

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
May 24, 1961

EXAMINER HEARING

IN THE MATTER OF: :

CASE 2283 Application of Skelly Oil Company for an excep- :
tion to Rule 303 (a), Lea County, New Mexico. :
Applicant, in the above-styled cause, seeks :
permission to commingle the Denton (Devonian) :
Pool production and the Denton-Wolfcamp Pool :
production on its Mexico "F" Lease comprising :
Lots 1, 2, 3, and 4, the SW/4 NE/4 and the :
SW/4 NW/4 of Section 2, Township 15 South, :
Range 37 East, Lea County, New Mexico, and to :
allocate the production to each well in each :
pool on the basis of periodic well tests. :

BEFORE:

Elvis A. Utz, Examiner.

T R A N S C R I P T O F P R O C E E D I N G S

MR. UTZ: We'll call Case No. 2283.

MR. MORRIS: Application of Skelly Oil Company for an
exception to Rule 303 (a) Lea County, New Mexico.

MR. WHITE: Charles White of Gilbert, White & Gilbert,
Santa Fe, New Mexico, appearing on behalf of the Applicant. I also
have an associate with me, George Salinger from Tulsa, Oklahoma.
We have one witness to be sworn.

(Witness sworn.)

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

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You may proceed.

ARTHUR RAY BAUMGARDNER,

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

DIRECT EXAMINATION

BY MR. WHITE:

Q Will you state your name for the record.

A Arthur Ray Baumgardner.

Q By whom are you employed and in what capacity?

A Skelly Oil Company as Petroleum Engineer, Hobbs District.

Q Have you previously testified before the Commission as a petroleum engineer?

A Yes.

Q And your qualifications have been accepted?

A Yes, sir.

Q Will you briefly state the purpose of the subject application?

A Skelly Oil is asking for an exception to the rules of the Commission.

marked for identification.)

Q (By Mr. White) Will you refer to what has been marked Exhibit Number 1 and explain that to the Commission?

A Exhibit Number 1 is a plat showing the Mexico "F" Lease with the flow lines, the tank battery, the proposed flow lines and the offset operators with the Mexico "F" Lease outlined in red. The D designates the Devonian tank battery and the W designates the Wolfcamp tank battery.

(Whereupon, Applicant's Exhibit 2 marked for identification.)

Q (By Mr. White) Will you refer to Exhibit Number 2 and explain that to the Commission, please?

A Exhibit Number 2 is the proposed tank battery installation showing the method by which we will test the different zone productions at periodic intervals.

Q Will you please trace the flow of oil from the respective resevoirs?

A The Devonian oil from Well No. 1, 4, 3 will enter the resevoir on the left and then to the heater treater. Wells No. 2, 10, 5 will enter the middle resevoir and heater treater and after hey come through the heater treater will be commingled. They will enter one of the tanks at the right. The Wolfcamp production from Wells 6, 7, 8, 9, 11 and 12 will enter the facility on the left comprised of separator, heater treater, settling tank, and measured in the tank on the left side of the plat.



Q What testing facilities do you want to use?

A The zone on the Devonian Pool production will be tested in this way. The individual well test will be tested as shown on Exhibit 3. Exhibit 3 is a schematic diagram of the proposed well testing facilities. We will have a three-phase portable metering separator that we will put in the flow lines and meter the production in each well. This will separate and meter the oil, gas, and water and return the production to the flow lines.

Q In your opinion, is this an accurate means of measuring the production?

A Yes, sir.

Q Will you give the production history of these wells?

A The Wolfcamp wells are approaching economic limits. The April production was as follows: Well 6 produced 375 barrels of oil, 7200 barrels water, 29 MCF gas. Well 7 produced 1806 barrels oil, 9690 water, 277 gas. Well No. 8 produced 321 barrels oil, 4590 barrels water, 51 MCF of gas. Well 9 produced 948 oil, 840 barrels water, 452 MCF of gas. Well 11, 343 barrels oil, 6480 barrels water, 30 MCF of gas. Number 12 produced 7560 water, 83 MCF gas. The lowest production is about 13 barrels oil per day. This Well No. 11 which produced a total of 343 barrels of oil for the month also produced 200 some odd barrels of water per day. We are pumping these wells with a rod type installation from approximately 9980 feet.

Q Are any of them capable of making top allowable?

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A No, sir.

Q In your opinion, will any of these wells be capable of making top allowable in the future?

A I don't think so. There is a water flood study being made of the area north of our lease, but our lease has not been included in the study because it has been determined that we are in the dry portion of the resevoir and will not be affected by the water flood.

Q Will you give the crude characteristics?

A The crude characteristics of this intermediate type grade crude has a gravity of approximately 42 degrees API gravity, purchased by the Service Pipelines, Incorporated and sold down the pipe line. There is no distinction between the Devonian and Wolfcamp crude.

Q The working interests are common?

A Yes.

Q How about the royalty interests?

A Yes, sir, the state of New Mexico has the royalties on the lease.

Q Do you have any economics that you can give the Examiner?

A The Wolfcamp is approaching economic limits due to the extreme pumping depth and the large amount of water necessary to be handled to get oil production. As was stated previously, I believe the lowest production from any well in there was approximately 13 barrels a day.



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Q What prices are the crudes presently bringing after they are commingled?

A It will be -- after commingling, it will be the same price as before commingling except that we hope to reduce the weathering time on the installation by putting the crudes together. Also, we are contemplating an evaporator recovery system for the installation after it's commingled thereby increasing the revenue.

Q Do you have any further testimony you wish to offer at this time?

A No.

MR. WHITE: We offer Exhibits 1, 2 and 3.

MR. UTZ: Without objection, Exhibits 1, 2 and 3 will be entered into the record.

MR. WHITE: That concludes our direct.

MR. UTZ:

Q Mr. Baumgardner, do you have the April production for the Devonian?

A Yes, sir.

Q Would you give that? Do you have it on a per well basis?

A Yes.

Q Give that, please.

A Well No. 1, 2872 barrels, 4010 water, 4004 MCF gas. Well 2 produced 2684 barrels oil, 113 barrels water, 2658 MCF gas. Well 3 produced 4590 oil, 8040 water, 3323 MCF. Well 4 produced 567 oil, 7000 water, 3323 MCF gas. Well 5 produced 4614 barrels oil, 113



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barrels water, 6124 MCF gas. Well No. 10 produced 4214 barrels oil, 0 water, 1919 MCF gas.

Q This zone doesn't appear to be quite as marginal as in the Wolfcamp.

A No, sir.

Q The production appears to be about 4590, whereas your top unit allowable would be 5983.

A That's right, the top allowable for each Devonian well, I believe, is 193 barrels oil per day times the number of days per month.

Q Do you expect that Devonian will be able to increase its rate of production?

A I doubt it seriously. I don't think that it will because we are getting tremendous amounts of water now in the majority of the wells.

Q Is the royalty worth the same in each of these zones?

A Yes, sir, the state of New Mexico.

Q From your Exhibit Number 2, on the Devonian, do you use two heater treaters because of capacity?

A I believe that's right, we elected the heater treater rights in lieu of water knock out on this particular lease.

Q Where is your portable meter separator hooked in?

A At the well.

Q At the well head?

A Yes, sir.



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Q Do you test each well separately?

A Yes, sir.

Q I am rather interested to know why you chose to do this. Was it so you could keep all your other wells on production?

A Yes, sir. We are below top allowable and we would like to keep from shutting down as much as possible.

Q Now, what will be your advantage in using this system over what you have now? Would you take out some flow lines?

A No, sir. The Wolfcamp tank battery is in bad need of repairs which may require replacement of some of the present facilities. By commingling this, we can reduce the cost of replacing this tank battery which will make it look more favorable to the Wolfcamp zone economically.

Q Is that the sole advantage?

A No, sir, we will also decrease the weathering time on the Wolfcamp tank battery production and we also anticipate putting in this vapor recovery system which by commingling we can take the vapors from one installation which will be the vapors from both productive zones.

Q Have you made any investigation as to the amount of vapors?

A Yes, sir. We will have approximately 80 MCF gas per day.

Q That will be pretty rich gas, I presume.

A Yes, sir. Both crudes are above forty gravity.

MR. UTZ: Any other questions of this witness?

MR. MORRIS:



Q Mr. Baumgardner, how often do you plan to test these wells?

A A minimum of once a month.

Q Once a month?

A Yes, sir.

Q In the event that any of the wells in either of these pools becomes capable of making top allowable, will Skelly be willing to notify the Commission?

A Yes, sir, I'm sure they will.

MR. MORRIS: That's all I have; thank you.

MR. UTZ: Any other questions of the witness? If not, the witness may be excused. The case will be taken under advisement.

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STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, THOMAS F. HORNE, Court Reporter, in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in machine shorthand and reduced to typewritten transcript under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this, the 12th day of June 1961 in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Thomas F. Horne

NOTARY PUBLIC

My Commission expires:

May 4, 1965

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2283 heard by me on May 24, 1961.

Thomas F. Horne, Examiner
 New Mexico Oil Conservation Commission

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