

BEFORE THE
OIL CONSERVATION COMMISSION
Hobbs, New Mexico
March 1, 1956

IN THE MATTER OF:

Case No. 1023

TRANSCRIPT OF PROCEEDINGS

BEFORE THE
OIL CONSERVATION COMMISSION
March 1, 1956
Hobbs, New Mexico

-----)
Application of Sinclair Oil and Gas)
Company for an order granting approval)
of the proposed Seaman Unit Agreement)
consisting of 1522.05 acres of land, more)
or less, in Lea County, New Mexico.)
)

Applicant, in the above-styled cause, seeks)
an order granting approval of the proposed)
Seaman Unit Agreement embracing 1522.05)
acres of land, more or less, in Lea County,)
New Mexico, consisting of the following)
described acreage:)
)

Township 16 South, Range 33 East)

SE/4 Section 12)
SE/4 & NE/4 Section 13)
SE/4 & NE/4 Section 24)
)

Township 16 South, Range 34 East)

Lots 3 & 4, E/2 SW/4 Section 7)
Lots 1, 2, 3, & 4, E/2 NW/4 &)
E/2 SW/4 Section 18)
Lots 1, 2, 3, & 4, E/2 NW/4, &)
E/2 SW/4 Section 19)
)

Case No. 1023

BEFORE:

Warren W. Mankin, Examiner

TRANSCRIPT OF HEARING

EXAMINER MANKIN: The next case is Case 1023, the application of Sinclair Oil and Gas Company, for an order granting approval of the proposed Seaman Unit Agreement in Lea County, New Mexico.

MR. WEBB: Mr. Examiner, I am Layton Webb of Fort Worth. I would like to make a brief statement for the record. I have one witness, Mr. Larry Seaman,

our Division Geophysicist, to have sworn in. The proposed Seaman Unit contains 1522.05 acres located in Township 16 South, Range 33 East and Township 16 South, Range 34 East. It is all state land. There are four leasehold owners, namely Sinclair who is the unit operator under the agreement, and Cities Service Oil Company, Skelly Oil Company, and Shell Oil Company. The unit agreement has now been completely signed including the over-riding royalty owner who is Mr. Earl Levick of Roswell and he has drawn his signature up and the unit agreement has been approved by the Commissioner of Public Lands, State of New Mexico, on February 19, 1956. I might state that this unit agreement follows in substance the form of agreements which the Commission has approved before. As I said, I have one witness, Mr. Seaman.

LARRY SEAMAN

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

DIRECT EXAMINATION

By MR. WEBB:

Q. One further statement that I would like to make is that the over-riding royalty owner is under Sinclair's---one of Sinclair's leases and I do not at this time have an executed copy of the consent but if they care for an executed copy, I will furnish the Commission with it just as soon as we can.

State your name please.

A. L. O. Seaman

Q. Where do you live Mr. Seaman?

A. Fort Worth.

Q. And by whom are you employed?

A. Sinclair Oil and Gas Company

Q. And in what capacity are you employed?

A. Division Geophysicist.

Q. In your position as Division Geophysicist in the Fort Worth office do you have charge of geophysical exploration in New Mexico?

A. Right.

Q. And thats all of the State of New Mexico, is that right sir?

A. No, not the West half.

Q. Of Lea County, New Mexico?

A. Yes.

Q. Have you ever testified before this Commission?

A. No.

Q. If you will state briefly your education and experience and background for the Commission, please.

A. I graduated from Oklahoma University in 1925. I worked for Shell Oil Company before going to work for Sinclair, I have worked for Sinclair for 29 years.

Q. And your work with Sinclair has been with geophysical exploration primarily, is that correct?

A. Primarily, since geophysical work started and exclusively since geophysical work started in the United States.

Q. Mr. Seaman, you are familiar with the area covered by the proposed Seaman Unit, are you not?

A. I am.

Q. It covers land out of Township 16, Ranges 33 East and 34 East?

A. Thats right.

Q. Have you had occasion to---may I ask you this question. Have you or has there been accomplished under your supervision a geophysical survey of this area?

A. Yes.

Q. And by whom was that geophysical survey made?

A. A contract company, M. Y. Geophysical Company.

Q. And approximately what date was this done?

A. I would say the middle of 1954.

Q. And what method of geophysical survey was-----

A. Reflection seismograph.

Q. Would you briefly explain to the Examiner and to the Commission the exact type of survey that was conducted in this area?

A. Roughly, this area has an elevation of about 4150. Our detailed seismic work, the density of control was approximately around every section. We drilled---our average shot hole depth was around 240 feet. Our average powder charge was from 50 to 75 feet. The spread length on our geophone was 1760 feet on each side of the shot point. We used 24 place SIE equipment at 18 geophones per trace. That covers the mechanical details.

Q. Was the result of this geophysical survey positive or negative? In other words, were you able to get a picture?

A. Yes. We had apparently good records in this area--not the best, but fairly good.

Q. And the results of that survey--have you taken the results and interpreted them and placed them on a seismic reflection contour map?

A. Yes.

Q. And, I hand you what has been marked applicant's Exhibit No. 2 and ask you what this instrument is?

A. This is a contoured reflection seismograph map and it is contoured in time. The time element there, if you will notice on the top of the contour is 1.680, thats

one second and 680 thousands of a second. That is the time that it took the seismic wave to go from the surface down to the top of the Devonian and back to the surface.

Q. Excuse me. This map was made by you or under your supervision, is that correct?

A. Yes. The contour interval there converted to feet or time, in other words, converted to feet on what you would call a section of this map is 75 feet plus or minus. We determined that from knowing the velocities of the seismic waves in this area. The picture as a whole has approximately 250 feet plus or minus closure, the interpretation was with the fault on the east side and the structure being on the downthrow side of this fault and a portion of the closure being controlled by that normal downthrow fault.

Q. Mr. Seaman, your interpretation of this seismic reflection survey which you have placed on the ownership plat for the unit area, the unit area outline is shown in green there, would you say that the unit area does or does not embrace substantially all of what you consider the Devonian geological feature to be in this particular area?

A. Yes, in our experience with the geophysical structures in New Mexico, I would say that we feel like we have very well covered what would be Devonian production, if we get Devonian production.

Q. And do you feel that the size of the Devonian structure as you interpret there, that a unit operation such as we have proposed here would be beneficial in the industry and would prevent waste and promote the best ultimate recovery of oil and gas?

A. Yes.

MR. MONTGOMERY: Mr. Seaman, does the unit provide for expansion or the reduction in the size of the units?

A. Yes.

MR. MONTGOMERY: And I didn't understand for sure if you said that this was correct to plus or minus 75 feet.

A. Yes, plus or minus 75 feet as near as we can tell from our velocity control in this part of Lea County.

MR. MONTGOMERY: Did you state how many feet of closure you had?

A. I would say 250 plus or minus.

MR. MONTGOMERY: That's all I have.

MR. MANKIN: Any other questions of the witness?

MR. WEBB: For the purpose of the record I would like to introduce applicant's Exhibit 1 and 2, Exhibit 1 being the executed unit agreement and Exhibit 2 being the ownership plat showing the unit area outlined in green on which has been superimposed a reflection contour map.

MR. MANKIN: I have one question, I don't know whether Mr. Seaman can answer it or you can answer it. The segregation clause has that been provided in this--

A. Yes, sir. The segregation clause has been provided, I believe, by the usual form. I will state what it is. It is a complete segregation with the proviso that a drilling well with----on land embraced within the lease, whether within or without the area will hold the entire lease. Otherwise it is completely segregated.

MR. MANKIN: So that particular segregation clause was---has been approved by the Commissioner of Public Lands which ordinarily requests such a-----

MR. WEBB: Yes, it is the clause which the Commissioner requires.

MR. MANKIN: And he has approved it as such?

MR. WEBB: On February 19th, I believe.

MR. MANKIN: Are there any further questions of the witness?

MR. WEBB: The original location as shown in the unit agreement is shown to be 660 feet from-----

MR. SEAMAN: From the South and East lines of Section 13, 16 South, 33 East.

MR. WEBB: Alright fine, Thank you.

MR. MANKIN: Is that a change from the original?

MR. WEBB: That was the original location and upon survey it was determined that that fell 3 feet off of state highway right of way. Is that not correct, Mr. Seaman? And it was changed and I am advised with the consent of the local office of the Commission. I don't know that for sure, but I was advised-----to 580 from the South----

MR. SEAMAN: I understood 550-----

MR. WEBB: 550 from the South and 660 from the East.

MR. MANKIN: It was changed 110 feet to conform with-----

MR. WEBB: Yes.

MR. GURLEY: That was part of the unit agreement, was it. Well did the agreement state where the well was to be-----

MR. WEBB: Yes, sir. And perhaps I had better introduce photostatic copies of the wires from the various non-operators agreeing to the change in location.

MR. GURLEY: You received permission from all of them did you to that effect?

MR. WEBB: Yes, including the over-riders and all.

MR. MANKIN: I have one other question. What is the---I am sure that the application and agreement states the depth of the well, but for the matter of the

