V • V	22	A Richard Steinhorst, Lafayette, Louisiana, consulting
SIMMS BLI	23	petroleum engineer.
209 SIN	24	Q First of all, Mr. Steinhorst, to clarify this record,
	25	would you please delve through your records and state

1		the answer to Examiner's question about the exact
2		perforations in the Go Po Go 2?
3	A	The exact interval perforated was 11,460 to 468. That
4		is all the perforations. That is not all the
5		perforations in that area.
6	Q	State all of them.
7	A	The well was perforated 11,408 to 416, 11,518 to 524,
8		and 11,539. 518 to 524. 11,532 1/2 to 11,538
9		MR. UTZ: Mr. Baldwin stated 11,380 to 11,400.
10		THE WITNESS: That was not perforated. That was a
11	reco	mmendation but it was not actually perforated.
12		MR. COOLEY: This is the Go Po Go 2 that he asked
13	abou	ut.
14		THE WITNESS: I am sorry. I gave you the Go Po Go
15	1.	The Go Po Go 2 is perforated 11,382 to 11,404. I was
16	prer	pared to answer you on the Go Po Go 1.
17		MR. UTZ: Mr. Steinhorst, if you don't have it
18	avai	lable right at the moment, you could write us a letter
19	and	tell us.
20		THE WITNESS: I will. I am sorry I don't have that
21	info	ormation and I don't have any information on the Go Po Go
22	2 wi	ith me, except I do know that that one interval was
23	peri	forated.
24		MR. UTZ: Mr. Cooley, you may proceed.
25	Q	(By Mr. Cooley) Mr. Steinhorst, there has also been

1		some discussion with respect to Midwest well drilling in
2		Section 3 of Township 23 South, 26 East.
3		Are you familiar with that well?
4	Α	Somewhat.
5	Q	Are you also familiar with the average length of time
б		during which it is required to drill a well of that
7		nature?
8	Α	Yes.
9	Q	What is that average?
10	A	The average time to drill a well in the South Carlsbad
11		field has been about forty days.
12	õ	What has been the history to date of the Midwest well
13		which we were discussing?
14	λ	They are seventy plus at 11,430.
15	0	Did they encounter any particular difficulties of which
16		you are personally aware?
17	A	They have encountered several difficulties which are
18		not uncommon in the field.
19	Q	Are you aware of the name of the drilling company that
20		is conducting that operation?
21	Α	Yes, sir.
22		MR. KELLAHIN: Mr. Examiner, I wonder if I might
23	obj€	ect at this time. What is the relevancy of the Midwest
24	well	with regards to this hearing?
25		MR. COOLEY: The relevancy will be revealed by the

209 SIMMS BLDG. P.O. BOX 1092 & PHONE 243-6691 & ALBUQUERQUE, NEW MEXICO 67103 1216 FIRST NATIONAL BANK BLDG. EAST & ALBUQUERQUE, NEW MEXICO 87103

1 answer to the last question, and I request permission that 2 the question be answered. 3 MR. UTZ: You may proceed. Overruled. Noble Drilling Company. 4 THE WITNESS: 5 (By Mr. Cooley) What is that answer? Q Noble Drilling Company. 6 Å 7 MR. KELLAHIN: I object again about the relevancy of Noble Drilling Company to this particular Application. 8 Ι believe Mr. Cooley has not established relevancy at this 9 point. 10 MR. COOLEY: Relevancy of Noble Drilling Company is 11 that Samedan is a spinoff or a sister company of Noble or 12 owned by the same people. 13 MR. HATCH: I don't think that has been established. 14 MR. KELLAHIN: I don't believe we have evidence on 15 the record to establish that point. 16 MR. COOLEY: That was testified to. It surely was, 17 by Mr. Hannifin. 18 MR. HATCH: I think we are through with this line 19 of questioning. 20 MR. COOLEY: I am through with the line of 21 questioning, but if the relevancy isn't understood by the 22 Commission, then it was a useless line. The point of 23 relevancy, if you have a sister company that is in the 24 drilling business, it is quite logical to assume that that is 25

209 SIMMS BLDG.0P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 1216 FIRST NATIONAL BANK BLDG. EASTOALBUQUERQUE, NEW MEXICO 87108

1	who	is going to drill your well.
2		MR. KELLAMIN: I will object to that, because we
3	had	the witness from Samedan here saying that there is no
4	indi	cation that Noble is going to drill this well. They put
5	it c	out for bids, so it is not relevant at this point.
6		MR. UTZ: I think that is a true statement, Mr.
7	Kell	lahin. I believe that is the way he testified.
8	Q	(By Mr. Cooley) Mr. Steinhorst, have you prepared a
9		cost estimate with respect to drilling of the well in
10		question?
11	A	I have.
12	Q	I hand you what has been marked as Grace Exhibit Number
13		3 and ask you if that is the estimate to which you
14	-	refer?
15	A	It is.
16	Q	Would you explain that and do so by way of first
17		explaining it and then do so by way of comparison as to
18		why the discrepancy between the cost that you portray
19		and those which have been portrayed by Hannifin Exhibit
20		5?
21	λ	I have not had an opportunity to make a direct
22		comparison with the A.F.E. as submitted by Mr. Hannifin.
23		I believe if I recall from my notes they had a dry hole
24		cost of \$216,807 as compared to our dry hole cost of
25		\$245,400 and they had a completed well cost of \$305,162

209 SIMMS BLDG.•P.O. BOX 1092•PHONE 243-6601•ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

1		compared to our \$366,030. There is an item in our A.F.E.
2		which perhaps is not pertinent and that is a \$2,800
3		item for title opinion and legal work which may not be
4		pertinent to this particular exhibit.
5	Q	No such item appears in the Hannifin Exhibit 5?
6	A	This is correct.
7	Q	In essence, there is some comparable of apples and
8		oranges there?
9	A	Right. I noticed that they have a drilling cost to
10		11,800 feet of \$8.90 a foot. We have not been able to
11		find any contractor that we consider competent to give
12		us a contract price to 11,800 on a footage basis.
13	Q	What price are you projecting in your evaluation?
14	A	We are projecting a price of \$10.20 a foot to 9,700 feet
15		at which point it is necessary to reach mud weight of
16		somewhere in the neighborhood of, oh, 10.4 to 10.5 and
17		at that point you go on day work.
18	Q	This differential in drilling cost represents a very
19		large percent of the differential between the two
20		A.F.E.'s; is that correct?
21	А	Yes, sir. In other words, they have a drilling cost of
22		\$105,000 and our drilling cost is somewhere in the
23		neighborhood of about \$150,000 and this is an experienced
24		drilling company's factor.
25	Q	That has been the experience that you have encountered
	L	

209 SIMMS BLDG. # P.O. BOX 1092 #PHONE 243-6691 #ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST #ALBUQUERQUE, NEW MEXICO 87108

1		in drilling all the wells Mr. Grace has drilled in that
2		area?
3	A	Yes.
4	Q	Hypothetically, assuming that any independent drilling
5		contractor would drill for Mr. Hannifin at \$8.90 a foot,
б		is there any reason to assume that he would not drill
7		for Mr. Grace for the same price?
8	A	No.
9	Q	So if there is a drilling contractor available in the
10		area that is competent and will drill for \$8.90 a foot,
11		you of course could hire him?
12	A	That's correct.
13	Q	Your drilling cost would then be reflected as the same
14		as Mr. Hannifin's?
15	А	That is correct.
16	Q	And the sole issue is whether there is or isn't someone
17		available to do that. If he is available, he is
18		available to both of you?
19	A	He should be.
20	Q	Are you familiar with the history of Mr. Grace's drilling
21		operations in the South Carlsbad Morrow Gas field and
22		surrounding areas?
23	λ	I am.
24	Q	Would you please review that for the Examiner?
25	A	Well, the first well that Mr. Grace drilled in Carlsbad

209 SIMMS BLDG. P.O. BOX 1092 \*PHONE 243-6691 \* ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST \*ALBUQUERQUE, NEW MEXICO 87108

1216 FIRST NATIONAL BANK BLDG. EAST + ALBUQUERQUE, NEW MEXICO 87108 NEW MEXICO 209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-6691 ALBUQUERQUE.

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

dearnley, meier & mc cormick reversion remined

field was the City of Carlsbad and although I wasn't actually present at the time, I understand for all intensive purposes, it looked like a dry hole to everybody but Mr. Grace, and by his perseverance in trying to learn what he could about the Morrow formation, he started out with a well that was making nothing but water really, to a well that is now producing eleven million cubic feet of gas a day. The next well he drilled was the Panagra, which was not a successful completion in the Morrow. The Morrow at this particular point failed and did not indicate commercial production. You say it was not a successful completion. Q Was it not successful for mechanical reasons, or for the reason that the formation had not developed in the area? That is what I said, that the Morrow did not indicate А commercial production at this point in the field. It has been completed up the hole in the Cisco, actually, but the Morrow was tested and it did test noncommercial. Would you proceed then? Q The next well drilled was the Humble Grace Number 1 and A this well was initialed for a calculated open flow of 33,239,000 cubic feet a day. The well has experienced mechanical difficulties and is presently shut-in. The next well drilled was the Grandonoco and this

well was,	at an absolute	flow of 7,	,794,000.	That is	a
matter of	record in the	Commission.	. That wel	l is	
producing	very well.				

The next well drilled was the Go Po Go Number 1, and this one experienced very severe mechanical problems which were from the service company breakdown and the well is presntly being tested.

Q The mechanical difficulties have been corrected?
A Yes. What actually happened was that the cement flash set way ahead of the time the plug was supposed to hit, and for all intensive purposes, you may say the hole was junked, but it has now been brought back into proper mechanical condition and it is presently being tested.

The next well drilled was the Carlsbad Grace Number 1, which was the first dual well that Mr. Grace completed and the tests on it so far indicate a 14,000,000 absolute open flow capacity on the Strawn and a 2,000,000 absolute open flow capacity on the Morrow.

This well is not on production because a gas contract to sell the gas has not been negotiated.

The Go Po Go Number 2 was the next well and the last was drilled by Mr. Grace and this well indicates an absolute open flow -- I say indicates because this hasn't been completely made official yet -- of about

dearnley, meier & mc cormick and a service

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1		100,000,000 cubic feet a day.
2	0	All in all, how many wells have been drilled by Mr.
3		Grace in the South Carlsbad area?
4	A	Seven.
5	Q	Have any of those wells been dry holes?
6	A	Not so far.
7	Ũ	None of the seven were dry holes?
8	A	None of the seven were dry holes.
9		MR. UTZ: Did you mention the Humble Grace?
10		THE WITNESS: I mentioned the Humble Grace.
11	Ω	(By Mr. Cooley) What is the status of it?
12	А	It is shut-in.
13		MR. UT2: You haven't started to dual yet?
14		THE WITNESS: No. We haven't started work on it
15	yet.	That is being set up and we are trying to get everything
16	line	d up before we jump in with both feet.
17	Q	(By Mr. Cooley) Over what period of time were the wells
18		that you have just discussed drilled?
19	A	Oh, over a period of about two years.
20	Q	At what point in time did you become personally involved?
21	A	I became personally involved in the early part of this
22		year.
23	Q	Have you reviewed the records and the completion
24		methods and drilling methods that were utilized prior
25		to your coming here?

1	A	Yes.
2	Q	Are you personally now familiar with all the methods of
3		Head and head and to work for Mr. Grace?
4	A	I am not familiar with some of the very early practices
5		that were used on these early wells, but on the last
б		five wells, I have been particularly interested in the
7		completion methods and the drilling methods and the
8		improvements that have been made from one well to the
9		next.
10	Q	Do you feel that the experience that Mr. Grace has had
11		in this area has brought about continued improvement
12		in drilling and completion techniques?
13	A	Yes, I do.
14	Q	Would you describe those as they progressed?
15	A	Well, for one thing, let's take the last two wells
16		drilled. The Carlsbad Grace and the Go Po Go Number 2.
17		I believe that any geologist that analyzes these
18		two wells will say that they were very comparable as
19		far as the main zone of porosity and permeability of
20		these two zones.
21		The Morrow formation in the Carlsbad Grace shows
22		an open flow capacity of about 22,000,000. The Go Po Go
23		Number 2 has really no better porous zone and it is
24		about actually it is not quite as great an interval
	1	

as the porous zone in the Carlsbad Grace and the change

209 SIMMS BLDG. # P.O. BOX 1092 # PHONE 243-6691 # A LBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST # ALBUQUERQUE, NEW MEXICO 87108

1		in the mud program and the approach to completion almost
2		increased the ability of the well to produce by five
3		fold.
4		I think that is very significant.
5	Q	Is it your professional opinion that there are many
6		peculiar aspects of drilling and completing wells in
7		the South Carlsbad area?
8	A	Very definitely.
9	Q	That experience is the best teacher as to how to best
10		drill and complete wells in the area?
11	A	It is a very, very big factor.
12	Q	Do you know of any improvement that could be brought
13		about, even over present drilling and completion programs
14		that have been utilized?
15	A	Well, let's say the last one was pretty good. I am sure
16		that the next one drilled there will be some improvement.
17		I can't tell you at this moment what it would be because
18		we would sit down and look at what we have done and what
19		it accomplished and we would discuss what we might do
20		to improve the places that we don't feel like we are
21		doing the very best job that perhaps can be done.
22	Q	You have spoken in terms of the improved productivity
23		as a result of drilling completion methods. What effect
24		if any have these innovations had upon costs of the
25		well?

209 SIMMS BLDG. @ P.O. BOX 1092 @ PHONE 243-6691 @ ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST @ ALBUQUERQUE, NEW MEXICO 87108

1

Λ

2 I can't give you, off the top of my head, the along. 3 improvement in cost, but the Carlsbad Grace was a very reasonably priced well for a dual, and for a good dual. 4 5 The Go Po Go 2, while we don't have the totals yet on the acutal completion -- drilling completion costs, б 7 bills indicate that it has been a considerably our more reasonably priced well than any of the others. 8 Even though it is the best of all the wells? 9 0 Α Even though it is the best of all of them. It is a more 10 reasonably priced well than any of the rest of them. 11 MR. UTZ: You don't know what that figure is yet? 12 THE WITNESS: I don't think all the bills are in. 13 Those bills that we have, like our mud bills and our 14 perforating bills and our completion costs, which we know, 15 because we keep up with them as we go along --16 Now, we did encounter difficulty on this particular 17 well which did increase the cost of it over and above what 18 it should have been and we had about five days of fishing 19 out some railroad car spikes and chains and bolts and a few 20 things that somebody had dropped in the hole, and this did 21 increase the cost over what it should be. 22 (By Mr. Cooley) Well, comparing items such as mud, 0 23 what improvement, if any, did you notice in the drilling 24 methods used on the Go Po Go 2 as compared to previous 25

They have improved the cost of the well as you went

209 SIMMS BLDG.0 P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST0ALBUQUERQUE, NEW MEXICO 87108

1		wells?
2	A	Quite a considerable improvement. I have shown on my
3		A.F.E. here a mud cost of \$8,000. Our mud cost on the
4		Go Po Go 2 were slightly over \$7,000.
5	Q	And the previous wells drilled in the area?
6	A	They went up as high as \$27,000.
7	Q	So improvement in drilling operations resulted in a very
8		substantial mud savings?
9	A	The Grandonoco cost about twenty-seven. The Carlsbad
10		Grace was eighty-three.
11	Q	Have you reviewed the Hannifin?
12	A	I have looked at it. I have not made a direct comparison
13		However, I notice a couple of things. It is a little
14		difficult without a straight edge here. They have got
15		drilling mud \$20,000. They have got their logs at
16		\$10,000, which is a little bit cheap, particularly since
17		they have no allowance down here for their completion
18		logs.
19		Your completion logs will run you about \$3,000 and
20		your uphold log will run pretty close to twelve. I say
21		uphold log, your drilling log.
22		They have figured gross stem tests. We figured
23		rate, time and drill stem tests, plus costs of drill
24		stem tests as a separate item.

I notice no allowance in here for daylight or

209 SIMMS BLDG.@P.O. BOX 1092@PHONE 243-6691@ALBUQUERQUE, NEW MEXICO 87103 1216 First National Bank BLDG. East@Albuquerque, new Mexico 87108

anything like that. 1 What have you estimated that cost to be? 2 Q \$4,650. It takes about three days to log and run Α 3 casing. 4 Then in summary, the difference in the footage rate, Q 5 foundation of drilling the well, and the items that you б have pointed out, account for the difference in your 7 estimates and they are both estimates, are they not? 8 They are both estimates. Ours is based pretty Α Yes. 9 close on what we know the actual costs are going to run. 10 If you encounter multipays in the drilling of this well, Q 11 does this increase the cost of testing these pays? 12 Certainly does. А 13 Has it been your experience that you should expect to Q 14 encounter multiple pays in this well? 15 You have got a good possibility. We didn't allow for Α 16 it in the drilling A.F.E. as presented, because of the 17 fact that the Go Po Go 2 did not have good shows above 18 the Morrow and we wouldn't contemplate extensive testing 19 of those zones. 20 However, the Go Po Go 1 did have, so you are in 21 between. You could very well increase your cost by 22 having to test those zones. 23 You have an item of \$10,000 for contingencies. Would 0 24 this be one of the contingencies? 25

1	А	Yes.
2	Q	Mr. Steinhorst, I hand you what has been marked as Grace
3		Exhibit Number 7, which is a I would like for you to
4		briefly explain that for the record.
5	A	Grace Exhibit Number 7 is a letter from Cities Service
6		Oil Company to the Conservation Department of New
7		Mexico setting out an itemized schedule of estimated
8		costs from the drilling of the well at 11,900 feet in
9		Eddy County in Section 19, 22 South, 27 East.
10	Q	What does that estimate set forth as being the total
11		cost for producing well?
12	A	\$338,442.
13	Q	What is the dat of it?
14	A	It was received by the Conservation Department on
15		February 4, 1972. I don't particularly see a date.
16	Ω	Mr. Steinhorst, are you aware of any increases in any
17		items of either tangible or intangible that would cause
18		an increase in the total cost of the well since February
19		of '72?
20	А	Yes, for example, they have nine and five-eighths inch
21		casing and if I am reading these figures correctly, it
22		is about \$30,000. There is around 5,300 feet which is
23		normal for the area and the last nine and five-eighths
24		that we purchased cost \$28,000.
25	Q	For 5,400 feet?

1 For 5,400 feet, and this happened to be a very good А They also are showing five and a half inch, it 2 price. 3 looks like about \$3.50 a foot and all tubular goods have gone up in the last seven or eight months. 4 5 In fact, there have been two increases since that time? 0 б А That's correct. MR. UTZ: Percentagewise, how much? 7 I believe the first one was four THE WITNESS: 8 percent and I can't remember what the last one was. It runs 9 in my mind that there have been a total of about seven percent 10 increase in the price of tubulars. 11 That's close enough. MR. UTZ: 12 (By Mr. Cooley) Mr. Steinhorst, I hand you what has Q 13 been marked Grace Exhibits 8, 9, 10, 11, 12, and 13, and 14 ask you to please identify those. 15 А Exhibit Number 8 is a letter from the State of New Mexico 16 Oil Conservation Commission with reference to compulsory 17 pooling order in South Carlsbad Morrow Gas Pool, Eddy 18 County, New Mexico, "To whom it may concern, we the 19 undersigned, as owner or owners of the oil and gas and 20 other mineral rights in and under the south half of 21 Section 24, Township 22 South, Range 26 East, do hereby 22 request that Michael P. Grace, II, and Corinne Grace 23 be made operators of the proposed well which is to be 24 drilled in orthodox location of Mr. Grace's choice. 25

dearnley, meier & mc cormick again and a set the set of the set of

209 SIMMS BLDG.0 P.O. BOX 10920PHONE 243-06910ALBUQUERQUE, NEW MEXICO 87103 1216 First national Bank Bldg. Eastoalbuquerque, new mexico 87108

1		We feel that Mr. Michael P. Grace, II, and Corinne Grace
2		have proved their ability in this area. They are best
3		qualified to be operators."
4	Q	Mr. Steinhorst, Exhibits 8 through 18, inclusive, when
5		taken together with Grace Exhibits 4 and 5, represent
6		identical requests on behalf of mineral owners under
7		the southwest quarter of Section 24 in support of Mr.
8		Grace's Application, do they not?
9	A	Yes.
10	Q	Mr. Steinhorst, do you have any recommendation with
11		respect to risk factor in light of your experience with
12		respect to this Commission?
13	A	As previously stated by Mr. Baldwin, I think it is a
14		pretty good certainty that some kind of a well is going
15		to be made at the location suggested.
16		I would say our risk factor of twenty-five percent
17		or 125 percent of cost would be reasonable.
18	Q	Do you have any recommendation with respect to operating
19		charge?
20	A	I think the common and accepted operator charge in the
21		field is \$135 per month per well.
22	Q	Would you recommend that?
23	А	I would recommend that.
24	Q	Is it your opinion that the selection of Michael P. and
25		Corinne Grace as operators of this well will result in

209 SIMMS BLDG. P.O. BOX 1092.8PHONE 243-6691.4LBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST.4ALBUQUERQUE, NEW MEXICO 87108

1	the prevention of waste and protection of correlative
2	rights in the area?
3	A It is.
4	MR. COOLEY: No further questions of this witness.
5	MR. UTZ: I believe you stated in regard to
6	Exhibit Number 5 of Hannifin's that it did not include logs.
7	I know that item 4 does include logs.
8	THE WITNESS: We said we did not include enough
9	money for completion logs.
10	MR. UTZ: I see. That was your \$3,000?
11	THE WITNESS: That was our \$3,000, yes, sir.
12	MR. UTZ: Questions of the witness?
13	CROSS-EXAMINATION
14	BY MR. KELLAHIN
15	Q Mr. Steinhorst, you ran through for us, a history of
16	Mr. Grace's seven wells in this area?
17	A That's correct.
18	Q Mr. Grace was directly responsible for the supervision
19	and operation of all those wells, I take it?
20	A That is absolutely correct.
21	Q In referring you to some of these wells, I would like
22	to go over them again with you, if I might.
23	You indicated that there was some mechanical
24	difficulties on this Humble Grace Number 1?
	A That's right.

209 SIMMS BLDG. P.O. BOX 1092. PHONE 243-6691 A LBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST A LBUQUERQUE, NEW MEXICO 87108

1	0	Do you recall what the mechanical difficulties were?
2	А	τdo.
3	Q	Would you please tell me?
4	А	The first mechanical difficulty was involved with a
5		liner hanger which was improperly, or had the improper
6		identification. In other words, it was improperly made
7		by the manufacturer. This caused mechanical problems.
8		Another liner hanger was gotten and it also was
。 9		not proper. It didn't have proper identity, so it was
		machined out and the liner was eventually set. Even so,
10		these faulty liner hangers have caused mechanical
11		difficulties with the well.
12		Right now, there is a four and a half packer loose
13		in that. This has been testified to before the
14		Commission.
15	Q	I understand those kind of difficulties. What
16	32	responsibility does Mr. Grace have as an operator and
17		a supervisor of a well for those kind of problems?
18		- •
19	A	If you are going to do anything on a well, every time
20		you run something below the floor on a rig, you are
21		subject to mechanical difficulty.
22	Q	You are telling me that this could happen to any
23		operator?
23	A	This could happen to any operator. It could happen to
		the very best and it could happen to the very worst.
25	l I	

dearnley, meier & mc cormick again the service of t

1	Q	It is not necessarily reflective of Mr. Grace's
	2	
2		competency as an operator?
3	A	That is correct.
4	Q	You have indicated to us that you have felt Mr. Grace
5		was a competent operator in this area?
6	A	That's correct.
7	Ω	What other factors do you use to arrive at that
8		opinion? What are the factors?
9	A	You arrive at that opinion by the results of the
10		operations that the man is conducting. And it is the
11		same way with you as an attorney. How do you determine
12		whether you are a good attorney, by the results that you
13		get.
14	Q	Are you talking about the mechanical result on a
15		particular well?
16	А	Or a particular case, or however it goes.
17	Q	Would you also consider it important that the operator
18		be in compliance with all Commission rules and
19		regulations and orders and things like that?
20	А	This goes without saying.
21	Q	That would be a factor?
22	А	This would be a factor.
23	Q	Would you consider management practices as a factor in
24		determining a successful operator or competent operator?
25	A	That is also a part of your analysis.

209 SIMMS BLDG.• P.O. BOX 1092.• PHONE 243-6681.• ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST.• ALBUQUERQUE, NEW MEXICO 87108

1 0 With regards to management practices, would you consider it a factor whether or not the operator was prompt in 2 3 payment of his obligations incurred in drilling? You would use that to evaluate him, I assume? 4 I have got to disevaluate everybody that I work for. 5 Α That answers my question. With regard to these 0 6 management practices, wouldn't you also consider a 7 competent operator to be one that promptly distributed 8 the earnings from the particular well to all other 9 interest owners? 10 I am talking about royalties and that sort of thing. 11 That would also be a factor, wouldn't it? 12 Contraine and and This is dependent upon the provision orders and the title А 13 opinions and the works of the attorneys. 14 And the State law? 0 15 Well, true, but I mean basically you have got to have А 16 title opinion before you do anything. If you can't 17 get your attorney to move --18 I am talking about State royalties and that sort of Q 19 thing. Do you have any knowledge of any incident 20 involving the Graces as operators which you would 21 personally consider as substandard? 22 No, sir, not really. А 23 Were you involved at all with the Graces' City of Q 24 Carlsbad well that you alluded to earlier? 25

PAGE

92

dearnley, meier & mc cormick as we are reacted and

209 SIMMS BLDG.•P.O. BOX 1092•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 8 1216 FIRST NATIONAL BANK BLDG. EAST •ALBUQUERQUE, NEW MEXICO 87108

1	A	Not the drilling and completion of it. I have since been
2		in the production of it.
3	Q	Have you had any difficulties with regard to production?
4	A	We had some for a while.
5	Q	What were they?
6	A	Water.
7	Q	What about water?
8	λ	We had it.
9	Q	What kind of water are we talking about?
10	λ	We are talking about thirty or forty barrels an hour.
11	Q	Salt water?
12	Α	Salt water.
13	Q	What were you supposed to do with the salt water?
14	A	It is being flushed in an underground formation.
15	Q	You encountered difficulty, didn't you?
16	A	Right.
17	Q	What did you do with the salt water?
18	A	It was hauled off for a while and it went to several
19		different places. It was being used in other wells in
20		the area.
21	Q	Was any of it ever disposed on the surface?
22	Α	Not that I am aware of.
23	Q	You are sure of that?
24	Α	I never saw any of it.
25	Q	You told me about the Humble Grace Number 1. Let's go

209 SIMMS BLDG.0P.O. BOX 10920PHONE 243-06910ALBUQUERQUE. NEW MEXICO 87103 1216 First National Bank Bldg. East0albuquerque, new Mexico 87108

on to the Go Po Go Number 1. You indicated that there 1 was some mechanical problems with that particular well. 2 3 Would you please tell me again? Well, as I said before, what happened is they were 4 A 5 cementing the oil string --0 Who was cementing? 6 Dow Chemical Company, I guess they call it. А They were 7 cementing the oil string. 8 Would you expect the operator to be aware of difficulties Q 9 in this area and be able to --10 A No. 11 Again the same problem, it could happen to any operator? Q 12 You don't usually expect a service company of the А 13 quality of Dow Chemical Company to have a failure of the 14 type that occurred. This is not a common failure. 15 I understand this is not then the kind of mechanical 0 16 failure that you would directly attribute to Mr. Grace's 17 ability as an operator? 18 A Wait a minute. I don't quite know as I gather what you 19 are driving at with your questions. 20 What I am asking you is, is this the kind of mechanical Q 21 problem you would expect a competent operator to 22 prevent? 23 Α No. 24 Q I believe you told me that these seven wells that the 25

1		Graces had drilled, none of them were dry holes in the
2		Morrow; is that correct?
3	A	No.
4	Q	Please correct me.
5	A	None of them were dry holes, but one well is not
6		commercial any more.
7	Q	Is it commercial anywhere else?
8	A	Yes. It is commercial in the Cisco.
9	Q	You have alluded to the cost factors to this proposed
10		well and you told us that Mr. Grace is improving with
11		each effort. I would like to go back with you and have
12		you relate to me the best you can, the completion costs
13		for these seven wells.
14		Can you provide me with that?
15	Α	I can't give you that off the top of my head.
16	Q	Would it be possible for you to provide that information
17		to the Commission? I think it would be relevant to
18		their decision.
19		MR. COOLEY: It seems to me like what is good for
20	the	goose is good for the gander.
21		MR. HATCH: I believe on the other case, there was
22	asl	light difference. It was your witness that you were asking
23	tos	send something in and this man has requested something
24	from	n your witness. I don't know how the Examiner will rule.
25		MR. COOLEY: I withdraw my request to submit any

209 SIMMS BLDG. P.O. BDX 1092 OPHONE 243-6601 ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST OALBUQUERQUE, NEW MEXICO 87108

exhibit of ours, other than stamping on an affidavit of Samedan's. MR. HATCH: The witness was your witness.

MR. COOLEY: Oh, yes, Mr. Martin was my witness. Of course, I got that shoved down my throat. He was obviously adverse, but the Commission can't observe that.

MR. KELLAHIN: I believe Mr. Cooley opened the door on this particular subject by asking the witness Mr. Grace's competency and he alluded to the fact that he was improving his cost with each well and he was getting better all the time.

He asked him the cost of the Go Po Go Number 1 and he said all the bills weren't in. I think it is relevant that we be able to compare costs because that is going to be one of the major factors in deciding who is the operator.

We have one set of A.F.E.'s that proposes a well to be completed at substantially reduced costs than Mr. Grace is capable to furnish and I think it would be important that the Commission have his cost on these other wells.

I would again request that the Graces be required to furnish us the cost on the seven wells.

MR. COOLEY: We have explained through the direct testimony of Mr. Steinhorst that there is basically no difference in the estimated cost of this well and Hannifin's estimate of the cost of this well.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

1

2

3

4

5

6 7 8 9 10 11 12 MEXICO 8710: 209 SIMMS BLDG.@P.O. BOX 1092@PHONE 243-6691@ALBUQUERQUE, NEW MEXICO 8 1216 First national bank bldg. East-albuquerque, new Mexico 87108 13 14 15 16 17 18 19 20 21 22 23 24

25

If you start at the same point, assuming that you could use the same drilling contractor at the same price, they are the same. We disagree that you can hire one for \$8.90. If you can, we are positive that we can hire them for the same price.

We have set down what we think is a realistic going price that is being paid in the area of \$10.20 a foot. If it can be done for \$8.90, more power to them.

Mr. Steinhorst has testified, and I am sure that this Commission can take judicial notice, that a third party drilling contractor under all ordinary circumstances is going to quote the same price to one operator, or to Grace, as opposed to Hannifin.

MR. HATCH: I think perhaps there is no problem here. If I understand the question was put to Mr. Steinhorsthe had testified that the price was getting better all along and that the question was put to him "Can you give me the cost of each of these," and Mr. Steinhorst said he could not; is that correct?

MR. COOLEY: He can't give the exact cost on wells that he hasn't been involved in. Perhaps if he would give those estimated costs, that might satisfy Mr. Kellahin.

MR.HATCH: First, let me ask Mr. Steinhorst if he can supply these costs at a later date.

THE WITNESS: Well, I don't see any reason why they

1	can't be. I would like to say that the cost of completion
2	as shown on our A.F.E.'s are essentially those of the
3	Go Po Go 2 and this is realistic and what I am saying is that
4	I don't care what kind of a quotation they give me from a
5	drilling contractor, I am still saying as a professional
6	engineer and a knowledgeable individual that you can't do
7	it for that.
8	MR. UTZ: Does that satisfy you, Mr. Kellahin?
9	MR. KELLAHIN: No, sir.
10	MR. UTZ: Do you still want figures for each year?
11	MR. KELLAHIN: Yes, sir. I think it is relevant.
12	MR. COOLEY: The witness has already testified he
13	sees no reason why they can't be furnished.
14	THE WITNESS: I just can't give them off the top
15	of my head.
16	MR. COOLEY: It just gets back to what is good for
17	the goose is good for the gander. I still suggest Hannifin
18	produce the well costs of the one well that Samedan drilled
19	in the area. Our historical costs are a matter of record.
20	We have to furnish them and I think they should do the same.
21	MR. KELLAHIN: I believe there is one slight
22	difference. Mr. Steinhorst did testify that he had reduced
23	costs by well without any supporting evidence, so to speak.
24	You requested the well cost from Samedan from a

person which he really didn't know whether he had the

dearnley, meier & mc cormick at action and set to SIMMS BLDG.@P.O. BOX 1092@PHONE 243-6691@ALBUQUERQUE, NEW MEXICO ( 1216 FIRST NATIONAL BANK BLDG. EAST@ALBUQUERQUE, NEW MEXICO 87108

23

24

25

209 SIMMS

authority to give those or not. 1 Wait a minute. I want a clarification. MR. UTZ: 2 Mr. Martin didn't testify as to well costs at all. 3 MR. COOLEY: He testified that he thought the 4 estimate as presented by Mr. Hannifin was reasonable. 5 MR. UTZ: He can do that. 6 And the same yardstick applies. MR. COOLEY: You 7 can shoot at the moon, but if you only get a half a star in 8 actuality, there is quite a bit of difference and I am asking 9 and am perfectly willing to submit our historical costs from 10 day 1, and we have testified on Direct that they used to be 11 higher and that we have labored to reduce those costs. 12 I think that if we are going to compare historical 13 operations, and there can't be any questions in the 14 Examiner's mind who the real operator is, if Hannifin is 15 successful in this Application, let's look at everybody's 16 track record. 17 MR. UTZ: I don't see any reason why we can't 18 request Samedan --19 I don't think this is the proper place MR. HATCH: 20 to bring that back up. I think the question here is that 21 Mr. Kellahin asked that in light of Mr. Steinhorst's testimony 22

back that up with some figures to which Mr. Steinhorst said

that the price has gone down with each well, he asked him to

that he could not give them at this point, if I understand

1	it.
2	THE WITNESS: That's right.
3	MR. HATCH: If I understand his answer, he does not
4	know the cost of those wells. Therefore, really there is
5	nothing to back up his statement. It is not my if the
6	Graces want to support his statement with the figures, I have
7	no objection to it.
8	If Mr. Kellahin has asked for it to be submitted,
9	but I don't see that it is your position, whether you care
10	if it is ordered in or not.
11	MR. UTZ: Can you supply that information, Mr.
12	Steinhorst? Would you do so?
13	THE WITNESS: Yes.
14	MR. KELLAHIN: Mr. Examiner, perhaps we could leave
15	it up to Mr. Grace whether he wants to provide those costs
16	or not, and let the Examiner decide if he does have them or
17	if he doesn't have them.
18	MR. UTZ: That's correct. The Examiner will decide.
19	MR. KELLAHIN: Mr. Steinhorst, I have a few more
20	questions for you.
21	Q (By Mr. Kellahin) With regard perhaps to my own
22	education on these tests on your Carlsbad Grace Number 1,
23	you indicated absolute open flow pressures of 14,000,000
24	or something in that neighborhood.
25	I would like you to clear this up for me. How do

209 SIMMS BLDG.• P.O. BOX 1092.0 PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 you use these absolute open flow pressures to determine 2 the well potential? 3 In other words, do you see what I am looking for? 4 This is the accepted method by the Oil Conservation Α 5 Commission, State of New Mexico, in evaluating the б ability of a well. 7 These are reasoned opinions on your part, based on tests 0 and that sort of theing to determine the potential of 8 a particular well based on a certain test; is that 9 correct? 10 А There is a procedure set out in a manual issued by the 11 Oil Conservation Commission of New Mexico which very 12 specifically sets out how these tests are made and how 13 the calculations of these open flows are arrived at. 14 Then there is no way, if you follow Commission rules, Q 15 there is no way to vary --16 No. A 17 We are consistent? Q 18 А It is all consistent. It is all under the same basis. 19 Is it possible for two different engineers to arrive at Q 20 different calculated open flow potentials? 21 Not with the same set of data. А 22 Depending on the use of the Commission rules, if a 0 23 competent engineer does the work, he should come up with 24 the same result?

PAGE

101

209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-6691 ALBUQUERQUE, NEW MEXICO 8710 1216 FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

1	A	That's right.
2		MR. UTZ: The same engineer can test and get a
3	diff	erent test at a different time.
4		THE WITNESS: Tests vary, but with the same data,
5	a co	mpetent engineer will come up with the same data.
6		MR. UTZ: That's true, unless he makes a mistake.
7		MR. KELLAHIN: Thank you, Mr. Steinhorst. I have
8	no f	urther questions.
9		MR. UTZ: Other questions of Mr. Steinhorst?
10		REDIRECT EXAMINATION
11	<u>BY M</u>	IR. COOLEY
12	Q	Mr. Steinhorst, the difficulties that were encountered
13		in the wells that you discussed under Cross-Examination
14		were caused by service companies, were they not?
15	A	Correct.
16	Q	Does any oil operator have any control over service
17		companies when it comes on his location?
18	A	Not in the sense of what you are trying to imply, if I
19		understand your question.
20	Ω	Do you have any control over the cement or the way it
21		is made up and the way it is put together or anything
22		else?
23	A	You order so many sacks of a certain class cement mixed
24		a certain way and it comes out in a bin and unless you
25		take a sample of it and go take it to a laboratory and

209 SIMMS BLDG. P.O. BOX 1092. PHONE 243-6691. ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST. ALBUQUERQUE, NEW MEXICO 87108

1		have it analyzed, you have to assume that the man gave
2		you what you ordered.
3	Q	Do you know any prudent operator that runs such samples
4		of cement or anything like that?
5	A	They accept the fact that the order has been filled
б		properly.
7	Ω	With respect to the packer that was defective, this
8		again was a service company, was it not?
9	A	It was a manufacturing problem, yes.
10		MR. COOLEY: No further questions of this witness.
11		CROSS-EXAMINATION
12	BY M	IR. UTZ
13	Q	I think the question came up as to a problem with the
14		cementing job on the Go Po Go Number 1; is that correct?
15	A	Yes.
16	Q	What was the problem?
17	A	The problem was apparently it flashed set.
18	Q	It set too quick?
19	A	It set with a plug way up the hole.
20	Q	With continuous pumping?
21	A	It set while they were pumping. In other words, faulty
22		cement.
23		MR. UTZ: The witness may be excused.
24		Do you have another witness, Mr. Cooley?
		MR. COOLEY: No, I do not. I would like to offer

209 SIMMS BLDG.• P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 into evidence at this time Applicant's Exhibits 1 through 5, 7 through 13, with the understanding that the missing 6 2 3 is the exhibit that we requested be furnished at this 4 Commission by Samedan. MR. HATCH: Which was rulled against, if I 5 understand it. 6 MR. COOLEY: It is a standard procedure to establish 7 a record with respect to a refused exhibit. 8 MR. UTZ: Exhibits mentioned, with the exception 9 of Exhibit 6, will be accepted into the record of this case. 10 MR. COOLEY: Mr. Examiner, my co-counsel, Mr. 11 Watkins would like to address you at some point. 12 MR. WATKINS: If the Commission please, on behalf 13 of Mr. Grace --14 MR. KELLAHIN: Excuse me. I am sorry for 15 interrupting. Are you making a summary? 16 MR. WATKINS: I am going to clarify one point before 17 we close. 18 MR. KELLAHIN: I'm sorry. 19 MR. WATKINS: The Examiner did make a statement 20 that the failure of Mr. Grace to produce his cost on each 21 of these wells would be taken into consideration and, as I 22 understand it, Mr. Martin was going to seek advice from his 23 counsel and his company on whether or not Samedan would also 24 submit their cost on the well that was drilled in that area 25

209 SIMMS BLDG.& P.O. BOX 1092&PHONE 243-6691.0ALBUQUERQUE, NEW MEXICO 87103 1216 First national bank bldg. Eastoalbuquerque, new mexico 87108

ь - ч.ч - 2--- - - -1 dearnley, meier & mc cormick action and water of 2 3 5 6 7 8 9 10 11 12

4

13

14

15

16

17

18

19

20

21

22

23

24

25

209 SIMMS BLDG. P.O. BOX 1092 \$PHONE 243-6691 \$ALBUQUERQUE, NEW MEXICO 87103 1216 First national bank bldg. East \$ALBUQUERQUE, NEW MEXICO 87108

and I would like to know what is the Commission's intention on taking that into consideration if they fail to supply this information?

Since Mr. Martin testified to the fact MR. UTZ: that he thought the Moran estimate A.F.E. was proper, I think I would have to consider his failure to supply the information requested the same as I would yours.

MR. WATKINS: May we have a short recess so I may confer with Mr. Grace before we close the hearing, or close our evidence and presentation to the Commission.

> MR. UTZ: How long do you need?

MR. HATCH: I would like to ask something here. The request of Mr. Martin to furnish information I don't believe was in support of any question that was asked Mr. Martin.

Would you explain why they should be treated the same, Mr. Watkins?

MR. WATKINS: As I understand it from the testimony, Samedan is going to be the operator if Mr. Hannifin is awarded the operation and I believe the question asked by Mr. Cooley was what the cost of this well that Samedan had been the operator on was in that same area.

He said he did not know. Mr. Cooley asked him if he could get those figures and he said he would have to find out from his counsel. That is the same thing. There have not been an absolute refusal and neither has there been a

refusal on the part of Mr. Grace to supply these documents and I would ask that if the actual operator for Mr. Hannifin refuses to supply to the Commission this information on their past performance, would that not be taken into consideration and given the same weight as the failure of Mr. Grace to supply these same type of figures.

MR. HATCH: Of course, the final decicion here will be by the Examiner, but I think at the time the question was asked to Mr. Martin, he was asked if he knew what the cost was and he indicated that he did not know and then it was asked whether he could furnish those figures and he said he did not know and he was your witness.

At the present time, we have a witness who is your witness who testified to certain ranges of figures and on Cross-Examination it appeared that he did not know to what he had testified on which he was asked to furnish some figures that would support his testimony.

Now, if my impression is right, Mr. Steinhorst does not know the cost of those now. If you want to furnish information to support that, I have no objection to it. Mr. Kellahin doesn't because he asked for them, so it is your refusal if you do not want to.

I don't think the Examiner -- he shouldn't step in and tell you what to put up to support your witness.

MR. WATKINS: We asked on both sides and in fact I

dearnley, meier & mc cormick 👘 🖅 🖓 🖓 🖓

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

MEXICO 8710

×⊒z

209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-6691 ALBUQUERQUE.

1

2

3

4

think the Examiner can see that Mr. Martin certainly is not testifying on our behalf, even though technically under the law he may be classified as our witness because we did call him.

However, I believe Mr. Steinhorst was that he did not want to, off the top of his head, give these figures. I think it is in the record that he said that several times. I am not saying at this time we will refuse to supply to the Commission or to the hearing Examiner those figures.

All I am trying to determine is will that carry the same weight as Mr. Martin who will be the actual operator, his refusal to submit the same type of figures.

MR. HATCH: My recommendation to the Examiner is no.

MR. WATKINS: Again we would request a short recess.

MR. UTZ: You understand my position in regard to your well cost figures. I would consider it supporting evidence of Mr. Steinhorst testimony.

MR. WATKINS: If Mr. Martin decides to supply these figures, would you also consider that in the same way?

MR. UTZ: Frankly, I don't see why all the secrecy about supplying the well cost figures. I think that is really the case here, whether it is Mr. Martin, Samedan, or the Graces.

1 (Whereupon, a brief recess was held.) 2 MR. UTZ: The hearing will come to order, please. 3 MR. WATKINS: I have conferred with Mr. Grace and we will supply what Mr. Kellahin requested and a representative 4 history to support Mr. Steinhorst's position on this. 5 MR. UTZ: All right. 6 MR. WATKINS: And Mr. Steinhorst's own estimate, 7 that I believe was asked for also. 8 MR. KELLAHIN: So there is no confusion about this, 9 Mr. Watkins, I asked for the total well completion costs. 10 MR. WATKINS: That is exactly right. 11 MR. KELLAHIN: Thank you. 12 MR. UTZ: The statements are in order. 13 MR. KELLAHIN: Sir, I would like to provide some 14 rebuttal testimony if I might. 15 I would like to recall Mr. Hannifin. 16 (Whereupon, Mr. Hannifin having previously sworn 17 came to the stand.) 18 19 D. L. HANNIFIN, 20 having already been previously sworn, testified as follows: 21 DIRECT EXAMINATION 22 BY MR. KELLAHIN 23 Mr. Hannifin, you remember that you are under oath and 0 24 I would like to ask you what, if any, personal 25

209 SIMMS BLDG.P.D. BOX 1092 PHONE 243-6691 ALBUQUERQUE, NEW MEXICO 8710: 1216 FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

1		involvement you have had with the Graces as operators
2		of any well?
3	А	Only as an overriding royalty owner under the Grandonoco
4		well. My overriding royalty is under the northwest
5		quarter of Section 23 South, 26 East, which well went
6		on the line February 4, according to the Commission.
7	Q	Mr. Hannifin, directing your attention back to the
8		Crandonoco, I show you what has been marked Hannifin
9		Exhibit 9 and 10.
10		What if any difficulty did you have with Mr. Grace
11		with regards to the payment of the royalties in this
12		particular well?
13	A	As far as my own overriding royalty?
14	Q	Yes, sir.
15	A	I have had no difficulty. I have received no division
16		order for any royalty.
17	Q	Mr. Hannifin, let me ask you that again.
18	λ	I have received neither a division order nor a royalty
19		from the time I left Roswell yesterday morning.
20	Q	When was this well put on the line?
21	Α	The 4th day of February, 1972.
22	Q	It is your understanding that there is no division
23		order?
24	А	I have received no division order.
25	Q	You have not received any royalty payments?

209 SIMMS BLDG. P.O. BOX 1092.0PHONE 243-66910 ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST 0ALBUQUERQUE, NEW MEXICO 87108

I have received no royalty. 1 A Mr. Hannifin, I show you what I propose to mark as 0 2 Hannifin Exhibits 11 through 21, and I ask you to 3 identify where you got these and what they are. 4 I acquired these at the County Clerk's office, Eddy А 5 County, New Mexico, Carlsbad. The clerk certified to 6 They are liens and judgments against Michael each one. 7 P. and/or Corinne Grace. I think one of them might be 8 on Grace Petroleum Company. 9 I object to the introduction of any MR. COOLEY: 10 such evidence as being immaterial in this case. 11 MR. KELLAHIN: In answer to that, Mr. Cooley, I 12 believe that the last witness for Mr. Grace testified that 13 in his evaluation and opinion of what a competent operator 14 was, he said one of the factors he used to consider it was 15 whether the operator had good management practices, such as 16 prompt payment of obligations incurred in drilling and the 17 distribution of those earnings derived from the well to

The man answered that question on Cross-Examination. I think not only is it relevant for a competent operator to be able to put a hole in the ground and get oil or gas, but he has got to also be able to pay his bills and efficiently and effectively run his operation and I believe these documents are relative to this.

209 SIMMS BLDG.+P.O. BOX 1092+PHONE 243-6691+ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST+ALBUQUERQUE, NEW MEXICO 87108

18

19

20

21

22

23

24

interest owners.

MR. COOLEY: If only those debts which are just and 1 due and a man has a right to contest any bill if he thinks 2 it is not due or is too large. These cases are in litigation 3 and any debts that are due will certainly be paid. 4 MR. HATCH: Excuse me. I think probably some 5 questions could have been directed to Mr. Steinhorst б concerning this information. I don't really believe they 7 are relevant to introduce at this time. You may wish to 8 respond to that, Mr. Kellahin. 9 MR. KELLAHIN: I am sorry, Mr. Hatch. I didn't 10 hear you. You do not believe that they are relevant? 11 MR. HATCH: I don't believe they are relevant at 12 this time through this witness. I think perhaps some 13 questions could have been asked Mr. Steinhorst concerning 14 those, but I don't believe the introduction of them is 15 proper. 16 MR. UTZ: You say some of these were judgments? 17 MR. KELLAHIN: Some of these have been reduced to 18 judgments and some are mechanic's liens that have been filed 19 against the Graces. I was under the impression that these 20

would be relevant to the question of competency as an operator.

MR. HATCH: I think Mr. Steinhorst answered the question that people are often late. I don't believe that proper foundation has been laid to introduce these.

209 SIMMS BLDG.• P.O. BOX 1092.• PHONE 243-6691.• ALBUQUERQUE, NEW MEXICO 8710. 1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

21

22

23

24

	MR. UTZ: What were the Exhibit numbers that you
inte	nded to offer, Mr. Kellahin?
	MR. KELLAHIN: Eleven through 21.
	MR. UTZ: Eleven through 21 in regard to the
offe	ring thereof, Mr. Cooley's objection will be sustained.
Q	(By Mr. Kellahin) Mr. Hannifin, I would like to draw
	your attention back to the estimated well costs you
	received from Moran.
	MR. UTZ: That was Exhibit 5.
Q	(By Mr. Kellahin) You heard Mr. Steinhorst's testimony
	with regard to his estimation of cost?
λ	Drilling cost?
Q	Drilling cost, yes, sir. This Exhibit indicates a
	discrepancy between your estimated cost with regard to
	the footage?
A	Yes. Cost per foot of drilling.
Q	On what did you base how do you support the item you
	have there?
A	I support the drilling cost \$8.90 a foot by a drilling
	bid from Moran Drilling Company of Hobbs, New Mexico,
	furnished and signed by Mr. McPeter.
Q	I propose to have that marked as Exhibit 22 and show it
	to Mr. Cooley for his possible objection.
	There was some testimony, Mr. Hannifin, with regard
	to logging costs. Mr. Steinhorst provided us with one
	offe Q Q A Q A Q A

209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-6691 ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

	CTT
1	estimation and you have provided us with another. How
2	do you support your A.F.E. there?
3	A On the logging costs, I realize that Mr. Steinhorst
4	might represent a different type of logging program. I
5	am not sure, but mine is made by Dresser Atlas
6	Corporation and it shows a total cost of \$8,596.90.
7	Q Do you have any other testimony or any other
8	clarification you would like to make at this point with
9	regard to your Exhibit Number 5?
10	A Not that I know of.
11	MR. KELLAHIN: That's all the questions I have.
12	MR. HATCH: Mr. Kellahin, I don't know that you
13	moved for the introduction of Exhibits 9 and 10. Do you
14	wish to?
15	MR. KELLAHIN: I move for the introduction of those
16	Exhibits that have been marked 22 through 23 and 9 and 10.
17	MR. UTZ: Without objections, Exhibits 8, 9, 10,
18	22 and 23 will be entered into the record of this case. Do
19	you have anything further, Mr. Kellahin?
20	MR. KELLAHIN: No, sir.
21	MR. UTZ: Questions of the witness?
22	CROSS-EXAMINATION
23	BY MR. COOLEY
24	Q Mr. Hannifin, I know you have previously testified that
25	you wouldn't be supervising the drilling of this well,

PAGE

113

209 SIMMS BLDG. P.O. BOX 1092 & PHONE 243-6691 & ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST & ALBUQUERQUE, NEW MEXICO 87108

1		but do you know whether a line would or would not be
2		set and proposed in the completion method if you drilled
3		the well?
4	А	I have no idea.
5	Q	You are aware, are you not, that if a liner is set, that
б		another set of logs have to be run?
7	A	No, I am not.
8	Q	Are you aware that it is standard practice of all
9		operators in the field to do so?
10	λ	No, I am not.
11	Q	Are you aware that it is also standard practice of all
12		operators in the field that if you drill a well down
13		there to run completion logs in addition to the logs
14		that have been quoted by Dresser Atlas?
15	A	No, I am not.
16	Q	You are aware, are you not, that Mr. Steinhorst has
17		alloted \$3,000-some for the cost of such completion
18		wells?
19	A	If it shows on this, you A.F.E.
20	Q	With respect to Exhibit Number 22, which is the footage
21		quote, these things are somewhat meaningless unless you
22		have a drilling contract in front of you to go with the
23		quote.
24		Do you know at what point, or at what depth Moran
		would propose to go on day work?

He shows no depth as his drilling goes. A It shows going 1 to 11,800 feet at \$8.90 a foot. 2 Are you saying that Moran has offered to go on day work Q 3 all the way to TD on this well? 4 It doesn't say that at all, Mr. Cooley. Α 5 Does it offer to go to footage rather than from TD? Q 6 Evidently from the bid you are holding in front of you, А 7 sir. Of course, all I have is what the bid that was 8 submitted by Moran Drilling Company says. 9 MR. COOLEY: Mr. Examiner, I do object to the 10 introduction of Exhibit Number 22 for the reason that it is 11 vague and ambiguous because I am personally aware that it is 12 standard practice in the industry that at depths such as 13 these, they do not drill footage to total depth, and unless 14 these standard A.P.I. contracts that is utilized in the 15 industry has a point at which there is a switch-over from 16 footage to day work and this not only involves a difference 17 in cost, but it is a complete transfer of the risk of the 18 loss of the hole and any well drilled on a footage to the 19 point where a well is drilled footage, the drilling contractor 20 is fully responsible for the loss of that hole. 21 At the time it goes on day work, the operator

At the time it goes on day work, the operator becomes responsible for it. Accordingly, I would request that if Exhibit 22 is to be accepted, that it be accepted in the light of an Exhibit 22 which would be a form of

209 SIMMS BLDG.@P.O. BOX 1092@PHONE 243-6691@ALBUQUERQUE, NEW MEXICO 8710 1216 First national bank bldg. East@Albuquerque, new mexico 87108

22

23

24

10

11

12

13

14

15

16

17

18

19

20

2í

22

23

24

25

209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-9691 ALBUQUERQUE. NEW MEXICO 87103 1216 FIR5T NATIONAL BANK BLDG. EAST •ALBUQUERQUE, NEW MEXICO 87108

1 contract filled in that Moran is willing to undertake in 2 this area because it gives the implication that they are 3 willing to drill to 11,800 feet at \$8.90 a foot but they have a day work quote and I know from experience in the industry 4 that there will be a switch-over at some depth and that is 5 specified in the A.P.I. contract and I would suggest to the б Commission that this Exhibit is misleading and ambiguous 7 unless it is read in light of the contract completely filled 8 out with respect to terms that Moran is willing to undertake. 9

This is far below anything that has been offered to us.

MR. KELLAHIN: I will have to defer to the Examiner's expertise. If I understand it correctly, Mr. Cooley's objection really goes to one of weight rather than of admissability of a particular document and I will leave it to the Examiner's expertise to determine whether he thinks it carries any weight at all, or whether he thinks it carries the necessary cautions that Mr. Cooley has alluded to.

MR. COOLEY: It goes to ambiguity. It is ambiguous as it is written because there is no way that you can determine what the well cost would be until you see the contract.

MR. KELLAHIN: Deferred to the Examiner. MR. HATCH: I think he has only offered it as supporting evidence to the A.F.E. figure of drilling costs

that was in question in making the estimate. Mr. Cooley has 1 pointed out some problems with it and I think, as Mr. 2 Kellahin says, you can certainly accept it in evidence as 3 some sort of supporting testimony as to the basis of his 4 A.F.E. 5 Is there any objection on the part MR. COOLEY: 6 of Mr. Hannifin to have Moran supply a fully filled out 7 contract as Exhibit 22a? 8 MR. HATCH: I don't believe Mr. Hannifin has 9 testified to having a contract with this person and I think 10 it would be improper for the Commission to require him to 11 make a contract with someone. 12 MR. COOLEY: I don't mean an executed contract, Mr. 13 Hatch, but a proposed contract that would accompany this 14 letter. 15 MR. HATCH: That is up to the Examiner whether he 16 wants to require such a thing. I wouldn't think it would be 17 necessary. 18 MR. UTZ: Mr. Cooley the question that enters my 19 mind as to Exhibit Number 5 which is an A.F.E. which was 20 accepted into the record which states 11,800 feet drilling 21 at \$8.90 a foot. 22 MR. COOLEY: We have most directly attacked that

MR. COOLEY: We have most directly attacked that figure because it can't be achieved.

MR. UTZ: Did you object to Number 5 also?

216 FIRST NATIONAL BANK BLDG. EAST . ALBUQUERQUE, NEW MEXICO 87108

23

24

1	MR. COOLEY: We attempted to destroy the credibility
2	of that figure through Mr. Steinhorst's testimony and now
3	they are attempting to support it by the letter from Moran
4	which I submit again that a question can be clarified as to
5	what they will or won't drill a well for.
6	I don't mean to require a contract, but require them
7	to submit you a proposed contract.
8	MR. UTZ: The question in my mind, Mr. Cooley, is
9	how much they worked as anyone expects.
10	MR. COOLEY: It has been standard practice of Grace
11	and of Pennzoil and other operators that drill on a footage
12	basis to a given depth to convert to day work as the well
13	gets deeper and more complicated.
14	Pennzoil, for instance, goes on day work below
15	10,000 feet and I am just questioning whether the Exhibit 5
16	in if Moran will work for \$8.90 a foot for Mr. Hannifin
17	there is no reason to believe he won't do the same for Mr.
18	Grace.
19	MR. KELLAHIN: I don't know if we have anything to
20	support that supposition or not. Moran is free to contract
21	with whom they please and set the price at what they mutually
22	agree upon.
23	MR. UTZ: Mr. Hannifin, maybe you can interpret
24	Exhibit Number 22. What does he mean by day work, zero to
	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

11,800 feet, do you know?

25

dearnley meier & mr rnrmink were a seried

1	THE WITNESS: To my interpretation, he is going to
2	drill zero to 11,900. Day work, I presume, is during drill
3	stem tests which is normal day work operations. I am not
4	an expert in that field at all.
5	MR. UTZ: I would interpret the Exhibit to say that
6	he would drill for \$8.90 a foot plus day work whenever
7	required.
8	THE WITNESS: That is my interpretation.
9	MR. UTZ: Did Moran tell you how much day work was
10	going to be required?
11	THE WITNESS: I shouldn't think so, sir. I don't
12	think he could tell us how long it would take it to run drill
13	stem tests or logs or various other operations that are on
14	day work.
15	MR. UTZ: What do you think?
16	MR. HATCH: I think it is supporting testimony.
17	You cannot say that this is the price he is going to get a
18	well drilled for. The claim has not been made. He has been
19	putting forth an estimate and one of the estimates was
20	questioned and he put forth some testimony or some evidence
21	as to why he chose that figure.
22	There is no binding contract, of course, but there
23	is not on either side.
24	MR. UTZ: This is true. Mr. Cooley, I will
25	overrule your objection and expect Exhibit Number 22.

dearnley, meier & mc cormick 👳 🕬 🐨 🐨

1	Any further examination?
2	MR. COOLEY: No, sir.
3	MR. UTZ: Are through with your witnesses?
4	Other questions of the witness? He may be excused.
5	We are at statements once more.
6	MR. COOLEY: No, we are not. We are at rebuttal
7	testimony now.
8	MR. UTZ: Have you got another witness?
9	MR. COOLEY: Very brief, Mrs. Grace.
10	(Whereupon, Mrs. Grace was called to the stand and
11	sworn.
12	* * * *
13	CORINNE GRACE,
14	having been first duly sworn according to law, upon her oath,
15	testified as follows:
16	DIRECT EXAMINATION
17	BY MR. COOLEY
18	Q Mrs. Grace, Mr. Hannifin testified on rebuttal that
19	there have been some failure on yourself or Mr. Grace's
20	part with respect to certain persons overriding royalty
21	interests.
22	Do you have anything to say about that?
23	A Yes. When the Grandonoco well went on the line, I
24	immediately called our attorneys Hinkle, Bondurant, Cox &
	Eaton and asked them to please do the title opinion and

dearnley, meier & mc cormick approximate with the

draw the division order and they said they would. Once a week for the first few weeks I called them and I said that I have not received it, may I please receive it.

They would say that they were very, very busy and that they were going to do it. After that I started calling them three times a week. They were busy and they finally sent me the title opinion without the division order because they had certain requirements.

One of those requirements was that there were two people, Mrs. Speena and Barecka Oil Company. They had no record in their title opinion of them owning any interest in this well.

In the meantime, because the time had elapsed, Mr. Cuda, an attorney in Roswell, had written me that he represented this gentleman here and Mr. Hannifin and he represented Barecka Oil and Betty Speena and a few other people.

They had some small overrides on this well and our attorneys, Hinkle, Bondurant, Cos & Eaton firm, had informed Mr. Cuda that he had no record of Barecka Oil and Betty Speena having any assignment from Pan American, who is now Amoco Oil Company and would he please get hold of Amoco and if they had any assignment or any royalty to please give it to him so he could then prepare the division order.

dearnley, meier & mc cormick 👳 🕬 🕬 🕬

1

2

3

4

5

б

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

He didn't get this from Mr. Cuda and he finally 1 sent me, in a rough draft, a division order, so he 2 wouldn't keep running up fees and for me, when I got it, 3 to pay the money and first circulate the division order 4 and pay the money. 5 I finally decided that time was going on and I sent б Mr. Cuda money for everybody that he had on his list, 7 all of their royalties up to where I had been paid, 8 except for Bareck and Speena and I asked him in a letter 9 that he advised me if I wished to circulate the division 10 order without these two people, or wait until he 11 straightened it out. 12 I have not heard from Mr. Cuda and if Mr. Cuda 13 hasn't distributed the money, it is not my fault. 14 You have paid all monies due from Michael P. Grace and 0 15 Corinne Grace on accounts of overriding royalty that 16 were discussed in his testimony with respect to the 17 Grandonoco well by and through his attorney and agent, 18 Mr. Cuda? 19 I haven't heard A Yes, except for Speena and Barecka. 20 from them. 21 Mr. Hannifin? Q 22 Mr. Hannifin, of course. А Yes. 23 When did you do that? 0 24 I did it approximately two weeks ago. А I have 25

209 SIMMS BLDG.+P.O. BOX 1092+PHONE 243-6691+ALBUQUERQUE, NEW MEXICO 87103

1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

1		correspondence that gives the date.
2	2	Anything else that you would like to testify to with
3		respect to Mr. Hannifin's most recent testimony?
4	A	I have paid every check. One check may have arrived
5		today, as soon as that clears, I will pay it when I get
6		the division order.
7	Q	Do you or Mr. Grace owe any just debts for and on
8		account of the drilling of any of your oil and gas
9		properties or production thereof that have not been
10		paid?
11	λ	None that are over thirty days old.
12	Ω	Do you have some bills that have been contested?
13	A	Yes, I do, and as in any business, there will be
14		dishonest people who try to do things wrong and we don't
15		pay bills that we don't owe.
16	Q	You don't allow yourself to be victimized by the service
17		companies or anyone else?
18	А.	No.
19	Q	If it were a joint operation, this would be a joint
20		account and if you settled an account, you contested an
21		account and it would be settled in favor of all the
22	A	We have settled over half of the contested already and
23		our Carlsbad attorneys are in the process of settling
24		the others very well in our favor and whoever belongs
24		to the well's favor.
<i>"</i>		

209 SIMMS BLDG.• P.O. BOX 1092•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

1		We try to pay our bills in thirty days and get the
2		you get a many of them give you a two percent off if
3		you pay in thirty days. Like on pipe, we pay in ten
4		days to get two percent off.
5		I don't think we could have paid for seven wells if
6		we didn't have credit somewhere.
7		Mr. COOLEY: Thank you very much, Mrs. Grace.
8		MR. UTZ: Any Cross-Examination?
9		MR. KELLAHIN: Yes, sir.
10		CROSS-EXAMINATION
11	<u>BY</u> M	R. KELLAHIN
12	Q	Mrs. Grace, am I correct in saying that Mr. Hannifin's
13		money is now with the Hinkle firm; is that correct?
14	А	It is with Atwood & Malone in Roswell. He is his
15		attorney. He said he represented you.
16	Q	What was the difficulty with Mr. Hinkle now?
17	A	Mr. Hinkle's firm it was Mr. Lewis Cox and his firm
18		and he was traveling a great deal and there was a
19		certain amount of delay in his completing the title
20		opinion and when he did, he had certain requirements
20		in this title opinion that were to be corrected before
21		I circulate a division order and pay any funds, but due
		to the fact that Mr. Cuda did not furnish me the
23		requirements, I still went ahead wrongfully and paid
24		these people.
25	L	

dearnley, meier & mc cormick and that we were an

209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-6691 ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

1	Q	The difficulty with Mr. Hinkle now was with regard to
2		the title and not with regard to any money that might
3		have been owed Mr. Hinkle?
4	Α	I have paid Mr. Hinkle over \$50,000 in the last year.
5	Q	You indicated that you were paying all the bills of
6		those people that you consider the bills just and
7		reasonable. You have just said that; isn't that right?
8	A	Yes.
9	Q	Do you consider Civils Tank, Incorporated, of honest
10		people that you deal with?
11	Α	I will ask my attorney if I should go into this.
12		MR. COOLEY: I think that is an improper question.
13		MR. KELLAHIN: I was going to ask her if she has
14	paid	Civils Tank, Incorporated.
15	Q	(By Mr. Kellahin) Mrs. Grace, have you paid Civils
16		Tank?
17	A	I have paid them what I owe them. They dropped a tank
18		and broke it and then sought to charge me over \$400.
19		That is one of the items. There are many of them.
20	Q	Have you paid Civils Tank for equipment, tools and
21		supplies furnished you in the claim of \$509.68?
22	λ	Transwestern is paying some of the bills for Civils
23		Tank.
24	Ω	Are you paying the bills for B & E, Incorporated, Hobbs?
25	A	I think Transwestern is responsible for that.

209 SIMMS BLDG. P.O. BOX 1092. PHONE 243-6691. ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST. ALBUQUERQUE, NEW MEXICO 87108

1	Q	Are you paying Gil Supply and Rental, Incorporated,
2		Odessa, Texas? Are you aware of that obligation?
3	A	Very much so. Are we going to fight that case here?
4	õ	Here?
5	Λ	Yes, are we?
6	Q	No, ma'am. I am just asking if you paid it?
7	А	You want to know what happened on that? They brought
8		out drilling material three days late. Now, what would
9		happen to a hole if you sat for three days at \$64 an
10		hour rig time?
11		I am not that kind of an operator.
12	Q	Don't you think that people you hired to complete these
13		wells for you also reflects upon your ability as an
14		operator?
15	λ	Wait a minute. I hired these people for one reason,
16	- - -	because they had furnished a certain plastic to Pennzoil.
17		Pennzoil got in a lot of trouble in a wildcat well out
18		there and they had terrible circulation and the only
19		people that could correct it was Gil Supply, because
20		they happened to have this certain plastic and they
21		bought it and they got through their law circulation,
22		so we got hold of them in case that we would get into
23		the same trouble, we would be prepared and they told us
24		there was a certain item. What was that stuff?
25		I am telling you how I got hooked up with those
	L	

They are the only people that furnish that crooks. 1 plastic and if you will just bear with me, I will explain. 2 I would be happy to have you tell me. 3 0 There was a certain thing that we wanted and I can't A 4 remember the name of it right now, calcium carbonate. 5 Eighty-three drums to be exact? 0 6 I didn't order it in drums, sir. That was the whole А 7 problem. 8 Okay. Q 9 A Will you let me explain my case? If you want to fight 10 it here, you brought up the subject about these crooks. 11 You have not paid them? 0 12 NEW MEXICO 87103 I don't owe them. Α 1216 FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108 13 How about Land Marine Rental Company, a corporation? 0 14 says that you owe them some money, \$3,000. 209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-6691 ALBUQUERQUE, 15 They owe me over \$50,000. It was their fault, the fire Α 16 on the Panagra. They had a faulty blow-out preventer. 17 That explains that one. How about this one with Q 18 Norman and Burnson Company, a New Mexico corporation? 19 Λ That has been settled and cleared up. It has been 20 removed, paid, settled. It has all been settled. 21 This judgment has been paid? Q 22 It is settled. А 23 How about Matt Chase, Incorporated? Q 24

> А It was settled very much in our favor.

25

It

1	Ŋ	How about your difficulties with Mr. Pomeroy?
2	Α	It has been settled, very much in our favor.
3	Q	You have paid the judgment, then?
4	A	No. I said it was settled.
5	Q	You have reached an amicable settlement with Mr. Pomeroy?
6	A	Very favorably on our side.
7	Q	How about Abbet Brothers?
8	Α	It has been settled in our favor.
9	Q	How about Pool Company?
10	A	It has been settled in our favor.
11	Q	How was it settled in your favor, Mrs. Grace?
12	Α	Because they billed us more than we owed and we paid them
13		what we owed and they settled for it.
14	Q	Thank you.
15		MR. UTZ: Are there other questions of Mrs. Grace?
16		MRS. GRACE: If I could say something to clarify
17	this	\$8.90 drilling, they have got, I have been told Cactus
18	Dril	ling Company for Cities Service. They said somewhere in
19	this	s testimony they had an estimate from Cities Service.
20		I understand that Cactus Drilling Company drilled
21	Citi	es Service's first well in the South Carlsbad field for
22	\$8.9	0 a foot, down to approximately 9,700 feet, and from
23	ther	e when they waited up to seventeen pounds, eight pounds
24	per	fifteen hundred, \$50 a day on without drilled pipe, and
25	sixt	een hundred, \$75 with drilled pipe and Cactus lost money

and they said they would never drill another well in the 1 South Carlsbad for \$8.90 and I notice that Cities Service 2 later put in an A.F.E. and it was for more than that. 3 MR. KELLAHIN: With all due respect, this is all 4 hearsay. 5 MR. COOLEY: It is not at all unusual to take 6 hearsay for whatever it is worth. 7 MR. UTZ: We appreciate the information and we will 8 accept it for what it is worth. 9 REDIRECT EXAMINATION 10 BY MR. COOLEY 11 0 Mrs. Grace, the items that were listed off by Mr. 12 Kellahin were involved in a number of different wells, 13 were they not? 14 Yes, sir, over a period of several years. А 15 Several million dollars were spent in drilling? 0 16 A For those few piddling few, I think that is a mighty few 17 to get in an argument with. 18 MR. COOLEY: No further questions. 19 MR. UTZ: Questions? Witness may be excused. 20 Statements? 21 MR. KELLAHIN: Very briefly, Mr. Utz, I won't take 22 any more of your time. I believe the Examiner is fully 23 competent to evaluate the testimony in evidence on each side. 24 I would like for you to keep in mind that although Mr.

209 SIMMS BLDG.&P.O. BOX 1092 @PHONE 243-6691@ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST@ALBUQUERQUE, NEW MEXICO 87108

Hannifin does not have the experience in this area, he has made his best effort in retaining individuals to represent him and to supervise his operation here.

He does seek to be designated the operator. He will be the individual responsible to the Commission regardless of who he hires to supervise. He has made efforts to have the Graces voluntarily join him. They have refused. They, on their part, have made efforts to have him join them. He has refused and the sole single question for you to resolve, then, is who in your estimation, as supported by the facts here, should be designated operator.

Mr. Grace has had some experience in this area. He has drilled some seven wells. You have heard the testimony about those particular wells. Some of the wells have reached a state in which they have had mechanical problems.

Mr. Steinhorst said that it could happen to anybody. Nevertheless, Mr. Grace has a propensity for having some difficulty in this area.

Perhaps we can allude to that as the difficulty in the area itself and perhaps we can attribut that in some part to Mr. Grace's competency. It is for you to decide. I believe, we, in the best effort, have supported Mr. Hannifin's position that he in fact ought to be designated the operator.

The single most compelling reason is that his costs are far less than Mr. Grace's costs. That is all I have.

dearnley, meier & mc cormick 👼 👘 👘 🕬

1

2

3

5

6

7

8

Q

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

Thank you.

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. COOLEY: I would at this time move that the Application of Hannifin be dismissed because from his own testimony, he owns no working interest whatsoever in the south half of Section 24 and I submit that the statutes in the State of New Mexico particularly 65314 requires, as a prerequisite to force pooling, that one be an owner and have the right to drill.

He has testified here that he is contractually divested himself of that right to drill and that he has no standing before this Commission at this time nor has he had since he granted that right and privilege to Samedan.

MR. UTZ: Even though it was verbal.

MR. COOLEY: He said the deal was binding. That was his testimony. I don't know how he is bound. That is the only evidence in this record that he has no working interest. He has got eleven and a quarter percent overriding interest until payout, and five percent if carried and converted with an option to convert five percent so that would be convertible to the fifty percent working interest.

The other has nothing to do with interest.

MR. UTZ: The motion will be overruled. You may proceed with your statement.

MR. COOLEY: It is clear, as Mr. Kellahin has pointed out, that the Applicant Hannifin, by his own

dearnley, meier & mc cormick age and a set and

209 SIMMS BLDG.0.P.O. BOX 10920PHONE 243-66910ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EASTOALBUQUERQUE, 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

admission, has no knowledge or expertise whatsoever with respect to drilling or operating oil and gas wells. He has stated that he has placed his full faith and confidence in Samedan Oil Corporation.

Although we had one witness from Samedan, he is not in the operating division or portion of that company, and he too, disclaims any knowledge of the type of expertise that is required to successfully conduct the operation that we are discussing here.

In the record we have here presented to you all of the Grace team that will go out and drill and complete the proposed well. They are subject to vigorous cross-examination and inquiry. We have been asked to supply historical cost data, which we have agreed to do.

On the other hand, the one outing at the race track that Samedan has had in this particular area resulted in a dry hole which we believe was probably the most expensive well ever drilled in the area. There is no evidence in the record to support that fact and apparently it will never be produced. We have requested it.

The gist of it is that our team has been here before this Examiner and this Commission available for any type of cross-examination with respect to their expertise and their knowledge and their experience. The Hannifin team, consisting of Samedan, has not been and we know nothing in

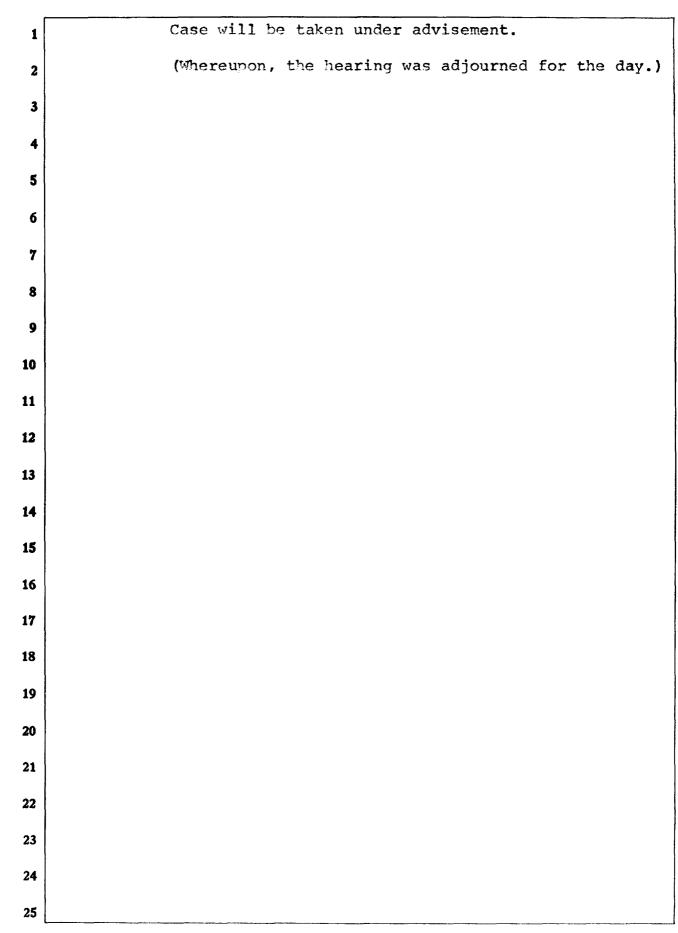
209 SIMMS BLDG.0P.O. BOX 10920PHONE 243-66910ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EASTOALBUQUERQUE, NEW MEXICO 87108

this record of their capability. 1 I feel that as it is apparent on this record that 2 there is only one controversy between the parties. Each 3 thinks that it should be force pooled. Each thinks the well 4 should be at an identical location. Each thinks this is a 5 good shot. Who is the better qualified operator? 6 Mr. Grace has drilled more wells in the South 7 Carlsbad area than any other operator. If experience is not 8 the best teacher, I don't know where you get it. There is 9 no point to belabor this any further. I think it is clearly 10 on the record in this case as it is closed here in a few 11 moments, that there is only one operator who can be chosen 12 because the other is a complete unknown quantity. 13 Thank you, Mr. Examiner. 14 MR. UTZ: Other statements? 15 Case will be taken under advisement. 16 MR. HATCH: We have a telegram addressed to the 17 New Mexico Oil Conservation Commission, dated September 26, 18 1972, re Case 4819, "Atlantic Richfield Company, owner of 19 lease in southwest quarter Section 24, 22 South, 26 East, 20 Eddy County, New Mexico, has farmed out this interest to 21 Grace and his wife, Corinne Grace, et al, and will take 22 Atlantic Richfield's position on compulsory pooling of this 23 tract." Signed, J. R. Rhotenberry. 24

MR. UTZ: Other statements?

dearnley, meier & mc cormick 🐙 🕬 🕬 👘

209 SIMMS BLDG. P.O. BOX 1092 & PHONE 243-6691 & ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST & ALBUQUERQUE, NEW MEXICO 87108



209 SIMMS BLDG.0 P.O. BOX 10920PHONE 243-66010ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EASTOALBUQUERQUE, NEW MEXICO 87108

•	STATE OF NEW MEXICO )
1	) ss
2	COUNTY OF BERNALILLO )
3	I, MARCIA HUGHES, a Notary Public, in and for the
4	County of Bernalillo, State of New Mexico do hereby certify
5	that the foregoing and attached Transcript of Hearing before
6	the New Mexico Oil Conservation Commission was reported by
7	me; and that the same is a true and correct record of the
8	said proceedings to the best of my knowledge, skill and
9	ability.
10	
11	
12	NOTARY PUBLIC
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	1-819+4834
24	hu the 72
25	

209 SIMMS BLDG. P.O. BOX 1092 & PHONE 243-6691 & ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST & ALBUQUERQUE, NEW MEXICO 87108

2	WITNESSES		
3	WILLIAM LEMAY		
4	Direct Examination by Mr. Kellahin	4	
5	Cross-Examination by Mr. Utz	12	
6	Cross-Examination by Mr. Cooley	12	
7	Cross-Examination by Mr. Utz	18	
8			
	D. L. HANNIFIN		
	Direct Examination by Mr. Kellahin	19	
	Cross-Examination by Mr. Utz	26	
	Cross-Examination by Mr. Cooley	27	
	Redirect Examination by Mr. Kellahin	40	
	Cross-Examination by Mr. Cooley	40	
	D. L. HANNIFIN (Recalled)		
	Direct Examination by Mr. Cooley	42	
	Cross-Examination by Mr. Kellahin	44	
	MARK S. MARTIN		
	Direct Examination by Mr. Cooley	46	
	MARK S. MARTIN (Recalled)		
	Direct Examination by Mr. Cooley	54	

1	INDEX (Continued)		
2	WITNESSES		
3	THOMAS A. BALDWIN		
4	Direct Examination by Mr. Cooley	60	
5	Cross-Examination by Mr. Kellahin	68	
6	Cross-Examination by Mr. Utz	70	
7			
8	RICHARD STEINHORST		
9	Direct Examination by Mr. Cooley	71	
10	Cross-Examination by Mr. Kellahin	89	
11	Redirect Examination by Mr. Cooley	102	
12	Cross-Examination by Mr. Utz	103	
13			
14	D. L. HANNIFIN (Recalled)		
15	Direct Examination by Mr. Kellahin	108	
16	Cross-Examination by Mr. Cooley	113	
17			
18	CORINNE GRACE		
19	Direct Examination by Mr. Cooley	120	
20	Cross-Examination by Mr. Kellahin	124	
21	Redirect Examination by Mr. Cooley	129	
22			
23			
24			
1			

page 138

1	EXHIBITS					
2		ADMITTED	OFFERED			
3	Applicant's Exhibit Number 1	11	5			
4	Applicant's Exhibit Number 2	11	6			
5	Applicant's Exhibit Number 3	11	8			
6	Hannifin's Exhibit Number 4	25	21			
7	Hannifin's Exhibit Number 5	25	22			
8	Hannifin's Exhibit Number 6	25	23			
9	Hannifin's Exhibit Number 7	25	24			
10	Hannifin's Exhibit Number 8	25	24			
11	Grace Exhibit Numbers 4 & 5	104	43			
12	Grace Exhibit Number 1	104	61			
13	Grace Exhibit Number 2	104	61			
14	Grace Exhibit Number 3	104	75			
15	Grace Exhibit Number 7	104	86			
16	Grace Exhibit Numbers 8, 9, 10	8				
17	11, 12, and 13	104	87			
18	Grace Exhibit Numbers 14					
19	through 18		88			
20	Hannifin's Exhibit Numbers 9 &	10 113	109			
21	Hannifin Exhibit Numbers 22 and	d 23				
22		113	112			
23						
24						

209 SIMMS BLDG. & P.O. BOX 1092 & PHONE 243-6691 & ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108