

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

April 25, 1962

EXAMINER HEARING

IN THE MATTER OF:

Application of Amerada Petroleum Corporation for a)
 quadruple completion and a non-standard gas pro-)
 ration unit, Lea County, New Mexico. Applicant, in)
 the above-styled cause, seeks permission to complete) CASE
 its L. G. Warlick "A" Well No. 1, located in Unit I) 2535
 of Section 19, Township 21 South, Range 37 East, Lea)
 County, New Mexico, as a quadruple completion)
 (combination) in the Eumont Gas, Blinebry Oil, Penrose-)
 Skelly Oil and Drinkard Oil Pools with the production)
 of oil from the Drinkard and Penrose-Skelly formations)
 to be through parallel strings of 2 7/8-inch casing, the)
 production of oil from the Blinebry formation through)
 a string of 1 1/4-inch tubing set within another)
 parallel string of 2 7/8-inch casing and the pro-)
 duction of gas from the Eumont formation through the)
 casing-tubing annulus. Applicant further seeks the)
 establishment of a 160-acre non-standard gas proration)
 unit in the Eumont Gas Pool comprising the S/2 NE/4 and)
 the N/2 SE/4 of said Section 19, said unit to be)
 dedicated to said L. G. Warlick "A" Well No. 1.)

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Case 2535.

MR. MORRIS: Application of Amerada Petroleum Corporation for a quadruple completion and a non-standard gas proration unit, Lea County, New Mexico.

MR. BUSHNELL: H. D. Bushnell in association with Kellahin and Fox appearing for Applicant. I have one witness.

MR. MORRIS: Let the record show that the witness has

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been previously sworn.

MR. UTZ: Are there other appearances in this case? You may proceed.

MR. BUSHNELL: The purpose of this application is to obtain permission for a multiple completion pursuant to statewide Rule 112 in a pool where no such similar multiple completions have been permitted or authorized. Also, to obtain permission to use tubing smaller than 1.670 I.D. Also, to authorize a non-standard unit.

A. E. SNYDER,

called as a witness herein, having been previously duly sworn on oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BUSHNELL:

Q Would you state your name and company for which you are employed?

A A. E. Snyder. Amerada Petroleum Corporation, Hobbs, New Mexico.

Q What capacity?

A District Engineer.

Q Have you testified in that capacity in prior Hearings before this Commission?

A Yes, sir.

(Whereupon, Applicant's Exhibit
No. 1 Marked for Identification)



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Q I hand you what has been identified as Amerada Exhibit No. 1 and ask you to state what it is and what it shows.

A Exhibit No. 1 is a plat showing the location of the proposed multiple completed well, Amerada's Warlick "A" No. 1, located in Unit I, Section 19, Township 21 South, Range 37 East, Lea County, New Mexico. It also shows the leasehold and the area surrounding this well, the location of the wells and the designation of zones that they're completed in.

Q It also shows, encircled in red, the well subject of this application?

A Yes.

Q When was the L. G. Warlick "A" No. 1 Well spudded?

A On January 12th, 1962.

(Whereupon, Applicant's Exhibit No. 2 Marked for Identification.)

Q I hand you what has been identified as Amerada's Exhibit No. 2 and ask you to state what that is and what it shows?

A Exhibit No. 2 is a gamma ray acoustic log of Amerada's L. G. Warlick "A" No. 1. On this log are shown the tops of the various intervals of production proposed in our application, starting at 2,607 feet as the top of the Yates or the Eumont Gas zone, and Eumont perforations are from the zone 3,385 to 3,636, and they're selective perforations, and the top of the Grayburg or Penrose-Skelly producing formation is 3,650 with completion perforations from 3,756 to 3,796, top of the Blinbry zone at 5,588, and



selective Blinebry perforations from 5,588 to 5,942, top of the Drinkard zone at 6,324, with selective Drinkard perforations 6,594 to 6,664.

(Whereupon, Applicant's Exhibit No. 3 Marked for Identification)

Q I hand you what has been identified as Amerada's Exhibit No. 3 and ask you to state what that is and what it shows.

A Exhibit No. 3 is a schematic diagram of the installation in subject well. Again, it shows the tops of the zones of interest, the perforated intervals and the casing and tubing design. The 9-5/8-inch casing was set 1,252 feet with 800 sacks of cement which circulated, then one string of 2-7/8-inch was set at 6,759. Number two string was also set at 6,759 and it is 2-7/8-inch casing. The number three is 2-7/8-inch casing set at 6,749. These three strings of casing were cemented in the common well bore with 1,133 sacks which brought the top of the cement to 1,320 feet. The number three string of casing as you'll note has dual completion within it which necessitated running one string of 1-1/4-inch tubing set at 5,560 feet on a packer and has an Otis Sliding Sleeve at 5,556. The Blinebry production will go through 1-1/4-inch tubing and the Eumont gas production will be annular space between the 1-1/4-inch tubing and 2-7/8-inch casing.

Q Did you use any particular method in cementing?

A Our method of cementing was one approved by the Commission, running turbulizers in the possible zones of

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completion 100 feet above and below and pumping cement down two strings of casing followed by plugs.

Q Would you give the Completion Data?

A Starting on the left, the Drinkard completion has actually been completed and the potential test, it flowed 182 barrels of 30.7 degree API oil in 24 hours, on a quarter inch choke, 600 pounds tubing pressure and gas-oil ratio 1,968.

Q As for the Penrose-Skelly?

A The Penrose-Skelly, although it has not officially been completed, was tested, flowed 165 barrels of 37 degree oil and 15 barrels of water for 24 hours on a 18/64 choke, 300 pounds tubing pressure, gas-oil ratio 1,700. The Blinebry completion flowed 94 barrels of 38.9 degree oil in 24 hours on 18/64 choke, 950 pounds tubing pressure, and gas-oil ratio 7,800. The Eumont Gas completion was acidized and fracked and has not recovered all of the load oil. It's still flowing load oil with gas. The gas is increasing on it.

MR. PORTER: My Snyder, could you give me the oil production in the Blinebry zone?

A Yes. 94 barrels.

Q (By Mr. Bushnell) What are the bottom hole pressures?

A The bottom hole pressure in the Blinebry zone at a sub-sea datum of minus 2,400 feet was 2,072 pounds. In the Penrose-Skelly at a sub-sea datum of minus 267 was 1,190 pounds. In the Drinkard



at a sub-sea datum of minus 3050 was 1,326 pounds. The Eumont zone, of course, we were not able to determine a bottom hole. When the well cleans up, we'll be able to determine a surface shut-in pressure as a gas well.

MR. UTZ: Do you just estimate?

A No.

Q (by Mr. Bushnell) Is it your opinion that the method of completion as shown on Exhibit No. 3 will maintain separation of the common sources?

A Yes.

Q Is this method of multiple completion one that meets the standard of the industry?

A Yes, sir.

Q By this application you are also asking for approval to use tubing smaller than 1.670, referring to your Exhibit No. 3, I think you've already explained where you are using the small tubing. Would you state why you have used it?

A This is the only practical size of tubing that could be run in the size of casing that we have.

Q You are also, by this application, asking for permission to establish a non-standard unit. Referring to Exhibit No. 1, have you indicated there your ownership map in red the proposed area?

A Yes, sir.

Q What is the description of that area?



A This is proposed 160-acre non-standard unit for the Eumont completion, would be composed of Amerada's Warlick lease, which is described as the South Half of the Northeast quarter of Section 19, Amerada Gas Warlick "A" Lease, described as the North Half of the Southeast quarter of Section 19, Township 21 South, Range 37 East, Lea County, New Mexico.

Q Is it your opinion that all of this area is underlain by the Eumont?

A Yes, sir.

Q And what evidence do you have to support that conclusion?

A On Exhibit 1, let me call your attention to some other wells that are completed in the Eumont, Unit F, of Section 20, 21, 37, is the Eumont completion on Amerada and Rodman's Randall "A" lease; to the north of the proposed unit in Unit A of Section 19, Penrose Oil Company has a Eumont Gas completion in the No. 1 Well; to the west Gulf Oil Corporation's Eunice Unit No. 1 in Unit K of Section 19 is a Eumont completion; to the south in Section 30, Unit C, Texaco's Henderson No. 4 is a Eumont completion. This effectively gives Eumont pay on four sides of the proposed well, leaving only directly to the east without a Eumont completion. I believe from this I would draw the conclusion that the entire 160 acres could be assumed to be productive from the Eumont.

Q Were these exhibits prepared by you or by someone under your supervision?



A Yes, sir.

MR. BUSHNELL: I offer Exhibits 1 through 3.

MR. UTZ: Without objection, Exhibits 1 through 3 will be entered into the record of this case.

(Whereupon, Applicant's Exhibits Nos. 1 through 3 admitted into Evidence.)

MR. BUSHNELL: That's all.

CROSS EXAMINATION

BY MR. UTZ:

Q Do you have the I.D. and your O.D. of your inch and a quarter?

A The O.D. is 1.66 on the 1-1/2 and the I.D. is 1.38.

Q Do you have the I.D. on the 2-7/8?

A The I.D. is 2.441.

Q Gives you approximately a 3/4-inch annular space?

A Yes, sir.

Q Do you anticipate any trouble with that small an annular space?

A No. As a gas well, we feel there would be no problem in flowing the gas. If liquids are produced, we feel it would be similar to flowing through the tubing, so we anticipate no trouble also.

Q You anticipate a gas well?

A Yes.

Q In the 68 foot interval between the bottom of your 9-5/8



and the top of the cement on your small strings do you have any producing zones or water zones?

A No, sir.

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

MR. MORRIS: Yes, sir.

MR. UTZ: Mr. Morris.

BY MR. MORRIS:

Q Mr. Snyder, I'm interested in the acreage dedication within Section 19 to their Eumont Wells. In the North Half of the Northeast quarter there's a Eumont Well. Is that 80 acres dedicated to that well?

A Yes, sir, that 80 in addition to the South Half of the Southeast quarter of Section 18. That well has 160 acres dedicated to it.

Q Yes. With respect to the Gulf Well in the Southwest quarter?

A The entire West Half of Section 19, 320 acres is dedicated to that well.

Q There is no Eumont Well in the South Half of the Southeast quarter, is there?

A No, sir.

Q Those wells are owned and operated by whom?

A An operator named Perry.

Q Mr. Perry is not going to share in the Eumont unless he drills a well and dedicates his 80 to it, that's the way it would

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appear?

A If he approaches Amerada on the subject I'm sure that we could work out something with him.

MR. MORRIS: Thank you.

BY MR. UTZ:

Q How about the dedication of Texaco to the south?

A That Texaco Well has the North Half of Section 30, being a full 320 acres.

Q And the Southwest quarter of Section 20 is not dedicated to a Eumont Well?

A No, sir.

Q Mr. Perry would have a possibility there, too, would he not?

A Yes.

Q In the unit that you propose here is the royalty and working interest common?

A No, sir, the working interest and royalty is diversified slightly and we're presently working out an agreement for unitization.

Q Would you notify the Commission when the unitization of this unit is complete?

A Yes, sir.

MR. UTZ: Are there any other questions? The witness may be excused.

(Witness excused)

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MR. UTZ: Are there any statements in this case? The case will be taken under advisement.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, 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 under my personal supervision and contains a true and correct record of said proceedings, to the best of my knowledge, skill and ability.

Ada Dearnley
NOTARY PUBLIC

My Commission Expires:
June 19th, 1963.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2535, heard by me on *Apr 25*, 19*62*.
Thos G. Utz, Examiner
New Mexico Oil Conservation Commission

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