

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
August 6, 1969

EXAMINER HEARING

IN THE MATTER OF:)
)
)

Application of Pan American)
Petroleum Corporation for a unit)
agreement, Chavez County, New Mexico)
)

Case No. 4183

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

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MR. NUTTER: Case No. 4183.

MR. HATCH: Case No. 4183. Application of Pan American Petroleum Corporation for a unit agreement, Chavez County, New Mexico.

MR. COOTER: Paul Cooter of Atwood and Malone of Roswell, appearing for the Applicant, Pan American. We have two witnesses.

(Witnesses sworn)

PETER ABBEY

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

DIRECT EXAMINATION

BY MR. COOTER:

Q Would you state your name, please?

A Peter Abbey.

Q By whom are you employed, Mr. Abbey?

A Pan American Petroleum Corporation.

Q And in what capacity?

A District land man.

Q Would you briefly relate what Pan American seeks by its Application in this case?

A Pan American wishes to form a State and Federal Unit comprising approximately 5120 acres for the drilling

of a 11,000 foot top Mississippian test at a location in the NW/4 of Section 27, 15 South, 30 East in Chavez County, New Mexico.

Q For this Hearing did you prepare certain exhibits or were certain exhibits prepared under your supervision?

A Yes, sir.

(Whereupon, Applicant's Exhibits Nos. 1 through 6 were marked for identification.)

BY MR. COOTER:

Q I will ask you to relate what is shown on what has been marked as Exhibit 1. This is marked on the back.

A Exhibit 1 shows the proposed unit outline with the acreage colored in red being that for which the working interest is committed. The State acreage comprising approximately 680 acres is xed in black.

Q The remaining acreage is federal?

A The remaining acreage is federal.

MR. NUTTER: Would you repeat that well location?

THE WITNESS: NW of 27.

MR. NUTTER: Did you give a specific footage?

THE WITNESS: No, I didn't give a specific footage.

MR. NUTTER: Just somewhere in the northwest quarter of the section?

THE WITNESS: Right.

BY MR. COOTER:

Q What is the percentage of the working interest that is owned by Pan American in this proposed unit area?

A Pan American has approximately 93.75 percent.

Q The balance being shown in white is owned by others?

A Right.

Q Have the owners of all the working interests in other acreage committed that or consented to the unit?

A No. The only other party that has consented to that is C.R.A., Incorporated, which owns a 40-acre tract. Mrs. Grace owns 40 and we have not heard from her. Irving Wolf owns 240 acres and he has indicated that he is not willing to join in the unit.

Q Would you please identify what has been marked as Exhibit No. 2?

A Exhibit No. 2 is the proposed unit agreement for the Cedar Point Unit area.

Q Is there a drilling obligation or what is the drilling obligation set forth in the unit agreement?

A It provides for a drilling of a well to the depth of 11,000 feet, less the top of the Mississippian or

if commercial production is encountered at a lesser depth.

Q How soon would the commencement --

A (Interrupting) The well would be started within 6 months of approval of the agreement.

Q What is the estimated cost of this proposed well?

A Estimated cost of a dry hole is \$148,000. and a producer, \$199,000.

Q Has that proposed unit been submitted to the U.S.G.S. for its approval?

A Yes, it has.

Q Did you receive a response from them?

A Yes, sir, that is Exhibit 3.

Q There is a State Lease involved. Has the proposed agreement been submitted to the Commission of Public Lands in the State of New Mexico?

A Yes, it has.

Q Have you received a response?

A Yes, sir, it is Exhibit No. 4.

Q No. 4.

MR. COOTER: We will present our geological information with Mr. Roberts. That concludes our direct examination of Mr. Abbey.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Abbey, including Pan American's acreage and C.R.A. acreage, what is the total committed acreage to this unit in percent?

A 94.53 percent.

Q 94.53 percent committed?

A Yes, sir.

Q And the royalty interests under the entire thing indicated their approval?

A Yes, it being all State and Federal, right.

MR. NUTTER: Are there any other questions of Mr. Abbey?

You may be excused.

(Witness excused.)

WAYLAND ROBERTS

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

DIRECT EXAMINATION

BY MR. COOTER:

Q Would you state your name for the record, please, sir?

A Wayland Roberts.

Q By whom are you employed, Mr. Roberts?

A Pan American Petroleum Corporation.

Q In what capacity?

A I am area geologist for eastern New Mexico.

Q You are a graduate geologist?

A Yes, sir, that's correct.

Q Have you previously testified before the New Mexico Oil Conservation Commission and made your qualifications a matter of record?

A Yes.

Q How long have you been employed by Pan American?

A 19 years.

Q For the purpose of this Hearing, have you prepared or were certain exhibits prepared under your supervision?

A Yes.

Q These are the exhibits which have been marked Exhibits 5 and 6, is that correct?

A Yes, sir, that's correct.

Q Would you first briefly identify each exhibit and then relate to the Examiner what you have shown thereon?

A Exhibit 5 is a general information map. It shows the general outline of our proposed unit. The location

of this proposed unit is in the southeastern Chavez County near the common corners of Eddy, Lea and Chavez Counties just west of the Caprock-Green Field. Exhibit 6 is a two-well stratigraphic cross section that runs approximately northwest to southeast. In the lower part of Exhibit 6, the cross section, you will notice that the line of section is shown with respect to the outline of the Cedar Point unit and the location of the two wells are shown, one being west of the proposed unit, the other one is to the east or southeast where our nearest sub-surface point of control is available.

Also on Exhibit 6 on the righthand side, we have shown intervals here that we refer to as the Morrow-Atoka Interval. It is within this interval that we are presently assigning our major prospect zone. These are the sands within the lower part of the Pennsylvanian that is our target zone.

The relationship of our proposed unit to the development of the sand, cross referencing the two exhibits, shows that in the upper lefthand corner of Exhibit 5, we have a note that states that -- the pink serrated line there approximates the northwest limit of significant sandstone development within the lower prospective zone

of the Atoka-Morrow. On the lower righthand portion of exhibit, there is a note that states that this represents, this area here represents the down-dip limit of the unit boundary as determined by sand development relative to structural and thickness data.

Based on regional studies, we feel that there is a close relationship between sand development within the interval of approximately 500 feet of thickness. This would be the Atoka-Morrow interval of about 500 feet of thickness. Any structural nosing that we may have developed is on the basis of structural information available.

Q Mr. Roberts, let me interrupt you at this point and ask you if the lower productive zone or the formations within the lower productive zone as shown on your Exhibit 6 are productive in other fields in the general area and if so, where are they?

A Yes, they are productive. They are productive in the Atoka-Penn Field which is about 5 miles directly south of Artesia, New Mexico. They are also productive east of Artesia in the Chalk Bluff-Penn Field and then further east in the Empire-Penn Field.

Q You show on your Exhibit 6 a pinch-out of the lower prospective zone over toward what has been marked

as the Texas No. 1 Perry Federal which is right in Section 29. Is the production in the other fields, the Atoka -Penn, Chalk Bluff-Penn that you mentioned, does it encounter a similar geological anomaly?

A Yes, the relationship both stratographically and structurally in the areas that were produced from these lower sands, is essentially -- the interpretation is based on this particular area here.

Q Back up just a minute. Is the preface of my last question, that the lower prospective zone as shown is pinched-out or non-existent in the Texas No. 1 Perry Federal, is that correct?

A Yes, sir.

Q On Exhibit 5, on the map, did you map this interval, that is the lower prospective zone on a regional basis?

A Yes, we did.

Q Is that the basis for the unit outline?

A That is one of the bases, yes, sir. The principal basis here, of course, localizes in this particular area, is to relate that regional occurrence of the sand locally where we have structural information that would allow us to locally restrict it to an anomalous area. The

structural information here that we have is on the basis of both regional sub-surface and in this particular case, seismic information.

Q Do you have any other information reflected in these exhibits?

A On the righthand side of Exhibit 5 is a breakdown of the acreage picture that has already been discussed. Also included here are the approximate formation tops. Those that are identified by an asterisk to the right of the formation are considered potential pay zones. Those include the Queen, the San Andres, possibly the Wolfcamp and Pennsylvanian. Of course, our primary objective is within the Pennsylvanian, the lower part of the Pennsylvanian.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Roberts, I note that on Exhibit No. 6, take the Texaco well there, if the lower zone were present, you would encounter about 10,200, apparently, and on your tabulation here on Exhibit 5, you give the top of Pennsylvanian with an asterisk with a potential pay zone of about 8300. Are you talking about the top of the Pennsylvanian way up in the upper Pennsylvanian is 8300?

A That is correct.

Q Where would you expect the lower zone to be in the Morrow, for example?

A At approximately 10,600 or 10,700, the top part of it.

Q I see. Is there any prospective Devonian in this area?

A The Devonian produces, as shown on Exhibit 5 immediately to the west here, but under our proposed unit outline, we assign no prospects to the Devonian.

Q Which would be the Devonian production here?

A The wells that are in Section 17, 20, 29 and 32. There are 6 wells that are producing.

Q In other words, these Texaco wells out here to the west are all Devonian wells?

A Yes, they are.

Q Now, I know it is normally Pan American's designation when they are drilling a Devonian well to file for a test of the Mississippian which is merely to ascertain at what depth you will find the Mississippian to determine where the Devonian would be. Do you plan to take this into the Devonian?

A At this time there are no plans to drill a well

into the Devonian.

Q It is primarily a Pennsylvanian test?

A Our objective here is to penetrate all of the sands that lie just immediately above the Mississippian.

Q So it is primarily a Pennsylvanian test?

A That's correct.

Q Do you anticipate if you do obtain production from the Pennsylvanian that it will be oil or gas?

A I would judge that it would be gas.

Q I see.

MR. NUTTER: Are there any further questions of Mr. Roberts?

You may be excused.

(Witness excused.)

MR. COOTER: Mr. Examiner, we would tender Exhibits 1 through 6.

MR. NUTTER: Pan American's Exhibits 1 through 6 will be admitted in evidence.

(Whereupon, Applicant's Exhibits Nos. 1 through 6 were offered and admitted into evidence.)

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


MR. COOTER: Nothing further, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case No. 4183?

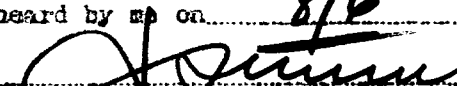
We will take the case under advisement.

STATE OF NEW MEXICO)
)
 COUNTY OF SANTA FE)

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.


 COURT REPORTER

My Commission expires April 8, 1971.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 4183 heard by me on 8/6 1969.

 Examiner
 New Mexico Oil Conservation Commission