

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
February 5, 1964

EXAMINER HEARING

IN THE MATTER OF:

Application of Cities Service Oil Co.
for a dual completion, Lea County, New
Mexico.

Case No. 2977

BEFORE: DANIEL S. NUTTER, EXAMINER

TRANSCRIPT OF HEARING

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MR. NUTTER: Call next Case No. 2977.

MR. DURRETT: Application of Cities Service Oil Company
for a dual completion, Lea County, New Mexico.

MR. KELLAHIN: Jason Kellahin appearing for the applicant.
We have one witness.

(Witness sworn)

E. F. MOTTER,
called as a witness herein, having been first duly sworn on oath,
was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:



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Q Would you state your name, please?

A E. F. Motter.

Q By whom are you employed and in what position?

A Cities Service Oil Company, Division Engineer.

Q Have you testified before the Oil Commission and had your qualifications made a part of the record?

A Yes, sir, I have.

Q All right.

MR. KELLAHIN: The witness' qualifications acceptable?

MR. NUTTER: Yes, sir.

Q (By Mr. Kellahin:) Mr. Motter, are you familiar with the application of Cities Service Oil Company in Case 2977?

A Yes, sir.

Q What is proposed by Cities Service in this case?

A We propose to dual complete the Brunson C No. 4 as a Drinkard and Blinebry oil dual.

Q Now, referring to what has been marked as Exhibit Number One, would you identify that exhibit and discuss the information shown on it?

A Yes. This is a plat of the area, indicating the Brunson, Cities Service Brunson "C" lease colored in yellow with the subject well, the Brunson "C" No. 4 indicated by red hashes. This well is located 1980 from the South line and 1980 from the East line, Section 3, Township 22 South, Range 37 East, Lea County. The well was originally a Drinkard single completion, and has been



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producing from seven to ten barrels of oil a day and about 90 MCF of gas per day, penalized. Within the past year, there have been a couple of other duals offsetting this well in the Drinkard and Blinebry. They are the Humble "S" No. 22, Unit "M", Section 2, 22, 37. That has been outlined in red pencil. This well currently is producing through parallel strings of 2 3/8 tubing, producing about eight barrels a day from the Blinebry and four barrels a day from the Drinkard, and both zones are penalized by high ratio.

Immediately north of the proposed dual, is a dual completion in the Drinkard and Blinebry, which is the Gulf No. 3 Mark, and this well is located in Unit "G", Section 3, 22, 37. It is completed in 7 inch casing, with two strings of 2 3/8 inch tubing. Its current production is 17 barrels of oil from the Blinebry and three barrels from the Drinkard. I don't believe the Drinkard would be penalized, but the Blinebry is penalized because of ratio. The Drinkard does have a high ratio, but capacity is somewhat limited. To protect ourselves, we decided we had better go into it and test the Blinebry in the Cities Service Brunson "C"-4, which is completed in the Drinkard and ran a log through the Blinebry formation, which, I believe is Exhibit Two. We perforated the Blinebry from 5790 to 5820, 5823 to 30, 5838 to 42. Acidized with a thousand gallons, followed this with 15,000 gallons lease crude and 15,000 pounds of sand frac. The potential from this zone was 60 barrels of oil per day on 16/64ths choke with a GOR of 5965.

The gravity of the Blinebry is 33 degrees. We have not



run a bottom hole pressure, but we have checked some of the off-sets, and we understand that the pressure is in the neighborhood of 1590 pounds.

Q Do you have any information on the gravities of other zones?

A We plan to dual the Drinkard, which has 37 degrees gravity and bottom hole pressure in the neighborhood of 800 pounds.

Q Now, referring to what has been marked as Exhibit No. 3, would you discuss that exhibit?

A Yes. This is a schematic of the dual completion as we propose it. We will set a Texas Iron Works Retrievable single packer at 6201, and a Texas Iron Works Retrievable dual packer at 5664. The long string to the Drinkard will be composed of 6518 feet of 2 1/16th Interval Joint J-55 tubing and the Blinebry tubing string will be 1/2 inch regular tubing, set at 5664. This well has 5 1/2 inch casing, 15 1/2 pound. The drift is 4.825. The OD of the 2 1/16th inch I.J. tubing is 2.33, and the inch and a half regular joint is 2.2, about 30 hundredths of an inch clearance. We have a large surplus of inch and a half tubing on hand, and one of the reasons for running this, it saved a cash outlay of approximately \$3,300.00 for additional string of 2 1/16th, which would comply with the present administrative procedure for multiple completions.

We have run some friction loss calculations on the inch and a half tubing, and at the present allowable of 52 barrels a day with an approximate 6,000 to one ratio, the friction loss is



practically negligible when compared to 2 1/16th tubing. By the way, I think the present rules permit an ID of 1.67 by administrative procedure, internal diameter of inch and a half regular tubing, 1.61.

Q We are talking about six one hundredths of an inch?

A That is about right.

Q Other than that one factor, would this application be eligible for administrative approval?

A That's correct.

Q Is this the type of dual completion that has been approved by the Commission, other than the tubing size?

A Yes, many times.

Q Will all the zones be fully protected?

A Yes, they will. Of course, we will run packer leakage tests on approval of this application, and segregation tests as necessary.

Q Were Exhibits One, Two and Three prepared by you or under your supervision?

A Yes, sir, they were.

MR. KELLAHIN: Like to offer in evidence Exhibits One, Two and Three.

MR. NUTTER: Cities Service's Exhibits One through Three will be admitted in evidence.

MR. KELLAHIN: That is all I have on direct examination.

* * * *



MR. NUTTER: Are there any questions of Mr. Motter?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Motter, is it expected that the Blinebry will flow on completion?

A Yes, it is.

Q So, you won't have any artificial lift problem?

A No.

Q What did you say the OD was of the 2 1/16th IJ tubing?

A The Interval Joint, the joint portion is 2.33 inches.

Q What about the smaller tubing string?

A The colars are 2.2.

Q Mr. Motter, this Texas Iron Works HDR Retrievable packer is set by what means?

A Mechanically set packer, they are both, dual and single, are set on the 2 1/16th tubing string.

Q Are they set by rotation or weight?

A Set by weight, combination of rotation and weight.

Q Are there any other questions of Mr. Motter?

MR. NUTTER: He may be excused. Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: That is all I have, Mr. Nutter. Thank you.

MR. NUTTER: Does anyone have anything they wish to offer in Case 2977? Take the Case Under advisement.



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STATE OF NEW MEXICO ¶

COUNTY OF BERNALILLO ¶

I, ROY D. WILKINS, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill, and ability.

WITNESS my Hand and Seal of Office, this 10th day of February, 1964.

[Signature]
NOTARY PUBLIC

My Commission Expires:
September 6, 1967.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2977 heard by me on 2/5, 1964

[Signature], Examiner
New Mexico Oil Conservation Commission

