BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico December 11, 1959

## EXAMINER HEARING

IN THE MATTER OF: Application of Francis L. Harvey for an exception to Rule 104 of the Commission ) Case Rules and Regulations and for certain exceptions to well completion requirements.)

) Case 1828

## TRANSCRIPT OF HEARING

1 BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico December 11, 1959 EXAMINER HEARING PHONE CH 3-6691 IN THE MATTER OF: Application of Francis L. Harvey for an excep-) tion to Rule 104 of the Commission Rules and Regulations and for certain exceptions to well) Applicant, in the completion requirements. ) Case 1828 above-styled cause, seeks an order establishing 25-acre spacing for Mesaverde wells in Sections 10, 11, 21, 22, 23 and 33 of Township 18 North, Range 3 West, Sandoval County, New Mexico, in exception to Rule 104. Applicant further proposes certain exceptions to well completion requirements. **BEFORE:** Mr. Daniel S. Nutter, Examiner TRANSCRIPT OF HEARING MR. NUTTER: We will take Case 1828. MR. PAYNE: Case 1828: Application of Francis L. Harvey for an exception to Rule 104 of the Commission Rules and Regulations and for certain exceptions to well completion require-ALBUQUERQUE, NEW MEXICO ments. MR. HARVEY: I am Francis Harvey. MR. PAYNE: You propose to represent yourself, Mr. Harvey? MR. HARVEY: Yes, sir. MR. PAYNE: All right, I'll swear you in. (Witness sworn.)

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## FRANCIS L. HARVEY

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

MR. HARVEY: As stated in my application, my partners and I have drilled a number of shallow wells in 18 North, 3 West over the past several years. We encountered the Mesaverde formation somewhere between 200 to 500 feet from the surface. We have found that a number of these wells, we have oil shows, and last summer we drilled one well in Section 21. We cored 20 feet of what we thought might be a pay section at approximately 700 feet, and then 900 feet we picked up a much better pay section and cored 20 feet of it.

We set 5-1/2 inch casing and have produced a well since then through the core hole without any treatment of any sort. The well makes from 12 to 15 barrels of oil per day with approximately six percent fresh water. We then went north on 40-acre spacing program and encountered something that might be considered as the 700 foot sand, but with more water, and we didn't consider it commercial, and we didn't encounter the 900 foot sand at all.

Then we drilled two wells south, one on 40-acre spacing and another 40-acre spacing a way to the south. We encountered perhaps two or three feet on the 40-acre tract immediately south of the oil well at the 900 foot pay, and none of the 900 foot pay on the other well to the south.

Since it's pretty obvious the Mesaverde formation is



very lenticular, and while this well that we now have is held up and we have produced approximately 1500 barrels and we still receive about the same amount of oil as we did when we first brought it in, we have decided that if we could get close enough to this well, probably to the west or east, that we should certainly pick up this 20 feet of pay, because we just don't believe there is one little spot with 20 feet of pay.

But to step out on the regular 40-acre spacing certainly hasn't proved profitable, and we haven't been able to find it. I have a plat that I have drawn up here. It shows the spacing we propose and on a 40-acre spacing, our wells would have to be 1320 feet apart; on 10-acre spacing, our wells would be 660 feet apart. On two and a half acre spacing, our wells could be 330 feet apart. We believe that we can define the pool if we're allowed to step out 330 feet apart and not run off the pay zone.

The acreage that our group owns or controls in 18 North, 3 West, is checked on this plat. I'm sorry that I haven't sent plats in sooner, but due to a death in my brother's family, he was unable to get plats for me. This is -- I don't want to leave this with you unless I must.

MR. PAYNE: All right.

MR. HARVEY: This is a surface geological map made by Mr. Chaney, a geologist who worked that area for many years. He was the one who got us interested in the area in the first place. Here is our oil well on this plat.

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## CROSS EXAMINATION

BY MR. NUTTER:

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Q If we mark this oil well on this checkered exhibit, Mr. Harvey --

Yes, sir.

Q -- we probably would have the location of it and we won't need your contour map then. That's in Section 21?

A Yes, the oil well is in Section 21. That would be the Northwest of the Southeast, that's just right where your pencil is.

Q It's slightly west of the center?

A Yes, sir.

Q **O**f that 40?

A Yes, sir. Then the dry hole is in the Southwest of the Northeast.

Q What distance is it from the producing well?

A It's about 1320 feet.

Q Then you came south and drilled two wells?

A Yes, sir, we came south and drilled two more wells. Thi one is less than 1320 feet. I think it's probably about, oh, in the neighborhood of a thousand feet from that well.

Q Would you depict it as being a dry hole?

A It's a dry hole, yes, sir.

Q And then the second well?

A It would be in Section 28, and that is the Northwest of the Northeast.



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MR. PAYNE: That's also a dry hole?

A Dry hole, yes, sir.

Q (By Mr. Nutter) Is this a well over here?

A That's an oil well. It's a small oil well. We drilled now that is a small oil well, and this was a little gas well here. They have been drilled at different depths. We didn't pick up the oil sand in any of those wells. The first wellswe drilled, this map doesn't show them but we have drilled a number of wells scattered through the past several years. We drilled wells to the Dakota sand

Q Is this well that's in the Southeast of the Northeast of Section 21, would you consider that a commercial well?

A Well, it's very marginal. It's in a 500 foot sand and it isn't the same producing horizon as this at all.

Q If the Commission should find it necessary to create a pool here, what would you recommend as being the limits of the pool that have been proven productive so far, the 40-acre tract in which the one well is producing?

A At the present moment, yes, sir.

Q In the neighborhood of 14, 15 barrels?

A Yes, we have an application in that is more or less subject to this application by Mr. Arnold, and we want to drill very close to this line right here in this 40-acre tract.

Q You have a proposed location, then, in the Northeast of the Southwest of Section 21?

A That's correct.

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Q Mr. Harvey, does your application seek anything besides the two and a half acre spacing for this proposed area?

A No, sir, it does not.

Q What is your proposed casing program for the wells in here?

A Well, I bought a load of 5-1/2 inch casing and for the next few wells, we will use a 5-1/2 inch casing.

Q That's a single string of casing?

A Well, we run 5-1/2 and tubing and rods.

Q There's no separate surface casing being set?

- A Yes.
- Q What diameter?
- A 7-3/4.

Q Approximately what depth do you run that?

A 20 or 30 feet, and cement it in, one joint of the casing cemented in, we don't have any pressure bomb. We don't want, of course, to take a chance. We're drilling with small rotary rigs, we don't want to take a chance on messing up our oil.

Q Then you are running a tubing and setting a pump?A Yes.

MR. PAYNE: You are aware that no matter how many wells you drill on the 40-acre, you just get a 40-acre allowable?

A We would be very happy to get an allowable on one of the wells. What would the allowable be there?



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Q (By Mr. Nutter) The present allowable is 52 barrels per 40.

A We intend, as I told you a while ago, nothing has been done to this well, naturally, but if we encounter the same sand here, we intend to sand frac and hope to make a bigger well, in which case, of course, we won't want to drill any more wells on the acre.

MR. PAYNE: This well that you are drilling, is that a flowing or pumping well?

A It's flowing. There's very little gas pressure. When it's shut in any length of time, it gets up close to a hundred pound We have had difficulty getting enough gas to run our pump from the well.

MR. PAYNE: Is this Federal acreage?

A Yes.

MR. PAYNE: Have you plugged all the dry holes?

A Every one but this one is still producing.

MR. NUTTER: Does anyone have any further questions of Mr. Harvey? Do you have anything further you want to offer?

A No, sir, I believe not.

MR. NUTTER: These exhibits have been identified as Nos. 1 and 2 in the hearing, if you wish to offer them.

MR. HARVEY: Yes, sir.

MR. NUTTER: We accept these as Exhibits and as evidence in this case. Does anyone have anything for Case 1828?



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Mr. Payne, do you have anything?

MR. PAYNE: Mr. Examiner, we have received a letter from Pan American Petroleum Corporation regarding this application, and Pan American has no objection to the proposal of the applicant; provided, however, that the total allowable accruing to a 40-acre tract, regardless of number of wells thereon, be set no higher than for a normal unit allowable for a 40-acre well, which is, of course consonant with Commission Rules and Regulations.

MR. NUTTER: Does anyone have anything further? If not, we will take this case under advisement.

MR. HARVEY: Thank you very much.

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STATE OF NEW MEXICO ) ) ss COUNTY OF BERNALILLO )

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings was reported by me in stenotype and that the same was reduced to typewritten transcript under my personal supervision, and contains a true and correct record of said proceedings, to the best of my knowledge, skill and ability.

DATED this 26th day of December, 1959, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Or an

My Commission Expires:

June 19, 1963.

I do hereby certify that the foregoing is a compress resurd of the proceedings Decaing of Gass No... the Esserated 19 1.0 Ci. heard by Examiner luci Mexico Oil Conservation Commission New



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