BEFORE THE

Oil Conservation Commission

SANTA FE, NEW MEXICO

July 25, 1956

IN THE MATTER OF:

CASE NO. 1109

TRANSCRIPT OF PROCEEDINGS

DEARNLEY-MEIER AND ASSOCIATES
COURT REPORTERS
605 SIMMS BUILDING
TELEPHONE 3-6691
ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
HOBBS, NEW MEXICO
JULY, 25, 1956.

IN THE MATTER OF:

CASE 1109: Application of Jake L. Hamon and Warren Petroleum Corporation for an order granting permission to convert their non-productive D. F. Willhoit No. 2 Well located in the South Knowles Devonian Pool, Lea County, New Mexico, into a salt water disposal well in compliance with Rule 701 of the New Mexico Oil Conservation Commission Statewide Rules and Regulations. Applicant, in the above-styled cause, seeks an order granting permission to convert their non-productive D. F. Willhoit No. 2 Well into a salt water disposal well. Applicant proposes to inject salt water into the well at a strata between 5,000 and 7,000 feet; said well is located 660 feet from the South and West lines of Section 18, Township 17 South, Range 39 East, South Knowles Devonian Pool, Lea County, New Mexico.

BEFORE:

MR. DANIEL S. NUTTER, Examiner.

P R O C E E D I N G S

MR. NUTTER: The next case is 1109.

MR. GURLEY: Application of Jake L. Hamon and Warren Petroleum Corporation for an order granting permission to convert their non-productive D. F. Willhoit No. 2 Well located in the South Knowles Devonian Pool, Lea County, New Mexico, into a salt water disposal well in compliance with Rule 701 of the New Mexico Oil Conservation Commission Statewide Rules and Regulations.

MR. SHAW: I wish to represent Jake L. Hamon and Warren Petroleum Corporation in this case.

MR. GURLEY: Do you have a witness?

MR. SHAW: I will be my own witness.

MR. GURLEY: All right.

(Witness sworn.)

HOWARD W. SHAW

a witness, on behalf of the applicant, having been first duly sworn on oath, testified as follows:

DIRECT EXAMINATION

BY MR. GURLEY:

Q Would you state your name, please?

A I am Howard W. Shaw; I reside in Odessa, Texas. I am employed by Jake L. Hamon as an engineer. I wish to represent Jake L. Hamon and Warren Petroleum Corporation in presenting this evidence in support of our request for a salt water disposal system.

Q I would like to ask you a question or two. Have you ever testified before this Commission before? A No.

Q Give us a general background of your education so we can take you as an expert witness.

A I am a graduate petroleum engineer from the University of Texas, I have six and a half years field experience, last five years in West Texas and New Mexico.

MR. NUTTER: The witness' qualifications are acceptable.

A We feel that it will be in the best interest of conservation and production of fresh water sand to set up this disposal system. We wish to use our D. F. Willhoit No. 2, located in the SW/4 SW/4

Section 18, Township 17 South, Range 39 East, for a disposal well. This was drilled to a depth of 12,316 feet; dry and abandoned on May 16, 1956, temporarily abandoned with the permission of the Oil Conservation Commission by putting a cement plug from 11,400 to 595 feet.

Now, this well, we have run 326 feet of 13 and 3/8 inch 48 pound H-40 new casing, also ran 5,000 feet of 9 and 5/8 inch J 5536 and 40 pound casing, also new and cemented from bottom to top. We propose to inject salt water into the zone between 5,000 and 7,000 feet. This includes the San Andres, Glorieta and Clear Fork Formations.

Now, the nearest production in these zones, as I understand it, is in Brownfield, located approximately six miles to the northeast, producing from the Glorieta; Carter field, four miles to the south, from the San Andres. These formations are non-productive in the area where we wish to set up this system, and we can't see any possible damage to the production in the other areas. In fact, we might help them by partial flood.

Now, this Willhoit No. 2, we have not yet tested this zone to see whether it will take water, but we have evidence from other parts of the field, as in Federal Davis No. 1, we lost circulation at a depth of 6,920 feet, and it took approximately 40 cement jobs to seal off this lost circulation; Holloway No. 1 lost circulation in the same zone. In order to determine a little more about this, a drill stem was run from 4948 feet to 6840; 45 minute test recovered 6100 feet of salt water. Amerada is injecting into what we feel

to be the same zone approximately three miles north in the Knowles Field.

At the present time we are producing approximately 1,000 barrels of salt water per day from our ten wells in this field. That is a little too much to get rid of by open pit evaporation. We propose to set up a closed disposal system using contamination water filter and treater at the disposal well site to the gathering lines of six inch cement lined pipe; the water to be brought to the treater by combination of hydrostatic head and gas pressure from our vertical emulsion treaters at our various tank batteries.

We propose to inject down nine and five eights casing directly, if, however, by observation and test, it should prove that this is being damaged by salt water, we will be glad to run a string of tubing to inject and pack off the casing.

This is all the evidence I have to present, sir.

BY MR. NUTTER:

Q How would you know whether the casing was being damaged by corrosion?

A Well, the only way that we would have to test that I know of would be from examining it, taking the head off at the top of the well and examining it close to the top.

Q I see. Do you propose to have any pressure on the water at the top of the injection well?

A Well, I don't propose to at the present time. I believe that it will go in on a vacuum. I have examined Amerada's system, which

we think is injecting into the same zone to the north of us, and their water is going in at a vacuum of approximately 27 points.

Q One other thing, you submitted an electric log with your application; Willhoit No. 2 is the injection well, is it not?

A That is correct.

Q This log on the Willhoit No. 2 has the top of the San Andres being marked at 5420 on it, and your application gives it as 4935. What is correct on that?

A The information I have here was received from our geologist in Midland, top of the San Andres, 4935.

Q As given in the letter of application?

A Yes, sir.

Q There is a discrepancy in the Clear Fork and Tubb, however, you will inject in open hole from 5 to 7000 feet?

A That is right.

MR. NUTTER: Does anyone have any questions of the witness? Did you have any exhibits?

A I have a plat showing what we have in the hole here that I would like to submit.

MR. NUTTER: The plat has been marked Exhibit No. 1 in Case 1109. Is there any objection to the receipt of this Exhibit in evidence in this case? If not, it will be received.

Does anyone else have any questions of the witness? If not, he will be excused.

Is there anything else to be presented in this case? If not, we

will take the case under advisement.

* * * * *

STATE OF NEW MEXICO)
: ss
COUNTY OF BERNALILLO)

I, THURMAN J. MOODY, Notary Public 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 in stenotype and reduced to typewritten transcript by me and/or under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS MY HAND AND SEAL, this, the 6th day of August, 1956, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Notary Public

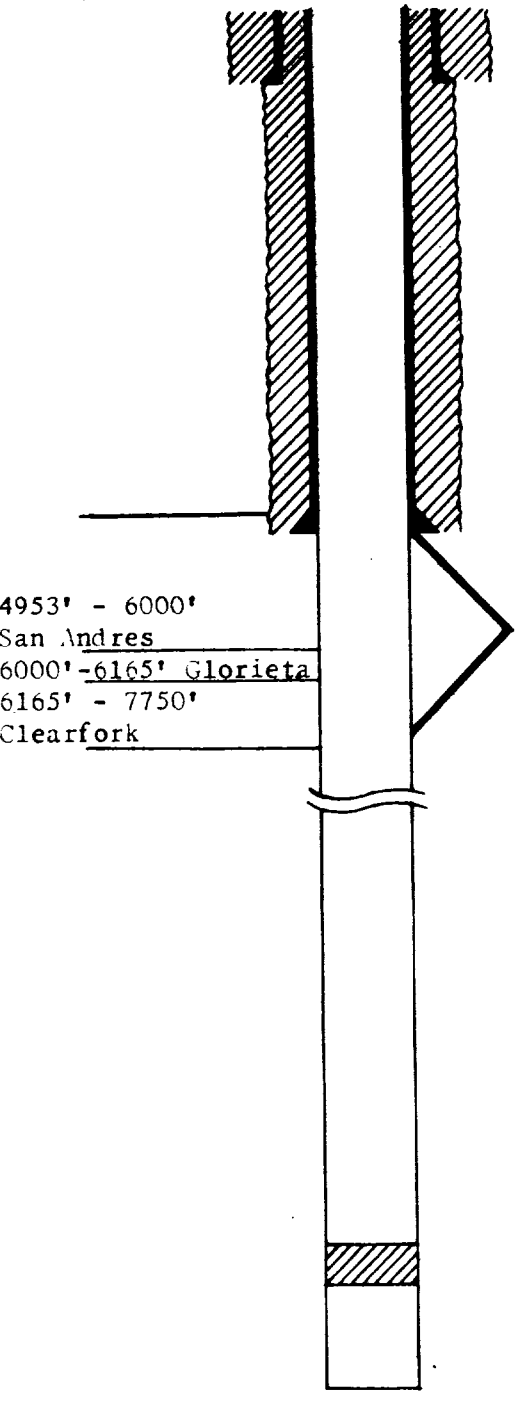
My Commission expires:

April 3, 1960.

JAKE L. HAMON & WARREN PETROLEUM CORP.

D. F. WILLHOIT NO. 2

660' FSL & 660' FWL of Sec. 18, T-17-S, R-39-E, Lea County, New Mexic



326' of 13 3/8" 48# H-40 Csg. cemented to surface

5000' of 9 5/8" 36# & 40# J-55 Csg. cemented to surface

Proposed injection zone 5000' - 7000'

11,400' - 11,595' Cement plug

12,316' T. D.

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 1
CASE 469