

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 27, 1960
EXAMINER HEARING

IN THE MATTER OF:)

Application of Union Oil Company)
of California for approval of a)
unit agreement.)

Case 1871

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IN THE MATTER OF:)

Application of Union Oil Company of)
California for approval of a unit)
agreement. Applicant, in the above-)
styled cause, seeks an order approv-)
ing its North Anderson Ranch Unit)
Agreement, which Unit is to comprise)
360 acres, more or less, consisting)
of portions of Sections 32 and 33, Town-)
ship 15 South, Range 32 East, Lea)
County, New Mexico.)

Case 1871

BEFORE:

Mr. Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Case 1871.

MR. PAYNE: Application of Union Oil Company of Calif-
ornia for approval of a unit agreement.

MR. BRATTON: Howard Bratton, Hervey, Dow and Hinkle,
appearing on behalf of the applicant, Union Oil Company. I have
two witnesses and ask that they be sworn.

(Witnesses sworn.)

MR. UTZ: Are there any other appearances in this case?

W. M. STANDLEY

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

DIRECT EXAMINATION

BY MR. BRATTON:

Q Will you state your name, occupation and where you are employed?

A I am W. M. Standley, District Land Man for Union Oil Company, California and Roswell, New Mexico.

Q Does the area embraced in the North Anderson Ranch Unit, the subject of this application, come within the jurisdiction of your office?

A It does.

Q Are you familiar with the Unit Agreement and the developments with relation to the execution thereof?

A Yes, sir.

Q With relation to the Unit Agreement, Mr. Standley, is it in exact accordance with the model form of the Commissioner of Public Lands?

A It is exactly the model form.

Q As originally drafted, it deviated somewhat?

A Yes.

Q But it has now been corrected where it is a model form for a unit of all State land?

A That's right.

Q Referring to what has been marked as Exhibit A, Mr. Standley, is that a plat of the area in the unit and also showing

the location of the well?

A Yes, it does.

Q Will you read the description of that for the Examiner?

A Part of Sections 32 and 33, Township 15 South, Range 32 East, Lea County, New Mexico.

Q What are the exact descriptions?

A In Section 32, the East Half of the Northeast Quarter, the Northeast Quarter of the Southeast Quarter, 33 Section, Northwest Quarter and the North Half of the Southwest Quarter.

Q The location of the well is shown in the exact center of the proposed unit?

A It is in the Southwest of the Northwest of 33.

Q Referring to Exhibit B, is that the Exhibit B from the Unit Agreement showing the ownership of the acreage and royalty and overriding royalty?

A Yes, sir.

Q All the acreage in the unit is State acreage?

A State land, yes.

Q There is one overriding royalty owner?

A Yes.

Q Has the Agreement been approved as to form and context and content by the Commissioner of Public Lands?

A Yes, it has.

Q Are you going to have 100% commitment by the working

interest owners?

A Yes, we will have 100%.

Q And how about the overriding royalty owners?

A The override will commit, it hasn't yet, but it will.

Q The unit calls for the drilling of one test well?

A Yes, it does.

Q And that is a Devonian test well?

A Yes.

MR. BRATTON: I have no further questions.

MR. UTZ: Do you have another witness to testify as to structure?

MR. BRATTON: Yes.

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

(Witness excused.)

(Marked Union Oil Company's Exhibit No. 3, for identification.)

DAVID A. DUNN

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

DIRECT EXAMINATION

BY MR. BRATTON:

Q Will you state your name, occupation and where employed?

A David A. Dunn, District Geologist with Union Oil

Company of California and Roswell, New Mexico.

Q Have you previously qualified by this Commission as an expert witness?

A Yes, sir.

Q Are you familiar with the area in question in this application?

A I am.

Q With the proposed North Anderson Ranch Unit Agreement?

A Yes, I am.

MR. BRATTON: The witness's qualifications acceptable?

MR. UTZ: Yes, sir.

Q Referring to what has been marked Exhibit 3, will you explain that report and the attached map?

A The report is a short geological report to accompany the structure contour map that is presented showing the structure as interpreted from the available well control and by the use of seismic information. The letter or report explains that the seismic method in this area is not 100% useable for definite outlining of structure due to the poor continuity of deep reflections. Dip records, which appear to be valid, can be used and coordinated with subsurface interpretation from well control to draw a structural interpretation.

The map with 100 foot structural contours shows the structure of the Anderson Ranch and the interpreted structure of the

~~North Anderson Ranch Unit.~~ The Devonian wells have the subsea datum of the Devonian underlined in red. The wells that are on the map in the Anderson Ranch Field do not have a datum or Wolfcamp or shallower wells. The red lines shown on the structure map give the indication of a probable fault zone.

It is the general consensus of opinion that the eastern flank of the Anderson Ranch structure is a fault with displacement down to the east. None of the wells in the Anderson Ranch Field have actually penetrated this fault, and in accordance with normal geological practices, the interpretation on the map has been shown as a short dip. The fault indicated between the Anderson Ranch Field and the North Anderson Ranch Unit is indicated by lack of continuity on seismic lines and is a logical interpretation as a result of faulting if it exists on the east flank.

The red line with the datum shown of minus 9135 plus or minus is the approximate original oil-water contact in the Anderson Ranch Devonian Field. There is no information available to indicate the definite oil-water contact on the postulated structure at the north end of the Anderson Ranch Field. However, the T.P. Lane Miles Unit test in Section 32 of Township 15 South, Range 32 East which encountered the Devonian at a minus 9270 subsea did not have any shows from the Devonian and it definitely suggests that the oil-water contact, if any, will be higher than that level.

It is assumed in the structural interpretation of this nature that the oil-water contact will be approximately the same as the related structure to the south. The rate of dip, as indicated by the wells in Section 2 in the Anderson Ranch Field, Township 16 South, Range 32 East, definitely indicates that the two wells, the two northernmost wells of the Anderson Ranch Field are approximately at the oil-water contact. The indication from seismic work also indicates that north dip across these wells would bring the Devonian below the water level at this point. The unit outlined as drawn is anticipated to cover all of the commercially productive zone of the postulated structure.

Q What would be the approximate cost of a Devonian well in this location?

A Approximately \$252,000 as a dry hole and over \$300,000 completed. I can give you the AFE on that.

Q That's all right, I don't believe we need the exact figures. Due to the diversity of ownership in this area and the high cost of the proposed well, in your opinion is unitization essential in order that the well be drilled?

A Yes, in my opinion it definitely is. As I have pointed out in my report, that in this small unit area which covers 360 acres there are five State lease owners. The maximum acreage held by nine companies inside the unit area is 80 acres. While the proposed test is less than a mile north of Devonian production,

this test is definitely a wildcat venture with all the inherent risks of such a venture and is not justified on the basis of the small acreage holdings by any individual company.

Q Therefore, in your opinion, Mr. Dunn, the approval of the proposed unit would protect correlative rights and would be in the interest of prevention of waste?

A Definitely.

Q Is there anything further you have to say with regard to your interpretation of the area?

A No, sir.

Q Did you prepare Exhibit No. 3 and the attached contour map?

A I did.

MR. BRATTON: I have no further questions.

CROSS EXAMINATION

BY MR. UTZ:

Q You base your, well I'll call it postulated oil-water contact, for this structure based on the Anderson Ranch Field, is that correct?

A That is right. Of course it is impossible to anticipate an oil-water contact on a wildcat proposition such as this and we can only say with certainty that it would be somewhere above the subsea datum of minus 9270 as indicated by the T.P. Well in Section 32. My personal feeling is that the oil-water contact

in the Anderson Ranch Field is probably controlled by a fault such as I have indicated on the east side of the field, and the probable, the spill point is probably represented by the point of intersection of that fault plane and by our interpretation we say that the probable fault zone reaches about the same point of intersection at the north end of the north structure as we show it, and therefore would probably have approximately the same water-oil-water contact if oil in structure are present.

Q On that presumption then you feel that you have all of the potential productive acreage within the boundaries of this unit?

A Yes.

MR. UTZ: Any other questions?

MR. PAYNE: Yes.

BY MR. PAYNE:

Q From either Mr. Dunn or Mr. Standley, is the allocation formula based solely on the amount of acreage that each operator has?

A Yes, sir.

Q Notwithstanding where the well is drilled?

A Yes, sir.

Q What percentage did you say you had committed of the working interest owners?

A All of it.

MR. PAYNE: Thank you, that's all.

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

MR. BRATTON: I would like to offer applicant's Exhibits 1, 2 and 3 in evidence.

MR. UTZ: Without objection they will be entered into the record.

MR. BRATTON: We have nothing further to offer, Mr. Examiner.

MR. UTZ: Any statements to be made in this case?

MR. BRATTON: Mr. Examiner, I would like to substitute this new form of Unit Agreement for the form which was attached to the application. This is the form which has been amended to coincide identically with the Commissioner of Public Lands' model form.

MR. UTZ: We'll 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 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 15th day of February, 1960.

Ada Dearnley
 Notary Public-Court Reporter

My commission expires:

June 19, 1963.

I do hereby certify that the foregoing is a correct and true copy of the proceedings in the Proceedings of the New Mexico Oil Conservation Commission heard by me on Jan. 27, 1960.
John R. Meier, Examiner
 New Mexico Oil Conservation Commission