DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M. PHONE 325-1182

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
October 24, 1962

EXAMINER HEARING

IN THE MATTER OF:

Application of The Pure Oil Company for approval of the Red Hills Unit Agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Red Hills Unit Agreement, covering 28,796 acres, more or less, of Federal, State, and fee lands in Township 25 South, Ranges 32 and 33 East, and Township 26 South, Range 33 East, Lea County, New Mexico.

CASE 2671

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 2671.

MR. DURRETT: Application of The Pure Oil Company for approval of the Red Hills Unit Agreement, Lea County, New Mexico.

MR. MORRIS: Richard Morris, Seth, Montgomery, Federici and Andrews, Santa Fe, appearing for The Pure Oil Company. We will have two witnesses to present testimony in this case, Mr. Charles Sabine, Mr. Howard Alexander. I request that they be

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sworn at this time.

(Witnesses sworn.)

MR. MORRIS: If the Examiner please, this is the application of The Pure Oil Company for the approval of an exploratory unit in Lea County, New Mexico. Cur first witness will be Mr. Charles Sabine.

CHARLES B. SABINE

called as a witness, having been first duly sworn on oath, testified as follows:

DIRECT EXAMINATION

BY MR. MORRIS:

Mr. Sabine, will you please state your name and position, please?

Charles B. Sabine, Landman with The Pure Oil Company attached to the staff of the exploration manager in Houston, Texas.

Have you previously testified before the New Mexico Oil Conservation Commission?

Α No. sir.

Would you briefly outline for the Examiner your higher education and your experience in the oil business?

Well. I received my education at the University of Α Illinois, graduated in 1935 with a B.A. Degree followed by University of Illinois College of Law; entered the employ of Pure Oil Company in 1937 in the production end of it, a year's experience there, followed by transfer to the Land Department.



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that time I have been doing land work in 15 States in the past 25 years; presently located in Houston, Texas.

Q Mr. Sabine, are you familiar with the application of The Pure Oil Company in Case 2671?

A I am.

MR. MORRIS: Mr. Examiner, are the qualifications of this witness acceptable?

MR. UTZ: Yes, sir, they are.

Q (By Mr. Morris) Mr. Sabine, would you refer now to what I'll ask the reporter to mark as Pure's Exhibit No. A?

(Whereupon, Applicant's Exhibit No. A marked for identification.)

Q Would you state what's shown on Exhibit No. A?

A Exhibit A is a land ownership plat based upon G.L.O. base and upon which is outlined in hatchered lines the outline of the proposed Red Hills Unit. This Unit contains 28,796.468 acres, of which 23,475.52 acres, or approximately 81.5 percent is Federal land, 3,520.96 acres or approximately 12 percent is land owned by the State of New Mexico, and 1800 acres or 6.25 percent is patented land or fee land.

Q Is the ownership of these lands shown by color coding on Exhibit A?

A Yes, sir. The Federal land is indicated by an orange color; the land owned by the State of New Mexico is in blue; and the fee land is in purple, or heliotrope.

Q And this unit is located in what townships and ranges?



It's in Townships 25 and 26 South, Ranges 32 and 33 East, Lea County, New Mexico. As further identification, the west line of the Unit is adjoining and contiguous to the Cotton Draw Unit operated by Texaco Inc., on which the Paducah Field has been developed, currently producing in the Delaware at approx imately 47 to 4800 feet.

Now. Mr. Sabine, is the Red Hills Unit proposed by Pure to be an exploratory unit?

- Yes, sir.
- Where will the initial well in this Unit be located?
- Α The initial well will be located in the South Half of Section 32, Township 25 South, Range 33 East.
 - Q That's on State acreage?
 - Α It's on a State lease, yes, sir.
 - To what formation is that well projected? Q
- That well will be projected to a depth sufficient to test the Devonian, or 18,000 feet.
- Is there a possibility, Mr. Sabine, that the well might Q be taken to a deeper formation?
 - Distinctly, yes, sir.
- Are the obligations of Pure with regard to this test Q well spelled out in the Unit Agreement?
 - Yes, sir.
- MR. MORRIS: Referring to that Unit Agreement, I will ask that it be marked as Pure's Exhibit B.



(Whereupon, Applicant's Exhibit No. B marked for identification.)

Q (By Mr. Morris) Is this, what has been marked Exhibit B, the final form of the Unit Agreement that will be proposed by Pure?

A Yes, sir, subject to whatever alterations or modifications might be developed in obtaining its approval in the U.S.G.S in Washington.

Q Has the Unit Agreement been actually executed by any working interest?

A No. sir.

Q What is the status of the Unit Agreement as far as approval by the U.S.G.S. or the State Land Office is concerned?

A The Land Office of the State of New Mexico has approved the Unit Agreement as to form and content. The U.S.G.S., in our application for designation of Unit area, was advised that we would use the standard Unit Agreement form as proposed by them in their Unit Plan Regulations, with the necessary modifications to include land owned by the State as well as fee land and also with a modification in connection with their non-discrimination clause which they have recently asked be changed. Other than that there will be no changes or modifications in the form as suggested by the U.S.G.S.

Q The Unit Agreement then is in a standard approved U.S.G.S. form with certain modification to account for State and fee lands?



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And I might add with an added provision which is entitled "Conflict of Supervision", which appeared in several Unit Agreements recently which have been approved.

Upon final and formal approval by the U.S.G.S., what action will Pure take at that time?

Immediately upon our receiving final approval by U.S.G.S. as to the designation of the Unit, together with the area and depth. which incidentally that has been given preliminary approval by the local U.S.G.S. office, we will then put the Unit Agreement in final form, secure its execution, and present it to the State Land Office for their final approval.

Also at that time you will begin to circulate that among the working interest operators?

We will have it executed by sufficient parties to grant us effective control of the Unit, prior to its presentation to the State Land Office.

Let's refer to some of the specific provisions in the Unit Agreement, Mr. Sabine.

All right.

First, with respect to Section 3 of the Agreement, what lands and what formations are unitized pursuant to this Agreement?

All lands and all formations.

Are the lands that are unitized subject to the formation of a participating area, if and when production is obtained?



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- A Right.
- Q Referring to Section 4 of the Agreement, is it true that under that section Pure Oil Company is to be the operator?
 - A Yes, sir.
- Q Referring to Section 16 of the Agreement, does that section recognize State and Federal conservation authority?
 - A Yes, sir.
- Q In the Agreement, is provision made for the expansion and contraction of the Unit area?
 - A Yes, sir.
- Q In final form, Mr. Sabine, will there be attachments to this Unit Agreement?

A This Unit Agreement, when placed in final form, will have attached to it Exhibit A which will be a plat upon which the Unit area will be outlined and tract numbers will be assigned to the various tracts, in accordance with their leasehold ownership or as royalty subdivisions make it necessary; and there will also be shown the identifications necessary in order to identify Federal, State and fee lands.

Exhibit B will be attached to the Unit Agreement, which will be a schedule of leases by tract numbers, reflecting lessor, lessee, expiration dates, participation overrides, and working interest ownership.

Q If the Commission should desire executed copies of this Unit Agreement in final form, will Pure be willing to furnish



those?

Α Yes, sir.

Q Would you outline the working interest ownership in the proposed Unit area, and state to what extent negotiations have proceeded to get that working interest signed up or committed?

As I indicated before, the Unit Agreement has not been signed by anyone in the Unit; however, we have various commitments, we have commitments in various stages of final commitment, you might say, within the Unit Agreement or within the Unit area. We either own or have committed to us to participate in the Unit. that's final commitment, a total of approximately 67 percent. We have a tentative commitment of an additional 14 percent, and a probable commitment which we have no reason to believe wouldn't be committed within the next few days an additional 14 percent. making a total of approximately 95 percent. Do you want any individual commitments?

I don't believe that will be necessary unless the Q Examiner desires it, Mr. Sabine.

Α All right.

In your opinion, what will be the effectiveness of operating this area under your proposed Unit plan?

А Well, we feel that under the Unit plan is the only effective and economical way this area can be developed. Increasing over the past few years, operations in the oil business have been conducted jointly. This has been due to the extreme depth to

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which we have to go in order to find oil and also the corresponding cost of such operations. So with the peculiar lease situation in this area, together with the extreme depth we anticipate going and I might add those depths that were set out there are minimum depths -- and the corresponding cost of this operation, which we anticipate will be a minimum of \$1,000,000.00, we feel a joint operation is the only feasible way that it can be conducted. joint operation in this area, together with the geological and geophysical information that has been developed makes the formation of a Unit very attractive, and we feel the only way that it can be operated.

Mr. Sabine, were Exhibits A and B prepared under your supervision and direction?

Α Yes. sir.

MR. MORRIS: I move the introduction of Exhibits A and B. Mr. Examiner.

MR. UTZ: Without objections, the Exhibits A and B will be entered into the record.

> (Whereupon, Applicant's Exhibits Nos. A and B admitted in evidence.)

(By Mr. Morris) Mr. Sabine, is the time element with respect to this application deemed critical by Pure Oil Company?

The time element involved in the formation of this Unit is one of the most important things with which we have to contend. We have found no disagreement at all among any of the parties in the Unit as to the formation of the Unit and in the drilling of



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the well. Everyone is interested in it, and along with that we have a peculiar situation involving the leases. There are several hundred and I might say a few thousand acres of Federal leases, the secondary -- I don't say the secondary -- the extended term of which terminates in February. So with the time involved in securing approval from the U.S.G.S., we feel that every day that passes is critical to us: therefore, it would be appreciated very much if the Commission would give their earliest attention to our application.

Q We would request approval of the application at the earliest possible date. Do you have anything further you would like to add to your testimony, Mr. Sabine?

A I might add that we anticipate commencing operations in January if we can secure the necessary approval and get the decision as soon as possible.

MR. MORRIS: Mr. Examiner, that's all we have of this witness at this time. Mr. Alexander will testify with respect to the geology of this area.

MR. UTZ: Are there any questions of the witness? The witness may be excused.

(Witness excused.)

HOWARD ALEXANDER

called as a witness, having been first duly sworn on oath, testified as follows:

DIRECT EXAMINATION

BY MR. MORRIS:



DEARNLEY-WEIER REPORTING SERVICE, Inc.

SANTA FF. N. M PHONE 989-3971 Q Mr. Alexander, will you state your name and position for the record?

- A I am Howard Alexander, District Geologist in Midland.
- Q You are employed by The Pure Oil Company?
- A Employed by The Pure Oil Company.
- Q Have you previously testified before the New Mexico Oil Conservation Commission?
 - A No. sir.
- Q Would you briefly state to the Examiner your higher education and your experience in the oil business?

A I graduated from Kansas State College with a Bachelor of Science in Geology in 1951, spent approximately a year doing graduate work, was employed by Pure in Billings, Montana in June of 1952. Since that time I have worked as a Subsurface Geologist in the Rocky Mountains, and then in the last two years as District Geologist in Midland, Texas.

Q Are you familiar with the application of Pure Oil Company in Case 2671?

A Yes, sir.

MR. MORRIS: Mr. Examiner, may Mr. Alexander testify as an expert witness?

MR. UTZ: Yes, sir, he may.

- Q (By Mr. Morris) Have you prepared an exhibit showing the structure in the proposed Red Hills Unit Area?
 - A Yes, sir, I have.



MR. MORKIS: I ask that be marked as Exhibit C.

> (Whereupon, Applicant's Exhibit No. C marked for identification.)

(By Mr. Morris) Referring to that exhibit, Mr. Alexander, would you explain what's shown thereon?

Α This is a reflex seismograph map on an approximate Devonian horizon structure. It's a north-south trending feature with approximately 1700 feet of closure, bounded on the east with a down-thrown flat with approximately 1100 feet of flow; on the west with a down-thrown flat with approximately 750 feet of flow. The high point of the structure is located in the South Half of Section 32, Township 25 South, Range 33 East.

Q What deep well control do you have in this general area that has helped you in your interpretation?

Deep well control is practically nil. Devonian test drilled in Richardson Bass James Ranch Unit approximately eight miles to the northwest, and several Devonian tests drilled in the Bell Lake Unit by Continental Oil approximately six miles to the northeast. There are two Bone Spring tests drilled in this immediate area, one by Texaco in Section 18, Township 25 South, Range 32 East, and one by Gulf Oil Corporation in Section 17, Township 26 South, Range 33 East.

Mr. Alexander, do you expect to encounter possible production in shallower formations in this test well?

А Yes, sir, we do.

Do you have an exhibit prepared which would show the



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relationship and depths of those shallower formations?

A Yes, sir.

MR. MORRIS: I ask that be marked Exhibit D.

(Whereupon, Applicant's Exhibit No. D marked for identification.)

A The primary reservoir will be the Devonian, the next possibility will be the Pennsylvanian-Morrow sand section, the next the Pennsylvanian-Strawn section, the Permian-Wolfcamp lime, the Permian-Bone Spring lime, and the Delaware-Permian Delaware section below the field pays into the Paducah to the west and Siluro Draw to the east.

- Q Is there also a possibility going deeper you might find some production in the Ellenburger at some, what, 22,000 feet?
 - A 21,000 feet, yes, sir.
- Q Then would you say that there is a definite possibility of multiple completions in this area?
 - A Yes, sir, I would.
- Q And these formations that you've stated to be possibly productive will be tested as the test well is drilled?
 - A Yes, sir, they will.
- Q Would you state in your opinion, Mr. Alexander, whether the proposed unit area adequately covers the geologic structure?
- A Yes, sir, I believe it covers the structure very well, as can be seen on Exhibit C.
- Q Do you have a special request to make of the Examiner and of the Commission with respect to this Exhibit C?



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GUERGUE, N. M. INF 243.6691 A Yes, sir, I do. We request that the Examiner keep this information confidential and return the Exhibit C to us when they are through.

Q Would you state at what address you would like to have this exhibit sent?

A Yes, sir. I would like to have it sent to me, H. G. Alexander, Box 671, Midland, Texas.

Q Were Exhibits C and D prepared by you or under your supervision?

A Yes. sir.

MR. MORRIS: Move the introduction of Exhibits C and D, and that concludes the examination of Mr. Alexander at this time.

MR. UTZ: Without objection Exhibits C and D will be entered into the record of this case.

(Whereupon, Applicant's Exhibits Nos. C and D entered in evidence.)

MR. MORRIS: May I inquire of the Examiner if Mr. Alexander's request with respect to Exhibit C will be entertained?

MR. UTZ: Yes, it will. We have no use for the map after we get through deciding this case. 18,000 feet is a little deep for us, anyway.

Any questions of the witness?

CROSS EXAMINATION

BY MR. UIZ:

Q Would you give me the location of the exploratory well?



Α South Half of Section 32, Township 25 South, Range 33 East.

MR. MORRIS: Has there been a definite location established for that well yet, Mr. Alexander?

No, sir, just the South Half of the section.

MR. UTZ: If no further questions of the witness, he may be excused.

(Witness excused.)

MR. MORRIS: I have nothing further.

MR. UTZ: Are there any other statements in this case? The case will be taken under advisement.



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STATE OF NEW MEXICO SS COUNTY OF BERNALILLO

I. ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing was reported by me in stenotype, 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 this 20th day of November. 1962, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

My Commission Expires: June 19, 1963.

> I do hereby certify that the foregoing is a complete record of the properlings in ug ou Jase de . 2.67/---..., Examiner New Mexico 011 Conservati Commission

