

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
September 4, 1968

EXAMINER HEARING

IN THE MATTER OF:

Application of Mobil Oil Corporation  
for a waterflood expansion, Lea  
County, New Mexico.

Case 3851

BEFORE: Elvis A. Utz  
Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 3851.

MR. HATCH: Case 3851. Application of Mobil Oil Corporation for a waterflood expansion, Lea County, New Mexico.

(Whereupon, Applicant's Exhibits Numbers 1 through 4, inclusive, were marked for identification.)

MR. UTZ: Are there any other appearances in this case? You may proceed. You haven't made your appearance yet.

MR. SPERLING: Not yet.

MR. UTZ: You may proceed.

MR. SPERLING: If the Examiner please, James E. Sperling of Modrall, Seymour, Sperling, Roehl and Harris, Albuquerque, appearing for the Applicant. We have one witness: Mr. Hart. Would you stand, please?

(Witness sworn.)

FRANK HART

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

DIRECT EXAMINATION

BY MR. SPERLING:

Q Please give your name, place of residence, employer and capacity in which you are employed.

A Frank Hart, Midland, Texas, Mobil Oil Corporation. I'm Senior Engineer.

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

A I have.

Q And those qualifications have been accepted?

A They have.

MR. SPERLING: Mr. Examiner, the purpose of this application is to expand injection facilities relating to the presently established waterflood project in the Grayburg-San Andres Pay in the Vacuum Field, Lea County, New Mexico. By Order Number R-3318, which was the date of the last expansion, additional ten injection wells were approved by the Commission in that order.

The original project was established in 1958 and this is a continuation of the expansion program that has been taking place as the project has progressed.

Q Now, Mr. Hart, if you will please refer to what has been marked as Exhibit Number 1 and explain to the Examiner what that exhibit is and what it shows.

A Mobil Oil's Exhibit Number 1 is a plat showing all of the wells completed in the San Andres Formation while the lease is under flood and showing the proposed new injector, Bridges State Well Number 127 which is located 600 feet from the west line and 506 feet from the south line of Section 24.

Exhibit Number 1 also shows certain statistical information by each well and waterflood is described in the legend.

Q Now, that is the well which is circled in red in the Southwest Quarter of the Southwest Quarter of Section 24?

A It is, sir.

Q And what other information is contained upon the exhibit?

A Other information on the exhibit is production rate, barrels per day and barrels of water per day; barrels of oil per day and barrels of water per day on the producing wells and cumulative oil production and thousands of barrels as of 1-1-68. On injection wells, we have listed the rate per day and the cumulative injection into that injection well in each case.

Q And that same information is contained or is shown with reference to the previously drilled injection wells and the producing wells within the project area.

A Yes, sir.

Q Is the 127 Well a recently completed well, a proposed well, or when was it completed?

A Let's see.

Q It is recently completed, isn't it?

A Yes, I believe that's correct.

Q Now, would you please refer to Exhibit Number 2 and explain that.

A Exhibit Number 2 is a gamma-ray sonic log of the well and which is marked at the top of the San Andres Formation and the perforated interval which is opposite, selected porosities between 4484 and 4735 feet.

Q Now, would you please refer to Exhibit Number 3 and explain its purpose.

A Exhibit Number 3 is a diagrammatic sketch of the proposed condition of the well under injection operations. The well contains 1,605 feet of eight and five-eighths inch surface pipe which was cemented to the surface with 800 sacks of cement, 4,848 feet of five and a half inch long string cemented to the surface with 1400 sacks of cement, and the strings are two and three-eighths inch, cement lined tubing set on a packer approximately 50 feet above the uppermost San Andres perforations. Approximately 30 feet of cement were left inside the casing below the perforated interval.

The well is so completed that injection water can only enter a waterflood horizon.

Q Now, would you now refer to Exhibit Number 4.

A Exhibit 4 is a reservoir data graph depicting the

performance of the Bridges State G and State J Leases since January, 1966. This graph shows oil production, produced water and water injection, injected in this lease, and they are brought up to July of '68.

Q And this graph is related to time interval within which production and injection has occurred?

A Yes, sir, it's volume versus time.

Q Now, it appears from examination of Exhibit Number 1 that the proposed injection well is actually insulated from offset leases to the south and west by at least one row of presently completed wells, is that correct?

A Yes, sir, that is correct.

Q Is it your opinion and that of Mobil that the approval of this application for the injection of water within this particular well is necessary in order to continue the project which has been in operation for some time?

A Yes, sir, that is correct.

MR. SPERLING: I believe that's all, Mr. Examiner. I'd like to offer Exhibits 1 through 4 at this time.

MR. UTZ: Without objection, Exhibits 1 through 4 will be entered into the record in this case.

(Whereupon, Applicant's Exhibits Numbers 1, 2, 3 and 4 were admitted in evidence.)

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Hart, have you had any response from the Number 22--  
Well, any of the surrounding wells?

A No, sir, we haven't. We checked these out --

Q That was recently.

A -- very recently, before we applied for the hearing  
but we had no response.

Q Was this Number 127 Well drilled for this injection  
or was it a dry hole?

A No, sir. It was drilled as a producer and is  
presently producing about -- No. I'm sorry. Yes, sir, it was  
drilled for this injection, for this project as an injector.

Q Do you intend to put an inert fluid in the annulus?

A Yes, sir, we will put an inhibited fluid in the  
annulus. Also, we'll have a pressure gauge on the casing for  
monitoring purposes to alert us to any possibility of leaks  
that might occur in the future.

MR. UTZ: Are there any questions of the witness?  
The witness may be excused. Any statements? The case will be  
taken under advisement.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
FRANK HART	
Direct Examination by Mr. Sperling	2
Cross Examination by Mr. Utz	7

E X H I B I T S


<u>Number</u>	<u>Marked for Identification</u>	<u>Received in Evidence</u>
Applicant's Exhibits 1, 2, 3, 4	2	6



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

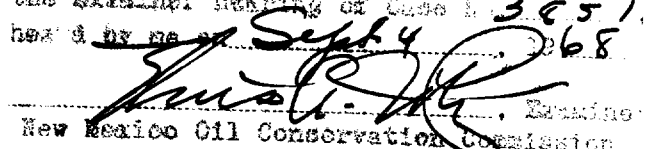
I, CHARLOTTE MACIAS, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings,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

Witness my Hand and Seal this 2nd day of October, 1968.

  
 \_\_\_\_\_  
 Notary Public

My Commission Expires:

February 10, 1971.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3851, heard by me on Sept 4, 1968.  
  
 \_\_\_\_\_, Examiner  
 New Mexico Oil Conservation Commission