### BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico April 10, 1963

### EXAMINER HEARING

IN THE MATTER OF:

Application of Pan American Petroleum Corporation for a triple completion. Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of its Southland Royalty "A" Well No. 8. located in Unit W. Section 4. Township 21 South. Range 37 East, Lea County, New Mexico, as a triple completion (conventional) to produce oil from the Blinebry Oil Pool. Tubb Gas Pool, and Drinkard Pool through parallel strings of tubing.

Case 2783

BEFORE: Daniel S. Nutter, Examiner.

### TRANSCRIPT OF HEARING

MR. NUTTER: We will call Case 2783.

MR. DURRETT: Application of Pan American Petroleum Corporation for a triple completion, Lea County, New Mexico.

MR. MALONE: May it please the Commission, Charles Malone of Atwood and Malone, for the applicant. We have one witness and one exhibit.

(Witness sworn.)

(Whereupon, Applicant's Exhibit No. 1 was marked for identification.)



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### ROBERT E. SMITH

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

### DIRECT EXAMINATION

### BY MR. MALONE:

- Q Would you state your name, please?
- A Robert E. Smith.
- Your address? Q
- Lubbock, Texas, Pan American Petroleum Corporation. A
- Q What is your position with Pan American in the Lubbock Office, please?
  - I'm a petroleum engineer, Senior Grade.
- For how long have you been a petroleum engineer with 0 Pan American?
  - Eleven years. A
- What is the jurisdiction of the Lubbock Office of Pan Q American, please?
- We follow the operations in the western part of Texas and southeastern New Mexico.
- Is the land described in the application under your 0 jurisdiction as a petroleum engineer?
  - Yes, it is. A
  - Have you previously testified before this Commission in



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matters of petroleum engineering?

Yes. I have. À

MR. MALONE: Would the qualifications of this witness be acceptable?

MR. NUTTER: Yes, sir, they are. Please proceed.

(By Mr. Malone) Would you describe the purpose in Q making this application. Mr. Smith?

Our purpose is to triple complete a well which we are currently completing in the oil zones of the Drinkard, Tubb and Blinebry Pools.

- Q Is this a new well or a workover?
- It is a new well. A
- Would you please go now to Attachment No. I, which appears to be a plat in your exhibit, and describe what that shows?

This plat, with the arrow pointing to our Southland Royalty "A" Well No. 8 is our application here, shows it is completed in an area of multiple completions. The immediate west offset is currently a Drinkard oil dual, Tubb gas well. The south offset is a Southland Royalty No. 2, which is a triple Drinkard oil and Blinebry and Tubb gas. This well was granted permission to recomplete by New Mexico Oil Conservation Commission Order 2343. The east offset is a Tubb-Drinkard oil dual completion.



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LBUQUERQUE, N. M. PHONE 243 6691 Q Are the offset operators shown on this plat in receipt of notice of your application?

A Yes, upon requesting application for hearing, we submitted on March 11, this year, a notice to all the offset operators.

Q Has your office received any objection or other communication opposing this application from any offset operator?

A No, we have not.

Q Will you go to Attachment No. II and describe what it shows?

A Attachment II is a diagrammatic sketch showing the mechanical aspects of the proposed triple completion. This is to be a conventional triple, utilizing separate tubing strings to produce each zone separately, and packers maintaining the separation in the well bore.

The well, as shown on the Attachment II, is equipped with 7" casing set at total depth of 6703 with a plug-back depth of 6658. We propose to separate by setting, or we have set packers between the Tubb perforations and the Drinkard perforations, and between the Blinebry perforations and the Tubb perforations. We have run one string, our long string into the Drinkard, which is a 2-3/8" O.D. EUE tubing. The Blinebry string and the Tubb string are 2" O.D. buttress thread tubing.



Q How will these three zones be produced if the application is granted?

Based on testing to date, it appears that it will be A necessary to pump the Blinebry and the Drinkard, and the Tubb will flow.

Will you be able to pump the Drinkard through a 2-3/8" Q O.D. tubing?

We will be able to pump it satisfactorily, and A we have ordered a special pump, 1-1/2 0.D. pump to pump the Blinebry.

You show the use of Otis type W.A. packers separating the Blinebry from the Tubb and the Tubb from the Drinkard. Is that a standard type of packer that is accepted in the industry?

Yes, it is. Α

Has the experience of your company with this packer proved that it is effective for its purpose?

It has. A

Would you describe the cement which exists in connection with this attachment?

Yes, the 7" oil string was set with 100 sacks of Incor. A containing 400 sacks of Neat cement, which brought the top of the cement behind the 7" casing to 2500 feet.

And the Blinebry perforations, which are the highest Q



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perforations, rather they begin at about 5837 feet, is that correct?

- That's true.
- So you have a solid cement job behind the casing at Q all points below 2500 feet?
  - A Right. Yes. sir.
- Is there anything further that you wish to discuss with respect to Attachment No. II?
  - A I believe it's been adequately covered.
  - Would you describe Attachment No. III. please?
- Α Attachment III is an Acoustilog of the well with the perforations in the three zones shown in red, and the top and base of the zones also shown in red.
- Is there anything further that should be pointed out Q in connection with this attachment?
  - I think not.
- If this application should be granted, would expense be prevented that would otherwise be necessary?
- Yes, if we were not granted permission to triply complete this, the zone which would be eliminated in order to develop it, it would require a separate well, which would incur additional unnecessary expense.
  - Q Now, then, with respect to the discussion shown in the



front of your exhibit, would you describe the situation as to classification of oil and gas wells and the action which would be taken by Pan American if this application is granted?

Yes, currently the Tubb, at this 40-acre location, is Á dedicated to 120-acre Tubb gas allowable currently assigned to our Southland Royalty "A" 4. If we are permitted to produce the Tubb in Well No. 8 as an oil well, the 40 acres will be removed from this gas proration schedule currently assigned No. 4.

Do you have anything further to add to your testimony in this case?

I think that covers it. Α

Was this exhibit prepared by you or under your direct supervision?

It was. A

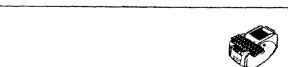
MR. MALONE: If it please the Commission, we offer Exhibit No. 1.

Pan American's Exhibit No. 1 will be ad-MR. NUTTER: mitted in evidence.

> (Whereupon, Applicant's Exhibit No. 1 was offered and admitted in evidence.)

MR. NUTTER: Any questions?

MR. DURRETT: Yes, I have one.



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### CROSS EXAMINATION

### BY MR. DURRETT:

- Referring to the Otis type packer, did you--Q
- Yes. A
- Q -- did you state that was a permanent type packer?
- I did not state, but it is a permanent type packer.

### BY MR. NUTTER:

- I am having a little difficulty figuring out what Q acreage is dedicated to what, the No. 1 directly north of the 8 is Plinebry gas?
  - Yes. Α
  - What acreage is dedicated to that well? Q
  - That well. I believe, is Western Oil. A
  - Q That is not your well?
- No, that is not our well. That well is shown in the Á stippling that covers our acreage.
- Now, the No. 5 up here is an indicated Drinkard and Blinebry gas dual?
  - Yes. A
  - What acreage is dedicated to it? Q
- The Blinebry gas is the 160 acres being everything, A well. let's see, it's described as the East Half of the -- well, this is one of those long sections, but it's the acreage shown



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in Wells No. 5, 4, 8 and 3.

- And that well has 160 acres dedicated to it in the Blinebry Gas Pool?
  - Yes, sir, I'm sure that's right. A
- Well, then, if the No. 8 well is completed as a Q Blinebry oil well, then it would necessitate reducing that?
  - Yes. I failed to mention that. A
  - To reducing the proration unit by 80 acres?
  - Yes. by 80 acres. I failed to mention that. A
- You have 120 acres dedicated to No. 4 as a Tubb Q gas well?
  - Yes. Α
  - Q What is the acreage there?
- It's the 40 acres for Wells No. 5, 4 and 8. See, when we completed Well No. 3 as a Tubb, we removed 40 acres there, leaving us 120.
- So, completion of this Well No. 8 as a Tubb oil well will leave you an 80-acre Tubb gas unit also?
  - Yes. Å
  - Have you actually made this completion yet, Mr. Smith?
- We have adequately tested it to know that it's going A to be a commercial well in all zones.
  - Have you tested it far enough to know that the



Blinebry will be an oil classification?

Yes, sir. It's pumping, I don't recall the gas-oil ratio right now, but it will be a low ratio well and will qualify as a Blinebry oil well.

- How about the Tubb?
- The Tubb is flowing with a high ratio, but the oil gravity is less than 45 degrees, it's in the neighborhood of 39.
- As a matter of fact, that's what I was going to ask you next, if you had any bottom hole pressure. GOR and gravity data for each of the three zones.

The Drinkard gas-oil ratio -- we do not have any bottom hole pressure data on any of the zones yet. The Drinkard gas-oil ratio are less than 2,000. I don't recall the exact number: and the Blinebry ratio, these are not exact numbers. have the exact numbers, but they're in the neighborhood of, I believe, I just don't recall the Blinebry at all, but the Tubb ratio was in the neighborhood of twelve. fourteen thousand. That was on preliminary test.

- Have the wells been cleaned up yet?
- They're still in the process. We just com-No, sir. pleted putting in our triple completion and they're now testing the Drinkard.
  - Q Have you taken your packer leakage tests yet?



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SANTA FE, N. M. PHONE 963-3971 A No, sir, we have not.

MR. NUTTER: Any further questions of Mr. Smith?

- Q (By Mr. Nutter) Oh, another thing, was the top of the cement at 2500, was that a temperature survey?
  - A No, it was not.
  - Q Was that an estimate?
- A It was an estimate, but I believe it's a 150% theoretical fill.
  - Q On the 500 sacks that you used?
  - A That's right.

MR. NUTTER: Any further questions of Mr. Smith? He may be excused.

(Witness excused.)

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

MR. MALONA: Nothing further except that if the Commission would wish to have anything further on GOR or gravity we'll be happy to furnish it.

MR. NUTTER: I think most of that data will be available on the packer leakage tests. Does anyone have anything to offer in Case 2783? We will take the case under advisement, and call 2784.



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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 22nd day of April, 1963.

> Public-Court Reporter

My commission expires:

June 19, 1963.

I do hereby certify that the foregoing is a complete record of the proceedings i the Examiner hearing of Case No. 278 heard by me

New Mexico Oil Conservation Commission

