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# BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico November 26, 1974

### EXAMINER HEARING

IN THE MATTER OF:

Application of American Quasar )
Petroleum Company of New Mexico )
for a unit agreement, Eddy )
County, New Mexico.

CASE NO. 5370

BEFORE: Daniel S. Nutter, Examiner

For the New Mexico Oil Conservation Commission:

Thomas Derryberry, Esq.
Legal Counsel for the
Commission
State Land Office Building
Santa Fe, New Mexico

For the Applicant:

Randolph M. Richardson, Esq. J. P. White Building Roswell, New Mexico

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# EXHIBITS

Applicant's Exhibits Nos. 1, 2 and 3

MR. NUTTER: Case 5370.

MR. DERRYBERRY: Case 5370. Application of American Quasar Petroleum Company of New Mexico for a unit agreement, Eddy County, New Mexico.

MR. RICHARDSON: Randolph M. Richardson, Roswell, New Mexico, appearing on behalf of the Applicant. We have one witness to be sworn.

(Witness sworn.)

MR. RICHARDSON: A copy of the Unit Agreement has already been furnished, and here are the geologic reports marked Exhibits, 1 through 3.

### EDGAR KING

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

## DIRECT EXAMINATION

BY MR. RICHARDSON:

Mr. King, will you please state your name and present occupation?

A Edgar King, Division Geologist, American Quasar Petroleum Company, Midland, Texas.

Q Will you please state your educational and professional background which would enable you to testify as an expert witness in this case?

A I graduated with a B.S. in Geology from Oklahoma State University in 1955, and I worked for 19 years as an exploration geologist for Cities Service Oil Company until the last six months, at which time I have been employed by American Quasar. For the last seven years, my work has been primarily in southeastern New Mexico.

Area and the matters contained in the application to the Commission for approval of a unit agreement?

A Yes.

MR. RICHARDSON: Are his qualifications acceptable?
MR. NUTTER: Yes, they are.

### BY MR. RICHARDSON:

Q Is the form of Unit Agreement that prescribed by Federal Regulations?

A Yes.

Q Has the unit area been designated by the United States Geological Survey as an area allowed to pursue for development under a unit plan of development?

A No. This case has been made to the U.S.G.S. and they advise that all is in order and the letters of designation will be submitted within the next 10 days.

Q Will you please tell the Commission the total

number of acres within the unit area and the number and percentage of acres, Federal, State and fee land?

- A It is a total of 3840 acres, which is 3450 acres of Federal land, or 89.583 percent. There is 400 acres of State land, or 10.417 percent.
- Could you tell the Commission, for the record, the township and range in which the unit is located and approximate location with reference to the nearest town?
- A The well will be located in 23 South, 23 East, and it is approximately 40 miles west of Carlsbad, New Mexico.
- C Would you now please refer to your geological report which has been handed to the Examiner, marked Exhibits 1 through 3. Was this report prepared by you or under your direct control and supervision?
  - A 'Yes, sir, by people under my supervision.
- Now, would you please briefly go through the report, referring to the maps by name, and indicating the significance of the maps and cross sections?
- A Exhibit 1 is a geological discussion of the proposed unit. It briefly outlines the geological report of the area.

Exhibit 2 is a structure map on top of the Morrow Formation with an isopach of the lower Morrow Sand

superimposed.

Exhibit 3 is a series of cross sections through the proposed unit area. It includes three cross sections: One, a north-south structural section; one, a regional east-west stratographic section; and the third is a detailed north-south stratographic section showing the pinch-out of the lower Morrow Sand. All of the cross sections are — the line of the section is illustrated on Exhibit 2 in different colors. They are designated by alphabetic letters.

Q would you please tell the Commission your conclusion as to the formations that are likely to be encountered and considered prospective for production?

A The primary objective of the test is the lower Morrow Sand which produces from both stratographic and structural traps in the area of southeast New Mexico.

The primary objective, again, is the lower Morrow Sand which we believe crosses the proposed unit area.

Could you please tell the Commission your projected total depth and location for your initial test well?

A We plan to drill the initial well 1980 from the north and west line of Section 9, 23 South, 23 East. The projected total depth will be 9900 feet.

- Q Have the other working interest owners in the unit been contacted?
  - A Yes.
- In your opinion, what percentage of the working interest will be committed to the unit?
  - A One hundred percent.
  - Q What percentage of the royalty will be committed?
  - A One hundred percent.
- In your opinion, will the operation of this area under the proposed unit plan of operation be in the interest of conservation, prevention of waste?
  - A Yes.
- Q In the event of production, will the correlative rights of all parties to the unit be protected?
  - A Yes.

MR. RICHARDSON: We would now like to enter the geological reports marked Exhibits 1 through 3 into evidence.

MR. NUTTER: American Quasar's Exhibits 1 through 3 will be admitted in evidence.

(Whereupon, Applicant's Exhibits Nos. 1, 2 and 3 were marked for identification, and were admitted into evidence.)

### MR. RICHARDSON: That is all we have.

### CROSS EXAMINATION

#### BY MR. NUTTER:

- Mr. King, you say that you already do have 100 percent of the working interest committed here, is that correct?
- A One nundred percent has been contacted, and this has been a pretty fast put together deal. I am not 100 percent certain that all of them have agreed to join, but the ones that don't will be carried by the American quasar in the initial --
  - (Interrupting) In effect, it will be unitized?
  - A Yes, siz.
- And the federal Government has agreed to the unit and likewise --
- A (Interrupting) Verbally, they have. They have not issued the letter, but they have assured us that it will be issued very shortly.
- And the form of contact to the unit agreement is satisfactory to them?
  - A Yes.
- Is the unitization satisfactory to both of those agencies?

- A Yes, sir.
- Q It more or less follows this structural high that you have depicted here on your plat of the area?

A Right. This is a fairly well known geological feature, subsurface. It is a projection of the producing feature of the Indian Basin Field which is about six miles to the north. The other key factor in the unit area is the outline of the sands, and we have chosen the 10-foot isopach as the cut-off for the effective limits of the reservoir, so, you see, it is controlled on the west side by a down to the west fault, and probably on the east side both by a pinching-in of the sand and dip on the east side.

Q You called this the "Indian Basin Fault." Does it go on up into the Indian Basin?

A It goes up to the west side of the Indian Basin Field and may -- I wouldn't guarantee it -- controls production of the Cisco Canyon Reef in that field.

MR. NUTTER: Are there further questions of Mr. King? He may be excused.

(Witness dismissed.)

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

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MR. RICHARDSON: No, sir.

MR. NUTTER: Does anyone have anything they wish to add to Case No. 5370?

We will take the case under advisement.

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STATE OF NEW MEXICO )

SS.

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.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of case No. 3370, heard by me on 1974

New Mexico Oil Conservation Commission

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