BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico April 10, 1963 EXAMINER HEARING FARMINGTON, N. M. PHONE 325-1182 IN THE MATTER OF: DEARNLEY-MEIER REPORTING SERVICE, Inc. Application of Continental Oil Company for authority to conduct interference tests, Lea County, New Mexico. Applicant, in the Case 2784 above-styled cause, seeks authority to shutin one Oil Center Blinebry well on its Meyer B-4 Lease, Section 4, Township 21 South, Range 36 East, Lea County, New Mexico, to observe pressure behavior and to transfer said well's allowable to other wells on said lease for a period not to SANTA FE, N. M. PHONE 983-3971 exceed 90 days. Daniel S. Nutter, Examiner. BEFORE: TRANSCRIPT OF HEARING MR. DURRETT: Application of Continental Oil Company for authority to conduct interference tests, Lea County, New Mexico. Mr. Examiner, we have received a letter requesting that ALBUQUERQUE, N. M. PHONE 243-6691 this case be continued to the next Examiner Hearing in April. The case will be continued until the next MR. NUTTER: Examiner Hearing in April, and readvertised.



STATE OF NEW MEXICO)) ss COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Cil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 22nd day of April, 1963.

Notary Public-Court Reporter

My commission expires:

June 19, 1963.

I do hereby certify that the foregoing is a complete reserd of the proceeding the Examiner hearing of Gase Lo heard by me of 19 New Mexico Oil Conservation Commission, Examiner

S

DEARNLEY-MEIER REPORTING SERVICE, Inc. A N. M. SANTA FE, N. M. SANTA FE, N. M. FARM PHONE 983.3971 PHONE 983.3971

FARMINGTON, N. M. PHONE 325-1182

ALBUQUERQUE, N. M. PHONE 243-6691

BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico April 24, 1963 EXAMINER HEARING FARMINGTON, N. M. PHONE 325-1182 IN THE MATTER OF: **JEARNLEY-MEIER REPORTING SERVICE, Inc.** (Continued from April 10, 1963 Examiner Hearing) Application of Continental Oil Company for auth-)CASE 2784 ority to conduct interference tests, Lea County. Applicant, in the above-styled New Mexico. cause, seeks authority to shut-in all wells in the Oil Center-Blinebry Pool, Lea County, New Mexico, for approximately 7 days to achieve stabilization, to leave one well shut-in for a period not to exceed 90 days to observe pressure behavior, and to transfer the allowables and make-up underproduction from the shut-in wells. FE, N. M. 983-3971 BEFORE: PHONE Elvis A. Utz, Examiner TRANSCRIPT OF HEARING MR. UTZ: Case 2784. MR. DURRETT: Application of Continental Oil Company for authority to conduct interference tests, Lea County, New Mexico. This case was continued from April 10, 1963, Examiner Hearing. и. м. 6691 ALBUQUERQUE, PHONE 243.6 MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, for the Applicant. We have one witness I would like to have sworn, please. (Witness sworn.) JACOB LAVINE called as a witness, having been first duly sworn on oath, testified as follows:



Į	DIRECT EXAMINATION						
	BY MR. KELLAHIN:						
	Q	Would you state your name, please?					
Σœ	A	A Jacob Lavine.					
325-1	Q	By whom are you employed and in what position?					
UC. FARMING PHONE	А	Senior Production Engineer, Continental Oil Company,					
E S	Eunice, New Mexico.						
ICE	Q	Have you ever testified before the Oil Conservation					
Y-MEIER KEPORTING SERVICE, Inc. santa fe, n. m. phone 983-3971	Commission?						
SI	А	Yes, sir.					
ONL		MR. KELLAHIN: Are the witness' qualifications accept-					
) <i>R</i> 1 83-3971	able?						
KEPC santa fe, phone 96		MR. UTZ: Yes, sir.					
	Q	(By Mr. Kellahin) Are you familiar with the applica-					
IEF	tion of Continental Oil Company in Case 2784, Mr. Lavine?						
ME	А	Yes, sir.					
	Q	Would you state briefly what's proposed?					
EARNLE N. M.	А	It is the application of Continental Oil Company for					
. м. 691	permission to conduct an interference test in the Oil Center-						
RQUE, N	Blinebry Pool and to transfer the allowables for twenty wells						
аниаленаие, N. Phone 243.66	during t	he test period.					
		(Whereupon, Applicant's Exhibits Nos. 1, 2, and 3 marked for identification.)					
	Q	Referring to what has been marked as Exhibit No. 1,					
2 2 2	would yo	u identify that exhibit and discuss the information shown					



on it?

DEARNLEY-MEIER KEPORTING SERVICE, Inc.

Exhibit No. 1 is a location and ownership plat showing A the Oil Center-Blinebry Pool in Lea County, New Mexico, Sections 3 and 4, and recently Section No. 9. The top allowable wells FARMINGTON, N. M. PHONE 325-1182 are shown circled in solid red. Wells which have a producing capacity below top allowable are shown in green, and one well with a penalized excess GOR is shown in the open green circle. The pool limits of the Oil Center-Blinebry Pool as currently defined are shown outlined in blue. Q Did you say it also included a portion of Section 9 presently, is that correct? SANTA FE, N. M. PHONE 983-397 Yes, sir, Sinclair has completed a well in the Northeast A Quarter of the Section. Has that been included within the defined limits of Ú. the Oil Center-Blinebry Pool? А No. sir. Q But it is the Oil Center-Blinebry well, is that correct? A Yes. Are you familiar with the testimony and the exhibits Q RQUE, N. M. 243-6691 that were presented in Case 2727 which resulted in Order No. PHONE R-2408? A Yes, sir. MR. KELLAHIN: At this time, if the Commission please.

we would like to offer in evidence the record and exhibits

offered in Case 2727 in the interest of saving time in this case.



This is the case which resulted in a temporary 80-acre order for the Oil Center-Blinebry Pool. I believe that it will save time if we just incorporate it into the record.

MR. UTZ: That was the entire subject matter of this case, 80-acre spacing?

MR. KELLAHIN: It adopted field rules for the Oil Center-Blinebry Pool, but in the main it was 80-acre spacing, yes, sir.

MR. UTZ: The record will include as part of the record in this case the record in Case 2727.

Q (By Mr. Kellahin) Would you state briefly what was attempted to be shown in Case 2727?

A In this case it was attempted to show and prove by the cross sections across the pool that the producing zones in the main pay can be correlated from well to well, and it is indicated to be continuous over the entire pool area. It was also shown by pressure build-up curves that a well should drain in excess of 80 acres.

Q What was the outcome of that case?

A Order No. 2408 established 80-acre drilling and spacing units. The rules, however, were temporary and contemplated review of the case after a period of one year, or during January, 1964.

Q What is the purpose of your proposed interference test as suggested in this application?



E. M. M. NLEY-MEIER REPORTING SERVICE, Inc. Sales 1. M. SANTA FE, N. M. SANTA FE, N. M. PHONE 983-3971 PHONE 983-3971 PHONE 983-3971

FARMINGTON, N. M. PHONE 325-1182

ALBUGULRQUE, N. M. PHOULRQUE, N. M. A The test is to be conducted for the purpose of further establishing that a well in the Oil Center-Blinebry Pool will effectively drain in excess of 80 acres.

Q How do you propose to do this?

A We propose to shut in all wells in the pool on a given date, hopefully May 1st, for a period of approximately seven days. The pressure buildup will be observed in the Continental Meyer B-4 Well No. 19 during the shut-in period. This shut-in period is for the purpose of achieving pressure stabilization in the reservoir, and we believe this should be accomplished in that time.

At the end of the shut-in period, the bottom-hole pressure will be measured in each Continental well capable of flowing, and this will be noted by a bottom-hole pressure bomb. Upon completion of the bottom-hole pressure measurement, each well in turn will be placed on production at the assigned allowables. Well No. 19 is proposed to be left shut in and its allowable transferred to other wells on the lease. The static bottom-hole pressure in this well will be observed frequently during the producing test period in order that the readings can be recorded.

Q How long do you propose to continue the test?

A Our calculations indicate that the drawdown in Meyer No. 4-19 should be observed within sixty days after production is resumed. This is based on limited reservoir data and could



FARMINGTON, N. M. PHONE 325-1182 DEARNLEY-MEIER REPORTING SERVICE, Inc. SANTA FE, N. M. PHONE 983-3971

ALBUQUERQUE, N. M. PHONE 243-6691 possibly be in error. We propose that if the pressure decline has not been observed at the end of sixty days, we ask that it be continued for another thirty days to find a measurable pressure drop.

FARMINGTON, N. M. PHONE 325-1182

Q

What do you mean by a measurable pressure drop?

A I mean a decline of sufficient magnitude that there is no question of bomb accuracy. A minimum of one percent, and preferably one and a half percent should be observed to be certain of our results. Since the reservoir pressure is in the vicinity of approximately 2200 psi, we hope to observe the decrease in excess of 35 psi.

Q Will it require this period of 45 to 60 days for the pressure to be affected by production from offset wells?

A We hope that, or our calculations indicate that a measurable pressure drop will be observed somewhere in the vicinity of ten to fifteen days after the production is resumed.

In addition to the transfer of allowable from the shut-in well, you indicated that you want to transfer allowables between wells. Why do you want to do that?

A We like to do this so that the test can be conducted without loss of current revenue due to temporary loss of allowable from the observation well. Also, because the higher withdrawal rates will hasten the reduction of pressure in the observation well.

How do you propose to allocate the production among



)EARNLEY-MEIER REPORTING SERVICE, Inc. ^{N. M.}
^{BANTA FE, N. M.}
^{FARN}
^{FARN}
^{PHONE 983-3971}
^{FARN}
^{PHONE 983-3971}

ALBUQUERQUE, N. M. PHONE 243-6691 the wells?

A We propose to withdraw the same amount of oil from the lease as if the interference test were not to be conducted. This involves transferring the allowable of the observation well and the allowable for the marginal well, No. 23, during the seven-day shut down period. It may be necessary for other operators to transfer allowables, and if they desire to do so in order to avoid loss of current revenue, we urge the Commission to grant their request.

Q Referring to what has been marked as Exhibit No. 2, will you identify that exhibit and discuss the information shown on it?

A Exhibit No. 2 is a tabulation of the wells in the Oil Center- Blinebry Pool showing the April allowable, daily and monthly: the proposed May and June daily and monthly allowables: the proposed withdrawal rates for the producing days of the months of May and June, and the allowable for the two-month period compared to the normal allowable for that period.

Q Now the allowables here appear to be pretty uniform, is that correct, for the month of April?

A Yes, sir.

Q Are these proposed allowables as you would change them for the subsequent months non-uniform? Referring back to the exhibit, if you'll notice that the April allowables are pretty uniform, aren't they?



FARMINGTON, N. M. PHONE 325-1182 JEARNLEY-MEIER REPORTING SERVICE, Inc. FE, N. M. 983-3971 PHONE ALBUQUERQUE, N. M. PHONE 243 6691

A Yes, they are, all the wells having 84 bopd allowable except Meyer B-4, the Meyer B-4 No. 23.

Q Are you transferring your allowables in the same fashion?

A No, sir, we are not. No. 23 is a marginal well and not capable of making up its allowable during the period of seven days. Well No. 21 is completed in the lower Blinebry, some 200 feet below the main producing zone from which all other wells in the pool produce. This well is not in pressure communication with the main reservoir. For these reasons, no allowable is being transferred from the observation well to either of these wells.

The allowables from No. 19, plus 9 bopd in May from Well No. 23, have been pooled and then re-allocated to the remaining wells in proportion to each well's measured Productivity Index. This distribution is shown in Column 4 for May and Column 6 for June.

Q What do you mean by the Productivity Index?

A Productivity Index is the number of barrels of oil per day which can be produced per pound drop in bottom hole pressure under stabilized flow conditions, barrels per day per psi pressure drop.

Q Is this measured by a bottom hole pressure bomb?

A Well, it's a production test with a bottom hole pressure bomb in the hole, which gives static conditions and a drawdown



E. N. M. SANTER REPORTING SERVICE, Inc. E. N. M. SANTA FE. N. M. SANTA FE. N. M. PHONE 983-3971 PHONE 983-3971 PHONE 983-3971

ALBUQUERQUE, N. M. PHONE 243-6691

FARMINGTON, N. M. PHONE 325-1182 during flowing period.

Q Why do you propose to allocate the allowable in proportion to this Productivity Index?

A First, it provides more nearly a common flowing bottom hole pressure which will provide a uniform pressure distribution in the reservoir during the test period. Secondly, it will hasten the occurrence of a measurable decrease in bottom hole pressure in the observation well.

Q What's the significance of Columns 8 and 9 on your Exhibit No. 2?

A Column 8 shows the producing rate in barrels per day that will be required to produce the assigned allowables during the 24 producing days in May remaining after the seven-day shut-in period. Column 9 shows the producing rate in June which is the same as the assigned daily allowable.

Q Then there would be a substantial difference in producing rates between May and June if this schedule were not followed?

A That is correct. It would also be necessary to produce the wells at a rate greater than 125 percent of the allowable during May.

Q The daily average allowable in May, spread over 31 days is considerably less than the daily allowable in June, is that right?

Yes, sir. This would, in effect, be carrying over to



CIEARNLEY-MEIER REPORTING SERVICE, Inc. Sava Fe, N. M. PHONE 983-3971 PHONE 983-3971 PHONE 983-3971 PHONE PHONE 983-3971

FARMINGTON, N. M. PHONE 325-1182

ALBUQUERQUE, N. M. PHONE 243-6691

А

June that portion of the allowable not produced in May because of the seven-day shut-in period. This is more favorable than merely reallocating each month's allowable between wells in that a constant producing rate is achieved throughout the test period. It does involve, in effect, a make-up-allowable effect. A constant producing rate during the test is very desirable.

Q Referring to what has been marked as Exhibit No. 3, would you state what that is?

A Exhibit No. 3 is a tabulation supplemental to Exhibit No. 2 in the event it's necessary to continue the test during July or the additional thirty days. The first three columns are identical to those in Exhibit No. 2. The remaining columns show the proposed July allowable if the test is continued to that month.

Q Then Exhibit 3 is merely showing the allocation to the individual wells as you did on Exhibit No. 2?

Yes, sir, with the additional thirty days.

Q What is the distance from the proposed observation well to the nearest producing well?

A The nearest well is about 1700 foot, but it is a low P.I. well. The nearest high P.I. well is approximately 2,000 feet.

Q What is the radius of an 80-acre circle?

A 1,054 feet.

What's the distance from the center to the corner of an



JEARNLEY-MEIER KEPORTING SERVICE, Inc. 5, N. M. SANTA FE, N. M. SANTA FE, N. M. PHONE 983-3971 FARM

FARMINGTON, N. M. PHONE 325-1182

ALBUQULRUUE, N. M. PHONE 243-6691 А

Q

80-acre square?

A 1320 feet.

Q If you can detect a significant pressure drop in the observation well, you will have proven that a well will drain considerably more than 80-acres in this reservoir, is that correct?

A Yes, sir. As a matter of fact, it would indicate a drainage area of 208 acres.

Q Do you feel that a failure to note a pressure drop in the shut-in observation well will indicate that one well will not drain 80 acres in the Cil Center-Blinebry Pool?

A No, it would mean that in a drainage area of 208 acres the observation time was insufficient to detect a measurable pressure drop. We are confident that a pressure drop would be observed in time and we expect to observe one during this test.

Q Have you already observed any decline in initial pressures in successive completions?

A Yes, sir. We had a recent completion, Meyer B-4, 25, and on the 13th of this month the pressure was calculated to be 2124 psi subsea depth at minus 2300, which is some 125 pounds less than the original pressure of the reservoir.

Q Then in your opinion will this interference test merely add additional evidence that one well will drain 80 acres in this reservoir?

A Yes, sir, that is correct.

Q

Are the other companies operating in the reservoir



FARMINGTON, N. M. PHONE 325-1182 DEARNLEY-MEIER REPORTING SERVICE, Inc. SANTA FE, N. M. PHONE 983-397 ALBUGULRQUE, N. M. PHONE 243-6691

cooperating with you in carrying on this test?

A We find in Sinclair's recent completion, the Adkins No. 11, it is producing only at a rate of 10 barrels per day of oil and approximately 25 barrels of water, and it's some 3,000 feet southeast of the observation well; and if they do not wish to shut their well in because of inability to make up the allowable, then we will have no objection to this whatsoever, or if the company's offset operators do not wish to comply with this interference test, they would not be under any obligation to do so.

Q You mean the shut-in period to comply with the interference test, the seven-day shut-in period?

A Yes.

Q If, for example, Gulf failed to shut their well in, would that in your opinion interfere with the interference test?

A Well, it would create a pressure drawdown in the reservoir. However, if the production rate in their well was kept constant, then it would be a constant decline in pressure or a static decline in pressure and it would have the same effect as if the well were shut in.

Q So long as they keep it on a constant production rate?A Yes.

Q Do you anticipate they will cooperate with you to that extent?

Yes, they have notified us they will.



FARMINGTON, N. M. PHONE 325-1182 DEARNLEY-MEIER REPORTING SERVICE, Inc. SANTA FE, N. M. PHONE 983-3971

ALBUQUERQUE, N. M. PHONE 243-6691

А

	Q	Were Exhibits 1, 2, and 3 prepared by you or under					
	your sup	ervision?					
	А	Yes, sir.					
8 1 8 1 8		MR. KELLAHIN: At this time I would like to offer in					
325-1	evidence Exhibits 1, 2, and 3.						
FARMINGTON, N. M. PHONE 325-1182		MR. UTZ: Without objection, Exhibits 1, 2, and 3					
	will be	entered into the record in this case.					
		(Whereupon, Applicant's Exhibits Nos. 1, 2, and 3 admitted in evidence.)					
		MR. KELLAHIN: That's all the questions we have on					
	direct,	Mr. Utz.					
м. м. 8-3971		CROSS EXAMINATION					
BANIA FE, N. M. PHONE 983-3971	BY MR. L						
РНС	Q	Mr. Lavine, you intend to shut in your No. 23 Well?					
	А	Yes.					
	Q	For the seven days?					
	А	Yes, sir.					
	Q	That well has a producing ability of what, 40 barrels,					
2 - 6	about 40	about 40 barrels per day?					
PHONE 243 6691	А	Yes, sir.					
PONE -	Q	And the No. 12 Well of Gulf's, their Bell Ramsey Well,					
م <u>ب</u>	has a pr	has a producing ability of about 40 barrels per day?					
	.A	Yes, it's a penalized GOR well, yes.					
;	Q	It's a high GOR?					
:	A	Yes, sir.					

JEARNLEY-MEIER KEPORTING SERVICE, Inc.



53

	is around	a 10-barrel a day well?					
FARMINGTON, N. M. PHONE 325-1182	А	Yes, sir. It will be noted that Well No. 20, Meyer					
	B-4 No. 2	O is outside the Pool limits, and this is an oversight					
	on, oh, I	don't know whose part it was, but it's been applied					
	for to be	included in the Pool. It's the second well drilled					
	in the Pool, and we can't quite understand why it hasn't been						
	included.						
	Q	It's your desire to include that well in this inter-					
	ference test?						
	А	Yes, sir. The application is made to extend the					
N. M. 3-3971	Pool limi	Pool limits to include this well.					
SANTA FE, N. M. PHONE 983-3971	Q	All of your wells are on the same lease, is that true?					
PHO	А	Yes, sir.					
	Q	Did Gulf concur with you in your request for 80-acre					
	spacing?						
	А	Yes, sir.					
ALBUGULROUE, N. M. 174.0NE 243.6691	Q	And did Sinclair?					
	А	I believe so, yes, sir.					
	Q	It would be unusual if they didn't?					
	А	Yes, it would.					
	Q	Now it's your desire to try to stabilize the field					
	pressure-	wise before you start conducting your interference test?					
-	А	Yes, sir.					
	Q	How can you stabilize the pool unless all wells are					

And the Sinclair Well which is about to be completed

Q

JEARNLEY-MEIER KEPORTING SERVICE, Inc.



shut in for a sufficient length of time?

A We do hope that everybody will cooperate and shut their wells in; however, the stabilization that we hope to have, the pressure in No. 19 will be stable if any wells are left producing and this producing rate is a constant rate. The pressure drawdown affected by the producing wells will be constant in No. 19.

Q Even though it might not be quite as high as equilibrium?

A Yes, that's true.

Q Do you know how easy it will be for Gulf to have a constant producing rate for a seven-day period?

A We have been notified by Gulf that they will shut their wells in if they will not be penalized or have a loss of production.

Q Yes, I know they have notified you of that, but I don't believe you answered my question. Do you think Gulf can stabilize their well on exactly 40 barrels a day or close to 40 barrels a day for a full seven-day period?

A No, I'm not sure that they can.

Q And if they don't, then it will affect your program somewhat?

A Yes, sir, it will.

Q On Exhibit 2 I notice that you have no allowable for your No. 25 well -- yes, I have found No. 25 now. Why is that? A Well, it was reported on the 13th of April top allowable



DEARNLEY-MEIER KEPORTING SERVICE, Inc. 5400 56691 Second PHONE 983-3971 PHONE 983

FARMINGTON, N. M. PHONE 325-1182

ALBOQULRQUE, N. M. PHONE 243-6691 well of 84 barrels a day on recent test. I'm not sure that the well will make in excess of 84 barrels a day, and therefore we will probably request that the well be permitted to produce at 84 barrels a day throughout the test and possibly the loss of production from this well will be made up in the other wells during the seven-day shut-in period.

Q In other words, you are requesting about the same thing that Gulf did. If we require them to shut in their No. 12 Well they'll want the No. 11 to make up its production for the sevenday period?

MR. KELLAHIN: I think, if the Examiner please, what Gulf is proposing is that the higher GOR well be treated as a top allowable well so that the allowable can be made up from it without penalty.

MR. UTZ: In other words, to allow the No. 12 Well to produce, to make up its allowable?

A Yes, sir.

MR. KELLAHIN: That's right. I think that's what Gulf is proposing.

MR. UTZ: I see.

Q (By Mr. Utz) To be treated as a non-exempt well for a period of time long enough to make up its allowable?

MR. KELLAHIN: Yes.

Q (By Mr. Utz) The allowable lost, I presume, would be seven times 40, 280 barrels?



JEARNLEY-MEIER REPORTING SERVICE, Inc. FARM 5. N. M. PHONE 983-3971 PHONE 9873-3971 PHONE 9873-3971 PHONE 983-3

ALBUQUERQUE, N. M. PHONE 243-6691

FARMINGTON, N. M. PHONE 325-1182 A Yes.

MR. KELLAHIN: Yes.

Q (By Mr. Utz) Now in the matter of transfer of allowables, is that shown on your Exhibit No. 3?

A Transfer of allowables during the 30-day additional period in excess of 60 days. Exhibit No. 3 is the July allowable, in the event that the test should be continued in excess of 60 days.

Q Oh, your May and June are shown on Exhibit No. 2?

A That is correct.

Q Column 8 and 9 would be the proposed producing rates for each of your wells?

That's correct, during May and June.

Q This volume, would that -- well, let's analyze it a little bit. 19 will be shut-in, 20, 21, 22 will produce allowable for other wells and the seven-day make-up, is that true?

A It will produce for the seven-day period plus the loss of allowable in No. 19.

Q	And	your	23	is	your	marginal	well?
---	-----	------	----	----	------	----------	-------

A Yes, sir.

Q 24 and 26 will also overproduce?

A Yes, sir.

Q And it's your proposal that Gulf will overproduce their No. 11 as well as their No. 12?

A That is correct.

Ś

FARMINGTON, N. M. PHONE 325-1182 DEARNLEY-MEIER KEPORTING SERVICE, Inc. SANTA FE, N. M. PHONE 983-397

ALBUGULRQUE, N. M. FRONE 243-6691 Α

Q And the Metex No. 5 will also overproduce in order to make up the seven-day allowable?

A That's correct.

Q By the end of June you would have made up all this back allowable, wouldn't you?

A Yes, sir, except for the loss in the event it has to be carried over into July, naturally the loss in production from No. 19 will still have to be made up in the other wells.

Q Yes, I understand that, providing your interference test would go through?

A Yes, sir.

Q In your opinion, do you think you can complete this interference test in 60 days?

A In my opinion, I feel certain that we can. However, this is, like I said before, based on the best available data and which is sometimes inaccurate, and we hope, we feel that it will be effective in 60 days.

Q Would it be your recommendation that the order include some administrative approval for an additional 30 days if necessary?

A Yes, sir.

What means do you propose to use for measuring your bottom hole pressure on your No. 19?

A We plan to run a bottom hole pressure bomb as often as possible, as often as the equipment is available, which will be



approximately, no less than twice per week.

Q And how long will you leave the bomb in the hole?
A Only long enough to take static bottom hole pressure.
Q Under the assumption that the pressure is stabilized?
A No, sir, under the assumption that just to measure a
pressure to see if it has drawn down. We will probably, in the
length of time that we leave the bomb in the hole, we'll probably get no drawdown in that short a period of time. However,
during a week's time we'll probably show some effects of drawdown.

Q In your opinion will this pool stabilize in seven days?A In my opinion, yes, sir.

Q And just prior to putting all your wells back on production, you will take a bottom hole pressure in No. 19?

A Yes, sir.

Q Is that the only well you intend to take pressures on? A No, sir. We plan to take pressures on all the wells that will be shut-in except for No. 3, which has a pumping unit on it and rods in the hole. All of the Continental wells, I might mention.

Q Gulf or Metex has no -- don't propose to take bottom hole pressures, then?

A We haven't requested that they do, no.

MR. UTZ: Are there any other questions of the witness? MR. KELLAHIN: I would like to bring out one thing, if



LEARNEEY-MEIER REPORTING SERVICE, Inc. E. N. M. SANTA FE. N. M. SANTA FE. N. M. FARM 3.6691 PHONE 983-3971 PHONE 983-3971 PHONE

FARMINGTON, N. M. PHONE 325-1182

ALBUQUERQUE, N. M. FHONE 243-6691 I may.

FARMINGTON, N. M. PHONE 325-1182

DEARNLEY-MEIER KEPORTING SERVICE, Inc.

SANTA FE, N, M. PHONE 983-3971

ALBUQULRQUE, N. M. PHONE 243-6691

REDIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Lavine, you say in your opinion the pool will stabilize in seven days. Will you continue to keep it shut in until it has stabilized?

A We would like to keep it shut in until the pressure has stabilized.

Q In other words, then, you would say it might be more or less than seven days?

A Yes.

Q The chances are that you would go the full seven days, would you not?

A Yes, sir.

Q In the event you had to keep it shut in longer than seven days, that would affect your proposed allocation of allowable shown on Exhibits 2 and 3?

A Yes, sir.

Q In other words, that is an example of how you propose to make the allocation, and not necessarily the allocation that you might make, is that correct?

A Yes, sir, that's correct.

MR. KELLAHIN: That's all I have.

RECROSS EXAMINATION

BY MR. UTZ:



Q How will you determine that your 19 or other wells are built up and have reached stabilization?

A When we have no increase in pressure, which probably we will have to determine that with two to three different measurements to be certain that the pressure is stabilized, and if the pressure remains constant over these two or three days, then we'll assume that the pressure is stabilized.

Q You don't intend to take pressures every day?

A Yes, sir, on the shut-in pressures, yes, we do.

Q You do.

A When I mentioned before about twice a week, I meant during the interference test or the shut-in period of 19, rather than the total shut-in period.

Q My understanding is correct, is it not, that you intend, even during the interference period, that you intend to transfer the allowables to wells around No. 19 in order to have a faster reaction?

A Yes, sir. If you'll notice on Exhibit 2 that No. 26, we propose to allocate most of the production, or a greater proportion of the production of 26 to No. 24 based on the P.I., to effect a greater drawdown in a shorter length of time.

Q No. 26 is quite a ways away from your No. 19, isn't it?

A Yes, sir.

Q Where is your No. 24?

A Northeast of No. 19, the northeast location of 19.



ALBUQUERQUE, N. M. PHONE 243 6691 MR. UTZ: Any other questions of the witness? MR. DURRETT: Yes, sir, I have a question or two. MR. UTZ: Mr. Durrett.

BY MR. DURRETT:

Q I'm not sure just what wells are going to be affected and how. Now the Commission has received some communications from various offset operators, and I want to read portions of these communications to you and ask you if their wells are going to be affected. We will go through each one individually.

We have a telegram from Sinclair, and they state that they have no objection to your application provided the interference tests do not include Sinclair leases. Didn't you state that the Sinclair well in Section 9, in the northeast corner of Section 9, isn't that going to be part of it?

A No, sir, it will not be shut in.

Q Will not be shut in?

A No.

Q And you don't propose to make that part of the test?A No, sir, we do not.

Q We also have a very long communication in the form of a letter from Gulf Oil Corporation, and I'll just briefly run through some of the points they raise and discuss those with you. They state, concerning their Easely State Well No. 8 located in Unit A of Section 5, 21 South, 36 East, "if it is mandatory that all wells be shut-in for the pressure build-up period, then Gulf



DEARNLEY.MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M. PHONE 325-1182

ALBUQULRQUE, N. M. PHONE 243-6691 objects to this part of the application." Now I think you stated it wasn't mandatory, didn't you?

A Yes, sir, we are not making it mandatory.

Q But you do propose that this Easely State Well No. 8 would be included?

A No, sir, the latest information I have on this well is that it is not completed and they are not real certain they can make a completion, and if it is a completion then it will be a marginal well; and it's a long distance from No. 19 and we will not even be concerned about it with the interference test.

Q Proceeding on with their communication here, they state: "We believe that any order issued approving Continental's application should provide that a penalized well in addition to top allowable wells will be allowed to produce in excess of the 125 percent maximum rate as specified by State-wide rules." Now I believe you testified concerning this high GOR well that you would be inclined to have it produce in excess, didn't you?

A Yes, sir.

Q And that should answer this objection?

A Yes, sir.

Q Their final statement here concerns your Exhibit No. 2. They state that they note" that Gulf loses 16 barrels of allowable, as indicated in Columns 10 and 11. This apparently is caused by dropping fractional barrels when calculating May and June daily allowables. It is recommended that any order written



)EARNLEY-MEIER REPORTING SERVICE, Inc. N. M. SANTA FE, N. M. PHONE 983-3971 PHONE 983-3971 PHONE 983-3971 PHONE PHONE 983-3971 PHONE PHONE PHONE

FARMINGTON, N. M. PHONE 325-1182

ALBUQULROUE, N. M. PHONE 243 6691 should provide each well will receive an allowable equal to its normal monthly allowable for the period of May and June so that the above loss will not occur." I'm not sure I understand that, so I wish you would comment on it.

A Well, I'm in complete agreement with them on that. I feel that this is a proposed schedule and the purpose of it is to produce only allowable production and not in excess of allowable, and any manner in which the offset operators or Continental should wish to produce this allowable so that it does not exceed 125 percent of production should be permitted to produce in that manner.

Q Well, I have the feeling that they are actually talking here about the mathematical computation.

A Yes, I think that is true, that is where these 16 barrels came from is from the fractional amount, rather than rounding off to .4, rounding off to .3.

Q But your application is that they be allowed to make their allowable up and not more than that?

A Yes, sir.

Q And not less than that?

A We don't intend to dictate their producing methods whatsoever, and at the Commission's discretion, they should so word it that the production should be made up in such a manner that will not exceed 125 percent of allowable, regardless of how they do it.



JEARNLEY-MEIER REPORTING SERVICE, Inc. W. M. M. SANTA FE, N. M. SANTA FE, N. M. PHONE 983-3971 PHONE 983-3971

FARMINGTON, N. M. PHONE 325-1182

ALBUQUERQUE, N. M. PHONE 243-6691 MR. DURRETT: Thank you, Mr. Lavine. I think that will answer my questions.

BY MR. UTZ:

Q Well, it clearly isn't your proposal to allow any wells to produce more than 125 percent of their allowable?

A No, sir.

MR. KELLAHIN: If the Examiner please, I think there might be a little confusion here. We do propose --

MR. UTZ: Is this daily allowable or through the month?

MR. KELLAHIN: We are talking about the allowable per well and the allowable is going to be transferred to these wells, so the effect is going to be that an individual given well will be producing in excess of 125 percent but it will be producing an allowable that came from another well. There will also be production in excess of 125 percent per day under the proposal, as I understand it. Is that correct, Mr. Lavine?

A Yes, but through the lease or through the month, we will not have to produce over 125 percent allowables.

Q (By Mr. Utz) For the lease or for the well per month?
A Per well per day.
Q You will?
A Well, yes, sir.

Q But per month, no?

A No, sir.

Q

Do you know what the drive mechanism is for this pool



yet?

Q

A No, sir, I think in the testimony presented in which 80-acre spacing was granted, it was determined that it was a depletion type drive, but we're not prepared to answer that question on the exact drive mechanism at all. A material balance will be run very shortly to determine whether the water drive is effective.

Q How high a rate do you intend to produce any one well on a daily basis?

A Let's see, the top well will be 141 barrels, 140.8, which is No. 24. That's almost 150 percent, I think.

It will be a little over 150 percent?

A Yes, sir, and the same applies to No. 26.

Q You think that rate of production will be injurious to the reservoir?

A No, sir. The P.I. was quite higher than that, or I.P., excuse me. We have no coning of water or excessive GOR.

MR. UTZ: Any other questions? If no other questions, the witness may be excused.

(Witness excused.)

MR. UTZ: Any other statements in this case?

MR. KELLAHIN: I don't want to make a statement, but I would suggest that as soon as the shut-in period has been determined and the amount of the allowable to be reallocated has been established, that Continental furnish the Commission with



JEARNLEY-MEIER REPORTING SERVICE, Inc. Santa Fe, N. M. PHONE 983.3971 PHONE 983.3971 PHONE

FARMINGTON, N. M. PHONE 325-1182

ALBUQUERQUE, N. M. PHONE 243-6691 a new schedule patterned on their proposal in this case, which would be similar to our Exhibit No. 2 but based on the actual figures and on a monthly basis which would avoid this 16-barrel proposition. Continental at that time will be willing to do that, in the event the Commission sees fit to approve the allocation and the application proposed.

MR. DURRETT: For the record, if the Examiner please, I do want to state that the Commission has received a telegram from Pan American stating that they support the application in this case. That will be placed in the Commission files.

MR. UTZ: We have pretty well covered Gulf's and Sinclair's?

MR. DURRETT: Yes, sir. That was covered in Mr. Lavine's cross examination. They will also be in the file if anyone wants to see them in their entirety.

MR. MONTGOMERY: Randall Montgomery for Metex, and we support Continental's application in principle and are happy to cooperate in any manner that will assist in acquiring the test. However, as intimated in the testimony and by the questions of the Examiner, we say that this is only one tool and will not necessarily indicate that one well will not drain 80 acres regardless of what the information is, if the information is negative. That's all.

MR. UTZ: Are there any other statements? If I may ask Mr. Lavine one more question, these pool limits shown on your



)EARNLEY-MEIER REPORTING SERVICE, Inc. N. M. N. M. PHONE 983-3971 PHONE 983-3971 PHONE 983-3971 PHONE 983-3971 PHONE 983-3971

FARMINGTON, N. M. PHONE 325-1182

ALENGULROUE, N. M. FHONE 243 6691 Exhibit No. 1 are the present pool limits?

MR. LAVINE: Yes, sir.

MR. UTZ: As of today?

MR. LAVINE: As of Friday.

MR. UTZ: I don't think we have extended anything since Friday.

MR. LAVINE: Well, it is possible that No. 20 will be extended by today. I talked to the Commission in Hobbs the other day and they said that they will get after that immediately because it was an oversight and the well has been classified in the Oil Center-Blinepry since completion.

MR. DURREIT: That wouldn't be official until we have a hearing on it as far as extending it.

MR. LAVINE: I see.

MR. UTZ: So then all the wells that you propose to put in this interference program would be all wells inside the present pool limits plus your No. 20?

MR. LAVINE: Yes, sir, that is true.

MR. UTZ: Any other questions? Any other statements?

MR. MONTGOMERY: Randall Montgomery. One point I failed to mention, Mr. Examiner, also in Continental's schedule it included Metex Supply would be shorted ll barrels. We would appreciate your taking that under advisement also.

MR. UTZ: I have an idea that the Hobbs proration office will see that you get your 11 barrels. The case will be taken



DEARNEEY-MEIER REPORTING SERVICE, Inc. Save Fr. N. M. PHONE 983-3971 PHONE 983-3971 PHONE

ALBUQUERQUE, N. M. PHONE 243-6691

FARMINGTON, N. M. PHONE 325-1182 under advisement.

* * *

STATE OF NEW MEXICO)) ss COUNTY OF BERNALILLO)

FARMINGTON, N. M. PHONE 325-1182 DEARNLEY-MEIER REPORTING SERVICE, Inc. SANTA FE, N. M. PHONE 983-397

ALBUQULRUUE, N. M. PHONE 243 6691 I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record of the said proceedings to the best of my knowledge, skill, and ability.

WITNESS my Hand and Seal this 10th day of May, 1963.

PUBLIC

My Commission Expires:

June 19, 1963.

I do hereby certify that the foregoing 18 the protectings in a complete ruuri a or CA38 33.27 84 the Examines 10 bearc Examiner. Nex100 011 Conservat on Commission New

