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

EXAMINER HEARING

IN THE MATTER OF:

Application of Sunray DX Oil Company for a waterflood project, Lea County, New Mexico.

Case 3855

BEFORE: Elvis A. Utz
Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 3855.

MR. HATCH: Case 3855, application of Sunray DX Oil Company for a waterflood project, Lea County, New Mexico.

MR. WHITE: If the Examiner, please, Charles White of Santa Fe, New Mexico, appearing on behalf of the Applicant. We have one witness to be sworn at this time.

(Witness sworn.)

MR. UTZ: Are there other appearances? You may proceed.

(Whereupon, Applicant's Exhibits 1, 2 and 3 were marked for identification.)

RALPH MANESS

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

DIRECT EXAMINATION

BY MR. WHITE:

Q Mr. Maness, would you state your name, please?

A Ralph Maness. I'm a petroleum engineer with Sunray DX Oil Company in Roswell, New Mexico.

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

A Yes, they have.

Q Will you briefly state what Sunray seeks by the subject application?

A We seek approval to convert our H. D. Greer Number 1 Well to water injection for the purpose of injecting produced water from our Boring and Greer leases. These leases are located in Sections 20 and 21 as shown on our Exhibit Number 1.

Q And it shows the injection well?

A Yes. The injection well is shown by the red triangle. This is our H. D. Greer Number 1 Well.

Q Is this now in an advanced state of depletion?

A Yes, sir, it is. The wells producing from the South Eunice Seven Rivers Field on our lease produced from two to five barrels of oil and one to five barrels of water per day.

Q What is the present status of the proposed injection well?

A It is a temporarily abandoned well.

Q Do you have any other information as to Exhibit Number 1?

A Yes. The brown circled wells on the map indicate the South Eunice Seven Rivers producing wells and the green circled wells indicate the Jalmat-Yates gas wells of which we have one on our lease which is our Boring and Greer gas unit. This well also makes considerable water and the water from this well is to be injected in our proposed injection well.

Q And in what formation did you say you intend to inject the water?

A We intend to inject the water into the Seven Rivers Formation.

Q Now, will you explain Exhibit 2?

A Yes, sir. Exhibit 2 indicates our existing casing design in our proposed injection well, the H. D. Greer Number 1 and our proposed tubing and packer arrangement for this injection well.

Q Does it show the quantity of the cement in the tops?

A Yes, sir. We have seven-inch twenty-four pound casing set at 3693 with cement at 325 sacks. Estimated top of cement was 1429 and we have nine and five-eighths thirty-six pound intermediate casing set at 1543. Cemented with 450 sacks.

On our sketch, we inadvertently left off the estimated top of cement on this string. It is 270 feet. And we have surface casing, seventeen two-inch forty pound set at 203 feet, cemented with 225 sacks which was circulated to surface.

Q Where is the location of your packer?

A Our packer will be set at approximately 3650, which is approximately 50 foot above where the seven inch casing is set. This will be a tension-type packer and we propose to run two and seven-eighths inch tubing in the well and it will be cement lined tubing.

Q Do you intend to use a pressure gauge or leave the annulus open?

A We most likely will use a pressure gauge; however, there's a possibility that we may leave the annulus open. We will, however, load the annulus with an inhibited fluid.

Q In your opinion, will any fresh water be affected by the installation?

A No, sir, I do not believe it will.

Q And will it effectively segregate the injected water from other zones?

A Yes, sir.

Q How much volume of water do you intend to inject?

A Approximately 150 barrels of water per day.

Q And under what pressure?

A Remedial work on this well before it was temporarily abandoned indicates that the well will take the water on a vacuum by gravity.

Q Will you explain Exhibit 3, your log?

A Yes, sir. Exhibit 3 is a radioactive log on the proposed injection well and all it is intended to show is the proposed injection zone. It shows casing set at 3693 and our plug-back total depth at 3733. This open hole will be our injection zone.

Q Does that complete your testimony?

A Yes, sir, it does.

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

A Yes, sir.

MR. WHITE: We offer Exhibits 1 through 3 and that concludes our direct.

MR. UTZ: Without objection, Exhibits 1 through 3 will be entered into this record.

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

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Maness, what is the source of the water here?

A Produced water from our Seven-Rivers Wells, South Eunice Field, on our Boring and Greer Leases and produced water from our Boring and Greer gas unit well which is completed in the Jalmat-Yates. We have been approached by at least one other operator in the field in regards to our injecting their produced water also; however, their produced water will be from the same zones.

Q In other words, at the present time, your producer, it will at least produce water from the 320 acres that you've shown on your Exhibit 1?

A That's correct, sir.

Q Now, how much water do you think you'll be injecting?

A Approximately 150 barrels, sir.

Q 150 barrels a day?

A Yes, sir.

Q That will go into the open hole at 3693 to 3733?

A Yes, sir, that is correct.

Q How long do you anticipate that it will take at this rate to cause a fill-up to the Seven Rivers Zone in this area?

A I am not, at this time, able to answer that question, sir. We have not studied this field for the possibility of waterflood. This proposal was to continue primarily for disposing of salt water with any possible results from this injection to be monitored closely for possible further expansion in waterflood.

Q Well, what advantage is it to call it waterflooded instead of an SWD well?

A Well, sir, if you inject -- if my understanding is correct -- if you inject waters into a producing zone, it is termed as a waterflood. Is that not correct, sir?

Q No. We've had two cases just before yours that want to do the very thing you want to do. It just depends on whether you're going to damage the formation or not or whether you're actually going to help it.

A Well, sir, as I said, we have not studied the formation and whether we will possibly receive any benefit; however, we plan to monitor the project and to see whether we do, and if

we do, we'll be looking at possible further expansion in terms of a waterflood project.

Q You wouldn't expect to do any damage to the formation by this injection, would you?

A No, sir. I wouldn't think there would be no --

Q Contrary, you would expect it to help, if anything?

A Yes, sir, that's correct.

Q And this entire zone is productive in this area, either in the Jalmat Gas Pool or in the South Eunice Oil Pool, is that correct?

A Yes, sir.

Q Do you know whether or not your company will have any objection to calling this what it is: salt water?

A We would have no objection to it, no, sir. We still --

Q If you still don't get any response for this, well, you could come in later on and call it a waterflood --

A This is correct.

Q -- and there would be no problem, would there not?

A We could still monitor it the same. The only particular difference would be in the forms which would be required.

Q And did you show what kind of water you have here anywhere?

A No. We do not have a water analysis. However, we have had not experienced any corrosion problems or stale problems with

this water.

Q It's pretty salty, though?

A Yes, sir, it's salty water.

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

I N D E X

E X H I B I T S

Number	Marked for Identification	Received in Evidence
Applicant's Exhibit Numbers 1, 2, 3	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 7th day of October, 1968.

Charlotte Macias
Notary Public

My Commission Expires:

February 10, 1971.

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