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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 12, 1968

IN THE MATTER OF:

Application of Leonard Latch
for three waterflood projects,
Eddy County, New Mexico.

Case No. 3929

BEFORE: D. S. NUTTER

TRANSCRIPT OF HEARING

MR. NUTTER: Call Case No. 3929.

MR. HATCH: Application of Leonard Latch for three waterflood projects, Eddy County, New Mexico.

MR. LATCH: Mr. Examiner, I am going to represent myself, if I may, sir.

MR. NUTTER: Are you Mr. Latch?

MR. LATCH: Yes, sir.

(Witness sworn.)

(Applicant's Exhibits 1 through 4 marked for identification.)

* * * * *

L E O N A R D L A T C H, the applicant, having been first duly sworn, was examined and testified as follows:

E X A M I N A T I O N

BY MR. NUTTER:

Q Would you state your name, please?

A My name is Leonard Latch, L-a-t-c-h.

Q You are the applicant in this case, Mr. Latch?

A I am, sir.

Q And you propose to represent yourself in this matter?

A Yes, sir.

Q Would you proceed?

A I am the owner and operator of several wells in the

Empire Field, Eddy County, New Mexico. The map I have here is Exhibit 1, will give the exact location of the area in question. Now, these wells are producing from a very shallow sand, the Yates Sand, to be exact. It's about, a thickness only of from 6 to 9 feet and most of the wells in the area are better than 15 years old and being shallow as they are, why, naturally the bottom hole pressure is practically nil at this time. The wells do make, they'll average close to a barrel of oil per day and probably a barrel and a half of water per day. So the area in question certainly needs something single allowable will be produced from said well.

- CASE 3933: Application of Texaco, Inc., for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pilot waterflood project by the injection of water into the Drinkard formation through its C. H. Lockhart Federal NCT Well No. 9 located in Unit P of Section 18, Township 22 South, Range 38 East, Drinkard Pool, Lea County, New Mexico. Applicant further seeks a procedure whereby said project may be expanded administratively without a showing of a well response.
- CASE 3934: Application of Texaco Inc., for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Drinkard formation through the Drinkard string of its multiple completed (tubingless) V. M. Henderson Well No. 8 located in Unit E of Section 30, Township 21 South, Range 37 East, Drinkard Pool, Lea County, New Mexico.
- CASE 3935: Application of Sinclair Oil Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pilot waterflood project by injection of water into the Yates and Seven Rivers formations through its B Davis Well No. 1 located 330 feet from the South and West lines of Section 34, Township 23 South, Range 36 East, Jalmat Pool, Lea County, New Mexico.

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Exhibit 2 is a map showing the wells that I plan to put under flood, a detailed map of the proposed waterflood and the wells that I do plan to make injection wells are circled. Now this is not a five-point pattern, but I have located the well, I think, the best possible location, in relation to the producing wells. There is one item I plan to do different here than other floods, or other floods nearby that was tried in this area, they had a lot of trouble in water break-throughs by injecting constantly in the injection wells. I am going to try an ~~inhibition~~ method, that is, inject in one well 24 hours, and in another well another 24, and just go around the clock, 24 hours to each well. I do not plan to

inject too great an amount of water because of this break-through proposition. I plan to put about two hundred barrels of water per well, or in the well I am injecting in, in each 24 hours. I am trying this system on another area not too far from here, and thus far, I haven't had any trouble with break-throughs.

Q You have five wells proposed so that would mean that you would be putting 200 barrels in each well every barrel of oil per day and probably a barrel and a half of water per day. So the area in question certainly needs something single allowable will be produced from said well.

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Q You have five wells proposed so that would mean that you would be putting 200 barrels in each well every fifth day?

A Every fifth day, that is correct, that is my intention. My source well is the No. 2 Well in the Saunders B lease. I fracked this well several years ago and apparently the frack went down a fracture or something, into the lower water because it does make an abundance of salt water, so I have all the salt water I need and it is a very brackish water. I intend to use this water, plus the produced water from the three leases. I plan to reinject that water which will give me roughly some 25 barrels of produced water daily and I plan to add to that this 125 barrels of salt water from the well that is capable of making an abundance of salt water. As I have already stated, the reservoir is way down. I hope that this method will eliminate a lot of my problems or problems that have been had in this area with break-throughs. These wells in question on

these three leases have produced approximately 150,000 barrels of oil, primary. I hope to do that good by secondary. Certainly I'll take a bonus if one is available.

This flood will serve two purposes: 1, I will have a way of getting rid of produced water; and No. 2, I hope to recover considerably more oil by the secondary method.

Exhibit 3 is a detail of the injection wells showing the pipe, the pay sections, et cetera, and then Exhibit 4 is the logs of the wells in question. Now, they are all old cable tool wells. I did not drill these wells; I bought the most of them, all of them in this area. There were no electric log runs, and I have obtained copies of the logs from the United States Department of Interior and that's the only logs, to my knowledge, that are available on these wells.

Q Let's see, Mr. Latch, observing these various schematic diagrams of the wells which you have attached to your application, I presume they're the same as your Exhibit 3 there?

A Yes, sir.

Q It appears that the depth of the wells is approximately 450 feet, is that correct?

A Yes, sir, that is right.

Q And each one of them has seven-inch pipe down to the top of the pay with the exception of the Saunders A-6, which

has five and a half-inch pipe?

A Yes, sir.

Q And from 20 to 30 sacks of cement were used in cementing each one of those strings of casing?

A Yes.

Q Do you have any idea where the top of the cement is on these various wells?

A I have not run logs on it, no, but it should come up about 50 feet above the base of your pipe and it certainly is in order, these wells have been in for some time, so I'll inject down tubing with a packer on the tubing.

Q You will have tubing and a packer on each one?

A Yes, sir.

Q I notice on three of the exhibits, the notation "WT 120 to 125, WT 105 to 110, WT 120 to 125". Is this water?

A It is water, yes, but it it is a brackish water, salt outcrops in this area.

Q So that's not fresh water sand?

A There are no fresh water sands to my knowledge in this area.

Q Where will the packer be set in each of the wells?

A Within 10 feet of the base of the pipe.

Q They are all open hole completions?

A Yes, sir, they were all open hole cable tool completions, some of them as far back as '35.

Q This Saunders B-2, that makes all that water?

A Yes, sir.

Q What formation does that make that water from?

A Well it's, frankly, it's a gradational thing in there. I'm not sure whether this is the Yates or Seven Rivers, but it's coming from below.

Q It's an Empire Pool well, then?

A Oh, yes; yes, sir, lot of the geologists in the area call this Seven Rivers. Frankly, I think it's Yates, but that's a debateable question anyway, anyhow it's a sandy lime reservoir.

Q This is the only one that makes very much water?

A That is correct, I fracked that well.

Q Is it deeper than the others?

A No, but it certainly sets up a frack. I have an abundance of water, I know it's not coming from up the pipe because I put a packer in there and checked the pipe. It's definitely coming from down hole somewhere.

Q You fracked into some kind of an aquifer down there?

A I do know from other wells that have been deepened

there is an abundance of salt water below the producing horizon about 50 feet and apparently we got in it.

Q What does the average well make as far as water is concerned, about a barrel and a half?

A Yes, sir, barrel and a half to two barrels a day, and about a barrel of oil.

MR. NUTTER: Any other questions of Mr. Latch?

A I might add on that the early flood that was tried in this area, they did have considerable trouble from this break-through and from this ~~imbibition~~ method I am hoping to control that. It will take longer to flood it, but I think from what evidence I have on hand, I am hoping to get away from the break-through.

Q (By Mr. Nutter) You have three leases here, the Saunders A, Saunders B and the Travis?

A Yes, sir.

Q Is there a difference in ownership?

A They're federal leases; I have received the green light from the U. S. G. S.

Q They have different names, are there different overrides?

A Different overrides is the reason for that. They are all federal leases.

MR. NUTTER: What is Exhibit 3?

MR. LATCH: The first two are maps, and the second one is a detail of the pipe, scale of the wells and the pay section.

MR. NUTTER: That's 3, isn't it?

MR. LATCH: Yes, sir, and 4 would be those well logs, or drillers logs from the O. C. C., or from the U. S. G. S.

MR. NUTTER: Oh, that are attached to these?

MR. LATCH: Yes, that are attached.

MR. NUTTER: All right, we will identify them in that manner. Mr. Latch's Exhibits 1 through 4 will be admitted in evidence.

(Whereupon, Applicant's Exhibits
1 through 4 admitted in evidence.)

MR. NUTTER: Do you have anything further, Mr.
Latch?

MR. LATCH: I believe not.

MR. NUTTER: Does anyone have anything they wish to offer in Case 3929? We will take the case under advisement.

I N D E X

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STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my hand this 21st day of November, 1968.

Ada Dearnley

 Ada Dearnley

I do hereby certify that the foregoing is a complete record of the proceedings in the Bernalillo hearing of Case No. 3929, heard at on 11/12/68 1968.
[Signature]

 New Mexico Oil Conservation Commission