REPORTING SERVICE, Inc. Santa Fe, N. M. PHONE 983.3971 PHONE 983.3971	BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico December 6, 1962
	EXAMINER HEARING
	IN THE MATTER OF:
	Application of Shell Oil Company for a unit agreement, Lea County, New Mexico. Applicant, ) CASE 2719 in the above-styled cause, seeks approval of its ) Antelope Ridge Unit Area, comprising 3840 acres, ) more or less, of Federal, State and Fee lands in ) Townships 23 and 24 South, Range 34 East, Lea County, New Mexico.
NG	BEFORE: Daniel S. Nutter, Examiner
REPORTI santa fe. n. m. phone 983.3971	TRANSCRIPT OF HEARING
	MR. NUTTER: We are going to call for Case 2719.
	MR. DURRETT: Application of Shell Oil Company for a
DEARNLEY-MEIER	unit agreement, Lea County, New Mexico.
	MR. MORRIS: I'm Richard Morris of the Santa Fe law
	firm of Seth, Montgomery, Federici and Andrews, representing the
	Applicant in Case 2719. We will have two witness, and I ask they
	be sworn at this time.
	(Witnesses sworn.)
	(Whereupon, Applicant's Exhibits Nol marked for identification
	O. V. LAWRENCE
	called as a witness, having been first duly sworn on oath, testi-
	fied as follows:
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## DIRECT EXAMINATION

BY MR. MORRIS:

Q Mr. Lawrence, please state your name and position.

A O. V. Lawrence, Roswell.Division Land Manager, Shell Oil Company, Roswell, New Mexico.

Q And have you previously testified before this Commission or one of its Examiners?

A I have.

Q Would you state what Shell seeks by its application in Case 2719?

A We propose the forming of an approximate 3,840-acre unit to be known as the Antelope Ridge Unit. As shown on Exhibit 1, the unit area covers six sections, being all of Section 27, 28, 33, 34 of Township 23 South, 34 East; and all of Sections 3 and 4 of Township 24 South, 34 East, Lea County, New Mexico.

Q Is this unit proposed as an exploratory unit to the Devonian formation?

A Yes, sir, it is.

Q And where is the nearest Devonian production to this unit area?

A To the unit area, it would be the production of Continental in the Bell Lake Unit to the west.

Q That is also shown on Exhibit 1, the boundary of the Bell Lake Unit adjoining your proposed unit?

A Yes, it is.



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Q What types of lands are involved in your proposed unit? A The unit area has all three types of land, being Federal, State of New Mexico, and Fee land. The Federal land consists of 2,040 acres, which is approximately 53 percent. The State of New Mexico land, 1320 acres, 34.5 percent of the unit area; and Fee land is 480 acres, approximately 12.5 percent.

Q What is the situation with respect to the working interest in this unit, Mr. Lawrence?

A There are two working interest owners, being Shell and Continental. Shell has approximately 95 percent, Continental Oil Company has 5 percent.

Q Has Continental agreed to the participation of their interest in this unit?

A They have agreed and they have executed the unit agreement, as has Shell.

Q What action has been taken with respect to overriding royalty interest and with respect to royalty owners who are fee owners in this unit?

A All of these owners have been contacted by letter. We sent along copies of the ratification for their consideration, also a copy of the unit agreement for their information in connection with signing. We have received several of the overriding owners, and several of the royalty owners have joined.

Q Is it too early to know what percentage of these owners will eventually join the unit?



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ALBUQUERQUE, N. M. PHONE 243-6691 A Yes, it is, because some of the letters were sent out as recently as the first of this week.

Q Now, Federal land is also involved in this unit. What negotiations have been made with the U.S.G.S.?

A We have received preliminary approval of the unit by the Director of the United States Geological Survey, Washington, D. C.

Q Has formal application for the approval of this unit been furnished to the State Land Office?

A Yes. We have furnished the State Land Office with an application for approval of this proposed unit.

Q Has the Land Office been furnished a copy of the unit agreement and supporting geological data?

A They have.

(Whereupon, Applicant's Exhibit No. 2 marked for identification.)

Q Mr. Lawrence, referring now to what has been marked Exhibit 2, which is a copy of the proposed unit agreement for which you seek approval today, would you state what type of agreement this is and what forms it might follow?

A The type of agreement is the standard type previously approved by the Commissioner, the Commission, and the Supervisor where Federal, State, and Fee lands are involved.

Q Is Exhibit 2, which we have just handed to the Examiner, an executed copy of that unit agreement?

A Yes, it is.



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FARMINGTON, N PHONE 325 Q What is Shell's obligation as far as drilling is concerned under this unit agreement?

A Under the provisions of paragraph 9, the unit operator. Shell Oil Company, is obligated to drill a 14,800 foot Siluro-Devonian test.

Q Has that well been started by Shell Oil Company?A Yes, it has.

Q Referring back for the moment to Exhibit No. 1, I notice on that exhibit a well in Section 27 which is shown on the exhibit as a producing well. Will that well count as the unit well under the unit agreement?

A No, it will not count as the unit obligation. There is a special provision that has been added to paragraph 9 which states that the well that has been completed in the Southeast Southwest Quarter of Section 27 will not be counted as a unit test until such time as another well capable of producing unitized substances is discovered in the unit area.

Q In what formation is that well in Section 27 completed?

A It is in the Devonian formation.

Q Which also will be the objective of the second well?

A That is true.

Q

Q Has the location been staked for the second well?

A It has been staked. It is in the Lot 2 of Section 4, Township 24 South, Range 34 East.

And that location is also shown on Exhibit No. 1?



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A Yes, sir, it is.

Q Going back to this first well, Devonian well that has already been completed, is there a possibility that that well will be participating in the unit after the second well is completed?

A After the second well is completed as a producer, yes. If a dry hole -- of course, no continuous development will be required in order to keep the unit in effect until additional development is found.

Q Is there a provision in the unit agreement, Mr. Lawrence, concerning State and Federal conservation laws and making the operation of the unit subject to those laws?

A Yes, sir, there is.

Q Does the unit agreement contain standard forms of expansion and contraction provisions?

A Yes, sir.

Q Does the unit agreement contain a standard form of subsequent joinder provision?

A Yes, sir.

Q What is your opinion, Mr. Lawrence, with respect to the operation of this area under the unit form of operation from a conservation standpoint?

A From a conservation standpoint, I feel that unit operations permit orderly development, the efficient recovery of unitized substances without waste. Now in this particular area where



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we have shutin gas production which has been shut in actually for several years, I think this is even more important. Q Do you have anything further you care to add to your testimony? FARMINGTON, N. M. PHONE 325-1182 А No, sir. Were Exhibits 1 and 2 prepared by you or under your Q direction? A Yes, sir. MR. MORRIS: We offer Shell's Exhibits 1 and 2 into evidence. Mr. Examiner. MR. NUTTER: Shell's Exhibits 1 and 2 will be admitted SANTA FE, N. M. PHONE 983-397 into evidence. (Whereupon, Applicant's Exhibits Nos. 1 and 2 admitted in evidence.) MR. MORRIS: That concludes the direct examination of Mr. Lawrence. Our other witness will testify with respect to the geology in this area. CROSS EXAMINATION BY MR. NUTTER: ALBUQUERQUE, N. M. PHONE 243-6691 Q Mr. Lawrence, did you state that the well down there in Section 4 has been staked or it has actually been spudded?

A It has been started. In fact, yesterday it was at a total depth of 12,250 feet, fishing.

MR. NUTTER: Any further questions of Mr. Lawrence?

MR. DURRETT: Yes, sir, I have one question.

BY MR. DURRETT:

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Q Mr. Lawrence, has the Commissioner of Public Lands given tentative approval or approved your unit agreement as to form?

A I can't say that, no. We have discussed this proposed unit and form of unit with the Unitization Section of the Land Office. I presume that the form will be satisfactory, inasmuch as the same form has been approved in the past.

Q And you haven't been notified at this date that there are any objections, at least?

A No, sir, I haven't.

MR. DURRETT: Thank you.

MR. NUTTER: Any further questions of Mr. Lawrence? He may be excused.

(Witness excused.)

M. L. ROBINSON

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

## DIRECT EXAMINATION

BY MR. MORRIS:

Q

Mr. Robinson, please state your name and position.

A M. L. Robinson, Division Exploration Manager, Roswell, New Mexico.

Q And that's for the Shell Oil Company?

A Yes, Shell Oil Company.

Q Have you previously testified before the Commission or



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ALBUQUERQUE, N. M. PHONE 243.6691 one of its Examiners?

A Yes, sir, I have.

Q Are you familiar with the application of Shell Oil Company in this case?

A Yes, sir, I am.

Q Do you have a seismic structure map of the proposed unit area available as an exhibit?

A Yes, sir, I do.

MR. MORRIS: I ask that be marked as Exhibit 3.

(Whereupon, Applicant's Exhibit No. 3 marked for identification.)

Q (By Mr. Morris) What does this exhibit show, Mr. Robinson?

A This is a seismic structure dip map at Siluro-Devonian level, which shows the anticline we propose to unitize. It shows several hundred feet of closure by virtue of those dip arrows in the east, south, north and west directions. Each dip arrow is intended to represent 80 feet of dip information at the objective level. As you can see, the structure in my opinion is nicely encompassed within the area we are proposing for unitization.

Q Then it is your opinion, based on this structure information, that the proposed unit area fairly covers the Devonian formation in this area?

A Yes, sir, that's right.

Q Is that opinion confirmed or affected by the well that has been completed in Section 27?



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FARMINGTON, 1 PHONE 325 A Yes, sir. I feel so, because the well encountered 171 feet of gross gas column in the Siluro-Devonian formation, and it's been our experience in Southeast New Mexico that an accumulation is fairly conclusive evidence of structure and, of course, vice versa. Additionally, we ran a dip meter in that well and we observed in the dip meter at the Siluro-Devonian level five degrees of northeast dip, which is a rather nice fit with what we mapped with a seismograph in that area. So we feel that, at least as far as we can say from one well, that the map is held up quite well to date.

Q In your opinion, Mr. Robinson, will the formation of the proposed unit promote conservation?

A Yes, sir. I believe it will, because it will provide us for orderly development in the area and efficient recovery of hydrocarbons from this structure and, of course, thereby conserve a natural resource.

Q Was Exhibit No. 3 prepared by you or under your direction?

A Yes, sir, it was.

MR. MORRIS: At this time, Mr. Examiner, we offer Exhibit 3, subject, if the Examiner please, to its being held confidential and being returned to Mr. Robinson at Post Office Box 1858, Roswell, upon completion of the Commission's examination of this exhibit.

MR. NUTTER: We'll hold the exhibit until such time as



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a request for rehearing, at least, would be expired.

MR. MORRIS: Would you return that to Mr. Robinson by certified mail, if possible? That completes the direct examination of Mr. Robinson.

> (Whereupon, Applicant's Exhibit No. 3 admitted in evidence.)

## CROSS EXAMINATION

## BY MR. NUTTER:

Q Does the drilling of the well in Section 4 to date, which is at 12,250 feet, does that further confirm the seismic structure so far, or do you know anything about the way the formations are running in that well?

A Well, right now, we think, at 12,200 we felt we were on a sample marker. Now we felt we were 22 feet high to the first well and we expect a major structural improvement to occur below that depth in the lower part of the Pennsylvanian, so to date we'd say we're doing fine.

Q How far is it west from here that the Bell Lake production occurs?

A I don't know for certain. It's four or five miles. It's quite a distance.

MR. NUTTER: Are there any further questions of Mr. Robinson? He may be excused.

(Witness excused.)

MR. MORRIS: That's all we have to offer.

MR. NUTTER: Does anyone have anything they wish to



DEARNLEY-MEIER REPORTING SERVICE, Inc. SANTA FE, N. M. PHONE 983-3971 ALBUQUEROUE, N. M. PHONE 243-6691

offer in Case 2719? We'll take the case under advisement.

\* \* \* \*

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 Proceedings 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 17th day of December, 1962.

My Commission Expires:

June 19, 1963.

I do hereby certify that the foregoing is a cosolete record of the proceedings in the East lose losering of Case Lo. 2719 ... heard of the ch. 13.6 , 1962.

New Mexico Oil Conservation Commission



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