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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
August 23, 1967

EXAMINER HEARING

IN THE MATTER OF:)
)
)

Application of Monsanto Company for)
a unit agreement, Eddy County, New Mexico)
)
)

CASE: 3640

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOREGISTERHEARING DATE AUGUST 23, 1967 TIME: 9 A.M.

NAME:	REPRESENTING:	LOCATION:
Sumner G. Buell	Montgomery, Anderson, & Buell	Santa Fe
James Heister	Montgomery, Anderson, & Buell	Santa Fe
M. D. Hume	RW Byram	Santa Fe
RL Harker	Amerasia	Tulsa, Okla.
Carl Traywick	U.S. Geological Survey	Roswell N.M.
W. J. La Mone -	John L. Harmon	Doeco, Tex.
B. K. Buell	Humble Oil	Hobbs, N.M.
Geary Buell	PAN Am	FORT WORTH
GEORGE FORD	✓	✓
James W. Kellaher	Kellaher & Fox	Santa Fe.
A. L. O'Brien	OCC	" "

MR. UTZ: Case Number 3640.

MR. HATCH: Case 3640, application of Monsanto Company for a unit agreement, Eddy County, New Mexico.

MR. HINKLE: Clarence Hinkle, Hinkle, Bondurant and Christy, Roswell, appearing for Monsanto Company. We have one witness and five exhibits. I would like to have Mr. Jones sworn.

(Witness sworn.)

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

* * *

R I C H A R D D. J O N E S, called as a witness herein, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. HINKLE:

Q State your name, residence and by whom you are employed.

A My name is Richard D. Jones. I live in Midland, and I am employed by the Monsanto Company.

Q In what capacity are you employed by Monsanto Company?

A I am a Senior Geologist.

Q Have you ever testified before the Oil Conservation Commission?

A No, sir.

Q Would you give briefly your educational background as a Petroleum Engineer?

A As a Petroleum Geologist.

Q A Petroleum Geologist.

A I received my Bachelor of Science Degree from the University of Texas in 1956. This was followed by one year of graduate study in Geology. In 1957 to 1958 I was a Geologist for the Seaboard Oil Company, that was followed by four years of service as a Geologist to Ralph Lowe of Midland, and since 1962 I have been employed as a Senior Geologist for Monsanto Company.

Q Has a large part of your work been in New Mexico or Southeastern New Mexico?

A Yes, sir. The past ten years have been principally in Southeastern New Mexico.

Q Have you made a study of the proposed Rock Tank Unit Area?

A Yes, sir.

Q Had you previously made a study before the formation of this unit?

A Yes, sir. We previously formed a unit in this general area, we called it our ~~Quave~~ ^{Quave} Unit and I did that work upon which that well was drilled.

Q That unit joins this proposed unit?

A Yes, and it encompasses a portion of this unit. That unit was dissolved.

Q What has your study consisted of as far as this Rock Tank Unit is concerned?

A I have made stratigraphic and structural studies in this area.

Q Have you prepared certain exhibits or were they prepared under your direction for introduction in this case?

A Yes, I prepared the exhibits.

Q Refer to Monsanto's Exhibit 1 and explain to the Commission what it is and what it shows.

A Exhibit 1 is an index map showing the location of the Rock Tank Unit in respect to other physical locations, in respect to Carlsbad. The unit is located approximately 12 miles southwest of Carlsbad and about nine miles north of the Carlsbad Caverns and approximately five miles southeast of the Indian Basin Field.

Q Now, refer to Monsanto's Exhibit Number 2 and explain what this is and what it shows.

A Exhibit Number 2 is a land ownership map. It shows the State, Federal and fee lands on this map. We have approximately 82 percent Federal lands within the proposed unit, approximately 15 percent State lands and approximately three percent fee lands.

Q Is Monsanto one of the principal owners in the area, lease owners?

A Yes, sir.

Q Monsanto and Faskin are the largest owners?

A Yes, sir.

Q Has this area been designated by the United States Geological Survey an area suitable and proper for unitization?

A Yes, sir. Exhibit 3 is that designation.

Q That's the designation by the Acting Director of USGS?

A Yes.

Q And this letter also indicates the form that would be satisfactory to the USGS?

A Yes, sir.

Q Have you prepared a structural map of the proposed Rock Tank Unit area?

A Yes, sir. Exhibit Number 4 is a structural map contoured on top of the Devonian formation. This map was contoured following the drilling of our Cueva Unit Number 1. We still had a large structural anomaly suggested in the area. We followed this mapping by a seismic survey which confirmed that there was indeed a structural anomaly in this proposed unit, under this proposed unit.

Q What control did you have for contouring on top of

the Devonian in this particular case?

A We have several wells that are indicated on this map, the structural datums below the well is the structural datum or estimated structural datum on top of the Devonian.

Q What are the wells that you have reference to?

A The Stanolind Guadalupe Foothills Well located in Section 20, 22, 25, Monsanto's dry hole in Section 28 of the same Township, the Inman Carnero Peak Unit in Section 31 of the same Township, the Logan Rains-Spring Unit in Section 24 of 22, 24, the Northern National McKittrick Hills Unit in the same Township. In Township 23 South, 24 East in Section 11, Gulf drilled their Number 1 North Caverns Unit, to the south in 25 South, 25 East, the Union Dark Canyon Unit went to the Devonian and that is our control to the south.

Q Does this show a very steep dip on the east side of the anomaly?

A Yes, it does. This map does not reflect the information that we obtained by seismic survey of the area, and I have put a fault on the west side of the proposed unit that was found by a seismic survey.

The adjustment in ~~this~~ subsurface map should move the crest of the structure to the west and the closing contour butts into the fault on the west, and therefore, we should shift everything slightly to the west with Sections 6 and 7 of

23, 25 being the crest of the structure.

Q Is that the basis you have gone on in outlining this proposed unit area?

A Yes, sir. The proposed unit outline is based upon the closing contour on top of the Devonian.

Q Have you indicated on Exhibit 4 the proposed outlines of the unit area?

A Yes, sir. The hashed marks on this map are the boundaries of the proposed unit.

Q This same information was submitted to the USGS before they designated the area?

A Yes, sir.

Q Does Monsanto propose to drill a test well if this unit is approved?

A Yes, we propose to drill an 11,000 foot Devonian test.

Q From the information available, 11,000 feet will test the Devonian formation?

A Yes, sir.

Q What other formations would be penetrated in the drilling of this well which have possibilities of producing oil or gas?

A Exhibit 5 is a reef trend map of the Lower Strawn. We consider this one of our primary objectives. This reef has

been penetrated to the Gulf North Caverns Well in Section 11 of 23 South, 24 East. In this well, water was recovered, our structure map would suggest that we can get sufficiently high over in the proposed unit to this well to possibly encounter hydrocarbons.

The Stanolind Number 1 Guadalupe Foothills Well was re-entered by Phillips and they tested a show of gas and oil in that well. However, it is a back reef well and therefore, was non-productive. So, we do have a show of hydrocarbons along this trend and the reef itself should be approximately 400 feet thick.

Q What depth do you expect to find this Strawn formation?

A At about 8100 feet.

Q Is there anything else with respect to this Exhibit that you would like to testify to?

A Well, there is no structure on top of this map but it does, the structure, subsurface structure map does conform to the Devonian structure map and this map is strictly a facies map, the back reef facies or green shales and back reef shell limestones in front of the reef to the southeast, there is no rock equivalent of this reef.

Q Are you familiar with the proposed form of unit agreement, copies of which have been filed with the application in this case?

A Yes, sir.

Q Is this the same form or substantially the same form that has heretofore been approved by the USGS and the Commissioner of Public Lands and the Oil Conservation Commission where Federal, State, and fee lands are involved?

A Yes, sir.

Q Is Monsanto designated as the unit operator under the terms of the agreement?

A Yes, sir.

Q Does the unit agreement provide for the drilling of a Devonian test well?

A Yes, sir.

Q Has this form been approved by the Commissioner of Public Lands, the office of the Commissioner of Public Lands?

A Yes.

Q Has Monsanto contacted all of the working interest owners or owners of leases within the unit area to ascertain whether or not they are willing to join in the unit?

A Yes, sir, and we have most all of the operators in the area committed either to farmout or to participate.

Q So you anticipate that you will obtain, if not 100 percent, a very large percentage of all of the acreage in the unit?

A Yes, sir.

Q Now, in the event this unit agreement is approved and the well is drilled and the discovery is made, in your opinion, would the unit agreement be in the interest of conservation and prevention of waste?

A Yes, sir.

Q In your opinion, would it promote the greatest ultimate recovery of unitized substances?

A Definitely.

Q You prepared, or there were prepared under your direction, all of the exhibits that you have referred to?

A Yes, sir.

MR. HINKLE: We offer in evidence Exhibits 1 to 5 inclusive.

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

(Whereupon, Exhibits 1 through 5
offered and admitted in evidence.)

MR. HINKEL: That's all we have.

CROSS EXAMINATION

BY MR. UTZ:

Q Do you have a percentage figure of commitments at the present time?

A No, sir, I do not have that at the present time.

MR. HINKEL: I might say this, it hasn't been, actually

been signed at the present time, but all of the working interest owners have indicated that they would either join or farmout to Monsanto.

MR. UTZ: They have indicated their willingness but they haven't put their signature on the line?

MR. HINKLE: Not yet, but we feel certain they will. These same people, or most of them, were also in the Cueva Unit which is the unit they drilled a dry hole on, which joins this unit on the east. It's practically the same bunch.

Q (By Mr. Utz) Do you have a location for your exploratory well?

A Mr. Utz, we have not definitely decided on this but it will either be in Section 6 or 7, and probably the northwest of Section 7, Township 23 South, Range 25 East. We intend to drill the highest point on top of the Devonian.

Q You also had some seismic work as control on this structure?

A Yes, sir. We had some seismic to confirm our subsurface anomaly.

MR. UTZ: Any other questions?

MR. HINKLE: I might add this, and ask him one other question.

REDIRECT EXAMINATION

BY MR. HINKLE:

Q On your structural map there, you show quite a long fault, was that shown very definitely by your seismic work?

A Yes, sir, very definitely, down to the west, fault.

MR. UTZ: Any other questions? The witness may be excused.

(Witness excused.)

MR. UTZ: Any statements in the case? The Case will be taken under advisement.

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STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

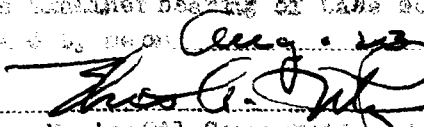
I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 27th day of August, 1967.


 NOTARY PUBLIC

My Commission Expires:

June 19, 1971.

I do hereby certify that the foregoing is a complete record of the proceedings in the Executive hearing of Case No. 3640, held at, near, Aug. 13, 1967.

 Recorder
 New Mexico Oil Conservation Commission