

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

PROCEEDINGS

The following matter came on for consideration before a hearing of the Oil Conservation Commission of the State of New Mexico, pursuant to legal notice, at Santa Fe, New Mexico, June 14, 1950, at 10:00 A. M.

NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the rules and regulations of said Commission promulgated thereunder, of the following public hearing to be held June 14, 1950, beginning at 10:00 o'clock a.m. on that day in the City of Santa Fe, New Mexico, in the Capitol (Hall of Representative).

STATE OF NEW MEXICO TO:
All named parties in the following
case and notice to the public:

Case 224

In the matter of application of Amerada Petroleum Corporation for an order for final approval of the Allison Unit Agreement embracing lands located as described in the application in Township 32 north, Range 6 west, and Township 32 north, Range 7 west, N.M.P.M., San Juan County, New Mexico, and other lands located in the State of Colorado, all containing 13,774.22 acres.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on May 31, 1950.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

/s/ R. R. Spurrier
/t/ R. R. SPURRIER, SECRETARY

SEAL

BEFORE:

R. R. Spurrier, Commissioner
George A. Graham, Attorney for the Commission

REGISTER:

Warren L. Taylor
Jal, New Mexico
For El Paso Natural Gas Company

R. S. Christie
Ft. Worth, Texas
For Amerada Petroleum Corporation

Roy O. Yarbrough
Hobbs, New Mexico
For the New Mexico Oil Conservation Commission

Al Greer
Aztec, New Mexico
For the New Mexico Oil Conservation Commission

J. O. Seth
Santa Fe, New Mexico
For Amerada Petroleum Corporation

COMMISSIONER SPURRIER: The meeting will be in session. Let the record show that we met in the House of Representatives and recessed to the Oil Conservation Commission office. Let the record show that proper publication has been previously made.

(Mr. Graham read the notice of publication for case 224.)

R. S. CHRISTIE, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. J. O. SETH:

Q. Will you state your name?

A. R. S. Christie.

Q. What is your profession?

A. Petroleum engineer.

Q. By whom are you employed?

A. Amerada Petroleum Corporation.

Q. You have testified before the Oil Conservation Commission a number of times?

A. Yes, sir.

MR. SETH: We will waive qualifications.

COMMISSIONER SPURRIER: That is all right.

Q. Are you familiar with the area known as the Allison Unit, the approximate acreage that is contained in it?

A. Yes, sir.

Q. It contains approximately 11,000 acres of land?

A. The entire amount?

Q. 13,774 acres, lying part in Colorado and part in New Mexico, which is fully described in the proposed unit agreement, and in the application.

Without going into details as to land boundaries, will you give geological and geophysical description of the area?

A. The structural feature which is recommended for prospecting, is a broad, flat-topped anticline with a general northwest-southeast trend,

and having a total closure of about 140 feet. The estimated depth to and thickness of the several recognizable formations to the basement complex are as follows: I don't believe I will give all those figures. Strike that.

The estimated depth and thickness of several formations which may be productive in San Juan Basin to the Dakota formations: Farmington Sand, estimated depth, 3000 feet; Pictured Cliffs Sand, estimated depth, 4000 feet; Point Lookout Sand, estimated depth, 6300 feet; and Dakota Sand, approximately 8500 feet.

Q. Are there any sands below the Dakota?

A. Yes, sir, there are a number of formations below the Dakota that might be productive.

Q. These are the sands that have been found to be productive in other wells in the San Juan Basin?

A. Yes, that is true.

Q. Are there any wells in the general vicinity?

A. Yes, sir, Stanolind Oil & Gas Company's well which has been completed approximately six miles southeast of this unit to the Dakota Sand.

Q. How was the anticline ascertained, what kind of work?

A. This anticline was found by seismograph work, geophysical work.

Q. I hand you Amerada's, the Applicant's Exhibit 1 and ask if that represents a contour map derived from seismograph work?

A. Yes, sir.

Q. The contour lines show what structure, formation?

A. Dakota.

Q. These figures represent distances below sea level?

A. That is right.

Q. This is a result of seismograph work?

A. Yes, sir.

Q. What is the tentative location of the first well?

A. The tentative location is the southwest quarter of the northwest quarter of Section 17, Twp. 32N. Range 6W, San Juan County, New Mexico.

Q. And what was the elevation?

A. The elevation is approximately 6500 feet.

Q. That location might be varied?

A. Yes, sir, the final location may vary some from this proposal dependent on a consideration of all pertinent information available at the time the location is made.

Q. Is there anything on the surface to indicate what the structure is?

A. No, sir.

Q. I would like to hand you Applicant's Exhibit 2 and ask you if that is a copy of Mr. Ferguson's report?

A. Yes, sir.

Q. Is he employed as senior geologist for Amerada?

A. Yes, sir.

Q. He has collected figures as to the depths of the various deposits?

A. Yes, he has.

MR. SETH: We offer Applicant's Exhibits 1 and 2 in evidence.

COMMISSIONER SPURRIER: They will be received.

Q. Have you a map showing the surface there?

A. Yes, sir.

Q. I hand you Applicant's Exhibit 4, and ask you if that is a map showing surface conditions?

A. Yes, sir, it shows surface contours of general area.

Q. Is the area rough or smooth?

A. It is a very rough terrain.

Q. Is it very difficult to get into?

A. Yes, sir.

Q. I hand you Applicant's Exhibit 3, does that represent standard status map?

A. It does, yes, sir.

Q. Now, without going into detail of each quarter section, it indicates, does it not, that there are approximately 2,000 acres of the unit in Colorado and 11,700 in New Mexico?

A. Yes, sir.

Q. What does it show with reference to working interests being committed to the unit agreement?

A. All working interests in the unit are committed to it.

Q. What per cent is Amerada's?

A. Approximately 89 per cent, slightly above that.

Q. Now, royalty, you pay what per cent committed to unit?

A. All royalty interests without exception are 5.11 per cent.

Q. Is that a large enough amount to justify refusal of approval of the unit, what do you think as to that?

A. I think we have submitted both by having all the working interests committed and approximately 95 per cent royalty interests, the unit should be approved.

Q. Now, do you have only two franchises of State land in the property that you have?

A. Yes, sir.

Q. The west half of 16, 32, 6, and the east half of 16, 31, 7?

A. Yes, sir.

Q. Now, Mr. Christie, based upon your knowledge, training, and experience, is the tract disclosed by the survey, give your opinion as to whether or not this is a proper structure to develop on a unit basis?

A. I think a structure of that type should be developed on a unit basis for several reasons. First, in a unitized area, it is possible to have more uniform spacing. By having more uniform spacing you do not concentrate a number of wells in any particular area because of various property lines. By having a unitized area, it is possible to withdraw where they should be withdrawn for better drainage. In other words, where a poor well is drilled, that is not producing, it would be better to withdraw. With unitization you can control withdrawal. The only other way that it can be done is with a complicated allocations. It makes for flexibility in spacing. In such a terrain as shown on Exhibit 4 it is very difficult to locate a well from property lines based on definite spacing. It may be necessary to move it a considerable distance from the standard 660 or standard 330 foot spacing. Another advantage, I think, of unitization of an area such as in this unit is that is more likely to be proved up more rapidly than under the usual method of development.

Q. Ordinarily, a field after the discovery well mushrooms out in all directions?

A. Yes, sir. Under unitization, the area is stepped out at greater

distances. By doing that, you prove up the area much more rapidly. It is important from this standpoint that the area be unitized because it is necessary, or at least advisable, to determine reservoirs as quickly as possible in order to obtain an outlet. The sooner you have developed known reserves, the more apt you are to get some pipeline to come into the area.

Q. In your opinion would this unit agreement and performance tend to promote conservation of oil and gas and better utilization of reservoir energy in that area?

A. Yes, sir, I do. I think any development under uniform spacing pattern for the withdrawal taken out of reservoir pressures is good conservation and will prevent underground waste.

Q. Would the State areas, in your opinion, get its fair share of oil and gas in place?

A. Yes, I do.

Q. Do you think considering other general interests the approval of the agreement would promote those interests?

A. Yes, sir.

Q. It would provide a fair proportion of production on an acreage basis?

A. Yes, sir.

Q. And each owner would receive his proportionate share on that basis?

A. That is correct, yes, sir.

MR. SETH: I believe that is all.

MR. CHRISTIE: Going to another important reason for unitization--if it develops that it will be necessary to test deeper horizons, it would not be economical to drill a deeper well on any small tract. Our geological report indicated the Devonian was somewhere around 15,000 feet. If it would be necessary to drill to that depth, you need a fairly large unit committed to the project.

Q. You expect to drill to the Dakota at 8500 feet?

A. Yes, sir.

Q. You intend to test that in any event?

A. Yes, sir.

Q. You might have to go deeper if indications show that it advisable?

A. I think that there is a good possibility of obtaining oil. If it is not found in any of the upper formations if evidence indicated in that structure, that deeper drilling would probably be carried out.

COMMISSIONER SPURRIER: Does anyone have any questions of this witness?
Mr. Graham?

MR. GRAHAM: Not at this time.

COMMISSIONER SPURRIER: If there are no further questions, the witness is excused. Let the record show that the form of Unit Agreement submitted is the usual form.

Before we close the meeting, I would like to say that the Commission has directed me to sit as an examiner to take this record.

The meeting will be adjourned.

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STATE OF NEW MEXICO)
 :
COUNTY OF SANTA FE)

I HEREBY CERTIFY that the foregoing is a true and correct transcript of the proceedings had at the time and place above written to the best of my knowledge, skill, and ability.

DATED this 14th day of June 1950, at Santa Fe, New Mexico.

Margaret Paul
REPORTER