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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
April 8, 1964

Examiner HEARING

IN THE MATTER OF:

Application of Pan American Petroleum
Corporation for a unit agreement, Eddy
County, New Mexico.

Case No. 3025

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING



MR. NUTTER: We will call Case 3025.

MR. DURRETT: Application of Pan American Petroleum Corporation for a unit agreement, Eddy County, New Mexico.

MR. MALONE: May it please the Commission, Charlie Malone of Atwood and Malone, for the applicant. We have two witnesses and six exhibits. Could our witnesses be sworn?

(Witnesses sworn.)

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

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

DIRECT EXAMINATION

BY MR. MALONE:

Q Would you please state your name and your business address?

A John H. Thompson, of Lubbock, Texas.

Q Your occupation, Mr. Thompson?

A I'm Staff Landman for Pan American Petroleum Corporation at Lubbock,

Q Is the area involved in this application under the jurisdiction of your office?

A Yes, it is.

Q Are you personally familiar with the application and its contents?

A Yes, I am.

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Q Briefly, what does the applicant seek here?

A We seek the approval of the Long Draw Unit Area comprising approximately 3514 acres in Township 20 South, Ranges 23 and 24 East, Eddy County, New Mexico.

Q Does Pan American have any specific desires with respect to the information which will be put in the record today?

A Yes. We would like for the information to be kept confidential for a limited time.

Q Referring now to what has been marked as Exhibit 1, would you state what this is, please?

A That is the proposed form of unit agreement.

Q What form was used for drafting this exhibit?

A Its the model form revised according to the present regulations.

Q And in speaking of the model form, you mean the one prescribed by the Code of Federal Regulations for Federal Lands?

A That is right.

Q Has the form, as shown in Exhibit 1, been approved by the Commissioner of Public Lands?

A It was approved, but there have been some modifications in it, in accordance with the request of the U. S. Geological Survey.

Q And have those changes requested by the United States Geological Survey been submitted to the Commissioner?

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A They were submitted yesterday, and Mrs. Reah, R-e-a-h, of the Commissioner's Office, advised me verbally this morning that she had no objection to these changes.

Q Will you be willing to obtain from Mrs. Reah a letter affirming the approval of the Commissioner to these changes and furnish it to the Commission?

A Yes, I am willing.

Q With respect to Exhibit Number 2, does this represent the original letter from the Commissioner approving the form of the unit agreement?

A Yes, it does.

Q Prior to these last minute changes that you mentioned?

A Yes, it does.

Q Does Exhibit Number 3 represent the approval by Arthur Baker, the Accounting Director of the United States Geological Survey, of the form of the unit agreement?

A Yes, it does.

Q I notice in the center paragraph in Exhibit Number 3 the letter of Mr. Baker, that he has stated that there were some changes made in colored pencil on the form submitted to him. Have those changes which he mentioned, been made prior to today, and are they reflected in Exhibit 1?

A Yes, they are.

Q Would you state briefly the situation which exists today

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with respect to joinder of owners of working interests in the proposed Unit Area?

A All of the parties owning working interest in the Unit Area have agreed to commit their acreage with the exception of Tract Number 9, which is an 80 acre tract owned by Thomas Connell, who at the present time says he is willing to sign the unit agreement but not the unit operating agreement, which of course, would not be a commitment, and therefore that is something we shall have to work out. However, the size of the tract and its location, we do not believe, will interfere with the operation of the unit.

Q For the clarity of the record this Connell tract, which you designated as Number 9, appears on Exhibit A to the Unit Agreement, and this Exhibit A for the ready reference of the Examiner has a paper clip on it. It's toward the back of the Unit Agreement. This Connell tract is in the extreme northwest part of the proposed unit, is that correct?

A That is correct. In addition to that we do not have the commitment of Hondo Oil and Gas Company of Tract 15, which is a 160 acre tract in the southwest corner, and the reason they do not wish to commit that at this time is that their lease comprises the south half of Section 36, in addition to the northwest quarter of Section 36.

Q And it is the northwest quarter of 36 which is designated Tract 15 in the proposed area?



A That is correct. However we feel that this will not interfere also with the operation of the unit.

Q The total acreage in the two tracts you've mentioned, 9 and 15, referred to as Connell and Hondo, is a total of 240 acres out of the proposed area of 3,514, is that correct?

A That is correct. I might mention that in connection with Tract 12, which is owned by Union Oil Company, covering all of Section 25, the ratification of the unit and the unit operating agreement, has been recommended by their District Office at Roswell and by their Division Office at Midland to their California Executive Committee, but due to the shortness of time the Executive Committee in California has not yet acted, or at least early this morning; however, they do expect approval momentarily.

Q Is it true that you have some deadlines in connection with these leases which has caused the proposal of this unit to be done rather quickly?

A Yes, it is. Two of the Federal leases expire on April 30, 1964. Inasmuch as neither one of them are the drill site, why these leases will expire on that date unless the unit is approved by both the State and the United States Geological Survey, and the drilling of the well commenced prior to that time.

Q What does the unit agreement provide now with respect to joinder of uncommitted interests?



A There is the usual provision for subsequent joinder in both the unit agreement and the unit operating agreement.

Q Is there anything further that you wish to state with respect to the ownership of the lands as reflected on Exhibit A contained in Commission Exhibit 1. What is the percentage of the Federal and State ownership, and is there any Fee ownership?

A There is no fee ownership and the area comprises approximately 90 percent Federal land and 10 percent State land.

Q Under the proposed unit agreement, what is the drilling operation of the operator with respect to depth?

A The unit agreement the obligation is to test all forms of Pennsylvanian age. We are proposing maximum depth of 9300 feet, which we believe will penetrate the Mississippian formation probably 200 feet, so that we feel that it will be adequately tested.

Q In other words, you feel that you will go beyond the Pennsylvanian something like 200 feet?

A That is correct.

Q What is your Exhibit Number 4, please?

A Exhibit Number 4 is our prepared unit operating agreement which has been submitted to all parties.

Q Were Exhibit Number 1, the proposed unit agreement, and 4, the operating agreement, prepared either by you or under your direct supervision?



A Yes, they were.

Q In your opinion in the handling of oil and gas lands and leases, would the approval of this application by the Commission tend to prevent waste and protect correlative rights?

A In my opinion it would.

Q Do you have anything further that you wish to add to your testimony at this time?

A Only that we would certainly appreciate prompt action by the Commission in order that we can accomplish this purpose by April 30th.

MR. MALONE: That concludes the direct examination of this witness.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Thompson, I misunderstood you I think. At first didn't you state that all the working interests has agreed to sign except Tract 9 and 15, or did you state that they had signed?

A No.

Q And then that would exclude Tract 12?

A I probably should correct that, that due to the short length of time since the United States Geological Survey approved our form, which was just last Thursday evening, why we have been working pretty hard to get these, and so that we have pretty well assured as to Tract 12, by both the District and Division offices



of Union, and they tell us that in 99 percent of the cases which they have submitted to their California office they have received approval.

Q The other working interest owners being California Company, Leonard, --

A Gulf.

Q Gulf and Pan American?

A Pan American, they have all agreed.

Q Have they actually signed?

A They have not signed. We do have telegraph commitments from each one, but they are willing to sign them.

MR. NUTTER: Any other questions of Mr. Thompson? You have another witness to testify to the geology?

MR. MALONE: Yes, Mr. Examiner.

MR. NUTTER: Mr. Thompson may be excused.

(Witness excused.)

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

DIRECT EXAMINATION

BY MR. MALONE:

Q Would you please state your name and business address?

A H. D. Teel, Pan American Petroleum Corporation, Lubbock, Texas.

Q Your occupation?



A I am District Geologist for Pan American .

Q Mr. Teel, are you familiar, personally, with the matters dealt with in this application?

A Yes, sir, I am.

Q You have not previously testified before this Commission on matters of geology, is that correct?

A That is correct.

Q Would you briefly state your training and experience in this field?

A Yes, sir. I graduated from the University of Texas in 1939 with a Bachelor of Science in Geology. I have worked 17 years for Pan American Petroleum Corporation, the last ten years being District Geologist, the last five years I have been handling Southeastern New Mexico.

Q And the area in this application is under your jurisdiction at Lubbock?

A Yes, sir.

MR. MALONE: Would the qualifications of this witness be satisfactory?

A Yes, sir, they are.

Q Refer now to Exhibit 5; would you state what that is?

A Yes, sir. Exhibit 5 is an isopac map of the Grosse-Abo reef which includes the proposed Long Draw Unit. The area outlined in red, of course, being the Long Draw Unit; the green



colored areas being the trend of the Abo reef. The Abo reef is pretty well defined by control that we have both at the north and the south end of the maps, and we know from past history that the Abo reef is not continuous around the rim of the Delaware Basin, but that it is breached or interrupted in many places. We have an indication here in Section 21 that the northeast corner of the Long Draw Unit, the Carper Drilling Company Number C, Number 1-A which had zero feet of reef, that indicated a breach in the reef at this point. We also have a gravity minimum in this area which back up this particular breaching. At the southeast end of the proposed unit --

Q Pardon me for interrupting. Is that southwest?

A Southwest, I beg your pardon. At the southwest corner of the proposed Long Draw Unit our gravity information again indicates that we have a breach in the reef. Also on our enclosure Number 6 we can indicate breaching on another map.

Q That's the exhibit which you will discuss next?

A Yes.

Q Would you go to that now, just to clarify that point, please?

A All right. You will note that the proposed Long Draw Unit on Exhibit Number 6 is a structure map of the top of the Cisco. Over this proposed unit we have a very very strong nose.. We have a syncline located to the northeast end of the unit, which



is also backed up by gravity and also by the Carper Well which has no reef.

At the southwest corner of the area we have a breach in the reef which is backed up by gravity and also indicated by this syncline on the contour map.

Q That syncline you mentioned at the southwest corner of the proposed unit area, is the nose extending from the lower right side to the upper left side of the southwest corner of the unit?

A That is correct.

Q Why have you depicted Abo as you evaluate it here on Exhibit 5, why is the Abo pertinent?

A We believe that it is the primary objective within this particular area. As I further stated, we generally know where the reef trends through this area. We think, we know that the reef is tilted to the northeast and if such breaching occurs at the southwest corner of the unit which we believe, then there's an excellent possibility for an Abo reef field in this area.

Q I notice on your other map you have shown on there zones.

A Yes, sir.

Q What is the opinion of the applicant, or your opinion, I should say, with respect to these other zones, and possible production?

A We think that the proposed Long Draw Unit has three possible pay zones within the area. You will note to the north of



the unit some seven or eight miles, in Section 18 we have the Tom Brown Drilling Company well.

Q You are referring now to Exhibit 6, aren't you?

A Exhibit 6, yes, sir. Which was completed from a Cisco Carbonate for 2.2 million cubic feet of gas per day. You have the Brown well to the south, Brown Number 1, and Antelope 6-N. It was dense in this zone and also dense in Tom Brown Number 1 Kewanee in Section 2. Therefore, we believe that porous carbonate swings to the east of both of the Brown wells, and swings around this nose. Therefore, in this particular unit area we have an excellent chance for Upper Cisco carbonates producing similar to the Tom Brown well here in Section 18.

Furthermore, now we have the Morrow production, which has been established in the Brown Number 1 Kewanee located in Section 2. It was completed for 2.6 million cubic feet of gas per day. We also, further to the south in the most active area in New Mexico is the Indian Basin country producing from the Cisco Canyon, and dualled from the Morrow. Most of the wells down here, which there are some ten or twelve, in number, are producing from the Morrow. The highest potential is in the Ralph Lowe Number 1-A Indian Basin, which completed for 15,000,000 cubic feet of gas from the Morrow. Therefore, we are sitting between two known Morrow producers.

Q Referring to the Ralph Lowe and the Tom Brown --



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A Kewanee State.

Q --Kewanee State?

A Therefore, in this particular area we think we have a stacking of pay zones, being the Abo Reef of roughly 3950, the Cisco at 6450, the Atoka Morrow section at 8500 feet.

Q Is it the intention of the applicant in the test well under this proposed unit to test all of these three formations?

A Yes, sir. We plan to drill at least 200 feet into the Mississippian formation to be positive that we completely penetrate all of the Pennsylvanian.

Q In your opinion, would the unitization and operation of this proposed area under the proposed unit agreement tend to prevent waste and protect correlative rights in the area?

A Yes, sir, it would.

Q Were Exhibit Numbers 5 and 6 prepared by you or under your direct supervision?

A Yes, sir, they were.

Q Mr. Teel, do you have anything further that you wish to add to your testimony?

A No, sir, nothing further.

MR. MALONE: That completes the direct examination. We would move the admission in evidence of Exhibits 1 through 6.

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



(Whereupon, Applicant's Exhibits 1 through 6 were admitted in evidence.)

MR. NUTTER: Does anyone have any questions of Mr. Teel? He may be excused. You covered it pretty adequately.

(Witness excused.)

MR. NUTTER: You have nothing further, Mr. Malone?

MR. MALONE: Nothing further, Mr. Examiner.

MR. NUTTER: Does anyone have anything they wish to offer in Case 3025? We will take the case under advisement and recess the hearing until 1:30.

(Noon Recess.)

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STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 14th day of April, 1964.

Ada Dearnley
Notary Public - Court Reporter

My Commission Expires:
June 19, 1967

I do hereby certify that the foregoing is a complete record of the proceedings in the hearing of Case No. 3025 heard by me on 4/8, 1964.
Ascan, Examiner
New Mexico Oil Conservation Commission



MAIN OFFICE 0000

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November 17, 1964

Pan American Petroleum Corporation
P. O. Box 268
Lubbock, Texas

Re: Long Draw Unit
Eddy County, New Mexico
Termination of Unit Agreement

Attention: Mr. Jack D. Anderson

Gentlemen:

The Commissioner of Public Lands approved as of November 17, 1964, the Termination of Long Draw Unit Agreement, Eddy County, New Mexico. Approval being subject to like approval by the United States Geological Survey.

We have handed two approved copies of this Termination to Mr. Jack D. Anderson.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

BY:

Ted Bilberry, Director
Oil & Gas Department

ESW/mar/v

cc:

United States Geological Survey
Roswell, New Mexico

Oil Conservation Commission
Santa Fe, New Mexico

