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1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
July 10, 1968

EXAMINER HEARING

-----  
IN THE MATTER OF: )

Application of Benson-Montin- )  
Greer Drilling Corporation and )  
Lloyd B. Taylor for Pressure )  
Interference Tests and Back )  
Allowable, San Juan County, )  
New Mexico. )

Case No. 3805

-----  
BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING



MR. UTZ: The hearing will come to order, please.  
The first case on the docket will be 3805.

MR. HATCH: Case 3805: Application of Benson-Montin-Greer Drilling Corporation and Lloyd B. Taylor for Pressure Interference Tests and Back Allowable, San Juan County, New Mexico.

I believe you have had a telephone conversation from the applicant in this case, haven't you, Mr. Utz?

MR. UTZ: Yes. The applicant requested a continuance until the next Examiner Hearing. A formal letter will follow. Case 3805 will be continued until July 24th.

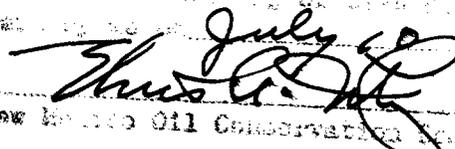
STATE OF NEW MEXICO )  
 )  
COUNTY OF BERNALILLO )

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 17th day of July, 1968.

  
\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires:  
June 19, 1971.

I do hereby certify that the foregoing is a true and correct copy of the transcript of hearing held before the New Mexico Oil Conservation Commission on July 10, 1968.  
  
New Mexico Oil Conservation Commission



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1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
July 24, 1968

EXAMINER HEARING

IN THE MATTER OF: )  
)  
)

Application of Benson-Montin-Greer )  
Drilling Corporation and Lloyd B. Taylor )  
for Pressure Interference Tests and Back )  
Allowable, San Juan County, New Mexico. )  
)

Case No. 3805

BEFORE: Daniel S. Nutter  
Examiner

TRANSCRIPT OF HEARING

## NEW MEXICO OIL CONSERVATION COMMISSION

## EXAMINER HEARING

Santa Fe, NEW MEXICO

Hearing Date JULY 24, 1968TIME: 9 A.M.

NAME	REPRESENTING	LOCATION
Jason Kellahin	Kellahin & Fox	Santa Fe
MAX E. GURRY	SOLAR OIL	MIDLAND, TEX
BILL T. STAPLER	" "	" "
Samuel Smith	Tenneco & Humble	Midland
Jerry Eskew	Aztec Oil & Gas	Hobbs
A. R. GREGG	DANSON-MANNA-GREGG	FRUITWATER
John F. Lacey	Tenneco Oil Co	Midland, Texas
Richard S. Morris	Montgomery firm	Santa Fe
Richard Ulrich	El Paso Natural Gas	Farmington
Walter Foy	Tenneco Oil Co.	Midland, Texas
Victor T. LYON	CONTINENTAL OIL CO	HOBBS N.M.
Anna E. [unclear]	RW Byram	SF - Austin

MR. NUTTER: The hearing will come to order, please. The first case this morning will be this Continued Case 3805 on the back of the docket.

MR. HATCH: Case 3805, Continued from the July 10, 1968, Examiner Hearing. Application of Benson-Montin-Greer Drilling Corporation and Lloyd B. Taylor for Pressure Interference Tests and Back Allowable, San Juan County, New Mexico.

MR. COOLEY: William J. Cooley, Burr and Cooley, Farmington, New Mexico, appearing on behalf of the Applicants. We have one witness, Mr. Albert R. Greer whom we'd like to have sworn.

(Witness sworn.)

ALBERT R. GREER

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. COOLEY:

Q State your full name, please?

A Albert R. Greer.

Q Mr. Greer, you previously testified before this Commission on many occasions, have you not?

A Yes, sir.

MR. COOLEY: Are the witness's qualifications acceptable

by the Examiner?

MR. NUTTER: They are.

Q Are you appearing as witness for both Benson-Montin-Greer Drilling Corporation and Lloyd B. Taylor, Mr. Greer?

A Yes, sir.

Q Have you prepared a plat which shows the area of involvement in this case?

A Yes, sir.

MR. COOLEY: I ask that this be identified as Exhibit Number 1 in this case.

(Whereupon, Applicant Exhibit Number 1 marked for identification.)

Q What pool does Exhibit Number 1 deal with, Mr. Greer?

A The La Plata Gallup Pool in San Juan County.

Q Does it bear any similarities to the Puerto-Chiquito Gallup, east and west, in Rio Arriba County, New Mexico?

A Yes, sir.

Q Are they both fractured shale reservoirs?

A Yes, sir, producing out of the Niobrara member of the Mancos shale.

Q Do we have other similarities with respect to the dip of the formations?

A Yes, sir. They have steep dips.

Q Would you state what your Exhibit Number 1 purports to depict?

A Exhibit Number 1 is a plat of the Gallup area. Shows wells presently completed as producers.

Q In what color?

A These are colored in blue; locations of proposed wells colored in red, and the red square is the general area in which we propose to drill our third well. It also shows the general structure of the producing formations contoured on an electric log marker within the Niobrara member located at the base of the main producing zone. The heavy contour lines are thousand foot intervals and the light colored ones, the light shaded ones are a hundred foot intervals. Also shows the boundary of the proposed unit.

Q Are any of the proposed wells actually in the process of being drilled?

A Yes, sir. The well designated P-31 in Section 31 is currently drilling, probably. We set intermediate casing to this one.

Q Would you outline for the Examiner what you propose to do in the way of procedures as far as testing in this pool at this time?

A Yes, sir. First, I should say that we interpret

information at this date to indicate that the area is divided into two pools, at least two pools. We believe they're separated by a fault which lies between the two producing wells which are colored in blue. We do not know the location of the fault, but we believe that it would approximate the zero contour interval as shown on this plat.

Q What leads you to believe that there are two separate pools in this area?

A The initial well, which is designated as the M-5 in Section 5, had an initial reservoir pressure on the order of 1500 pounds. It has been producing about ten years. Its pressure has dropped three or 400 pounds, and as of this year, the other well colored in blue in Section 6, the Taylor Number 1 Vic Walker, was completed and its initial pressure when projected to the same datum as the first well indicates a pressure on the order of 1500 pounds.

In other words, both wells have nearly the same initial pressures, but the pressure in one has dropped three or 400 pounds and, accordingly, I believe they are not in communication and if they're not in communication and are separated by what I believe to be a narrow boundary, why, we conclude it to be a fault.

Q Are there any other indicia that these two wells are

not in the same common source of supply as indicated by the characteristics of the oil itself?

A Yes, sir. The bottom hole sample in the Taylor Number 1 Walker indicates a bubble point of about 230 pounds. We do not know what the bubble point was in the first well, but from its gas-oil ratio, we'd estimate it to be something on the order of 1500 pounds and, so far, all of the fractured shale reservoirs, so far, found in this area have shown wells to have the same gas-oil ratio throughout the reservoir despite substantial differences in depth. So we really have two things which indicate separation of these two wells.

Q With this in mind, what is then proposed to be deduced from the tests which you intend to conduct in this area?

A We're concerned primarily with the reservoir around the Taylor Number 1 Walker and we want to take interference tests in the reservoir in this fault block and we propose to do that by drilling these three additional wells and determining from pressure interference whether they are in the same fault block and if they are, we will conduct interference tests in such a fashion as to be able to calculate oil in place per acre and, also, then be able to interpret the pressure buildup test in order to determine distances to boundaries from the wells and in this fashion be able to outline the reservoir, the area limits

of the reservoir in the west fault block and the primary reason for all this, as we believe, this particular fault block has good characteristics for gravity drainage which, if we are to operate at such a gravity drainage potential as realized, we'll probably want to inject gas and produce the wells in certain fashion, different from what we ordinarily would do.

Q Now, are the specialized interference tests that you just referred to an element of the same engineering approach that you used in Case Number 3455 concerning the Puerto-Chiquito Gallup Oil Pool in Rio Arriba County, New Mexico?

A Yes, sir. We have made similar tests and presented them in this other case to the Commission.

Q But you'll attempt to prove the per acre reserves as well as the aerial extent of the pool, fractured shale reservoir in the same engineering fashion as you did in that case?

A Yes, sir. We feel that this is necessary.

Q Do you feel that the information to be elicited from the tests which you propose will prevent waste?

A Yes, sir.

Q And result in the production of additional oil from this pool?

A Yes, sir. If the pool is produced under an ordinary solution gas drive procedure or mechanism, we can anticipate a

recovery of ten to fifteen percent of the oil in place, whereas as we can realize the gravity drainage recovery, we may realize as much as fifty to sixty percent of the oil in place, perhaps three or four times as much oil might be recovered if we can produce the reservoir in the manner we would propose, providing, of course, the tests show what we think they will.

Q How much longer do you propose to keep the Taylor Number 1 Vic Walker Well shut in?

A Well, we're thinking now about two months from the time of its last extension.

Q Was that July 8th?

A Which was July the 8th. However, we did not get started drilling other wells as we had planned and it may take a little bit longer than that, but in general, we want the well shut in until the other three wells are completed so that when we commence producing the Number 1 Vic Walker, the other three wells can be used as observation wells to reflect interference.

Q And then you propose to shut in the three wells which one is now drilling and the other two to be drilled in the very near future, immediately after they have produced their lode oil and established initial potential?

A This is correct.

Q And then use them as observation wells as the Vic

Walker back allowable is made up?

A This is correct.

Q And you are applying, are you not, for the opportunity to make up back allowable on all four wells involved, the Vic Walker Well and the three BMG Wells?

A This is correct.

Q At this point, is there any definite date on how long the BMG Wells will be shut in?

A No, sir. I would estimate at this time that the first one will be shut in probably four or five months and the others somewhat less.

Q Will you propose to keep the Commission advised of the tests as they are being conducted and inform the Commission when the tests have been concluded?

A Yes, sir.

Q Did you prepare Exhibit Number 1 or was it prepared under your supervision?

A Yes, sir.

MR. COOLEY: We offer into evidence Exhibit Number 1.

MR. NUTTER: Applicant's Exhibit Number 1 will be admitted in evidence.

(Whereupon, Applicant's Exhibit Number 1 was admitted into evidence.)

MR. COOLEY: We have no further questions.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Greer, as we summarized your application and printed it on the docket here, I think we've got all the points covered that need to be covered, but let's go over this just to be sure.

Now, you've got the Vic Walker. It's already been completed and it has been shut in --

A Yes.

Q -- in accordance with the previous Order of the Commission and an administrative extension of that Order, correct?

A Yes, sir.

Q And it's still shut in?

A Yes, sir.

Q Now, you're drilling the P-31 at the present time?

A Yes, sir.

Q And you propose to drill the I-6 and another well up here in the red square?

A Yes, sir.

Q And immediately upon establishing the potential for each of those three new wells, you will shut them in?

A That is true.

Q And when will you return the Taylor to production?  
After the third well has been drilled?

A This is our plan on that one, yes, sir.

Q And so you'll put it on production. It will have a sizeable amount of back allowable accrued to it and so you'll be producing it pretty hard for a period of time and observing the pressure drawdown in the other three wells?

A This is correct.

Q And you're asking for authority to shut in these other three wells for a period of up to 180 days after initial potential has been established and then to make up the production at some rate. Now, in the previous Order, we authorized a make-up period of three to one. That's three days of make-up for one day of shut in. Is this going to be satisfactory as far as the new wells are concerned?

A Yes, sir. We don't have any idea as to their productivity at this time but that sounds reasonable.

Q And at any rate, you've also requested provision in the Order for administrative extension of the make-up time or the shut in time if either becomes necessary?

A Yes, sir.

MR. NUTTER: Are there any other questions of Mr. Greer?

MR. COOLEY: Yes. Mr. Greer, what time is it?

MR. GREER: I have fourteen after 9:00.

MR. NUTTER: Sixteen. We'll take the case under advisement and call the next case.

I N D E X

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STATE OF NEW MEXICO )  
 ) ss.  
COUNTY OF BERNALILLO )

I, CHARLOTTE MACIAS, 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.

*Charlotte Macias*  
\_\_\_\_\_  
Notary Public

My Commission Expires:

February 10, 1971.

I do hereby certify that this is a true and correct copy of the transcript of the hearing before the New Mexico Oil Conservation Commission held by me on 7/24 1968 **3805**  
*Charlotte Macias*  
New Mexico Oil Conservation Commission