BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

Case No. 1575

TRANSCRIPT OF HEARING

January 7, 1959

DEARNLEY - MEIER & ASSOCIATES
GENERAL LAW REPORTERS
ALBUQUERQUE, NEW MEXICO
Phone CHapel 3-6691

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

Case 1575 Application of the Texas Company for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing it to dually complete its Henderson Well No. 5 located in the NW/4 NE/4 of Section 30, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Penrose-Skelly Pool and oil from the Paddock Pool through parallel strings of tubing.

Mabry Hall
Santa Fe, New Mexico
January 7, 1959

BEFORE:

Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: The next case on the docket will be 1575.

MR. PAYNE: Case 1575, "Application of the Texas Company for a dual completion."

(Whereupon, the documents were marked for identification as Applicant's Exhibits One, Two and Three).

MR. WHITE: May the record show the same appearances in this case as in the former case and the same witness and that he's been sworn.

MR. UTZ: Are there other appearances to be made in this case?

If not, you may proceed.

H. N. WADE

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

DIRECT EXAMINATION

BY MR. WHITE:

Q Mr. Wade, are you the same Mr. Wade that testified in Case Number 1574?

A I am.

Q Are you familiar with the Texas Company's operations in the Penrose-Skelly Pool?

A Generally, yes sir.

MR. WHITE: Are the witness' qualifications acceptable in this case?

MR. UTZ: Yes sir, they are.

Q (By Mr. White) Mr. Wade, will you refer to the ownership map marked as Exhibit Number One and explain that, please?

A This ownership map was prepared not only to show the ownership, but to show all of the wells in the general vicinity of the Texas Company's Henderson lease, which is located in the north half of Section 30, Township 21 South, Range 37 East. The wells shown are also identified as to pay or pool by the legend in the lower left hand corner of the exhibit. Offset operators with their names and addresses are shown in the lower right hand corner of the exhibit. The proposed dual well, the D. M. Henderson Well

Number 5, has been circled in red. This well is located in the northwest quarter of the northeast quarter of Section 30.

Q What two reservoirs are there involved?

A Involved is the Penrose-Skelly and the Paddock.

Q Has the Commission previously approved any dual completions in this area, to your knowledge?

A Not to my knowledge involving those two pays, no sir.

Q Would you briefly discuss the nature of the reservoir fluids?

A We are in the process of completing this well and as a result, we don't have too much information concerning the actual fluid to be produced from the well itself. We do have some scanty background on the other wells on this lease which are completed in the paddock and in the Penrose-Skelly.

Q The --

A The Penrose-Skelly is being produced by our Well Number 1 which is located in the southeast of the northeast of Section 30. In that well, we have arrived at some reservoir fluid properties. The gravity is somewhere in the range of 33 to 34 degrees.

MR. UTZ: Which formation was this?

A The Penrose-Skelly as estimated from the production from Well Number 1. The gas-oil ratio ranges from three thousand to five thousand to one. We have roughly estimated, and it certainly is an estimate, that the original bottomhole pressure in this area from the Penrose-Skelly was about 1,280 pounds. From the Paddock,

as indicated by production in Well Number 2, which is located in the northeast quarter of the northeast quarter of Section 30, we find that the gravity is 37 degrees. The gas-oil ratio is about five hundred to one and we have estimated that the original pressure in this reservoir was around 1800 pounds. We don't have up to date pressures in the reservoir. We can deduct this, though, and the Paddock formation has seemed to hold up considerably better than the Penrose-Skelly in this immediate vicinity. We gather from that that more than likely the bottomhole pressure has held up better in the Paddock than in the Penrose-Skelly. Using our estimates of 1280 pounds in the Penrose-Skelly and 1800 in the Paddock, it would be my guess that the difference between the pressures at this time would be even greater than the difference between those estimated original pressures.

We are, as I said, in the process of completion of these wells, which will involve the potentialing of both zones, at which time we plan to take bottomhole pressures in each, along with the packer leakage tests. At that time, we will have the information which will be necessary from a bottomhole pressure standpoint. On flow tests that we have gotten prior to the actual completion, the Penrose-Skelly zone in this well flowed immediately after recovering load oil at the rate of 27 barrels of oil per hour on a 24/64 inch choke. The tubing pressure during this test was 375 PSI. The Paddock zone, also during a preliminary flow test immediately after an acid treatment and immediately after recovering load oil, flowed

120 barrels of new oil in 12 hours through a 20/64 inch choke. The tubing pressure during this test was 50 PSI. There were no gas-oil ratios taken from either zone during these initial flow tests.

Q (By Mr. White) Now, Mr. Wade, will you refer to what has been marked as Exhibit Two, being a diagramatic sketch of the dual completion, and explain the proposed program?

A Yes, this diagramatic sketch was designed to show the tubing, casing and packer arrangements to be employed in this well. As indicated, there is 9 5/8 inch casing set at 1226 feet with the cement circulated to the surface. Five and a half--wait a minute, 7-inch casing has been set at 5210, the top of the cement behind this casing is 2330. The perforated intervals of the two zones are shown. The Grayburg has been perforated from 3686 to 3714, from 3742 to 3762, from 3770 to 3792, from 3816 to 3826 and from 3850 to 3874. The Glorieta or Paddock interval has been perforated from 5172 to 5188 feet. The total depth on this well was 5210, plugged back to 5205, which was actually the drillout point on cement. There will be two strings of 2 3/8 inch tubing run in this well. The separation device will be a Baker model packer which is set at 5100 feet. The long string of tubing which will serve the Paddock or Glorieta zone is set at 5132 feet. The short string of tubing to serve the Grayburg zone is set at 3859 feet and is attached or anchored to the long string by means of a Baker parallel string and core with latching set at 3680 feet. I believe that's the information that --

Q In your opinion, will there be any communitization between the zones?

A No, sir.

Q Is this the same type equipment that has been previously approved by the Commission in the way of --

A Yes sir, in many instances.

Q Will you refer to what has been marked as Exhibit Three and explain that, please?

A Exhibit Three is a radioactivity log which has been run on the well and it merely shows colored in red the perforated intervals and the top and base of the two zones for which a dual is requested in this well. There is nothing unusual about this, it's just presented to show the characteristics of the electric bed by the radioactivity log of the two zones in question.

Q Were those exhibits prepared under your direction and supervision?

A Yes, sir.

MR. WHITE: At this time, we move for the admission of Exhibits One through Three.

MR. UTZ: Without objection, Exhibits One through Three will be accepted.

Q (By Mr. White) Mr. Wade, will the Texas Company be in the position to take whatever tests that may be required by the Commission from time to time?

A Yes, sir.

MR. WHITE: We have no further questions.

MR. UTZ: Mr. Wade, do you have knowledge of the type of crude in the Paddock and Penrose zones?

A Only generally, Mr. Utz. I think that the Penrose-Skelly oil will no doubt be sour and that the Paddock will be less so. To what degree, I am not aware.

MR. UTZ: Are there other questions of the witness?

MR. FISCHER: Yes.

MR. UTZ: Mr. Fischer?

MR. FISCHER: Will one or both of your strings of tubing be shaped and bevelled at the collars, Mr. Wade?

A It is our operating practice to so handle it. I am sure they will be, yes sir.

MR. FISCHER: On your long string of tubing, it doesn't show, but will it be a bull plug or a collar at the bottom?

A Our tubing is usually run bull plug.

MR. FISCHER: Your Paddock pay, is it a gas type drive or water drive?

A I don't know, I think it's probably under the influence of some water encroachment. Whether or not it's a pure water drive, I doubt it, but it certainly is under the influence of water as indicated by the water production on this and other leases in the area, yes sir.

MR. FISCHER: You did get a water production test on the Paddock, didn't you?

A Let me see. I don't believe we did, or at least my information does not show that we did.

MR. FISCHER: I think that's all.

One other question, what type of a head do you have on that well?

A The make?

MR. FISCHER: Yes.

A I have no idea, Mr. Fischer.

MR. FISCHER: Well, is it a split doughnut?

A Most of our dual string equipment is. I am sure that is what it would be.

MR. FISCHER: Thank you.

MR. UTZ: Mr. Wade, I note that your Exhibit Two shows the lower zone to be Glorieta, whereas the Penrose-Skelly Pool is designated as Grayburg and Paddock. Is the Paddock a member of the Glorieta zone?

A Yes, sir.

MR. UTZ: Are there other questions of the witness?

If not, the witness may be excused.

(Witness excused).

MR. UTZ: Are there other statements to be made in this case?

If not, the case will be taken under advisement.

STATE OF NEW MEXICO )
: ss
COUNTY OF BERNALILLO )

I, JERRY MARTINEZ, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing was reported by me in Stenotype and that the same was reduced to typewritten transcript by me and contains a true and correct record of said hearing, to the best of my knowledge, skill and ability.

DATED this 9th day of January, 1959, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Jerry Martinez
Notary Public

My Commission Expires:
January 24, 1962

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1575, heard by me on 1-7, 1959.

Examiner
New Mexico Oil Conservation Commission