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

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico November 25, 1969

EXAMINER HEARING

)

IN THE MATTER OF:)			
)			
Application of	Tamarack Petroleum)			
Company, Inc.,	for a waterflood)	Case	No.	4260

expansion, Lea County, New Mexico.

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING



MR. UTZ: Case 4260.

MR. HATCH: Case 4260. Application of Tamarack Petroleum Company, Inc., for a waterflood expansion, Lea County, New Mexico.

MR. KELLAHIN: Mr. Examiner, if you please, Jason Kellahin of Kellahin and Fox, of Santa Fe, appearing for the Applicant.

We have one witness I would like to have sworn, Mr. Roy C. Williamson, Jr.

MR. UTZ: Any other appearances?
You may proceed.

(Witness sworn).

(Whereupon, Applicant's
Exhibit l was marked for
identification.)

ROY C. WILLIAMSON, JR.

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q State your name, please.
- A Roy C. Williamson, Jr.
- Q What business are you engaged in, Mr. Williamson?
- A I am a petroleum consultant.

- Q And where are you located?
- A In Midland, Texas.
- Q Have you ever testified before the Oil Conservation Commission of New Mexico and made your qualifications a matter of record?
 - A Yes, I have.

MR. KELLAHIN: Are the witness' qualifications acceptable, Mr. Examiner?

MR. UTZ: Yes, sir.

- Q (By Mr. Kellahin) Mr. Williamson, in connection with your work as a petroleum engineer, have you done any work for Tamarack Petroleum Company, Inc., in connection with Case 4260?
 - A Yes, sir, I have.
- Q Referring to what has been marked as Applicant's Exhibit No. 1, and the figures which are attached to that exhibit, will you state briefly just what is proposed by Tamarack Petroleum Company in this application?
- A We are requesting permission to convert the unit Well No. 18 to injection service.
- Now, you have referred to some of these other wells as proposed injection wells, in reference to what has been marked as Exhibit 1, figure 1. And, what is shown

on that exhibit?

A On this exhibit are shown the wells that are currently on injection, which are designated by the blue dots.

The red dots, designated as proposed injection wells, consist of two groups of wells: the first group of wells, for permission to inject, was requested and granted along with a formation of the unit.

The well that we are requesting now is shown by a red arrow on figure No. 1, as unit Well No. 18.

- Q Would you give the location of that well?
- A That location is in Section 23, Unit L, Township
 19 South, Range 35 East.
- Q Now, in the northeast Pearl Queen Unit, there are several producing rights: are there not?
 - A Yes, there are.
- And what zones do you propose to inject in this well?
- A In this well, we will inject into the so-called zone five and zone seven, as shown on the last exhibit, or the next to the last exhibit, which shows the down hole configuration of the proposed injection well.
 - O Now, the exhibits, figures No. 2 and -- two,

three and four; were they offered in the previous hearing?

- A Yes.
- Q Does this reflect that you will get an adequate flood of all of the horizons by using the injection wells, which have heretofore been approved and the proposed injection well?
 - A That's correct.
- Q Do you have any other comments in connection with the exhibit?
- A None other, except that zone five, which is declared present completed interval in well 18, will be squeezed, prior to commencing injection with the other two zones.
 - Q Is that zone making water at the present time?
 - A Yes, it is.
 - Ω Now, referring to --

MR. UTZ: I would like some clarification here.
You said zone five will be squeezed?

THE WITNESS: No, zone four will be squeezed.

MR. UTZ: Well, I thought you said zone five?

THE WITNESS: Well, I'm sorry. Zone four will be squeezed. Zone five and seven will be perforated for injection.

MR. UTZ: All these zones are in the Queen?

THE WITNESS: Yes. They are just at actually different production intervals within the Queen.

- Q (By Mr. Kellahin) And they are all embraced within the unit; is that correct?
 - A Yes, that's correct.
- Q Now, on the zone five, on figure three, you show that that zone as being wet in the Well No. 18. Do you know what the situation is there at the present time?
 - A From our study, we determined that the zone five is at the oil-water contact in this well.

However, that will not prevent it from being an effective injection well. The sand section is there and will accept water.

- Q Now, the well is not presently open in either zone five or seven; is that correct?
 - A That is correct.
- Now, referring to the diagrammatic sketch of your proposed completion; this reflects that you will be injecting through a plastic-lined tubing, and under a packer?
 - A Yes, that's correct.

- Q Is that the same type of completion that you proposed in the other wells --
 - A Yes.
 - Q -- which have been approved?
 - A Yes, that is the same.
- Q Will the casing tubing anulus be filled with an inert fluid?
 - A Yes, it will.
 - Q Will you install a pressure gauge at the surface?
 - A Yes.
- O And then, attached to the exhibit, is a log what well is that of?
- A This is of the requested well -- it's the old Gulf State No. 1, which has been redesignated as Unit Well No. 18.

It shows the zone four, five and seven, with the perf shown in zone four.

- Now, how much water will you inject in this well?
- A We plan to inject approximately one hundred and fifty barrels of water per day.
- Q Under what pressure do you anticipate you will inject?
 - A We will have a surface pressure of approximately

twenty-five hundred pounds.

- 0 What is the source of water?
- A In the Ogallala Formation.
- Q Now, are you presently injecting water into the unit?
- A Only in the three wells shown as blue, and that is for disposal purposes for the moment.

Construction is under way on the plant and distribution system, and injection should begin within the next few weeks.

- Q You are injecting produced water in the well: aren't you?
 - A Yes.
 - Q Will you reject produced water --
 - A Yes.
 - O -- throughout the life of the flood?
 - A Yes.
- Q But in addition, you will make it up with Ogallala water?
 - A Yes.
 - O What source?
- A The water source is seven miles northeast of the unit.

Q Was Exhibit 1, with the attachments, prepared by you or by someone under your supervision?

A Yes.

MR. KELLAHIN: Mr. Examiner, we offer in evidence Exhibit No. 1 with its attachment.

MR. UTZ: How many parts?

MR. KELLAHIN: Let me count them. It is an eight-page exhibit.

MR. UTZ: Exhibit No. 1, consisting of eight pages, will be entered into the record of this case.

MR. KELLAHIN: That's all I have.

CROSS EXAMINATION

BY MR. UTZ:

- Ω At this time, you have the two injection wells on the unit, as shown on figure 1 of the Exhibit 1; is that correct?
 - A That's correct.
- Q And this request is only for converting your No. 18 into an injection well?
- A That's correct. The other pool was approved in an earlier hearing.
 - Q Is it your plan now, to reject produced water?
 - A Yes.

- Q And that water will probably be brackish?
- A Yes, sir.
- Q And the Ogallala water is presently --
- A Yes, sir.

MR. UTZ: Any questions of the witness?

Any statements? The witness may be excused.

(Witness excused).

MR. UTZ: The case will be taken under advise-

ment.

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Applicant's Exhibit 1

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, CA FENLEY, Court Reporter 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.

Court/Reporter

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