BEFORE THE

Bil Conservation Commission

Santa Fe. New Mexico September 20, 1955

IN THE MATTER OF:

CASE NO. 960

TRANSCRIPT OF PROCEEDINGS

ADA DEARNLEY AND ASSOCIATES

COURT REPORTERS
605 SIMMS BUILDING
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ALBUQUERQUE, NEW MEXICO

BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico September 20, 1955

IN THE MATTER OF:

The application of Humble Oil and Refining) Company requesting approval of the proposed) Chalk Bluff Draw Unit Agreement, consisting of 7,512.92 acres in Eddy County, New Mexico) within Townships 17 and 18 South, Range 27 East., N. M. P. M.

Case No. 960

BEFORE:

Honorable John F. Simms Mr. E. S. (Johnny) Walker Mr. William B. Macey

REGISTER

Clarence E. Hinkle

Humble Oil and Refining

Roswell, N. M.

Hugh B. Jordan

Humble Oil and Refining

Roswell, N. M.

TRANSCRIPT OF HEARING

MR. MACEY: The hearing will come to order, please. The case is 960.

MR. HINKLE: Clarence Hinkle, Roswell, appearing for Humble Oil and Refining. This is the application of the Humble Oil and Refining Company for approval of the Chalk Bluff Draw Unit Agreement. We have one witness.

HUGH B. JORDAN,

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

DIRECT EXAMINATION

By MR. HINKLE:

- Q State your name, please.
- A Hugh B. Jordan.
- Q By whom are you employed?
- A Humble Oil and Refining Company.
- Q How long have you been employed by the Humble Oil and Refining Company?
 - A Five years.
- Q Have you previously testified before the New Mexico Oil Conservation Commission?
 - A No, I have not.
 - Q Are you a graduate geologist?
 - A Yes. sir. I am.
 - Q What school?
 - A Colby College in Waterville, Maine.
 - Q When did you graduate?
 - A 1950.
 - Q With what degree?
 - A A bachelor degree in geology.
 - Q When were you employed by the Humble?
 - A In July of 1950.
- Q Have you practiced your profession as geologist mostly in New Mexico and West Texas?
 - A Yes, sir.
 - Q Principally in New Mexico?
 - A Yes, sir.
 - Q Are you familiar with the area, and made a study of the area

in which the proposed Chalk Bluff Draw Unit area is situated?

- A Yes, I have.
- Q Are you familiar with the application of the Humble for approval of the Chalk Bluff Draw Unit?
 - A Yes.
- Q Do you know whether or not the Humble made application to the United States Geological Survey for approval of this area as one suitable and proper for unitization?
 - A Yes, I did.
 - Q Was that approved by the United States Geological Survey?
 - A Yes, sir, it was.
 - Q When was that approved?
 - A March 1st of this year.
- Q Did you file with the application for approval, or did the Humble file with the application for approval, a geological report?
 - A Yes, sir, I have that report here.
- Q Please refer to Exhibit Number 1 and explain to the Commission what that is.
- A This exhibit has a map showing the Permian Basin Area and the location of the proposed Chalk Bluff Draw Unit. It has a discussion of the subsurface stratigraphy, structure, economic points and Humble's recommendations.
 - What were the Humble recommendations in connection with?
- A Recommended that the unit to be known as Chalk Bluff Unit be formed in that area.
- Q Accompanying that application, did you submit plats showing the geological features involved?
 - A Yes, sir, there are five figures, A, B, C, D and E. Figure

A is a structure map on top of the San Andres Formation. Figure B is a structure contour map on top of the Pennsylvanian gas sandstone, which is our primary objective in this unit. Figure C is an isopach map of the thickness of that gas sandstone, and the two additional figures, D and E are electric logs of the two wells which have been completed in that zone just to the north and east of the proposed unit.

- Q Do these plats show the boundaries of the proposed unit area?
- A Yes, sir, they do.
- Q How many acres does the proposed unit cover?
- A Chalk Bluff Draw Unit will cover 7,512.92 acres.
- Q What portion of the proposed area is Federal lands?
- A Federal lands will be 5,832.88 acres, or 77.638 percent of the unit.
 - Q What portion is State land?
 - A State land will be 960 acres. or 12.778 percent of the unit.
 - Q What portions are fee lands?
 - A Fee lands are 720.04 acres, or 9.584 percent of the unit.
- Q Are you familiar with the form of the proposed unit which has been filed with the application for approval?
 - A Yes, sir, I am.
- Q Do you know whether or not this is in substantially the standard form which has heretofore been approved by the Commission for both Federal and State lands involved?
 - A Yes, I understand it is.
- Q Does the proposed unit agreement provide for the Humble as operator?
 - A Yes.

- Q Does it provide for the drilling of a test well?
- A Yes, sir, it does.
- Q Under the terms of the unit, when is that test well to be commenced?
- A The well is to be started within six months of the effective date of the unit.
 - Q What depth is the well to be projected?
- A The well will test all formations to the top of the Mississippian, but the depth to which will be required to drill will not exceed 9,500 feet.
- Q Does the proposed unit cover all the source beds, or is it limited to certain areas?
- A No, we are unitizing only substances from the base of the San Andres Formation.
 - Q Why is that?
- A The San Andres is productive in the entire pool in the shall ower beds of the Chalk Bluff area.
- Q There are a number of producing wells in the shallower beds in this producing area?
 - A Yes, sir, there are.
- Q Do you know if the Humble has contacted most of these owners and mineral owners involved in the area?
 - A Yes.
- Q With a view of getting them to commit their acreage or interest to the unit agreement?
 - A Yes.
- Q Do you anticipate that you will be able to get a large percentage of the owners to commit their interest to the unit?

- A We anticipate we will get greater than 90 percent.
- Q If this unit agreement is approved, and production is obtained, state whether or not, in your opinion, it would be in the interest of conservation and the prevention of waste?
 - A Yes, it will be.
- Q In the event the unit agreement is approved, and production is obtained, would the unit agreement be in the interest of conservation of reservoir energy and promotion of the greatest ultimate recovery?
 - A Yes. it will.

MR. MACEY: Any questions of the witness?

CROSS EXAMINATION

By MR. GURLEY:

- Q You stated that this had been approved on March 1, 1955 with the United States Geological Survey?
 - A Yes, that is right.
 - Q Is your letter with the application your evidence of the approval?
 - A Yes, it is.
- Q In that application, or that letter, I believe there were several suggestions, or requirements made. Have you more or less complied with those since the letter?
 - A You will have to ask Mr. Hinkle about that.
 - MR. HINKLE: You mean in regard to the changes in the form?
 - MR. GURLEY: Yes.
- MR. HINKLE: Yes, they were complied with before the application was filed here.
- MR. NUTTER: That is only a preliminary approval that United States Geological Survey gave?

MR. HINKLE: Yes.

MR. GURLEY: In the letter it states there in the middle of the third paragraph on the second page: "However, notice is hereby given that the right is reserved to deny approval of any executed agreement submitted --"

MR. HINKLE: That is a stock phrase which they put in all of these letters of approval for designation of an area. At the time these applications are submitted, they, of course, don't know how much acreage is going to be committed to the unit. You could conceivably go ahead and come up with a unit that didn't have a very large percentage, for that reason they make a reservation that they won't be obligated to approve one unless it does have sufficient commitment to give effective control of the area.

MR. GURLEY: At the present time do you have as much as 90 percent?

MR. HINKLE: This is in the process of being circulated for the signatures. At the present time I don't know what the percentage is, it is anticipated from the previous contacts that have been made there will be at least 90 percent. It is my understanding that those that might have some question about joining will be on the fringe or edge of the proposed area, so it wouldn't make much difference.

MR. GURLEY: That is all.

MR. MACEY: Anyone else have a question of the witness? By $\underline{\text{MR}}$. $\underline{\text{NUTTER}}$:

Who is the operator of the Logan Draw Unit?

A It has not been approved, but it is one that Stanolind was trying to form. The thing fell through on them, but I believe they

still intend to try to form a unit there.

- Q They seem to more or less take in half of this Pennsylvanian structure and Chalk Bluff Draw Unit takes in the other half?
 - A That is correct.
 - Q Where are the two wells that you said these logs --
- A I can point them out to you. Stanolind State A-1 and Continental.
 - Q They are not in the Logan Draw area?
 - A There are no deep wells in the Logan or the Chalk Bluff area
- Q Is provision made in this unit agreement for expansion and contraction of the unit area if practical or necessary?
- A Yes, it is. There is one other thing that maybe I should bring up, the Humble feels that when we reach the top of the Mississippian, if we find it high to what we expect, we would like to carry the well the Devonian, which will be an additional four or five hundred feet.
 - Q What is your test well going to be?
 - A 9.500.
 - Q Does it call for the drilling of additional wells?
 - A Within six months after the completion of the first well.
- Q You don't know the percentage of the acreage presently committed?
 - A No. I don't.
- MR. MACEY: Anyone else have a question of the witness? If not the witness may be excused. (Witness excused.)
 - MR. MACEY: Do you have anything further?
 - MR. HINKLE: We would like to introduce Exhibit Number 1.
 - MR. MACEY: Without objection it will be admitted. If nothing

STATE	OF	NEW	MEXICO)	
				:	SS,
COUNTY	OF	BEI	RNALILLO)	

I, <u>ADA DEARNLEY</u>, 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 12th day of October, 1955.

Notery Public, Court Reporter

My Commission Expires:

June 19, 1959