# BEFORE THE OIL CONSERVATION COMMISSION Hobbs, New Mexico April 3,1956

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TRANSCRIPT OF PROCEEDINGS

## BEFORE THE OIL CONSERVATION COMMISSION Hobbs, New Mexico April 3, 1956

The application of Sunray Mid-Continent Oil Company for an order granting permission to drill a proposed well on an unorthodox location in exception to Rule (a) and in compliance with Rule (b) of the Special Rules and Regulations for the Bagley-Siluro-Devonian Pool, Lea County, New Mexico, as set forth in Order R-69-D.

CASE NO. 1049

Applicant, in the above-styled cause, seeks an order granting permission to drill a well on an unorthodox location; said location being 330 feet from the North line and 330 feet from the West line of Section 1, Township 12 South, Range 33 East, Bagley-Siluro-Devonian Pool Area, Lea County, New Mexico.

BEFORE:

Warren W. Mankin, Examiner

### TRANSCRIPT OF HEARING

EXAMINER MANKIN: The next and last case on the docket today is

Case No. 1049, which is the application of Sunray Mid-Continent Oil Company

for an order permitting applicants to drill an unorthodox location in the Bagley
Siluro-Devonian Pool.

MR. GASSETT: John D. Gassett appearing for Sunray Mid-Continent Oil Company, and we have as witness Mr. Clarence Simms, Jr.

### CLARENCE SIMMS, JR.

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

## By Mr. John D. Gassett:

- Q. Will you state your name, please.
- A. Clarence Simms, Jr.
- Q. By whom are you employed?
- A. By Sunray Mid-Continent Oil Company.
- Q. In what capacity?
- A. District Geologist in the Roswell District. In that capacity as of July.
  - Q. Are you familiar with the Bagley-Siluro-Devonian Field?
  - A. Iam.
- Q. Have you previously testified before the Commission as an expert witness?
  - A. I have.
  - Q. Are the witness' qualifications acceptable?
  - MR. MANKIN: They are.
  - Q. Will you explain to the Commission what Exhibit No. 1 is.
- A. Exhibit 1 is a map contoured on the Siluro-Devonian horizon of the Bagley Field which indicates the producing Devonian wells which are indicated in green and the double-circle wells are wells that have been drilled to the Siluro-Devonian formation.
  - Q. Does the well which is the subject of this application appear on there?
- A. Yes, it does. It is located in the center of the SW/4 NW/4. It was drilled as Mid-Continent No. 1-65 State.
  - Q. What is the proposed location?
  - A. The proposed location is indicated in red.
  - Q. What is that location, please?

- A. That location is 330 feet out of the North and West lines of Section 1, 12 South, 34 East----33 East.
- Q. Is that proposed location within the defined boundary of the Siluro-Devonian Field?
  - A. Yes.
  - Q. It is within one mile of the defined limits?
  - A. Yes.
- Q. Now, was this structure map prepared by you or under your direction?
  - A. Under my supervision.
- Q. Now, where is this proposed location from the regular location? In other words, where would the regular location be for this unit?
- A. The regular location for this would be a 660 location out of the North and West corners.
- Q. I see by the structure map you have a fault bounding the field on the east, right in the----slightly to the northeast direction. Would you explain how you arrived at that, please?
- A. In explaining that, I would like to refer to Exhibit No. 2 which is a cross-section of the Sunray Mid-Continent well in Section 1 and also a Texas Pacific well located in the center of the SE/4 NE/4 of Section 2. You will notice on the cross-section that the Sunray Mid-Continent well was bottomed at about 11----about 10,792 feet in the Atoka formation. We have used thicknesses in the field and arrived at an estimated Mississippian top and Devonian top on this well and have shown that it is 900 feet---there is 900 feet of dip between the two wells. We have indicated a fault on the east side of this field for this

reason: We know the fault should be, or at least we feel that the Sunray Mid-Continent well did not cut a fault. It may have cut one in the Pennsylvanian formation. It it had, we would not be able to tell it. Therefore, we assume the fault would be west of the Sunray Mid-Continent well and some control to the south would indicate it would have to be east of the dry hole located in Section 11, which is in the center of the SE/4 NE/4 of Section 11.

- Q. Then according to your interpretation, could you make a Siluro-Devonian well at the regular location?
  - A. We could not.
- Q. Is this proposed location the closest location which you would recommend drilling a well to the regular location?
- A. This is the only location that I would recommend drilling to the Siluro-Devonian section on the Mid-Continent lease here, which expires July of 1957.
- Q. And the only way in which you can recover the oil which is under your lease in Section 1 then would be to drill a well at this proposed location?
  - A. Yes.
  - Q. Otherwise, you will not be able to recover the oil?
  - A. That is my opinion.
- Q. Now, approximately how many productive acres are on this tract on which the proposed location is?
  - A. Well, it is less than 80. 40, more or less.
- Q. The matter of allowable which will be governed by Paragraph C of Order R-69-C, will it not?
  - A. Right.

Q. I notice you have also shown a fault in making the boundary on the Northeast of the Field. Would you care to comment on that?

A. This fault is drawn between a dry hole and a producer in the North end of the Field. We show the fault in the direction as indicated on the map, if you would be running eastwest or most any direction in there. We do not have enough well control to confine it, therefore, we question whether its running in that particular direction or not. But we feel there is a fault in there, inasmuch as you have close to 900 feet of throw between the two wells.

Q. That, then in summary you would state that the reason that you are asking this exception be granted is to permit your company to recover the oil which underlies this lease and that a well drilled at the regular location might not do that, or probably would not, and that in order to protect correlative rights and to prevent the confiscation of properties, do you feel that this application should be granted?

A. Yes, I do.

Q. Do you have anything further to add?

A. I might point out that in Exhibit 1, the contoured map of the Field in the Siluro-Devonian formation could be shown in a little different direction than what we have. We could crowd both wells, the Sunray Mid-Continent Well and also the well in Section 11, and swing the fault a little bit more to include more acreage, however we did not try to indicate that here and there is no way of knowing exactly which way that goes.

MR. GASSETT: That is all.

MR. MANKIN: Your name again?

A. Clarence Simms.

MR. MANKIN: Mr. Simms, I notice that your council indicated something in regard to productive acreage, but I believe you will notice the advertisement, in calling the hearing and your application, made no particular reference to the allowable or the acreage that was to be assigned to this particular well; therefore, this call to hearing only concerns itself with the location, an unorthodox location, as you requested. Is there question of the witness in this case?

MR. CAMPBELL: The Commission, please, Jack M. Campbell, Campbell and Russell of Roswell, New Mexico, representing Texas Pacific Coal and Oil Company. If the Commission, please, I would like to make that point a little clearer in my own mind. It was my understanding from some of the questions asked by the Council that they were relying upon the automatic application of Section 'c' of Order R-69-D, in the event this unorthodox, offpattern location were approved, that would automatically be entitled to a 40-acre allowable. It is our position that this application, in the call of the hearing, did not include such a request. It is further our position that the testimony offered at this hearing by Sunray Mid-Continent, itself establishes that they are not, on their own interpretation, 40 productive acres within the productive limits or assumed productive limits of the Bagley Siluro-Devonian Pool which could be attributed to this well. And if Council could clarify that for me, we have or would like to have the opportunity to prepare some Exhibits and testimony in the event they are assuming that an order issued in this case could grant a 40-acre allowable to this well.

MR. GASSETT: Well, sir, that was not in the call of the hearing and we do not wish to discuss it at this time, however, we -----

MR. CAMPBELL: We don't want to be in the position of hiding behind the ball and having to spend the money to drill the well and then come in and take the position that they are not entitled to even a 40-acre allowable which we would be forced to do on the basis of our present information and I just want to make that point clear so that in the future if the well is drilled and completed and the information obtained is no more than we now have, we want to reserve the right to take the position of what allowable can be attributed on the basis of the then established productive acreage on the edge of the pool.

MR. GASSETT: How would you propose to set the allowable for this month?

MR. CAMPBELL: We are not seeking to set it, but we don't think it should be any greater than the proved productive acreage under your lease. If I have made myself clear on that, as far as our position is concerned, I would like to ask a few questions of the witness, if I may.

MR. MANKIN: Might I add before we go ahead on this that I have repeated that the call of the hearing concerned itself with only the unorthodox location and the position would be that setting of the allowable for this well would concern itself with a separate hearing after the well is drilled.

MR. CAMPBELL: Mr. Simms, do you have some information on connection with your Sunray Mid-Continent Well 1-65 with you?

MR. SIMMS: Some, yes, sir. What would you like?

MR. CAMPBELL: What was the total depth to which that well was drilled?

MR. SIMMS: This well was drilled 10,793.

MR. CAMPBELL: And what do you establish the elevation tobe at that location?

MR. SIMMS: 4240 is what we are using here.

MR. CAMPBELL: That would be 6503, approximately?

MR. SIMMS: 6552.

MR. CAMPBELL: 6552?

MR. SIMMS: Am I right? Must be a sub-sea, yes, sir?

MR. CAMPBELL: Now, at the time you abandoned that well, had you yet reached the top of the Mississippian?

MR. SIMMS: We had not.

MR. CAMPBELL: What do you consider the average water table to be in that area?

MR. SIMMS: I believe the water table is somewhere between a minus 6700 and a minus 6750 which is taken from the records in our office.

You might say there that that was the water table at the time these wells were drilled. Whether that's changed now or not, I don't know.

MR. CAMPBELL: Are you satisfied that you have sufficient information at this time for an interpretation of a fault generally in the direction and at the point that you have indicated on this contour?

MR. SIMMS: I would say again that this fault could be closer in to the dry hole in Section 11 and near the Sunray Mid-Continent dry hole in Section 1.

MR. CAMPBELL: Is it possible that it could be nearer the dry hole in Section 11 and further from the Sunray Mid-Continent Well in Section 11?

MR. SIMMS: Closer in. You mean closer to the west line?

MR. CAMPBELL: Closer to the west line, in other words, more vertical-----

MR. SIMMS: It could be any way.

MR. CAMPBELL: Until you drill this additional well, you won't be certain about that.

MR. SIMMS: We won't know then unless it cuts a fault, but we will have it pinned down a little closer.

MR. CAMPBELL: Is it possible that this could be a Devonian structure with a very steeply dipping plank as has been encountered in some areas in the Devonian formation, rather than an actual fault?

MR. SIMMS: It may be either one, but the results are the same.

MR. CAMPBELL: Does your company have any seismic information to substantiate the possiblity of the fault or of the steeply dipping plank here?

MR. SIMMS: Our company has shot in this area as crossed into the Bagley Field. The record quality on the west side -- on the east side of the Bagley Field is very poor and very questionable, indicating a disturbed area or possible fault. Our seismic maps show or indicate the fault on the east side of this field.

MR. CAMPBELL: I believe that is all.

MR. MANKIN: Is there further question of the witness?

MR. MONTOGMERY: Mr. Simms, in regard to the top of the Atoka, I assume that this well was and you stated that it was completed in the Atoka at total depth?

MR. SIMMS: That's our interpretation of it.

MR. MONTGOMERY: I notice you have 15 feet in the well of the Texas Company's No. 1 "B".

MR. SIMMS: That is an interpretation made on Schlumberger and I would not argue that point with anybody, but it does not matter if it's gone, you still have the Atoka and the Sunray Mid-Continent Well and it certainly can be gone on top of the structure because it is very high structure for the area.

MR. MONTGOMERY: Then it is your opinion that the Atoka has been eroded off portions of this structure?

MR. SIMMS: Or never was laid down. I'd like to point out that this Atoka pick is backed up by some fossil or bug information from the Hollandsworth Laboratories.

MR. MONTGOMERY: I was wondering if you would explain the difference between the two points which are 1320 feet apart where in the dry hole of the Sunray Mid-Continent, you have an estimated thickness of the Atoka of some 538 feet and in the Texas Pacific Coal and Oil No. 1 "B" you have only 15 feet.

MR. SIMMS: Now that's based on a Schlumberger interpretation and as I said before the T & P Coal and Oil you may go out of your earlier Pennsylvanian into the Mississippian and may have not cut an Atoka Section. It may be missing in that particular well. The average thickness that we show here or the thickness we show of the Atoka to the Mississippian is more or less taken from the well in the general area off to the East as we interpret the Atoka Section to or the top of the Section to the top of Ranchera Mississippian Line.

MR. MONTGOMERY: What is the average in the area that we are talking about?

MR. SIMMS: Well, I would say around 500 feet would be a good guess on that.

MR. MONTGOMERY: What was the environment during the Atoka time? I am asking this for just general information.

MR. SIMMS: Well, I would say this: The Atoka formation is principally made up of shales and sands and normally on most logs it is a point which can be picked but may be not quite as good as some of the other breaks.

MR. MONTGOMERY: Was there erosion sometime during the Atoka time that caused this thing to affect the structure?

MR. SIMMS: There could have been erosion during the Atoka times or some of these structures may have been high enough that the Atoka was not laid down.

MR. MANKIN: Is there further question of the witness?

MR. CAMPBELL: If the Commission pleases, I would like to comment for the record at this time and that is that the Commission records will reflect that Texas Pacific Coal and Oil Company Well No. 1 "D" in the NE/4 of the NE/4 of Section 2 was completed as a producing Devonian Well, but has been shut-in for a period of some 2 1/2 years in order to comply with the spacing pattern in this pool. I make that comment only for future reference in connection with any allowable hearing that may be held on a well offsetting it on a 330 foot location.

MR. MANKIN: Further question of the witness? If not the witness may be excused. Is there any further statements to be made in this case?

If not, we will take the case under advisement. Oh, I am sorry, we will

re-open as we wish to enter Exhibits 1 & 2 in evidence. Is there any objection to entering Exhibits 1 and 2 in evidence in this case? If not, they will be so entered. We will take the case under advisement. The hearing is adjourned.

STATE OF NEW MEXICO)

SS

COUNTY OF SANTA FE

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I, Dora Serna, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Commission Examiner at Hobbs, New Mexico, is a true and correct record, to the best of my knowledge, skill and ability.

Dated at Santa Fe, New Mexico on this 8th day of August, 1956.

Hora Serna