

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

EXAMINER HEARING

IN THE MATTER OF:

Application of Tenneco Oil Company  
for a waterflood expansion, Lea  
County, New Mexico.

Case 3853

BEFORE: Elvis A. Utz  
Examiner

TRANSCRIPT OF HEARING

MR. UTZ: The hearing will come to order, please.  
Case 3853.

MR. HATCH: Case 3853. Application of Tenneco Oil Company for a waterflood expansion, Lea County, New Mexico.

MR. WHITE: Charles White of White, Gilbert, Koch and Kelly, Santa Fe, New Mexico, appearing on behalf of the Applicant. We have one witness to be sworn.

(Witness sworn.)

(Whereupon, Applicant's Exhibits  
1 through 5, inclusive, were  
marked for identification.)

MR. UTZ: Are there any other appearances? If there are none, you may proceed.

WALTER V. PALMER

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

DIRECT EXAMINATION

BY MR. WHITE:

Q Mr. Palmer, will you state your full name for the record, by whom you are employed and in what capacity.

A My name is Walter Palmer. I'm employed by Tenneco Oil Company as a petroleum engineer.

Q Have your professional qualifications previously been accepted by this Commission as a matter of record?

A They have.

Q Will you briefly state what the petitioner seeks by the application?

A Tenneco appeared in Case Number 3790, hearing held June the 26th, 1968, requesting approval of the Mesa-Queen water-flood project. The Commission issued Order R-3444 dated July 3rd, 1968, approving same project.

The present hearing seeks to amend Order R-3444 substituting Unit Wells Numbers 16 and 24 in lieu of injection wells Number 15 and 22.

Q Do you also seek administrative approval to expand the area and add additional wells?

A Yes.

MR. WHITE: If the Examiner, please, at this point, we ask that you take administrative notice of the record in Case Number 3790.

MR. UTZ: I will do so.

Q Will you refer to Exhibit 1 and explain the exhibit, please?

A Exhibit 1 is a plat of the Mesa-Queen Unit showing the location of the producing and injecting wells. Also shown in red are the subject wells, Number 16 and 24.

Q Will you point out the injection wells 15 and 22?

A Injection Well Number 22 is the direct north offset to Well Number 24. Injection Well Number 15 is the direct west offset to the well shown in red, Number 16. They were the original wells intended for injection on the first application, 22 and 15.

Q Why does Tenneco want this substitution and what brought about the application?

A On the original application, Wells Number 16 and 24 were single wells and single tracts operated by single operators and it was not known whether they would join the unit; therefore, they were not designated as injection wells. Subsequently, those tracts have joined the unit and it is desirable to use them as injectors instead of Wells 15 and 22.

Q Will this substitution affect the water project in any way?

A It will improve the aerial sweep efficiency of the water injection pattern.

Q What is the present status of wells, 24 and 16?

A 24 and 16 are both marginal, submarginal producers.

Q Will you refer to Exhibit 2 and explain your diagrammatic sketch?

A Exhibit 2 is a schematic diagram of Unit Well Number 16, one of the wells we would like to convert to injection, showing the location of the casing and the number of sacks of cement used to cement that casing. Five and a half inch was cemented

at 3530 with 150 sacks. Estimated top of the cement, 2000 feet. Fresh water to be injected down the tubing at 300 to 600 barrels of water per day and approximately 1,000 to 1500 pounds per square inch pressure below a tubing packer set approximately 50 feet above the top of the perforations. Injection will be down two and three-eighths tubing and the annulus will be loaded with corrosion inhibited fluid, and the pressure gauge set at the surface annulus or left open to observe for any leaks.

MR. UTZ: Two inch tubing?

THE WITNESS: Two and three-eighths inch.

Q What type of packer will you use and what will be its location?

A Be a tension-type packer about 50 feet above the top of the perforation as shown in the diagram.

Q Will you refer to Exhibit 3 and explain that, please?

A Exhibit 3 is a schematic diagram of the other well, Unit Well Number 24, showing the same type of thing that I explained on the other diagram.

Q Same type installation?

A Yes, exactly the same type installation. The only difference here between, in Well Number 24 is we propose some new perforations and some additional Queen porosity. It will be the same type of completion with the annular corrosion inhibited fluid and the packer 50 feet above the top of the perforations

and two and three-eighths inch tubing.

Q In your opinion, will this proposed installation effectively segregate the injected water from the other zones?

A Yes, it should.

Q Will you refer to Exhibit Number 4 and 5, respectively?

A Exhibit Number 4 is a sonic gamma-ray log of Well Number 16, showing the perforated interval. And Exhibit Number 5 is the same thing for Unit Well Number 24, also showing the perforated interval and the proposed new perforations.

Q Proposed new perforations are 3412, 3420?

A That's right, sir.

Q Does that conclude your testimony?

A I believe that's all I have.

Q Were these exhibits prepared by you or under your direction?

A They were.

MR. WHITE: At this time, we offer Exhibits 1 through 5 and that concludes our direct.

MR. UTZ: Without objection, Exhibits 1 through 5 will be entered into the record in this case.

(Whereupon, Applicant's Exhibits Numbers 1 through 5, inclusive were entered in evidence.)

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Palmer, is it your intention to set a pressure gauge at the surface in the annulus?

A Yes, sir. We'll either do that or leave it open. Most probably use a pressure gauge.

Q And this is just plain tubing, uncoated tubing?

A Yes, sir.

Q Injecting fresh water?

A Fresh water purchased from Double Eagle Corporation of Roswell. The injected water will be treated with an oxygen scavenger for corrosion.

MR. UTZ: Are there any other questions of the witness? He may be excused. Statements in this case? The case will be taken under advisement.

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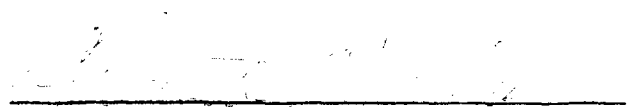
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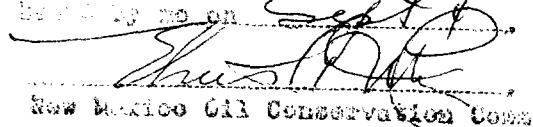
STATE OF NEW MEXICO    )  
                                   )    ss.  
 COUNTY OF BERNALILLO )

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.

Witness my Hand and Seal this 4th day of October, 1968.

  
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 Notary Public

My Commission Expires:  
 February 10, 1971.

do hereby certify that the foregoing is  
 a true and correct record of the proceedings in  
 the above hearing of Case No. 3853  
 held by me on Sept 11, 1968.  
  
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 Notary Public  
 New Mexico Oil Conservation Commission