BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico FARMINGTON, N. M. PHONE 325-1182 May 10, 1962 EXAMINER HEARING IN THE MATTER OF: Application of Pan American Petroleum Corporation for a triple completion, Eddy County, New Mexico. Applicant, Case 2547 in the above-styled cause, seeks an order authorizing the triple completion (conventional) of its Greenwood Unit Well No. 7, located in Unit H, Section 12, Township 19 South, Range 31 East, Eddy County, New Mexico, in such a manner as to permit the production of oil from undesignated Strawn, Wolfcamp, and Bone Spring pools through parallel strings of tubing. BEFORE: Daniel S. Nutter, Examiner. TRANSCRIPT OF HEARING MR. NUTTER: The hearing will come to order, please. ALBUQUERQUE, N. M PHONE 243.6691 The first case this morning will be Case 2547. Application of Pan American Petroleum Cor-MR. MORRIS: poration for a triple completion. Eddy County, New Mexico. MR. BUELL: May it please the Examiner, we have one witness, Mr. Rodgers. (Witness sworn.)

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JAMES T. RODGERS

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

DIRECT EXAMINATION

BY MR. BUELL:

Q Mr. Rodgers, would you state your complete name, by whom you are employed, and in what capacity and in what location, please?

A James T. Rodgers. I'm employed by Pan American in Lubbock as a petroleum engineer.

Q Would you briefly state for the record, Mr. Rodgers, your educational background in petroleum engineering?

A Yes, sir. I received a B.S. degree in petroleum engineering from L.S.U. and an M.S. degree in petroleum engineering from the University of Texas. I worked for three months with Gulf Oil on their engineering training program and one year at the University of Texas for the P.R.C. and assistant professor, three years with Texas Tech as assistant professor of petroleum engineering.

Q How long have you been employed by Pan American Petroleum Corporation?

A About a year.

Q How long have you been in Lubbock?

A About two months.



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A In Hobbs.

Q

MR. BUELL: Are his qualifications as a petroleum engineer accepted?

MR. NUTTER: Yes, sir. Please proceed.

Q Mr. Rodgers, will you look at what I'll mark as Pan American's Exhibit No. 1 and state briefly for the record what that exhibit is composed of?

A Yes, this exhibit is a brochure on our triple completion, the Greenwood Unit No. 7. This well is completed in the Lusk Strawn Oil - Wolfcamp Undesignated Oil and Bone Springs Undesignated Oil in Eddy and Lea Counties, New Mexico.

Q Let me ask you right at the outset, why is the hearing necessary for this triple, is it an unorthodox triple?

A Well, this is the first triple in these three zones.

Q It is a conventional triple, but it's just in three zones that have not been tripled in this area prior to this application?

A Yes, sir, that's right.

Q Would you go ahead and briefly discuss Exhibit No. 1 and point out to the Examiner the data which are reflected in this exhibit?

A Yes, sir. As shown on Attachment No. I on the right-hand side of the brochure, the well is located 1980 feet from the

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north line and 660 feet from the east line of Section 12, Township 19 South, Range 31 East, Eddy County, New Mexico. This well is just west of the Eddy-Lea County line. The nearest Strawn production is the El Paso Lusk Deep Unit Wells No. 1 and 2, and this unit is located approximately one and one-half miles southeast, which would place them in Lea County. The nearest Wolfcamp and Bone Springs production is the Pan American Greenwood Unit No. 3, approximately two miles northwest of Unit No. 7. This Greenwood is a dual in the Bone Springs and Wolfcamp, which is two of the three zones we are tripling the Greenwood 7 in.

If you turn the page, Attachment II is a diagramatic sketch of the submitted triple completion. We have shown here the type of completion. This is a three-tubing string completion, using two strings of OD Buttress Thread tubing and one string of $2-3/8^{m}$ OD tubing.

The Bone Springs perforations are 8616 to 8658 and above the upper packer. The Wolfcamp perforations are 10,212 to 26 between the upper and lower packer. The Strawn perforations are 11,136 to 60. The upper packer is a Model FA, the lower is a Model D Baker.

The Attachment III is a Gamma Ray - Neutron Log of this well and we have shown marked on this log in red the tops of the pay sections, and also the perforations are indicated.



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Attachment No. IV is a copy of Pan American's application for a multiple completion which was submitted by Pan American's letter of April 24, 1962.

Q Mr. Rodgers, are you submitting waivers from offset operators in connection with this application?

A No, sir. We do not request waivers because the offset operators are also part owners of the Greenwood Unit with Pan American.

Q But even though they all were partners, each one of them has been notified of this hearing here today?

A Yes, sir.

Q Do you happen to have with you the potentials on these three oil completions?

A Yes, sir. The three zones were all potentialed flowing oil. The Strawn flowed 206 barrels of oil and one barrel of water on 16/64 choke with 525 lb. tubing pressure. The GOR was 1150.

Q That was in what period of time?

A Twenty-four hour potential test.

Q Also on twenty-four hour potential, what did the Wolfcamp potential?

A The Wolfcamp flowed 220 barrels of oil and 20 barrels of water on 20/64 choke with a flowing tubing pressure of 300 lbs. The GOR was 1250. The Bone Springs zone was also on twenty-four



hour potential and flowed 183 barrels of oil on 16/64 choke with a flowing tubing pressure of 950 lbs. The GOR was 787. All three zones have gravities above 40. The Bone Springs is 40.5, the Wolfcamp is 41, the Strawn is 44.5.

Q Mr. Rodgers, have packer leakage tests been conducted on this well yet?

A No, sir, they have not. They will be conducted and submitted as required. There's a good possibility they are being conducted today.

Q It's your recommendation that they approve the triple completion request subject to satisfactory packer leakage tests being filed in due course with the Commission?

A Yes, that's our recommendation.

Q In your opinion will the approval of this request by the Commission serve conservation in that it will prevent waste?

A Yes, sir, it will. It's our opinion right now that neither of these zones is capable of supporting oil commercially on a single completion. Unless future data shows otherwise, we don't expect this to be prolific production, so thereby, by triple completing we feel that we have an opportunity to complete and produce from all three zones.

Q In that each one of these separate reservoirs will be completely isolated in this well bore, certainly there's no

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opportunity for the violation of the correlative rights of any owners of interest in the area, is there? No, sir. A Do you have anything else you would like to add, Mr. Q **Rodgers**? A No, sir, I don't. MR. BUELL: That's all we have at this time, Mr. Examiner. MR. NUTTER: Are there any questions of Mr. Rodgers? CROSS EXAMINATION BY MR. NUTTER: Mr. Rodgers, is this well in the potash area? Q No, sir, it is not, Mr. Nutter. A Pan American was recently drilling a deep test in the Q potash area? A To my knowledge, that was the Big Eddy Unit No. 1. MR. BUELL: The what? A The Big Eddy Unit No. 1. I believe that's properly called the Big Eddy Deep Unit No. 1. Is the cement circulated on the 9-5/8" pipe? Q No. sir, it's not. A What is the top of the cement? Q The top of the cement on the 9-5/8ⁿ is not known. A Ås it indicates there, there was 750 sacks of Incor used.

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Q I missed your flowing tubing pressure on the Strawn. A The Strawn flowing tubing pressure, 525 PSI. And the GOR again? 1150. Q A FARMINGTON, N. M. PHONE 325-1182 Do you have bottom hole pressures on any of these zones? Q No, sir, we don't have any as yet. We do plan to take A some. MR. NUTTER: Any further questions of Mr. Rodgers? may be excused. (Witness excused.) MR. BUELL: May I formally offer Pan American's exhibit in evidence? MR. NUTTER: Pan American's Exhibit No. 1 will be entered in evidence. Do you have anything further, Mr. Buell? MR. BUELL: No, sir. MR. NUTTER: Does anyone have anything further to offer in Case 2547? We will take the case under advisement. ALBUQUERQUE, N. M. PHONE 243.6691



STATE OF NEW MEXICO) SS COUNTY OF BERNALILLO)

I. ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 21st day of May, 1962.

New

Notary Public-Court Reporter

My commission expires:

June 19, 1963.

I do hereby certify that the foregoing is a complete record of the proceedings the Etuminer hearing of Case No. heard by 🕈 Examiner Mexico Cil Conservation Commission

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NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING - DANIEL S. NUTTER

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MAY 10, 1962 TIME: HEARING DATE LOCATION: REPRESENTING: HANE: Santa Fe Jacon Kellahin Kellahin & Fox Midland Texpco Inc. C.R. Block FORT WONTH PAN AM Gog Buell Cities Sarvice Rate La Hobber E. E. MOTTER Lubork Pan amencon J. T. Rodgers fubbork, Van american J.E. Thomas Julbert What & Lithent Santo 70 J Q. White H. Worth T.F. Hadge Watter h. Kahn. Tempe, Tux. Cabot Corp W.M. Sargent, Jr Roswell N. 14 GULF Oil CORP WV Kastler V.M. Hendricks LR Marshall JH Hoover Hobbs, N. M. Tenneco Dil Co. A.W. Nance BEST AVAILABLE COPY