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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

March 26, 1969

EXAMINER HEARING

IN THE MATTER OF:)
)
)

Application of Monsanto)
Company for a unit agree-)
ment, Eddy County, New)
Mexico.)
)

Case No. 4080

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

FILED
MAY 6 1969
CLERK OF DISTRICT COURT
COUNTY OF SANTA FE, N.M.

MAY 6 AM 8 19

MR. UTZ: Case No. 4080.

MR. HATCH: Case 4080, application of Monsanto Company for a unit agreement, Eddy County, New Mexico.

MR. HINKLE: Clarence Hinkle, Hinkle, Bondurant, and Christy, appearing on behalf of Monsanto Company. We have one witness, and I believe five exhibits.

(Whereupon, Applicant's Exhibits Numbers 1 through 5, inclusive, were marked for identification.)

(Witness sworn.)

RICHARD D. JONS

called as a witness by the Applicant, having been first duly sworn, was examined and testified as follows.

DIRECT EXAMINATION

BY MR. HINKLE:

Q Will you state your name, your residence, and by whom employed?

A My name is Richard D. Jons; I live in Midland, and I am employed by Monsanto Company as a District Geologist.

Q Have you previously testified before the Commission?

A Yes, sir.

Q Are your qualifications as a petroleum geologist a matter of record with the Commission?

A Yes.

Q Are you familiar with the application of Monsanto Company in this case?

A Yes, sir.

Q What does Monsanto seek to accomplish by this application?

A Approval of the Black River Unit Agreement embracing 14,961 acres in Townships 25 South, 26 South, Ranges 23 and 24 East, Eddy County, New Mexico.

Q Have you prepared or has there been prepared under your direction a certain exhibit for introduction in this case?

A Yes, sir.

Q Refer to Monsanto's Exhibit Number 1 and explain what this is and what it shows.

A Exhibit Number 1 is a plat showing the proposed Black River Unit area. The area consists of 12,480 acres, or 83.4 per cent of federal lands; 2,000 acres, or 13.4 per cent of state lands; and 480 acres, or 3.2 per cent of fee or privately-owned lands.

This exhibit also shows the location of the proposed test well, as far as the ownership of all the acreage within the unit area.

Q Now, refer to Exhibit 2, and explain to the Commission what that is and what it shows.

A Exhibit 2 is a structural map on top of the primary objective, the Lower Strawn carbonate. This exhibit shows a large southeast plunging anticline, bounded on the northeast by a fault, which is expressed in the surface by the Huapache monocline. The fault has a displacement of 1,800 to 3,500 feet of displacement.

Exhibit 2, and I will point it out, will be a cross-section, and it is designated on Exhibit Number 2.

Exhibit 3 is the cross-section showing the topography and structure of this feature.

Q Is the Huapache fault as shown on Exhibit 2, a prominent feature and well-delineated?

A Yes, sir, it is. It is expressed on the surface, and it has been penetrated by one well, the Humble well in the Huapache unit. In the southeast corner of this area, there is evidence of the fault there by a large displacement between two very close wells.

Q What information did you use in preparing Exhibit Number 2?

A We used the surface expression of the fault trend, and projected through the area. And we also utilized subsurface well information.

Q Are those wells shown on Exhibit 2?

A Yes.

Q What wells are they?

A The Gulf, located in Section 17, 26 South, 23 East, and in 26 South, 24 East; the Low Slaughter Draw Unit located in Section 16; the Superior Federal Unit located in Section 12; and the Delaware Apache Lehman No. 1, located in Section 28, 25 South, 24 East; in Section 28, the Cities Service government well; and in 25 South, 25 East, the Gulf No. 1 Kelly State.

Q What do the irregular lines show? There are two of them indicated here that go north and south.

A The wiggly line on the west side shows our estimated updip limit of our Strawn porosity. The one on the east represents our down-type, or basinward limit of our Strawn permeability and porosity.

Q Is this further shown by your cross-section exhibit?

A Yes, and also by the subsequent exhibit.

Q Now, refer to Exhibit Number 3, and explain that to the Commission.

A Exhibit Number 3 is a structural cross-section showing the structure of the general area. You will note on the well, on the left hand side of this section, the Gulf Unit has a dolomite facies. The remaining wells on the cross-section

show a tight limestone facies of the Strawn, starting to the east. And it also shows the major fault, which bounds the cross-section on the north.

Q Your cross-section, Exhibit Number 3, would indicate a rather steep structure in this area, is that true?

A Yes, sir, it is a rather steep structure, and it is a large anticlinal feature as exhibited on Exhibit Number 2. Our proposed location and proposed unit is structurally high to the Gulf Unit No. 1, which drill stem tested the only porosity of the Strawn in this area, and they recovered gas cut drilling fluid and sulphur water.

Q Now, your location is such that you are of the opinion that it would be in the dolomite section?

A Yes, sir.

Q Of the Strawn?

A These wiggly lines on this map, the area within those two lines, is our dolomite facies as we have depicted from isopach maps, which will be shown subsequently.

Q Do you have any further comment with respect to Exhibit Number 3?

A I would like to point out the Ralph Low No. 1 Slaughter Draw Unit is in the tight basinal facies, but this well did test gas to the surface in non-commercial quantities.

We do have good gas show in this prospective interval, and we hope to get structurally high and into the productive and commercial reservoir.

Q Now, refer to Exhibit Number 4, and explain what this shows.

A Exhibit Number 4 is the gross Strawn isopach map. If you will refer to Exhibit Number 3, you will see the Lower Strawn designated on that cross-section.

Q This Exhibit Number 4 indicates that your proposed unit area adjoins the Carlsbad Caverns National Park?

A That is true.

Q That would be the north boundary?

A This is the north boundary. The Carlsbad National Park cannot be leased, or we would have included that in our unit.

Q Now, refer to Exhibit Number 5, and explain this to the Commission.

A Exhibit Number 5 is an isopach map of our Strawn dolomite. Only one well has penetrated this dolomite, and that is the Gulf Unit No. 1.

Q That is located in what section?

A Located in Section 17, 26 South, 23 East. And based on our gross Strawn isopach, we feel that the central

portion of that isopach will be in a dolomite facies. The rocks west of our porous trend are tight limestones, and dolamites, and they do not carry reservoir properties. The wells on the east side of our porous trend are tight limestones and shales of basinal facies.

Q Do you have any further comments with respect to Exhibit Number 5?

A No, sir.

Q Now, are you familiar with the proposed formal unit agreement, copies of which have been filed with the application?

A Yes, sir.

Q Is this agreement substantially the same form as has heretofore been approved by the Commission, by the Commissioner of Public Lands, and by the U.S.G.S., where federal and state fee lands are involved?

A Yes, sir.

Q Is Monsanto designated as the unit operator in this agreement?

A Yes, that's correct.

Q Does the unit agreement make provisions for the drilling of an initial test well?

A Yes, sir, it does.

Q And it is to be located at the location which you already testified to?

A Yes, sir, in Section 3.

Q And is shown by the plat?

A Yes, sir.

Q What is the proposed depth of the test well?

A We propose to drill the initial test to the Morrow, and we expect that 9,700 feet will be sufficient to test -- 7,900 feet will be sufficient to test the Morrow.

Q What other probable oil-producing formation or gas-producing formations will you penetrate in drilling to the Morrow?

A We feel that only the Strawn and the Morrow offer economic potentials in this area. The Morrow sands are present in the area. We have not attempted to map them, because of the low well density and the difficulty in making accurate maps on that horizon. But the Cities Service government well located in Section 28, 25 South, 24 East, was completed opposite the Morrow Sandstone for a very nominal well of a little over 300,000 Mcf per day.

Q Has this area been heretofore designated by the U.S.G.S. for unitization?

A Yes, sir.

Q And also by the Commissioner of Public Lands?

A Yes, sir.

Q Has the form of unit agreement been approved by the U.S.G.S., and by the Commissioner?

A Yes, sir.

Q Does the unit agreement provide a definite time for the commencement of the test well?

A Yes, sir, we must commence a well within six months after approval. However, we anticipate starting this well next month, providing we receive all of the approval necessary.

Q What is the status of approval by the working interest owners in the unit?

A All of the working interest owners in the unit, proposed unit, have agreed to participate, and the operating agreement is being circulated for their signatures.

Q As well as the unit agreement?

A Yes, sir.

Q Have you also contacted or are you in the process of contacting the royalty owners and the overwriting royalty owners for their signature?

A Yes.

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A Yes, sir.

Q And in the event the unit agreement is approved and a discovery is made in the initial test well, in your opinion, will the unit agreement prevent waste, and be in the interest of conservation?

A Yes.

Q Will it tend to protect correlative rights?

A Yes, sir.

MR. HINKLE: We would like to offer Applicant's Exhibits 1 through 5 in evidence.

MR. UTZ: Without objection, Exhibits 1 through 5 will be entered into the record of this case.

MR. HINKLE: That is all of the direct testimony.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Jons, is this being communitized from the surface to the base, also?

A Yes, it is.

MR. UTZ: Are there any other questions of the witness? You may be excused. Are there any statements? The case will be taken under advisement.

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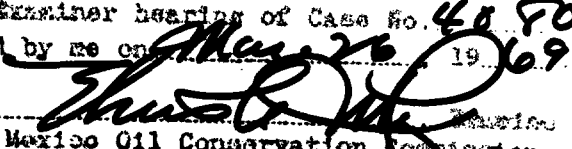
<u>EXHIBITS</u>	<u>MARKED</u>	<u>ADMITTED IN EVIDENCE</u>
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 COUNTY OF BERNALILLO)

I, SAMUEL MORTELETTE, Court Reporter in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and that 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. 4080 heard by me on May 26 1969

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