

BEFORE THE  
**Oil Conservation Commission**  
SANTA FE, NEW MEXICO  
September 15, 1955

IN THE MATTER OF:

CASE NO. 953

**TRANSCRIPT OF PROCEEDINGS**

**ADA DEARNLEY AND ASSOCIATES**  
COURT REPORTERS  
605 SIMMS BUILDING  
TELEPHONE 3-6691  
ALBUQUERQUE, NEW MEXICO

BEFORE THE  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
September 15, 1955

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IN THE MATTER OF: )  
)  
)

Application of Union Oil Company of California )  
for approval of the proposed Queen unit agree- )  
ment embracing 17,384.19 acres of land in )  
Township 23 South, Range 21 East, Township 24 )  
South, Range 21 East, and Township 24 South, )  
Range 22 East, in Eddy County, New Mexico. )

Case 953

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BEFORE:

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

TRANSCRIPT OF HEARING

MR. MACEY: The next case is Case 953. Mr. Hinkle.

MR. HINKLE: If the Commission please, Clarence Hinkle of Hervey, Dow and Hinkle, Roswell. This is the application of Union Oil Company of California for approval of the proposed Queen unit agreement embracing 17,384.19 acres of land in Township 23 South, Range 21 East, Township 24 South, Range 21 East, and Township 24 South, Range 22 East, in Eddy County, New Mexico.

D A V I D A. D U N N

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

DIRECT EXAMINATION

By MR. HINKLE:

Q State your name, please.

A David A. Dunn.

Q Where do you live?

A Roswell, New Mexico.

Q By whom are you employed?

A Union Oil Company of California.

Q In what capacity?

A As district geologist for Eastern New Mexico.

Q Have you testified previously before the Commission?

A No, sir.

Q Will you give to the Commission a brief resume of your educational, professional qualifications?

A Yes, sir. I graduated from Texas Technological College in 1936 with a degree in Geology. I worked for approximately a year and a half for the Gulf Oil Corporation at Roswell, New Mexico; then was a consultant in Roswell, New Mexico and in Lubbock, Texas until 1941, when I went into service. I got out of the service in 1946, consulted for approximately a year, and then went to work with Phillips Petroleum in Midland, covering West Texas and New Mexico for five years. I went with the Union Oil Company in my present capacity three and a half years ago.

Q Has most of your geological work been in West Texas and New Mexico?

A Yes, sir.

Q Are you familiar with the proposed Queen unit area?

A Yes, sir.

Q Did the Union Oil Company make application to designate this area as one suitable and proper for unitization?

A It did.

(Union Oil Company's Exhibit No. 1  
marked for identification.)

Q I hand you a letter which is identified as Union's Exhibit No. 1 and ask you to state what that is.

A Union's Exhibit No. 1 is a letter from the United States Geological Survey stating that the Queen unit area is subject to unitization as requested.

Q In other words, you are designating the area?

A Designating the area as one suitable for a formation of a unit.

Q In connection with that application did you file a geological report with the United States Geological Survey?

A I did.

(Union's Exhibit No. 2 marked for identification.)

Q I hand you Union's Exhibit No. 2 and ask you whether or not that is a copy of the report you filed with the United States Geological survey?

A It is.

Q What in substance does that report show?

A The report is a brief resume of the geological work that was accomplished in the area that delineated the area that we consider suitable for unitization. It summarizes the map that accompanies it and explains the geological evidence that is present in the area.

Q What kind of geological work was done?

A Surface party mapping on the supposed formations was in the area for approximately a year. This particular structure was isolated and mapped by a plain table method by John J. DeBenediti, a geologist of Union Oil Company.

Q Was all this work done under your direction?

A It was.

Q Was this report prepared under your direction, or prepared by you?

A This report was prepared by me.

Q You state that accompanying the report a plat or geological map was filed?

A I --

(Union's Exhibit No. 3 marked for identification.)

Q I hand you Union's Exhibit No. 3 and ask you if that was the plat you referred to?

A It is.

Q What did that show?

A It is a combination map showing the structure of the area as mapped on the lower San Andres formation. That structure contour map is drawn from control points of surface mapping from the Queen, Grayburg, and upper San Andres. Those lines show in red on the map, superimposed over a vertical magnetic intensity map that was prepared separately by Mr. Riggs of Carlsbad, New Mexico. The magnetic map was not done under my direction or the Union Oil Company. Mr. Riggs made it for us and the coincidence of the magnetic map with the surface map aided us in selecting the area for the unit.

Q Was this map prepared by you?

A It was.

Q Does it show the boundaries of the proposed unit?

A Yes, sir.

Q How many acres does the proposed unit contain?

A The proposed unit contains approximately 17,384. acres.

Q What portion of that area is Federal land? What percentage?

A The Federal land in the unit area is 16,388 acres, or 94.27 percent.

Q Are there any fee or State lands involved in the proposed area?

A There are no State lands in the proposed area. There are 995.78 acres of fee land.

Q Approximately six percent?

A Approximately six percent, yes, sir.

Q In your opinion does the proposed unit area cover all or substantially all of the geophysical features involved there?

A Yes, sir, it does.

MR. HINKLE: I would like to offer in evidence Exhibits 1, 2 and 3 that have been referred to.

MR. MACEY: Without objection they will be received.

Q Mr. Dunn, are you familiar with the form of unit agreement which was filed with the application for approval by the Commission?

A I am.

Q Is the Union Oil Company designated as the unit operator in that agreement?

A It is.

Q Under the terms of the proposed unit, is the Union required to drill a test well for oil and gas?

A It is.

Q When is that well to be commenced, with reference to the approval of the unit?

A It is to be commenced within six months of the approval of the unit agreement.

Q To what depth is the well to be drilled?

A The well is to be drilled to the Devonian formation, which we anticipate will be reached at 5500. We ask that we be not required to drill beyond a depth of 6000 feet.

Q In your opinion 6000 feet will adequately test the Devonian formation in the area?

A Yes, sir.

Q In your opinion will you be able to have a substantial percent of all the lease owners in the area commit their leases to the unit?

A Yes, sir.

Q In the event production of oil and gas is obtained, the unit is approved, state whether or not in your opinion it would be in the interest of conservation and the prevention of waste.

A I certainly believe that it will.

Q In the event of production, would the unit tend to promote the greatest ultimate recovery of oil and gas from the reservoir involved?

A Yes, sir.

MR. HINKLE: That is all.

MR. MACEY: Any questions of the witness?

CROSS EXAMINATION

By MR. GURLEY:

Q Have the terms of the unit agreement been submitted to the Federal government for their approval?

A The Federal government, through the United States Geological Survey at Roswell, has inspected the unit agreement. It is standard in all respects and they have indicated that it will be approved.

Q Then there is no deviation at all from the standard form?

A None except those requested by the government on the basis of regulations passed since their suggested form was published.

REDIRECT EXAMINATION

By MR. HINKLE:

Q I might ask one more question. Does the unit agreement form submitted here follow substantially the regulation form described by the Department of Interior regulations?

A Definitely so.

Q The only changes are on your provisions relating to approval by the Conservation Commission?

A That is right.

REXCROSS EXAMINATION

By MR. NUTTER:

Q What is your unit area based on, a magnetometer survey plus geological evidence?

A Yes, sir, it is based on the geophysical evidence plus the geological evidence. It is our opinion that the magnetic picture as shown will shift in the subsurface to conform more exactly with the surface picture as mapped. We do not believe that the sub-- that is, that the magnetic map gives the true center of the picture and that will be more truly reflected by the history found on the surface.

Q You don't believe that the area which is included in the unit boundary encompasses any unnecessary acreage; that is, it covers the structure and that is about all?

A That is right.

Q What percent of the unit area is committed to the unit at

the present time?

A At the present time the Union Oil Company of California has 88.6 percent of the total unit area under control. Contacts have been made and I am unable to say that any of the others have definitely indicated their willingness; however, we have been led to believe that approximately 8 percent additional interest will be committed to the working interest. We are sure that we will control well over 90 percent of the working interest in the area.

Q Provision is probably made, since it is a standard form unit agreement, for additional acreage to come into the unit after the approval date?

A That is right, or for a reduction of the unit area should evidence show that it should be reduced.

MR. NUTTER: That is all.

MR. MACEY: Anyone else? If nothing further, the witness may be excused.

(Witness excused.)

MR. MACEY: Is that all, Mr. Hinkle?

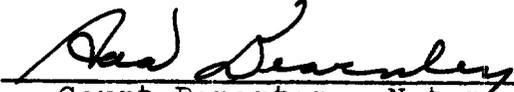
MR. HINKLE: That is all.

MR. MACEY: Anyone have anything further in the case? If not, we will take the case under advisement.

STATE OF NEW MEXICO     )  
                                      : SS.  
COUNTY OF BERNALILLO    )

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the Oil Conservation Commission, 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 20th day of September, 1955.

  
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Court Reporter - Notary Public

My Commission expires:

June 19, 1959.