

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
March 13, 1974

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco Production
Company for a unit agreement, Eddy
County, New Mexico.

)
)
)
) Case No.
) 5181
)

BEFORE: Richard L. Stamets, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil
Conservation Commission:

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MR. STAMETS: Call the next case. Case 5181

MR. CARR: Case 5181. Application of Amoco Production Company for a unit agreement, Eddy County, New Mexico.

MR. STAMETS: The record should show that the same witnesses as appeared in Case 5180 appear in this Case and have previously been sworn.

(Witness previously sworn.)

JACK D. ANDERSON

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

(Whereupon, a discussion was held off the record.)

DIRECT EXAMINATION

BY MR. BUELL:

Q Mr. Anderson, are you the same Jack Anderson that testified in the previous case?

A Yes, No. 5180.

Q All right, sir. In connection with this particular case I wish you would look first at what has been identified as Amoco's Exhibit No. 1. What is that Exhibit?

A It is Exhibit A to the Unit Agreement, and it outlines the proposed Trail Canyon Unit which comprises

5758.4 acres.

Q Would you describe the acreage included within the Trail Canyon Unit as reflected by Exhibit No. 1, please, Mr. Anderson?

A Yes, sir. All of the acreage is located in Township 24 South, Range 23 East, Eddy County, New Mexico, and includes all of Sections 1, 2, 3, 9, 10, 11, 14, 15 and 16.

Q All right, sir. Now we really have a mixed bag of acreage in this Unit; we have State, Federal and fee. How have you distinguished the various categories on Exhibit 1?

A The Federal acreage is shaded in green, the fee acreage is shaded in red and the State acreage is white.

Q What is the acreage breakdown, Mr. Anderson?

A In this Unit the State has 4838.4 acres which represents 84.02 percent of the Unit; Federal acreage is 640 which represents 11.12 percent and the fee acreage is 280 acres representing 4.86 percent.

Q So again, as in our previous case, we have a unit here which is composed primarily, predominantly of State acreage?

A Yes, sir.

Q All right, sir. What is the status of working-owners commitment to this Unit?

A All of the working-interest owners have given their verbal commitment to the Unit except Tract No. 9 which is owned by Perry R. Bass.

Q That Tract is in two parts, isn't it?

A Yes. Part of it is in Section 14 and part in Section 15. It is a State lease containing 640 acres.

Q All right, sir. What is your percent of commitment, including the Perry Bass 640 acres?

A We would have 88.88 percent.

Q All right, sir. When you consider your interest that is committed and the particular location of the Perry R. Bass acreage, do you feel that it would still give us effective operational control over the Unit?

A Yes, sir, I do.

Q Let me ask you this: Are you currently negotiating at this time with the representatives of Perry R. Bass with regard to a farm-out on the acreage that we just discussed?

A Yes, sir, we are doing this. The working-interest owners that have joined in the Unit are working with Mr.

Bass and we feel that we will be able to work out some type of agreement so the working-interest owners would have control of the Bass acreage.

Q All right, sir. What about the State and Federal royalty ownership? What is the status of commitment in that regard?

A Okay. By letter dated February 14th, 1974, we received preliminary approval from the USGS of the Unit Agreement; by letter dated December 26th, 1973, we received a letter from the State Land Commissioner giving his approval as to the Unit area. At this time we have in the Office of the Land Commissioner our request for their preliminary approval with the Unit Agreement and the attachments thereto.

Q All right, sir, let me direct your attention now to what has been identified as our Exhibit No. 2. What is that Exhibit?

A It is the Unit Agreement which is a 1968 reprint of the Federal form.

Q To your knowledge has the State committed State entrance to a unit agreement such as that same form and content, generally speaking?

A Yes.

Q All right, sir. Let me ask you now to jump back to Exhibit 1 if you will. I notice we've got two notches in this Unit, ones in the northwest corner, and let's just discuss that one first, I guess that would be Section 4. Why didn't you include Section 4 in this Unit, Mr. Anderson?

A Section 4 was not included. We approached the working-interest owner and were advised at the time that we were forming the Unit that that acreage was committed to some drilling activity to be carried on to the northwest of this proposed Unit.

Q All right, sir, now let's jump on over to the east edge of our proposed unit and I see we've got a two-section notch there; I would guess it would be Sections 12 and 13, is that correct?

A Yes.

Q Why weren't Sections 12 and 13 included?

A We had a similar story there. The working-interest owners were committed to a well being drilled in Section 16, Township 24 South, Range 24 East, and at the time we were forming the Unit their acreage was committed and tied to that test.

Q When this Unit was discussed with both representa-

tives of the Federal Government and representatives of the State of New Mexico, were they aware of the configuration that this Unit would be in as reflected by Exhibit No. 1?

A Yes. Our first attempt at putting this Unit together did include Sections 12 and 13 and we had to go back to the State Land Commissioner and advise him of the change and also we advised the USGS that we attempted to secure commitment of those two sections initially and were unable to do so.

Q All right, sir. Have you approximately located the position of the proposed test well in any way on Exhibit 1?

A Yes, it is indicated by a red dot. Footage location for the initial test well is 500 feet from the west line, 900 feet from the north line, that's Section 11, Township 24 South, Range 23 East.

Q Now that's an unorthodox location is it not, Mr. Anderson?

A Yes, it is.

Q Why is it located in that position instead of in an orthodox location?

A It's the topographic terrain; it's very rough

and rugged in that part of the country.

Q Based on the rugged surface conditions, has the Commission already approved administratively, based on waivers from all off-setting interest owners, the unorthodox location of our proposed test well?

A Yes, they have.

Q All right, sir. Do you have anything else you care to add at this time, Mr. Anderson?

A I don't believe so, I believe that would --

Q (Interrupting) What about time?

A I was waiting for you to bring that up. We have leases in this Unit that expire April 21st, 1974. It seems that the State must have issued a lot of leases back in '64 around April the 21st.

Q Are you again urging the Examiner to --

A (Interrupting) We urge them to give their usual expedient consideration.

Q All right, sir, other than that do you have anything you would like to add to the record?

A No, I think that will be it.

MR. BUELL: If it please the Examiner that is all that we have of Mr. Anderson.

MR. STAMETS: Are there any questions of the

Witness? He may be excused.

(Whereupon, a discussion was held
off the record.)

(Witness previously sworn.)

KES J. GAIZUTIS

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

DIRECT EXAMINATION

BY MR. BUELL:

Q Mr. Gaizutis, you're the same Mr. Gaizutis who
previously testified in Case 5180?

A Yes.

Q In connection with your testimony here, would
you at first please look at what has been identified as
Amoco's Exhibit No. 3 and state for the record what that
Exhibit reflects?

A Amoco's Exhibit 3 is a structure map prepared on
the top of the middle Morrow or top of the Morrow clastic
interval. The structural datums are indicated in blue
and contoured in blue lines. There is also indicated in
greenish-colored triangles isopach values of the middle
Morrow sand which we feel is the main objective in the area.
In addition, there are projected fairways or trends of

porosity within these sands and we feel they are critical to our story and are indicated in yellow and in orange.

Q Have you designated the Unit on your Exhibit No. 3?

A The Unit is outlined in green tape.

Q It would appear then that we're looking at a much smaller acreage on Exhibit No. 3 in this case than we were in Exhibit No. 3 in the previous case?

A Yes. Here we are looking at a small area where we have considerable control, considerable new drilling for the Morrow as a primary objective.

Q Is that why you've mapped the Morrow here as opposed to the Atoka on your regional map in the previous case?

A Yes, the structure horizon is more directly related to our main-objective sand in this particular area. We feel that the primary objective sand may be the only one here.

Q It might be helpful, and speed up this Case, Mr. Gaizutis, if we go now to what has been identified as Exhibit No. 4. Identify that for the record and then that way we will be able to jump back and forth between 3 and 4 and use them together to expedite your testimony.

What is Exhibit No. 4?

A No. 4 is a stratigraphic cross section through the area that we are proposing our Unit. The Exhibit is indicated A-A' with A being to the west and A' to the east of the mapped area.

Q Do you have a surface trace of that on Exhibit 3?

A Yes. The Exhibit 4 cross section is traced on the map and indicated as A-A' and traced in green.

Q It kind of forms an inverted "U" doesn't it?

A Yes. This is in response to the control in the area and in order to take into account all of the control we feel is important to the story.

Q Would you go ahead and explain the geology of this particular area in and around our proposed Unit using as you choose Exhibit 3 and Exhibit 4, Mr. Gaizutis.

A First of all, let me point out that production in the area has been primarily concentrated to the area to the immediate northeast in the Rock Tank Field, which is productive out of the Morrow. The production in the Rock Tank Field Area is primarily out of the Basal Morrow Sand which we have indicated on our Exhibit 4, or had separated from the middle Morrow. To the south, and in the area that we are concerned with, where our Unit exists,

the sands become very thin, very tight, and have not yielded any significant shows of gas. These can be seen on the cross section in Exhibit 4. We feel, however, that the middle Morrow clastic sands, as we designated it, does have a very good chance of having porous, permiable, well-developed sands in a zone that is outlined on the map as the porous-middle-Morrow-sand trend and designated by a yellow outline.

Q Mr. Gaizutis, we know we have tight Morrow to the left of us and tight Morrow to the right of us; what data have you looked at that make you feel the possibility exists that we'll have some good porous Morrow running in a northeasterly-southwesterly direction right through our proposed Unit?

A The most critical evidence is the Shell No. 1 China Canyon Unit Well located in Section 29, Township 23 South, Range 24 East, which is in the center of our Exhibit. The well shows very good sand development in the middle Morrow interval and long analysis indicate porosities up to 15 percent with an average in the 9 and 10 percent range. We feel that these ranges are very adequate and they contrast to porosity values through the middle Morrow sand intervals both to the northwest and southeast of about 4 to

7 percent, so we feel that we have an indication here -- I'll buy that it's rather slim that you have one well controlling the indication -- and yet we feel that regional work indicates to us that in this middle Morrow objective we do have orientation aligned parallel at the strike. The isopach values shown in green also tend to shore up this interpretation. We have not depicted an actual isopach interpretation on this map but indicated the values, but we do see, for example, in through here eighty net feet of sand as opposed to 50 feet, 40 feet, 30 feet, on either side of the proposed trend. Structurally we feel that we'll be just on regional depth through here. The well in Section 12, Township 24 South, Range 23 East, did not penetrate the Morrow section, it TD'd at the top of the Atoka, but the indications from extrapolation of the data obtained from that well indicates that there is strictly regional dip in the area. We don't feel that for this particular prospect that structure is critical. We see that where structure does play a dominant role or is very pronounced, we see two dry holes above A zones in Rock Tank Field, so sand quality and character seem to be more critical.

Q Here is the middle Morrow again our primary

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objective?

A Yes.

Q Do we have any prospects up above the middle Morrow as we had in the previous case?

A Yes, There are additional indications, both in the Atoka, that has produced marginally in the area, and recent production indicated here in the C. K. Lowe Well that originally was classified as Canyon, now appears to be Wolfcamp. We feel there is that shot in our well also.

Q Do we intend to drill our test well through the Morrow?

A Yes, we will also TD in the Mississippian Shale.

Q Mr. Gaizutis, do you have anything that you would care to add to your testimony at this time?

A The only other mention that we did not include in the original discussion was the appearance of the faulting through the area, the Apache monocline or fault to the southwest and what is believed to be a fault behind the Rock Lake --

Q (Interrupting) And the trace of those faults are shown on your Exhibit 3 in brown?

A Yes, sir.

Q Is that all, Mr. Gaizutis? Is that all you

have?

A Yes, sir.

MR. BUELL: That's all we have of Mr. Gaizutis on direct, Mr. Examiner. I would like to formally offer Amoco's Exhibits 1 through 4, inclusive.

MR. STAMETS: Exhibits 1 through 4 will be admitted into evidence.

(Whereupon, Applicant's Exhibits Nos. 1 through 4 were admitted into evidence.)

MR. STAMETS: Mr. Gaizutis, you called that Rock Lake, I believe you meant Rock Tank?

MR. GAIZUTIS: Rock Tank.

MR. STAMETS: Are there any questions of the Witness? He may be excused.

MR. ANDERSON: I don't believe the depth was given, 10,800 feet.

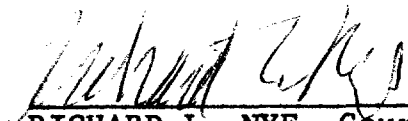
MR. STAMETS: Anything further in this case?

MR. BUELL: No, sir, Mr. Examiner.

MR. STAMETS: We will take the case under advisement.


STATE OF NEW MEXICO)
)
COUNTY OF SANTA FE) SS.

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.



RICHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5181, heard by me on 3/13, 1974.


_____, Examiner
New Mexico Oil Conservation Commission

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