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Application, Transcript,
5 mall Exhibits, Etc.

BEFORE THE OIL CONSERVATION COMMISSION STATE OF NEW MEXICO

TRANSCRIPT OF PROCEEDINGS

Case No. 353

Regular Hearing May 20, 1952

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COURT REPORTERS
ROOM 12, CROMWELL BLDG.
PHONES 7-9645 AND 5-8846
ALBUQUERQUE, NEW MEXICO

BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

May 20, 1952

(Readvertised upon submission of revised application) The Texas Company's application for 80-acre spacing for wells drilled to the common source of supply as discovered in Amerada's State EC "A" No. 1 well, NE NW 14-12S-32E, Lea County, in the East Caprock-Devonian Field.

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Case No. 353

(Notice of Publication read by Mr. Graham.)

MR. RAY: I have one witness.

MR. CAMPBELL: At the last hearing I entered an appearance in this case for the Leonard Oil Company. I would like to have the record show that I also appear for Sunshine Royalty Company, Roswell, New Mexico.

MR. RAY: The Texas Company in this case is requesting temporary order of the Commission approving for a period of one year 80-acre proration units and uniform spacing pattern for the wells in the East Caprock-Devonian Field. We believe such an order will provide for orderly and proper development of the reservoir, will prevent waste, and conserve steel by the drilling of unnecessary wells.

MR. SPURRIER: If you could speak just a little louder, please.

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MR. RAY: As the development in this pool is still in the initial stages, we are requesting a temporary order of the Commission to provide a regular spacing pattern for the future development and to allow for the accumulation for the additional reservoir data.

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having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. RAY:

- Would you state your name? Q
- J. V. Blackwood. Α
- By whom are you employed? Q
- By the Amerada Petroleum Corporation. A.
- In what capacity? Q
- District Engineer, West Texas-New Mexico District.
- Have you previously testified before the Commission? Q.
- Yes, I have.

MR. RAY: Are the witness' qualifications acceptable to A the Commission?

They are. MR. SPURRIER:

- In your capacity as District Engineer, have you been in charge of supervision of engineering work for your company in the area of the East Caprock-Devonian Pool?
 - Yes, I have. A

(Marked Exhibit No. 1 in Case No. 353, Texas Company,

for identification.)

- Q I hand you what has been marked as Exhibit 1 and ask you what it is.
- A It is a map showing the general area of the East Caprock-Devonian Pool, Lea County, New Mexico.
- Q Does this, in your opinion, show the wells that have been completed and the wells that are being drilled in this area?
- A Yes, it does. Two of the wells that are shown on this map are drilling wells and are now completed.
- Q The Amerada EC "D" and the Amerada Posey No. 1, which is shown as drilling wells here have recently been completed, is that correct?
 - A Yes, that is correct.
- Q In your work in this area have you studied the electric logs of the wells in this field?
 - A Yes, I have.
- Q Can you give the top of the Devonian formation as it was found in your EC "A" well?
- A The top of the Devonian, and as indicated by the electric log, was 11,244 feet or 6,880 feet below sea level.
 - Q Do you have an electric log of that well?
 - A Yes, I do.

(Marked Texas Company Exhibit No. 2 for identification.)

MR. RAY: I would like to submit in evidence Texas

Company Exhibit No. 2, the electrical log of the Amerada EC "A"

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well.

MR. SPURRIER: Without objection it will be received.

Can you give us the top of the Devonian formation found in the Amerada, State of New Mexico, EC "C" well?

The log indicated the top at 10,989 feet or 6,628 feet below sea level.

MR. CAMPBELL: What was the figure?

- 10,989. A
- Do you have a log of that well? Q.

(Marked Texas Company Exhibit No. 3 for identification.) Yes. A MR. RAY: As Exhibit No. 3 I would like to submit the electric log on the Amerada EC "C" well.

MR. SPURRIER: Without objection it will be received.

- Do you have the top of the Devonian formation as found in the Amerada, State of New Mexico, EC "D"?
- The top is indicated by the electric log 11,140 feet or A 6,729 feet below sea level.
 - Do you have a log of the EC "D" well? Q
 - A

(Marked Texas Company Exhibit No. 4 for identification.) Yes. MR. RAY: I would like to submit Exhibit No. 4 as the

electric log. State of New Mexico. MR. SPURRIER: Without objection it will be received.

Do you have the top of the Devonian formation as found Ĝ

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in your Amerada Posey No.1well?

A The top of the Devonian is indicated by electric log in the Amerada Posey well 11,158 feet or 6,808 feet below sea level.

- Q Do you have an electric log of that well?
- A Yes.

(Marked Texas Company Exhibit No. 5 for identification.)

MR. RAY: Exhibit No. 5, I would like to submit the electric log --

MR. SPURRIER: (Interrupting) Without objection it will be received.

Q I hand you an electric log on this Texas Company, State of New Mexico, BF No. 1 well. Would you look at that log and determine the top of the Devonian formation in this well. This is the Texas Company BF.

A The electric log indicates that the top of the Devonian is approximately 11,312 feet.

- Q What would be the subsea datum?
- A The elevation shown, it would indicate that the subsea datum is minus 6940.

(Marked Texas Company Exhibit No. 6 for identification.)

MR. RAY: Texas Company No. 6, I would like to present the log on the State of New Mexico BF.

MR. SPURRIER: Without objection the Exhibit No. 6 will be received.

Q In your study of this area have you determined a water

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table in the Devonian formation?

A We have drill stem tests and production tests that indicate that the water level is approximately minus 6910.

- Q That shows that our BF with a top at 6940 was approximately 30 feet below the water, is that correct?
 - A Yes, that is correct.
 - Q And for that reason the well did not make a producer?
 - A That is right.
- Q Has your company taken any production tests of your completed wells in this area?
 - A Yes, we have.
 - Q Have you measured any productive indices?
 - Yes, we have measured productive indices on two wells.
 - Q What wells were those?
- A The State EC "A" No. 1 and the State EC "C" No. 1.

 These are the only two wells that have been completed very long.
- Q Could you describe briefly to the Commission the results of those two tests?

A The test in the EC "A" No. 1 was taken for 48 hours through a 3/8 inch choke. The flow we had at an average daily rate of 504 barrels per day. The bottom hole pressure drop was 507 pounds given a productive index of .994 barrels per day per pound drop. This well is producing from a 10-foot perforated zone. In the State EC "C" No. 1 the well was tested for 24 hours through a 1/4 inch choke and flowed 1,117 barrels. The bottom

hole pressure drop we were unable to measure. It didn't drop enough for us to record the drop. The well is producing from 70 feet of open hole.

- Q In your EC "C" well you state you were unable to record any bottom hole pressure drop?
 - A Yes.
 - Q That would indicate then almost an infinite P. I.?
 - A Well, --
 - Q (Interrupting) Very high?
 - A Not infinite but extremely high.
- Q In your opinion what do these tests indicate about the nature of the reservoir?
- A These tests indicate that permeability in the reservoir is quite good.
- Q The P. I. you testified to in your EC "A" well is approximately one, that represents 10-foot section, 10-foot productive section?
- A Yes, that is right. EC "A" only had a short section above water.
- Q How much section above water approximately is in that well?
 - A Approximately 30 feet.
- Q In measuring these P.I.'s did you record a static bottom hole pressure for the reservoir?
 - A Yes, the initial pressure recorded for the reservoir

was in State EC "A" No. 1 on September 13, 1951, and was 4,454 pounds per square inch.

- Q Is that relatively close in your opinion to the original bottom hole pressure of this reservoir?
- A Yes, it is. The well had only produced some 1,900 barrels of oil and had been shut in for almost 10 days.
- Q Do you have a copy of the P. I. tests that we can submit to the Commission?

A Well, not very handy. Yes, I can get to them. We have a copy here of the one on the EC "A" and one on the EC "C".

(Marked Texas Company Exhibits No. 7 and 8 for identification.)

MR. RAY: Texas Company's Exhibits No. 7 and 8 I would like to submit P.I. tests of EC "A" and EC "C" wells.

MR. SPURRIER: Without objection they will be received.

- Q The permeability indicated by these P. I. tests, in your opinion, is very good in this reservoir?
 - A Yes, that is correct.
- Q Based on these P. I. tests do you think it is indicated that one well may drain a considerable area?
 - A Yes.
- Q Do you feel that these tests furnish a basis for the statement that one well may drain adequately an area of 80 acres?
 - A Yes, I believe they do.
 - Q Do you have any additional information on this reservoir

that you feel should be brought before the Commission's attention?

A No. I really don't have any more information on the reservoir at the present time.

MR. RAY: I have no further questions at this time.

MR. SPURRIER: Does anyone have a question?

MR. CAMPBELL: Is this witness in a position to testify as to the proposed location of these units or are you going to do that?

MR. RAY: I see. I will bring it up.

By MR. RAY:

- Q You have read the Texas Company's application in this matter?
 - A Yes, I have.
- Q In this application what is the requested location for the spacing pattern?
- A The requested location, that wells be located in the center of the northeast and southwest 40-acre tracts of each quarter section.
- Q In your opinion will such a pattern provide for regular development of this field?
 - A Yes, as far as I can see.
- Q In the matter of setting allowables for the requested 80-acre units, would allowable be determined by multiplying by 1.5 the normal allowable for a normal 40-acre unit with deep adaptation give approximately daily production of 450 barrels?

- A This month it would be something just a little less than 450 barrels.
- Q 450 barrels would be the figure you would get with 53 barrels for a 40-acre unit allowable?
- A I am not sure of that. I don't recall the shallow well allowable at the time, but the 40-acre allowable in East Caprock-Devonian was 301 barrels per day.
- Q In your opinion, based on the production tests available, do you at this time, do you think that these wells can produce an allowable of that nature without waste?
 - A Yes, I do.
- Q You think the productivity of the wells is indicated to be sufficiently good for that production?
 - A Yes.

MR. RAY: That is all I have.

By MR. CAMPBELL:

- Q Mr. Blackwood, in connection with the application of The Texas Company for 80-acre spacing in this field, you have stated that the wells are to be located in the northeast and southwest quarter, quarter section, is that correct?
 - A Yes, that is what is stated in the application.
- Q How do you propose to attribute the additional 40 acres by east-west rectangular 80-acre units, north-south diagonal, or on what basis?
 - A Well, it isn't stated in the application, but I see no

reason why it couldn't be on either north-south 80's or east-west 80's.

- Q You mean optional or do you mean it ought to be one or the other?
 - A Well, it could be optional.
- Q You feel that it would make no difference as far as you are concerned whether the tract, the 40 acres that you are attributing to this well, is to east or west, or north or south, or diagonal?
- A I hadn't considered the diagonal question, but I don't think it would make any difference in the other two cases.
- Q Would you leave that up to the owner of the lease, is that what you recommend?
 - A Yes.
- Q Then your application now is that the well be situated on a fixed pattern basis in the southwest quarter, quarter or the northeast, and that the owner of the lease had the option of running his unit, 80-acre unit, either north or south or east or west.
- A That would be my idea. I am not sure what the Texas Company has in mind in that application.
- Q It makes considerable difference to royalty owners which way it goes. You are not making any recommendation to the Commission in that regard?
 - A No. That is my point.

- Q In connection with your Exhibit No. 1, I believe you stated that your Posey A-1 well in the southwest of the southeast of Section 11 has now been completed?
 - A Yes.
 - Q When was that completed?
 - A That well was completed in April, April 25, 1952.
- Q Do you have any data on the well in addition to what, have you given any completion data on it to the Commission?
- A Not anything except the log which was given as an exhibit. The electric log and the top of the Devonian.
- Q You don't have any P. I. or anything of that kind on that well?
- A No, I haven't run a productivity index. We have a completion test on it.
 - Q What was the initial production of that well?
- A The test was 330 barrels of oil in nine hours on a quarter inch choke. The gas-oil ratio was 16.
- Q How does that well compare with your EC "C" well No. 1, in your opinion?
 - A It compares very favorably.
 - Q Your EC "C" is it a better well than the EC "A"?
 - A Yes, it is better than the EC "A".
- Q You have also completed your EC "D" well in Section 2, is that correct?
 - A Yes, that is correct. It was completed May 2.

- Q What did your initial test show on that?
- A The production during the first 24 hours was 888 barrels.
- Q Quarter inch choke?
- A No, the first eight hours were on 3/4 inch choke, one hour on 1/2 inch, and the rest of the time 1/4 inch.
 - Q How does that well compare with your EC "C" well?
- A It compares very favorably. Of course, it doesn't have quite as much section above water.
 - Q How much section does it have above water?
 - A EC "D" has 181 feet above water.
- Q The EC "C" well is apparently the highest well in the field so far?
 - A So far, yes.
 - Q How much section have you got there?
 - A 282 feet above water level.
- Q Doesn't Amerada now have a well drilling in the southwest quarter of the southeast quarter of Section 2, the EC "E" well?
 - A Yes, that is correct.
- Q That should be shown on here then, shouldn't it? It is not on your Exhibit 1, is it?
 - A No, it isn't on Exhibit 1.
 - Q That is a direct 40-acre offset to your EC "D" well?
 - A Yes.
 - Q And your EC "D" well is of the pattern that you are

proposing here?

- A Yes, that is correct.
- Q And you are seeking an exception for that well and for one other well, are you not?
- A The Texas Company's application they ask for one on their State BA, I believe.
 - Q Do you know whether that well is drilling or not?
 - A I don't know. No.
- Q Your application, I believe, recommends to the Commission that anyone who wishes to drill a 40-acre location may do so without hearing and their allowable will be one-half of the one and half allowable or three-fourths of a normal 40-acre allowable.
 - A I believe that is the way it read.
- Q Do you think your EC "A" and Texas Company BA well, which are both off pattern, should have that allowable?
 - A Should have which allowable?
 - Q Half of the one and half allowable?
- A No, not unless the lease, not unless another well is drilled on the lease.
- Q What is the present status of your EC "A" well, discovery well?
 - A It is on production. It is pumping.
- Q What is the reason for its pumping if it is such a good well?
 - A Well, it is making some water.

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- Q How much water is it making?
- A About 35 per cent.
- Q When did it start making that water?
- A I don't recall. It was about March of this year.
- Q What was your rate of production at that time?
- A Approximately 300 barrels per day.
- Q Do you believe that that well could be produced at the rate of 450 barrels a day if it makes water and is on the pump now?
 - A It will produce that much oil now, yes.
 - Q Don't you think that will damage it?
 - A No.
- Q You stated that in your opinion the permeability in this reservoir was very good. As I understand it, you base that conclusion on P. I. tests on two wells solely.
 - A That is correct.
 - Q Have you ever taken a core of any of your wells?
 - A No.
- Q Do you believe you can reach a decision that one well will drain 80 acres on P. I. tests on two wells?
 - A Well, not definitely, no.
- Q Without cores do you think that you can reach any reasonable conclusion as to the permeability, either the extent or the uniformity of permeability, in this reservoir?
 - A Yes. As a matter of fact, the productivity index

probably gives you a little better information on the uniformity than does core analysis.

- Q Can you determine from the P. I. tests on these two wells whether there may be in this area variations in permeability that might isolate certain zones from others?
 - A No, not on these two wells.
- Q But your opinion now is that one well in this field will drain 80 acres?
 - A Well, the information we have so far indicates that.
 - Q Why don't you ask for a permanent order then?
 - A Because we don't have all the information yet.
 - Q The fact is then --
 - A (Interrupting) On the two wells I couldn't do it.
- Q Well, the fact is on the basis of the two wells you can't say with any degree of certainty that any well will drain, adequately and efficiently, drain 80 acres?
 - A Well, not over the entire reservoir.
- Q Have you taken any tests which would give you any measurement of the permeability in this reservoir at all?
- A Well, there is a means of making a fairly good estimate by calculation from the productivity index tests.
 - Q Have you made that calculation?
 - A No, I haven't.
 - Q Have you any information on the porosity?
 - A No.

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- Q Have you any information on the pay out on these wells at the rate, at the present rate allowable 300 barrels?
 - A No, I don't.
- Q You don't have any cost information on the wells with you?
- A One of the, our second well, the State EC "C" No. 1, cost approximately \$237,000.
 - Q That was your EC "C" well?
 - A Yes.
 - Q And what is the allowable of that well?
- A I don't recall what it is this moment. It is something just less than 300 barrels.
 - Q You haven't computed the pay out period on that basis?
 - A No, I haven't.
- Q Do you feel that there is, I gather from your testimony you feel these are good wells, that there is no question in your mind about the economics of this thing insofar as the wells paying out is concerned, is there?
 - A No, not so far.
 - Q Do you have any reason to believe that there will be?
 - A No.
- Q What is the present status of the Posey No. 2 well. How deep is that?
- A I don't know at the present time, but it isn't very deep, probably in order of 4,000.

- Q You have four completed wells in the reservoir?
- A Yes.
- Q Do you know whether the Texas Company BF well, did it have Devonian sectional right?
 - A Yes, it did.
 - Q Did it get any oil shows at all, do you know?
 - A I don't believe it did.
- Q Do you have any information that would indicate whether the pay section within the Devonian in each of these wells is the same or approximately the same? Are they producing from the same area in the Devonian?
 - A Yes, as far as I know.
- Q Do you have the information as to whether they are actually open and producing each of the wells?
 - A Yes, I do.
 - Q Could you give that to me, please?
- A The EC "A" No. 1, with the top of the Devonian 11,244, is producing from perforations from 11,260 to 270.
 - Q And the EC "C"?
- A EC "C", with the top of the Devonian at 10,989, is producing from open hole, 70 feet of open hole, from 11,170 to 11,240.
 - Q The EC "D"?
- A EC "D" No. 1 is producing from 56 feet of open hole from 11,204 to 11,260.

Q Posey No. 1?

A Posey No. 1 is producing from 70 feet of open hole from 11,160 to 11,230.

Q If the computation on that cost of your EC "C" well No. lindicates an approximate pay out period on that well of 14 months, won't you say that was a pretty good well?

A Yes.

MR. CAMPBELL: I think that is all.

MR. SPURRIER: Let's take a five minute recess.

(Recess.)

MR. SPURRIER: We will proceed with Case No. 353.

MR. COLLISTON: I would like to ask the witness one or two questions.

MR. SPURRIER: Mr. Colliston.

MR. COLLISTON: Mr. Colliston representing Continental Oil Company. Mr. Blackwood, the Texas Company application in paragraph nine states the allowable for the 80-acre unit shall be calculated as follows: "The allowable assigned any well within the common source of supply shall be determined by multiplying the allowable for a normal 40-acre unit by the usual depth factor by 1.5." Are you proposing that as a special field rule to apply to the distribution of allowables within this field?

A I believe that was their intention.

MR. RAY: That is right. We are suggesting that as the allocation formula for the Caprock-Devonian Pool.

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MR. COLLISTON: It is true that could be a special field rule?

MR. RAY: We are merely suggesting the 1.5. We feel that it should be greater than 1.0 and that 1.5 is our recommendation.

MR. COLLISTON: You think the second 40 acres added to the first 40 acres should have some consideration in calculating the allowable?

MR. RAY: It is our purpose to set up the allocation for the 80-acre unit.

MR. COLLISTON: Within the pool?

MR. RAY: Within the pool.

MR. COLLISTON: You are not proposing the 40-acre allowable multiplied by 1.5 to be the formula for allocation to the field of its proportion of the state's allowable?

MR. RAY: Would you state that again?

MR. COLLISTON: You are not proposing the 40-acre allowable with deep well adaptation multiplied by 1.5 to be the formula for allocating oil to the pool, forgetting its proportion on the state's allowable?

MR. RAY: Yes.

MR. COLLISTON: I am speaking now of allocation between fields.

MR. RAY: We are proposing that the standard 40-acre unit be multiplied, that is with the appropriate depth modification

be multiplied 1.5 to determine the allowable for the 80-acre proration units we are requesting of the pool.

MR. COLLISTON: Within the field. Then it is a special field rule?

MR. RAY: That is right.

MR. COLLISTON: That is all.

MR. WHITE: Are all these wells capable of producing their full allowables?

A Yes.

MR. WHITE: EC "A", that is the one that is on pump and pumping so much water, is it not?

A Yes.

MR. WHITE: Is it producing its full allowable now?

A Yes, except for pipeline proration at the present time. It is capable of producing the present allowable.

MR. WHITE: That is all I have.

MR. SPURRIER: Any more questions?

MR. CAMPBELL: I would like to ask Mr. Ray a question. I don't know how to quite go about it. I would like to ask him if he knows whether it is The Texas Company's recommendation that these 80-acre units be north-south or east-west, depending on the option of the operator of the lease. Is that your recommendation or do you propose to the Commission some particular adjustment of the 80-acre tracts in this field?

MR. RAY: In our application we have not. We have not

defined the 80-acre units as either running north or south or east or west. Our purpose was that the operator could designate either way to suit the area of his lease. We did contemplate that they would be either east or west or north and south and would include portions of government quarter sections. In other words, quarter sections, there wouldn't be any diagonal units.

MR. CAMPBELL: Have you made any study in connection with that to see what the effect of diverse lease ownerhip would have upon the units in connection, for instance, with isolated 40-acre leases in the field?

MR. RAY: No, I have not.

MR. CAMPBELL: Have you ever made any effort in this field to unitize either the leases or the royalty or both?

MR. RAY: No.

MR. CAMPBELL: No effort has been made to unitize the field?

MR. RAY: Not to my knowledge.

MR. CAMPBELL: Don't you think the same thing could be accomplished by unitizing the field?

MR. RAY: I think that is quite possible.

MR. CAMPBELL: I think that is all.

MR. SPURRIER: Any more questions?

MR. RAY: I have a few more questions to direct to my witness.

Q Could you give me the base of the perforations in your

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EC "A" well, the subsea datum?

- A The subsea datum, or the base of the perforations in State EC "A" No. 1 is 6906.
 - Q How much is that above the water table in this field?
 - A Well, about four feet.
 - Q This well was originally drilled to water, was it not?
 - A Yes, it was drilled well below the water line.
- Q Then casing was set and cemented and it was perforated after that time?
 - A Yes.
 - Q Is that right?
 - A Yes.
 - Q How was the casing perforated?
 - A General perforations.
- Q Then it would be quite possible with such a small separation above water to crack your cement sheet and allow bottom water to be produced in that well, is that right?
- A Yes, it is easily possible. That is pretty close to water.
- Q In your opinion, the water production of your EC "A" is not an unusual thing?
 - A No, it isn't.
 - Q It discloses no detrimental reservoir characteristics?
 - A No.
 - MR. RAY: That is all the questions I have.

MR. SPURRIER: Any further questions of this witness?

MR. MACEY: Mr. Blackwood, in regards to the P. I. test
on the EC "C" No. 1, do you think that P. I. test is representative of that well?

A Yes, I do.

MR. MACEY: You don't think there is a possibility that you could have had a malfunction?

A I don't think so, no.

MR. MACEY: Did you run any subsequent test after this test?

A No.

MR. MACEY: In normal testing of wells, don't you think that is a little unusual to have a P. I. test that produces 1,100 barrels of oil when you have absolutely no drop in bottom hole pressure?

A It is unusual, yes.

MR. MACEY: Have you ever run across one before?

A Yes, I have.

MR. MACEY: In what area, could you tell me?

A In the Devonian at the Hightower Pool.

MR. MACEY: Absolutely no drop in bottom hole pressure?

A None that we could measure.

MR. MACEY: That is all.

MR. SPURRIER: Any other questions? If not, the witness may be excused.

(Witness excused.)

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MR. RAY: I would like to submit as Texas Company's Exhibit No. 1 a map of the area.

MR. SPURRIER: Without objection it will be received.

Does anyone have anything further in this case?

MR. RAY: I would like to make a closing statement.

MR. SPURRIER: Any other witnesses to appear?

MR. COLLISTON: I would like to make a statement.

MR. SPURRIER: Go ahead.

MR. COLLISTON: Continental Oil Company is not concerned in this field and therefore not concerned with The Texas Company's application except for its recommendation that the allowable be calculated by multiplying the 40-acre allowable with deep well adaptation by one and a half. The witness has stated that he intends that to be the special field rule for this field. It was not necessarily testifying as to allocation between fields. The question of allocation between fields for 80-acre fields with deep well adaptation was covered in Commission Hearing Case No. 313 held October 23, 1951, which was application on the Commission's own motion for an order amending Rule 505 oil proration, with particular reference to paragraph 2, proportional factors for deep wells under various spacing patterns. At that time Continental's arguments as to the proper calculations for double allowables for multiplying allowables was clearly brought out and the matter is now under advisement by the Commission. I would like to include the record of Case No. 313 into the record of this case by

reference.

MR. SPURRIER: Very well. Mr. Macey, you want to read those letters?

MR. MACEY: We have a number of letters from royalty owners in this area. The first is written by Coleman W. Robinson and Elbert Robinson, addressed to Mr. R. R. Spurrier:

"Dear Sir:

I own the land and minerals in 11 South, 32 East, around Texas Company's No. 1 Moore, and want to go on record opposing 80-acre spacing.

Please enter the protest before the Oil Conservation Commission hearing.

Respectfully yours,"

MR. RAY: I would like to point out that the area around our Moore well is not located in this reservoir.

MR. MACEY: The other is a letter from Gertrude C. Whittle, Lovington, New Mexico, addressed to the Oil Conservation Commission of the State of New Mexico, Santa Fe:

"Gentlemen:

I am a royalty holder on the Posey land which is in the EC "A" area. The land belonged to my mother originally. We have long awaited the possibility of getting a good income from this property to take care

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of us in our declining years.

I wish as of today to enter my protest against the 80-acre spacing requested in the above numbered application. Will you please give this your careful consideration.

Why shouldn't this pool be developed like other pools in this county?"

Reference is to Case 353.

Letter from F. J. Danglade, Lovington, New Mexico, regarding Case No. 353, addressed to the Oil Conservation Commission of the State of New Mexico, Santa Fe, New Mexico:

"Gentlemen:

As a royalty holder within the limits of the estimated productive portion of what has been designated East Caprock-Devonian Pool, I wish to register my protest against the temporary establishment of 80-acre proration units therein for the following reasons:

- 1. Lack of conclusive evidence that such spacing will adequately deplete the available source of supply.
- 2. So many exceptions will be necessary, including those requested in the application that an unfair situation will be created for those who are limited to spacing requested.

Respectfully submitted,

/s/ F. J. Danglade"

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J. Clyde Tomlinson, Longview, Texas, Oil Conservation Committee, State of New Mexico:

"Dear Sirs:

It is my understanding that The Texas Company and Amerada Petroleum Corporation have made application for 80-acre spacing pattern for the development in East Caprock-Devonian Field, Lea County, and that a hearing on this application will be held on May 20.

As the owner of substantial mineral interests in this immediate area, I desire to take this method of filing with your Honorable Body my opposition to an 80-acre spacing pattern in this field.

Thanking you for your consideration, I am,
Yours very truly,
J. Clyde Tomlinson"

The last is a letter from the First National Bank, Lubbock, Texas, addressed to the Oil Conservation Commission, Santa Fe, New Mexico:

"Gentlemen:

With reference to the application of The Texas

Company and Amerada Petroleum Company to you for 80-acre

spacing permit for the East Caprock-Devonian Pool in Lea

County, wish to say that my wife owns 120 acres of

minerals; her nephew, Paul Sparkman, owns 60 acres of

minerals; and sister, Mrs. Gertrude Whittle, owns 50 acres minerals southwest quarter and east half of the northeast quarter of Section 11 and north half of northeast quarter of Section No. 14, all in Township 12, Range 32 East.

The Amerada has drilled and is producing oil from No. 1 EC "A" well 660 feet west from the 80 acres north half of the northeast quarter of Section No. 14, 11 South, 32 East.

Also finished and is producing oil from EC "C" 660 feet north of the northwest quarter of the southwest quarter of Section 11, 12 South, 32 East.

This same well is 660 feet west of the east half of the northeast quarter of said Section 11, 12 South, 32 East.

We are due offset to these two wells and must protest this application for an 80-acre spacing as regards our holdings there. We beg your consideration and protection as to these offsets.

Yours very truly,
W. S. Posey
Agent for Haley C. Posey
Agent for Paul N. Sparkman
Agent for Gertrude C. Whittle"

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MR. RAY: I would like to state for the Commission that insofar as possible we have tried to get all the reservoir data that is presently available into the record. We have brought this application at this time even though more information would be desirable to definitely show that one well will drill 80 acres or one well will drain 80 acres in order to provide for development on a regular spacing pattern.

The Texas Company will core our BB well. We will take all steps to secure additional data. We are asking for a temporary order with the thought in mind if the application is granted that at a later hearing we can present full factual data to support this. We think no detriment will be worked by developing for a period of one year the reservoir on the spacing pattern we requested.

We are asking that the following area be included:
All of Section 2, the east half of Section 10, all of
Section 11, west half of Section 12, west half of Section 13, all
of Section 14, the east half of Section 15, all sections located
in Township 12 South, Range 32 East. That area is delineated by
the red line on our Exhibit 1. We are asking that 80-acre proration units be established for the East Caprock-Devonian Pool.

2. That all wells drilled should be located in the center of the northeast and southwest quarter of each governmental quarter section with a tolerance of 100 feet in any direction to avoid surface obstructions. Except the following locations: The

southeast quarter of the southwest quarter of Section 2, the northwest quarter of the northwest quarter of Section 14, which locations we request be designated as the wells for the proration units upon which they are located.

- 3. That no well shall be drilled or produced in the said pool except in conformance with the spacing pattern set forth above, except in order to protect corelative rights and increase without waste the ultimate recovery. The Commission shall have the right to approve without hearing the drilling of a well located in the center of any quarter of a governmental quarter section with a tolerance of 100 feet to avoid surface obstructions.
- 4. That all wells producing and hereafter completed in East Caprock-Devonian Pool be given allowable equivalent to one and a half times the top allowable for the 40-acre proration unit with deep pool adaptations.
- 5. If any well is drilled as an exception to the well spacing pattern set forth above under special order of the Commission the allowable for such well as compared with the allowable production therefrom of such tract with regular 80-acre unit shall be in the ratio of such tract to the area on the regular 80-acre unit. That this order shall cover all of the East Caprock—Devonian source of supply and any extension thereof which may be determined by further development shall continue in force for a period of one year from the first day of June, 1952. That each operator in the East Caprock-Devonian field shall file with the

Commission at Santa Fe on or about the 15th day of each and every month a monthly tabulated report for each well showing the allowable, the actual oil production, the water production, gas production, cumulative oil production, cumulative water production and cumulative gas production. This requirement is in addition to and similar to the other reports and surveys presently required by the Commission and is not a substitution, and is not in substitution or in lieu thereof.

- 8. That said operators shall cause a pool wide bottom hole pressure survey to be taken during the months of October 1952, April 1953. The results thereof reflecting such pressures of each well shall be submitted in writing to the Commission on or before the fifth day of the following month.
- 9. That at the regular Commission hearing for the month of May in 1953 the operators shall show cause why said pool should not be placed on 40-acre spacing with allowable adjustments.

MR. CAMPBELL: If the Commission please, that summary and the proposed order brings up something I would like to clarify the record on. Your BA well is not drilling now, is it?

MR. RAY: To my knowledge it is just a location.

MR. CAMPBELL: That is the one you are asking an exception for at this time?

MR. RAY: That is right.

MR. CAMPBELL: Any particular reason why you are asking for an exception? Why don't you put it in the orthodox place?

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MR. RAY: I don't think we object to the Commissions doing that. The reason that it was requested as an exception was that the approval to drill the well in that location was received from the Commission prior to the filing of our application.

MR. CAMPBELL: You would be willing to drill that well in the south 40 there instead of that north one? You would be willing to drill that one in the southeast?

MR. RAY: I doubt if our geologist would recommend a south location.

For the Commission's information, I would like to submit our proposed, the form of the proposed order which the Commission might take in this case.

MR. SPURRIER: Are there any more comments in this case?

MR. BLACKWOOD: I would like to make a statement on

behalf of Amerada Petroleum. We would like to concur in The Texas

Company's application. We feel that it is reasonable and see no

possibility of any damage being done to the reservoir or any

royalty owners by the issuing of a temporary 80-acre spacing. As

far as the allowable assigned 80-acre spacing, why, if testimony

in the case mentioned by the Continental representative should be

applied to this field, why, we have no objection to that, whatever

is worked out. We are not insisting on that 1.5 in any manner.

MR. RAY: I would like to state that the 1.5 is merely our recommendation. That the only thing we are concerned with is that an allowable be set for the 80-acre proration units if

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granted. We merely suggest the 1.5 figure and would accept the Commission's action as they see fit in the matter.

MR. SPURRIER: Any other comment?

MR. McKELLAR: Mr. McKellar representing Magnolia. Magnolia would like to go on record supporting this Texas Company application for a temporary 80-acre spacing order in this East Caprock-Devonian Pool. Of course I realize, even more so realize than before I came to the hearing, realize more so now that Texas Company and Amerada have little reservoir data available to place any engineering estimate whether one well will or will not drain 80 acres in the reservoir. P. I. test and all the reservoir test data which they do have indicates favorably that it will drain at least 80 acres. Of course the thing behind Magnolia in this case as in other similar cases, is that if the field can be developed on a wide spacing pattern initially that it will result in faster stepouts. The limits, productive limits, of the pool will be determined more rapidly and then should it develop that one well will adequately drain 80 acres it will result in considerable savings of time, money, and certainly, at this time, critical tubular goods. I think one point that was brought out this morning as to whether or not these wells would pay out economically and so forth, it should be, the determining test in cases of this nature should be whether the second well drilled on the 80 would drain a sufficient amount of additional oil to pay for the second well. Certainly, two wells on 80 acres will drain more oil than one well.

Four will drain more than two, but the test is will that second well on the 80 drain more oil than the one well to pay for the additional cost. We would like to go on record supporting the application.

MR. SPURRIER: Anyone else?

MR. WALKER: Don Walker with Gulf. Gulf does not have any productive acreage in this pool at this time. But we do have acreage which we think might ultimately be in the productive limits of the reservoir. We would like to go on record favoring a temporary 80-acre order to be effective until there is sufficient data to determine whether or not the 80-acre spacing is adequate to drain the property. We feel that it is never too late to convert an 80-acre drilling pattern to 40 acres. But on the other hand if you drill 40's when 80 would do the job, we certainly are contributing to a policy other than conservation. We do have a qualification to make, however, in view of the steeply dipping nature of the deeper reservoirs in New Mexico. Gulf does not feel that locations for such wells should be fixed for either 40 acres of the 80-acre pattern in the 80-acre unit.

MR. SPURRIER: Anyone else?

MR. HOWARD JENNINGS: I am a royalty owner in this. I would like to make an objection to this spacing program, in that I feel that the royalty owners are certainly not being given any consideration. Their offsets have not been protected. The Commission, the Amerada, and The Texas Company are asking the

Commission to protect them against the land owners. They are asking them to get between the land owners and them. I just don't think that the Commission should put themselves in that position. Texas Company has admitted that they haven't tried to unitize this area.

Frankly, if they, I feel that if they could go in there and unitize it, the royalty owners and lease holders would be on an equal basis. They are not worried about the individual mineral owners. They are worried about if they can get by with 80-acre spacing. Actually, they don't need a restraining order to do that. They are asking the Commission to do that for them. When you figure your allowables on one and a half basis, 1.5, actually you only get 75 per cent of your allowable if you had two wells.

Well, the royalty holder is not interested in the pay out of those wells. From the testimony that we have had today, it appears to me that a 14 or 15 months' pay out is certainly well worth drilling. In previous cases that have come before the Commission, for example, the Bagley-Hightower area, we have seen, if you will look at the map, wells drilled on 80-acre spacing. They have stepped out and gotten marginal wells due to their spacing pattern. They have drilled from four to five dry holes due to the spacing pattern.

Texas Company is asking for two exceptions already in the spacing pattern. They think they will get a dry hole if they move south in Section 14. I submit to the Commission that if they

get marginal wells due to their spacing pattern that won't make allowable and half, then where does the royalty owner stand. He has absolutely no, he has absolutely no recourse when they drill a dry hole on them. It appears to me that the Commission should deny this application immediately. We have had previous experiences where they have asked for it for six months, and asked for it for another six months, and asked for it for a year, and in effect they are getting what they want by just stalling.

MR. SPURRIER: Anyone else?

MR. JOHN TRIGG: I have a small royalty interest near the discovery Amerada EC "A" and I should also like to protest this proposed 80-acre spacing.

MR. SPURRIER: Anyone else?

1.1

MR. FOSTER: E. H. Foster representing Phillips Petroleum Company. We don't have any production in the area under
consideration, but we are very much in favor of the adoption of
80-acre spacing in this state where in fact it is justified. We
feel that if the Commission would grant this application on behalf
of The Texas Company that it would be a step in the right direction.
We are on record here in a number of instances repeating what the
Magnolia man said, if you don't start out on 80 acres you will
never get there. That is just a plain fact. You can also go back
to this 40-acre spacing if you want to. Now the statute in this
state, I have pointed this out before, doesn't require an operator
to drill more wells than is necessary to adequately develop the

land. As far as the principle objections that are usually made by the royalty owners, I think that the royalty owners would actually benefit by the adoption of 80-acre spacing wherever the facts were justified. I think he would be benefited because that would encourage the development of the deep production in the state. In addition to that the spacing pattern doesn't do away with the leases, contractual obligations, to the royalty owner to adequately develop the land. If the royalty owner feels like that the Commission's judgement isn't any good on the question of how much acreage a well will drill, he still has his remedy open to him to compel the adequate development of that land. No producer has any thought of trying to hide behind 80-acre spacing as a means of avoiding its contractual obligations. Whenever I hear a royalty owner get up and start talking about those things, I know he just isn't well informed, or he doesn't want to be well informed. I don't know which. I would be glad to inform him. like to deal with these matters direct. There isn't anything personal about it, but I think the record ought to be kept a little bit straight. Now, the next thing is that in my judgement a royalty owner cught to be bound by the conservation rules just the same as a producer. You can't play this both ends against the middle on this thing. The rules of conservation, if they are any good for producers, they are good for a royalty owner. You can't let the royalty owner operate on one set of rules and hold the producer to another set. There seems to be a little misunderstanding

on that point. If what I am saying will clear it up, then I feel like I am making some contribution to this hearing. But Phillips Petroleum Company very strongly wants to recommend the adoption of 80-acre spacing in this pool, and it appears to me that the Commission would be well justified in doing it on the present information. Later on you may want to go back to the 40 or you may want to even extend to 80. I don't know, but at the present time it seems to me that the information would well justify an order on authority of the Commission for 80-acre spacing in this pool.

MR. SPURRIER: Anyone else? If not, the case will be taken under advisement. We will move on to case, the fourth case, which is Case No. 354.

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

I HEREBY CERTIFY that the foregoing and attached transcript of hearing in Case No. 353 before the Oil Conservation Commission, State of New Mexico, at Santa Fe, on May 20, 1952, is a true and correct record of the same to the best of my knowledge, skill and ability.

DATED at Albuquerque, New Mexico, this _____ day of May, 1952.

REPORTER

ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
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PHONES 7-9645 AND 5-9546
ALBUQUERQUE, NEW MEXICO

BEFORE THE

OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

April 15, 1952

TRANSCRIPT OF PROCEEDINGS

CASE NO. 353

ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
ROOM 12, CROMWELL BLDG.
PHONES 7.9645 AND 5.9546
ALBUQUERQUE, NEW MEXICO

BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

April 15, 1952

In the Matter of:

The Texas Company's application) for establishment of 80-acre) spacing for wells drilled to) the common source of supply as) discovered in Amerada's State) EC "A" No. 1 well, NE NW) 14-12S-32E, NMPM, Lea County,) New Mexico, East Caprock-) Devonian field.

Case No. 353

(Notice of publication read by Mr. Graham.)

MR. RAY: C. J. Ray, representing The Texas Company, desires to modify their application in this case and therefore we request a continuation until the May hearing in order to provide for a re-advertisement of this amended application.

MR. SPURRIER: Is there any objection to Texas Company's motion?

MR. CAMPBELL: If the Commission please, no objection to the motion, but I would like the record to show that Atwood.

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PHONES 7-8645 AND 5-9846
ALBUQUERQUE, NEW MEXICO

Malone and Campbell, Roswell, New Mexico enter an appearance in 353 for Leonard Oil Company, Roswell, New Mexico.

MR. SPURRIER: It will be recommended to the Commission that the case be continued to the May 20th hearing. The case will be re-advertised.

* * * * *

STATE OF NEW MEXICO)

COUNTY OF BERNALILLO)

I, ADA DEARNLEY, do hereby certify that the above and foregoing transcript in Case No. 353 is a true and correct record of the proceedings before the Oil Conservation Commission on April 15, 1952, to the best of my knowledge, skill and ability.

WITNESS MY HAND AND SEAL this 16th day of April, 1952 at Albuqueruqe, New Mexico

Court Reporter

My Commission Expires:
June 19, 1955.

ADA DEARNLEY & ASSOCIATES

COURT REPORTERS

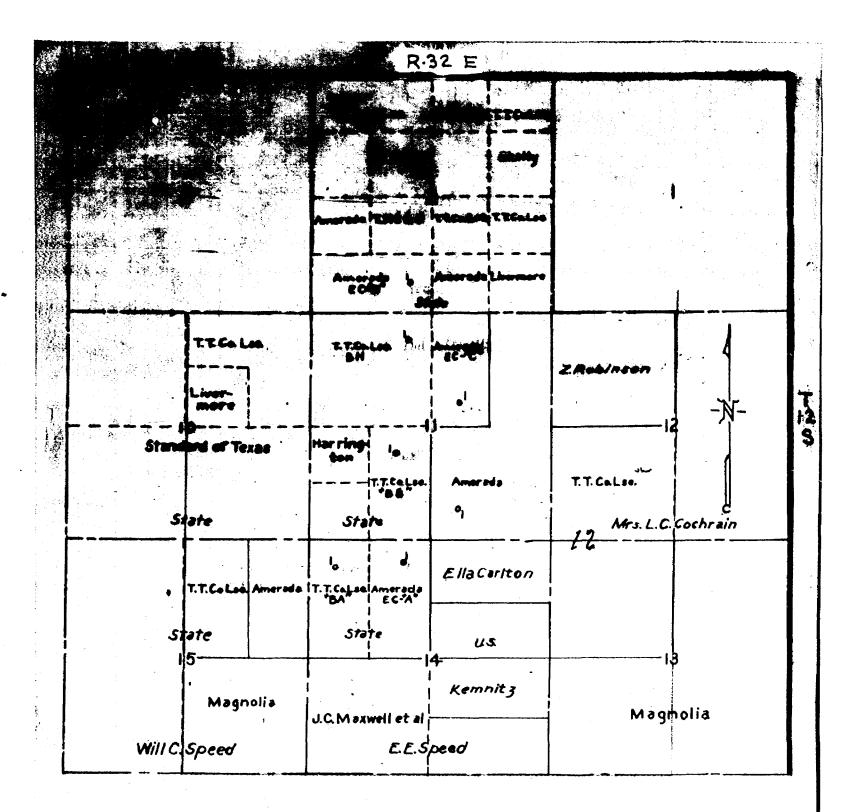
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Magnolia	J.C.Maxwell et al	Magholia
Will C Speed	E.E.Speed	

EAST CAP ROCK DEVONIAN POOL

LEA COUNTY, NEW MEXICO.

Scale: | "= 2000."



EAST CAP ROCK DEVONIAN POOL

LEA COUNTY, NEW MEXICO.

Scale: | " 2000,"

THE TEXAS COMPANY

TEXACO PETROLEUM PRODUCTS

PRODUCING DEPARTMENT
WEST TEXAS DIVISION



April 28, 1952

P. O. BOX 1720 FORT WORTH 1, TEXAS

Oil Conservation Commission State of New Mexico P. O. Box 871 Santa Fe, New Mexico

Attention: Mr. W. B. Macey, Chief Engineer

Gentlemen:

Enclosed please find three copies of The Texas Company's application for establishment of 80-acre proration units in the East Caprock Devonian Pool, Lea County, New Mexico. This is the amendment referred to in our letter of April 26, 1952.

Yours very truly,

Division Petroleum Engineer

CJR, Jr-ECH

APR 23 1050

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF THE TEXAS COMPANY FOR THE ESTABLISHMENT OF PRORATION UNITS AND UNIFORM SPACING OF WELLS FOR THE COMMON SOURCE OF SUPPLY IN THE AMERADA PETROLEUM CORPORATION'S STATE OF NEW MEXICO EC"A" WELL NO. 1, 660 FEET FROM THE NORTH LINE AND 1980 FEET FROM THE WEST LINE OF SECTION 14, TOWNSHIP 12 SOUTH, RANGE 32 EAST, LEA COUNTY, NEW MEXICO

APPLICATION

On behalf of The Texas Company, Fort Worth, Texas, this application is made with the following statements:

- 1. That the Amerada Petroleum Corporation has drilled and completed on August 31, 1951, its State of New Mexico EC"A" Well No. 1, located 660 feet from the North line and 1980 feet from the West line of Section 14, T-12-S, R-32-E, Lea County, New Mexico, and has discovered a new common source of supply found in said well below the depth of 11,000 feet.
- 2. The discovery well was drilled to a depth of 11,314 feet and encountered the top of the Devonian formation at 11,240 feet. Five and one-half inch casing was set and cemented at 11,314 feet with 600 sacks of cement. The well was plugged back to a depth of 11,290 feet and the casing was perforated with four holes per foot in the interval between 11,260 and 11,270 feet. On a 24-hour Potential Test ending August 31, 1951, the well flowed 549.6 barrels of pipe line oil through a ½-inch choke with a gas-oil ratio of 20 and an oil gravity of 43.3° API.
- 3. The productive portion of the new common source of supply is estimated to include the following described area:

All of Section 2, E/2 of Section 10, all of Section 11, W/2 of Section 12, W/2 of Section 13, all of Section 14, E/2 of Section 15, T-12-S, R-32-E, Lea County, New Mexico.

However, the above area is not necessarily the maximum limits of the pool. This new source of supply has been designated the East Caprock Devonian Pool.

4. In addition to the discovery well referred to above, the Amerada Petroleum Corporation's State of New Mexico ECmCm, located in the SW/4 of the NE/4 of Section 11, T-12-S, R-32-E, has been completed as a producer from this common source of supply. The Texas Company's State mBFm Well No. 1, located in the NW/4 of the NW/4 of Section 2, T-12-S, R-32-E, was drilled to this producing reservoir but did not make a commercial producer. The following wells are now drilling to the same common source of supply within the area described above:

The Texas Company State "BA" Well No. 1, NW/4 of the NW/4 of Section 14, T-12-S, R-32-E.

The Texas Company State "BB" Well No. 1, NE/4 of the SW/4 of Section 11, T-12-S, R-32-E.

Amerada Posey Well No. 1, SW/4 of the SE/4 of Section 11, T-12-S, R-32-E.

Amerada State ECⁿDⁿ Well N_o. 1, SE/4 of the SW/4 of Section 2, T-12-S, R-32-E.

5. That in order to bring about the orderly and proper development of said common source of supply, prevent waste and to avoid the drilling of unnecessary wells, and to secure the greatest ultimate recovery therefrom, and to protect the correlative rights of the interested parties therein, it is necessary and proper for the Commission to enter its temporary order of

one year's duration providing for proration units of 80 acres each, such being the area which may be efficiently and economically drained and developed by one well, and to provide for the uniform spacing of wells drilled into said common source of supply.

- 6. That all wells drilled into said common source of supply should be located in the center of the Northeast and Southwest 40-acre tracts of each quarter section, with a tolerance of 100 feet to avoid surface obstructions.
- 7. That The Texas Company's State "BA" and the Amerada's State EC"D", these wells currently drilling, which are located off the spacing pattern herein requested, should be granted exceptions to the spacing order established by the Commission hereunder and should be considered as the wells for the proration units upon which they are located.
- 8. That the order herein requested should cover all of the common source of supply discovered in the producing formation of Amerada Petroleum Corporation's State of New Mexico EC"A" Well No. 1 and their State of New Mexico EC"C" Well No. 1, and any additional wells drilled to said common source of supply should be drilled on the spacing pattern herein requested; except, that the Commission, in order to protect correlative rights and to increase, without waste, the ultimate production from this pool, shall be empowered to approve, without hearing, the drilling of a well located in the center of any quarter quarter section, with a tolerance of 100 feet to avoid surface obstructions.
 - 9. That 80-acre units shall be established as the

proration units for the East Caprock Devonian Pool. The allowable for the 80-acre unit shall be calculated by multiplying the allowable for a normal 40-acre unit by the appropriate depth factor and by 1.5. The allowable production from tracts containing less than 80 acres, compared with the allowable production therefrom if such tracts contained 80 acres, shall be in the ratio of the area of such tract to 80 acres.

10. A plat showing the area described above and the location of the wells drilled or drilling in said area is attached hereto, marked Exhibit A, and made a part hereof.

WHEREFOR, applicant respectfully requests that the Commission set this application for public hearing at a time and place to be fixed by the Commission, that due and proper notice be given as required by law, and at the conclusion of said hearing the Commission make and enter its temporary order of one year's duration determining and defining the probable productive limits of the common source of supply referred to above to include all of Section 2, E/2 of Section 10, all of Section 11, W/2 of Section 12, W/2 of Section 13, all of Section 14, E/2 of Section 15, Township 12 South, Range 32 East, Lea County, New Mexico, said pool or common source of supply having been named the East Caprock Devonian Pool, establishing proration units of 80 acres each, designating the location of all wells drilled to the said common source of supply to be the center of the Northeast and Southwest 40-acre tracts of each quarter section, except that in order to protect correlative rights and to increase without waste the ultimate production from this pool, the Commission shall be empowered to

approve without hearing the drilling of a well located in the center of a quarter quarter section with a tolerance of 100 feet in any direction from said described locations to avoid surface obstructions, and to provide for an allowable for the 80-acre provation unit calculated by multiplying the allowable for a normal 40-acre unit by the appropriate depth factor and by 1.5, with the provision that wells drilled on provation units of less than 80 acres shall be assigned allowable production in the same proportion as the acres in such unit are to 80.

Dated this 28th day of April, 1952.

THE TEXAS COMPANY

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Sheet 1 of 2 sheets

AMERADA B. TOM-HOLE PRESSURE-#EMPERA AND REPORT

231

234 12	
R.P.G. 3 NO. 4397 CLOCK NO. 10001 SPEED36 HR.	LEASE State EC MAM WELL NO. 1
ELEMENT NO.4735N RANGE 0-5600 CORR. TO 18	LOCATION Wildcat, East Caprock, Lea Co., N. Mex.
	DATE RUN 9-13-51 IME 10:18/MPULLED 9-15-51 TIME 12:30PM
	DOD-11,290' zonDevonian top //, v ⁴ b BOTTOM T.D. 11,314'
	CASING 5 1/2" DEPTH11,314 TUBING 2 3/8"DEPTH11,285"
HOURS SHUT IN 235 WELL HEAD PRESS.: CAS. PKT. TUB 450	TOP LINER PERFORATIONS 11, 260-2701
This is the first test LAST RESERVOIR PRESSURE DEPTH DATE	ELEVATION 4364 GRAVITY OF OIL 43.6 SP. GR. OF GAS
Estimated Shrinkage Factor-1	Gas Measured with Orifice Well Tester

Trap Pressure: 23 psi
Flow Line: 2"-376"
PURPOSE OF TEST

TEST RECORD

To Determine The Flowing Characteristics Of The Well.

TIME	DEPTH	PRESSURE	Press.	Prod.	Prod.	Prod. Net	P. 1.	Tog. REA	^ARKSR	Remarks
12:30P	11,264	4454						450	*****	Opened well on 3/8"
1:30	-6900)	3962	492	£1.12	20.61	21.17	0.0430	65	25	positive choke. Oil
2:30	1	3956	498		21.73	21.90	0.0440	65	23	immediately.
3:30		3956	498	•	22.08	21.56	0.0433	65	24	0% Water, 0% BS
4130	ĺ	3956	498		21.03	21.20	0.0426	65	24	•
5130	ł	39 3 6	518		21.37	21.73	0.0419	60	23	
6:30		3939	515		22.08	21.38	0.0415	60	23	
7:30]	3950	504		20.68	20.86	0.0414	65	22	
8:30	. 1	3939	515		21.03	2138	0.0415	65	19	
9:30	Ì	3945	509	. '	21.73	21.20	0.0417	70	20	
10:30	}	3945	509		20.68	21.03	0.0413	65	21	
11:30	1	3947	507		21.37	21.20	0.0418	70	22	
12:30A		3956	498		21.03	20.86	0.0419	70	19	
1:30	1	3947	507		20.68	20.86	0.0411	7 0	19	
2:30	-	3953	501		21.03	21.20	0.0423	65	19	
3:30	1	3956	498		21.37	20.69	0.0415	70	21	
4130	-	3953	501		20.01	20.52	0.0410	65	21	
5130		3956	498		21,003	20.68	0.0415	70	21	
6130		3953	501		20.68	21.03	0.0420	65	21	
7:30	1	3956	498		21.37	21.03	0.0422	65	21	
8:30	1	3956	498		20.68	20.68	0.0415	65	21.	
9:30	1	3956	498		20.68	20.68	0.0415	65	21	*
10:30	1	3956	498		20.68	21.20	0.0426	65	19	
11:30	{		-		21.73	21.73		65	19	

EXPLANATIONS OR CHART



R.P.G. N	O. CLOCK	но.	SPEED	HR.	LEASE	State EC	пУн			WELL NO. 1
ELEMENT NO.	RANGE		CORR. TO	<u>°F.</u>	LOCATION	wildcat,	East	Caprock,	Lea C	o., N. Mex.
RUN BY	CALCULATED B	Y REPO	ORTED BY	······································	DATE RU	<u>N</u> TI	ME	PULLED		TIME
				WELL	DAŢA					
POTENTIAL: CH	OKE OIL	WATER	G.O.R.		ZONE	ТОР		воттом		T.D.
HOW PRODUCE	D		P.I.		CASING	OEPI	'н	TUBING	<u></u>	DEPTH
HOURS SHUT II	N WELL HEA	D PRESS.: CAS.	TUB		TOP LINE	R P	ERFORAT	IONS		
LAST RESERVO	IR PRESSURE	DEPTH	DATE		ELEVATIO	ON GF	AVITY O	F OIL	SP. GR.	OF GAS

TEST RECORD

PIII	RPO	SF	OF	TEST

TIME	DEPTH	PRESSURE	Press.	Prod,	Prod.	Prod. No		Tog. ,	EMARKS GOR		Remarks
12130P	11,264	3939	515		21.73	21.55	0.0418	60	24		
2:30		3945	509		21.37	20.51	0.0403	60	25	•	
4:30		3942	512		19.65	21.46	0.0419	6 0	23		
6:30		3942	512		23.27	21.87	0.0427	60	21 21		
8130		3950	504		20.38	20.53	0.0407	60	21		
19130		3947	507		20:68	20.68	0.0408	60	19		
12:30A		3945	509		20.68	20.53	0.0403	60	22		
2:30	}	3945	509		20.38	20.45	0.0402	60	22		
4:30		3947	507		20.51	20.45	0.0403	60	21		
6:30		3947	507		20.38	20.45	0.0403	6 0	21		
8:30		3947	507		20.51	20.51	0.0405	60	22		
10:30		3936	-518		20.51	20.34	0.0393	60	24		
12:30		3936	518		20.16	20.16	0.0389	60	25	Test	Concluded.
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EXPLANATIONS OR CHART

Total production during test-1004.90 bbl in 48 hours Total production prior to test-1970.93 bbl On drill stem test-186.30 bbl After completion and prior to test-1784.63 bbl

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Hours

R.P.G. 3 NO. 10775 CLOCK NO. 10 001 SPEED 36 HR.	LEASE State LC"C" WELL NO. 1
ELEMENT NO. 4735 RANGE 0-5600 CORR. TO 181. F.	LOCATION East Caprock Pool, Loa Co., New Mexico
RUN BOCM/RAB CALCULATED BY RAB REPORTED BY RAB	DATE RUN 1-28-52 TIME 1:43PM PULLED 1-29-52 TIME 3:55PM
Formation Volume Factor: 1	
1-5-52 BS 0.17bbl 379.77 bbl/17 1/2 hrs WELL	DATA
POTENTIAL: CHOKE 12/64 OIL WATER 0 G.O.R. 20	ZONE Devonianop BOTTOM T.D. 11, 2401
HOW PRODUCED Natural flow thru tubing P.I	CASING 5 1/2" DEPTH11, 170 TUBING 2" DEPTH 11, 236
HOURS SHUT IN 54 WELL HEAD PRESS .: CAS. PKT TUB 565	TOP LINER PERFORATIONS OPEN HOLE
LAST RESERVOIR PRESSUREINITIAL - DATE -	ELEVATION 1371 de GRAVITY OF OIL 42.8 SP. GR. OF GAS
Trap Pressure: 19 psig	Gas Measurement: Orifice Well Tester
Flow Line: 150' of 2" Line TEST R	ECORD

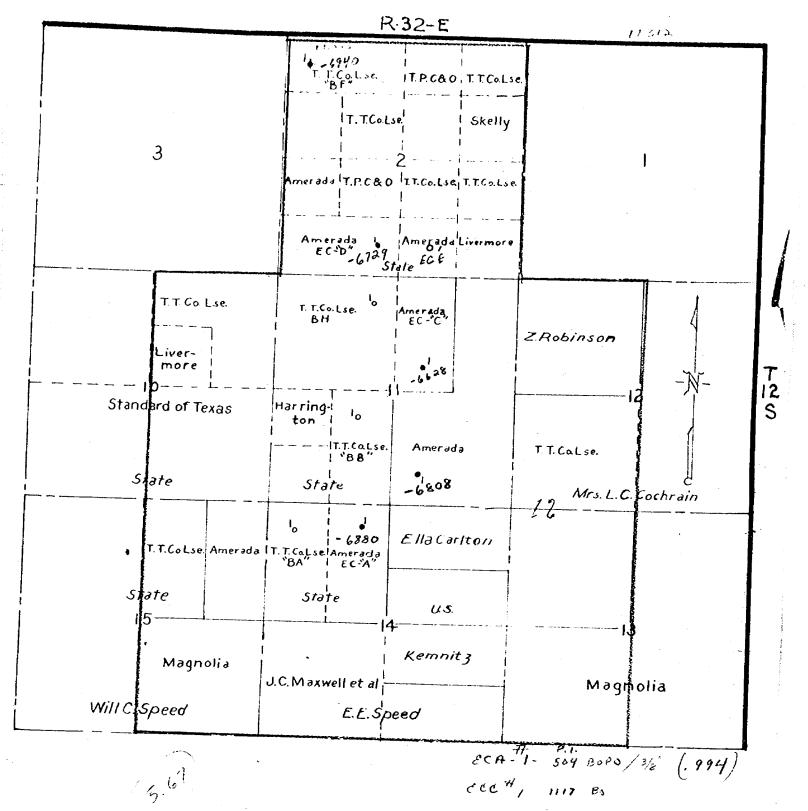
PURPOSE OF TEST To Determine The Flowing Characteristics of The Well.

TIME	DEPTH	¥206.		Prod	rod	Prod	Press	BHP	DEMARKS		· · · · · · · · · · · · · · · · · · ·
TIME	DEPTH	PRESSURE	Bbl	Tbg	Net	Net Avg	Tbg.	Decline	REMARKS	GOR	Remarks
3:05P	11,211	4451			-		565	0	Inf.		~ F
4:05	-6850)	Ħ	44.16	£1.01	45.17	45.16	473	н	Ħ	16	positive cheke.On
5:05		W ;	45.20	-0.06	15,14	46.18	478	Ħ	Ħ	15	oil immediately,
6:05		Ħ	47.26	-0.03	47.24	46.73	481	н	17	14	
7:05		Ħ	46.23	-0.91	46.22	46.74	482	Ħ	Ħ	18	
8:05		Ħ	47.26		47.26	46.58	483	Ħ	11	16	
9:05		11	45.89		45.89	46.41	483	Ħ	Ħ	18 16 17	
10:05		ri	46.92		46,92	47.27	484	n	11	17	
11:05		11	47.61		47.61	46.92	484	11	Ħ	16 16	
12:054		tt	46.23		46.23	45.89	484	11	Ħ	16	
1)05		Ħ	45.54		15.54	46.06	484	Ħ	Ħ	17	
2105		Ħ	46.57		46.57	47.43	484	#	11	17	
3:05		Ħ	48.30		48.30	47.78	484	n	Ħ	16	
4105		Ħ	47.26		47.26	46.92	484	Ħ	M	17	
5:05	ļ	Ħ	46.57		46.57	45.54	48 4	#1	Ħ	17	
6:05		Ħ	44.50		44.50	45.88	484	Ħ	H	18	
7:05		Ħ	47.26		47.26	46.92	484	н	Ħ	17	
8105		Ħ	46.57		46.57	46.75	<u> 484 </u>	H	H	17	-
9:05		N	46.92		46.92	46.58	484	n	27	17	
10:05		19	46.23		46.23	47.09	484	н	Ħ	17	
11:05	ļ	Ħ	47.95		47 - 95	47.44	484	P	Ħ	17	
12:05P		2	46.92		46.93	46.58	485	H	11	17	
1:05		Ħ	46.23		46.23	46.92	485	Ħ	14	17	
2:05	=	Ħ	47.61		47.61	46.92	485	Ħ	H	17	
3105	I		45.23	<u></u>	46.23	46.23	485	A RT C		- 17	Well shut in

Total production on test —— 1,117.42 bbls. Total production prior to test——5713 bbls.

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EAST CAP ROCK DEVONIAN POOL

LEA COUNTY, NEW MEXICO.

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(PROPOSED ORDER)

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF THE TEXAS COMPANY FOR THE ESTABLISHMENT OF TEXAS COMPANY FOR THE ESTABLISHMENT OF PRORATION UNITS AND UNIFORM SPACING OF WELLS FOR THE COMMON SOURCE OF SUPPLY IN THE AMERADA PETROLEUM CORPORATION'S STATE OF AMERADA PETROLEUM CORPORATION'S STATE OF NEW MEXICO EC"A" WELL NO. 1, 660 FEET FROM THE NORTH LINE AND 1980 FEET FROM THE WEST THE NORTH LINE AND 1980 FEET FROM THE WEST LINE OF SECTION 14, TOWNSHIP 12 SOUTH, RANGE 32 EAST, LEA COUNTY, NEW MEXICO

353 V CASE ORDER NO.

ORDER OF THE COMMISSION

This matter came on for hearing at Santa Fe, New Mexico, on May 20, 1952, on the application of The Texas Company to establish proration units and uniform spacing of wells for the East Caprock Devonian Pool in Lea County, New Mexico.

The Commission having heard the evidence presented and being fully advised,

- That due public notice having been given as required by law, the Commission has jurisdiction of the subject matter and of
- 2. That the information now available indicates that one well will effectively drain an area of 80 acres and considering the the parties. shortage of casing and other tubular materials the East Caprock Devonian Pool should be developed on 80-acre proration units for a period of one year.
- That the probable productive limits of the East Caprock Devonian Pool ascertainable from the information available at the time of the hearing in this case comprise the following land in Lea County, New Mexico.

All of Section 2, T-12 S, R-32 E E/2 of Section 10, T-12 S, R-32 E All of Section 11, T-12 S, R-32 E W/2 of Section 12, T-12 S, R-32 E W/2 of Section 13, T-12 S, R-32 E All of Section 14, T-12 S, R-32 E All of Section 15, T-12 S, R-32 E E/2 of Section 15, T-12 S, R-32 E

IT IS THEREFORE ORDERED:

- 1. That 80-acre proration units are hereby established for the East Caprock Devonian Pool as delineated above.
- 2. All wells drilled into the East Caprock Devonian Pool shall be located in the center of the northeast and the southwest quarters of each governmental quarter section, with a tolerance of 100 feet in any direction to avoid surface obstructions, except the following locations, to-wit:

SE/4 of the SW/4 of Section 2, T-12 S, R-32 E NW/4 of the NW/4 of Section 14, T-12 S, R-32 E

which locations shall be designated as the wells for the proration units upon which they are located.

- 3. That no well shall be drilled or produced in said pool except in conformance with the spacing pattern set forth above; except, that in order to protect correlative rights and to increase, without waste, the ultimate recovery from this pool, the Commission shall have the right to approve, without hearing, the drilling of a well located in the center of any quarter of a governmental quarter section, with a tolerance of 100 feet to avoid surface obstructions.
- 4. That all wells producing or hereafter completed in the East Caprock Devonian Pool are hereby given an allowable equivalent to one and one-half times the top allowable for a 40-acre proration unit with the deep pool adaptation, as provided for in the rules and regulations of the Commission.
- 5. If any well is drilled as an exception to the well spacing pattern set forth above under special order of the Commission, the allowable for such well, as compared with the allowable production therefrom if such tract were a regular 80-acre unit, shall be in the ratio of the area of such tract to the area of the regular 80-acre unit.
- 6. This order shall cover all of the East Caprock Devonian common source of supply and any extension thereof as may be determined by further development, and shall continue in force for a period of one year from the first day of June, 1952.
- 7. That each operator in the East Caprock Devonian Pool shall file with the Commission office at Santa Fe, New Mexico, on or before the 15th day of each and every month, a monthly tabulated report for each well showing the allowable, the actual oil production, the oil runs, water production, gas production, cumulative oil production, cumulative water production, and cumulative gas

-3-		
Case 3	353	
Order		

production. This requirement is in addition to and supplementary to the other reports and surveys presently required by the Commission, and is not in substitution or in lieu thereof.

- 8. That said operators shall cause a pool-wide bottom-hole pressure survey to be taken during the months of October 1952 and April 1953, and the results thereof reflecting such pressures of each well shall be submitted in writing to the Commission on or before the fifth day of the following month. (Bottom-hole pressure tests shall be taken as prescribed by Rule 302 of the Commission's Rules and Regulations.)
- 9. At the regular Commission hearing for the month of May in 1953, the operators shall show cause why said pool shall not be placed on a 40-acre spacing pattern with allowable adjustment.

DONE at Santa Fe, New Mexico, this ____ day of ____ 1952.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

Care 353

Mr. R. R. Spirier.

Down the land and
Cast around levas lo.

To I Moore and want to
80 a spacing please enter this motest

Commission hearing

Despt yours.

Coleman au Robinsan

Otherse Notices augusts.

ONL CONSERVATION COMMISSION

MAY 16 1952

SUBBUT L

17 May 1952 Re: Care no. 352 3 The Oil Conservation Connecion of the State of New Mexico Santa Fe, New Mexical Gertleman: I am a noyalty holder Pasey land which is in the ECA erea. The land belonged to my matheworiginally. We have long awaited the possibility of getting good meene from This property to take one of no nie one declining years and I wish protest against the 80 acre spacing requested in the spacing requested in the above membered application.

Will your please give this your canfull considerations

Why shouldn't this port be developed like other pools

why about the other pools

in this county?

Gertrude C. Whittle, 121-N. Second, Lovington N.M.

E. J. DANGLADE

LOVINGTON, NEW MEXICO 17 May 1952

Rer Case No. 353

Case 353

The Oil Conservation Commission of the State of New Mexico Santa Fe, New Mexico

Gentlemen:

As a royalty holder within the limits of the estimated productive portion of what has been designated as East Caprock Devonian Pool, I wish to register my protest against a temporary establishment of 80 acre proration units therein, for the following reasons.

- 1. Lack of conclusive evidence that such spacing will adequately deplete this valuable source of supply.
- So many exceptions will be necessary including those requested in the Application that an unfair situation will be created for those who are limited to the spacing requested.

Respectfully submitted,

FJD:gh

J. CLYDE TOMLINSON
OIL OPERATOR
BOUTHWEST RESERVE LIFE BUILDING
P. O. BOX 629
LONGVIEW, TEXAS

May 16, 1952

Oil Conservation Committee State of New Mexico Santa Fe, New Mexico. Case 353

Dear Sirs:

It is my understanding that The Texas Company and Amerada Petroleum Corporation have made application for an 80 acre spacing pattern for development in the East Caprock Field, Lea County, New Mexico; and that a hearing on their application will be held on May 20.

As the owner of substantial mineral interests in this immediate area, I desire to take this method of filing with your honorable body my opposition to an 80 acre spacing pattern in this field.

Thanking you for your consideration, I am

Very truly yours,

dly del toulinson.

JCT-3



FIRST NATIONAL BANK

LUBBOCK, TEXAS

May 16, 1952

W. S. POSEY

Case 353

Oil Conservation Commission, Santa Fe, New Mexico.

Gentlemen:

With reference to the application of The Texas Company and Amerada Petroleum Company to you for an 80 acres spacing permit for the East Caprock Devonian Pool in Lea County, New Mexico.

Wish to say that my wife owns 120 acres minerals, her nephew, Paul Sparkman, owns 60 acres minerals, and her sister, Mrs. Gertrude Whittle, owns 50 acres minerals in the Southeast Quarter (SE/4) and the East Half of the Northeast Quarter (E/2 NE/4) of Section No. Eleven (11), and the North Half (N/2) of the Northeast Quarter (N/2 NE/4) of Section No. Fourteen (14), all in Township 12, Range 32 East.

The Amerada has drilled and is producing oil from #1 ECA well 660 feet west from the 80 acres N/2 of the NE/4 of Section No. 14-11-32, and also finished and is producing oil from ECC 660 feet north of the NW corner of the SE/4 of Section No. 11-12-32, and this same well is 660 feet west of the East Half of the NE/4 of said Section 11-12-32. We are due offsets to these two wells and must protest this application for an 80 acres spacing as regards our holdings there.

We beg your consideration and protection as to these offsets.

VIII S. POSOV

Agent for Hallie C. Possy Agent for Paul N. Sparkman Agent for Gertrude C. Whittle

(dse 353

THE TEXAS COMPANY

TEXACO PETROLEUM PRODUCTS

PRODUCING DEPARTMENT WEST TEXAS DIVISION

April 26, 1952

P. O. BOX 1720 FORT WORTH 1, TEXAS

Oil Conservation Commission State of New Mexico P. O. Box 871 Santa Fe, New Mexico

Attention: Mr. W. B. Macey, Chief Engineer

Gentlemen:

The application of The Texas Company for establishment of 80-acre proration units in the East Caprock Devonian Pool, Lea County, New Mexico, will be amended to provide for Commission approval without hearing of locations to be drilled on tracts containing less than 80 acres, and to provide for the establishment of allowable production for the 80-acre unit calculated by multiplying the normal 40-acre unit by the appropriate depth factor and by 1.5, and to request the Commission's temporary order of one year's duration to approve this application.

Due to conflicting schedules, I will be unable to secure my Management's approval of this modified application until Monday, April 28th; this application will be air mailed to you on that date. I regret that I have been unable to get this to you sooner, but I hope that it will be in your hands Tuesday, April 29th.

Yours very truly,

C. J. Ray, Jr. Petroleum Engineer

CJR, Jr-ECH

Faithfully yours

for Fifty Years

125 88 1855

OIL CONSERVATION COMMISSION P. O. BOX 871

SANTA FE, NEW MEXICO

April 2, 1952

Mr. C. J. Ray, Jr. The Texas Company

Box 1720 Ft. Worth, Texas

Dear Mr. Rays

RE: OCC Case 353

This may be considered formal notification that your application of February 29 (re 80-acre spacing in the East Caprock-Devonian) has been set for hearing on April 15, 1952, at the regular hearing of the Oil Conservation Commission.

Legal advertisement has been properly issued, and the case has been listed on the Commission's informal docket which will probably be mailed tomorrow.

Very truly yours,

WEMIDT

W. B. Mucey Chief Engineer

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 353 ORDER NO.

THE APPLICATION OF THE THE TEXAS COMPANY FOR AN ORDER ESTABLISHING 80-ACRE PRORATION UNITS AND PROVIDING FOR ALLOWABLES FOR THE DEVONIAN COMMON SOURCE OF SUPPLY IN THE EAST CAPROCK-DEVONIAN FIELD.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on May 20, 1952 at Santa Fe, New Mexico before the 0il Conservation Commission of New Mexico, hereinafter referred to as "Commission."

NOW, on this ____ day of ______, 1952, a quorum being present, having considered the testimony adduced and the exhibits received at said hearing, and being fully advised in the premises,

FINDS: (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the testimony adduced and the exhibits received at said hearing do not provide sufficient evidence to establish that the plan of spacing requested by applicant will avoid the drilling of unnecessary wells or secure the greatest ultimate recovery from the pool, or that one well drilled on each 30 acre tract will efficiently and economically drain the recoverable oil from the pool, prevent waste or protect correlative rights.

IT IS THEREFORE ORDERED:

That the application be and the same hereby is denied. DONE at Santa Fe, New Mexico, on the day and year

hereinabove written.

OIL CONSERVATION	COMMISSION
Signed by:	
Chairman	
Nember	ngangganggan ng-dis-salah garangganggangan dali
Secretary	

OIL CONSERVATION COMMISSION P. O. BOX 871 SANTA FE, NEW MEXICO

June 20, 1952

THE TEXAS COMPANY Box 1720

Ft. Worth, Texas

Attention: Mr. Carl J. Ray, jr.

Gentlemen:

We enclose for your records a signed copy of the New Mexico Oil Conservation Commission's Order R-168, issued in Case 353 as heard upon petition of the Texas Company.

Very truly yours,

W. B. Macey, Chief Engineer

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INTER-OFFICE TRANSMITTAL SLIP

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BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 353 ORDER NO. R-168

THE APPLICATION OF THE TEXAS COMPANY FOR AN ORDER ESTABLISH-ING 80-ACRE PRORATION UNITS AND PROVIDING FOR ALLOWABLES FOR THE DEVONIAN COMMON SOURCE OF SUPPLY IN THE EAST CAPROCK-DEVONIAN FIELD, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on May 20, 1952, at Santa Fe, New Mexico before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 19 day of June, 1952, a quorum being present, having considered the testimony adduced and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the testimony adduced and the exhibits received at said hearing do not provide sufficient evidence to establish that the plan of spacing requested by applicant will avoid the drilling of unnecessary wells or secure the greatest ultimate recovery from the pool.
- (3) That the testimomy adduced and the exhibits received at said hearing do not provide sufficient evidence to establish that one well drilled on each 80-acre tract will efficiently and economically drain the recoverable oil from the pool, prevent waste or protect correlative rights.

IT IS THEREFORE ORDERED:

That the application be and the same hereby is denied.

DONE at Santa Fe, New Mexico, on the day and year hereinabove written.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

GUY SHEPARD, Member

R. R. SPURRIER, Secretary

Farmin 5231

THE TEXAS COMPANY

TEXACO PETROLEUM PRODUCTS

PRODUCING DEPARTMENT WEST TEXAS DIVISION



P. O. BOX 1720 FORT WORTH 1, TEXAS

February 29, 1952

CONSERVATION AND PRORATION WELL SPACING IN EAST CAPROCK DEVONIAN FIELD, LEA COUNTY, NEW MEXICO

Oil Conservation Commission State of New Mexico Santa Fe, New Mexico

Attention: Mr. R. R. Spurrier

Gentlemen:

Enclosed with this letter please find our application for 80-acre spacing units in the area of the East Caprock Devonian Field, Lea County, New Mexico.

We request that this matter be set for hearing.

Yours very truly,

C. J. Ray, Jr. Petroleum Engineer

CJR, Jr-ECH

Faithfully yours

on State and Compassion

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BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF THE TEXAS COMPANY FOR THE ESTABLISHMENT OF PRORATION UNITS AND UNIFORM SPACING OF WELLS FOR THE COMMON SOURCE OF SUPPLY IN THE AMERADA PETROLEUM CORPORATION'S STATE OF NEW MEXICO EC"A" WELL NO. 1,660 FEET FROM THE NORTH LINE AND 1980 FEET FROM THE WEST LINE OF SECTION 14, TOWNSHIP 12 SOUTH, RANGE 32 EAST, LEA COUNTY, NEW MEXICO

APPLICATION

On behalf of The Texas Company, Fort Worth, Texas, this application is made with the following statements:

- 1. That the Amerada Petroleum Corporation has drilled and completed on August 31, 1951, its State of New Mexico EC"A" Well No. 1, located 660 feet from the North line and 1980 feet from the West line of Section 14, T-12-S, R-32-E, Lea County, New Mexico, and has discovered a new common source of supply found in said well below the depth of 11,000 feet.
- 2. The discovery well was drilled to a depth of 11,314 feet and encountered the top of the Devonian formation at 11,240 feet. $5\frac{1}{2}$ -inch casing was set and cemented at 11,314 feet with 600 sacks of cement. The well was plugged back to a depth of 11,290 feet and the casing was perforated with four holes per foot in the interval between 11,260 and 11,270 feet. On a 24-hour Potential Test ending August 31, 1951, the well flowed 549.6 barrels of pipe line oil through a $\frac{1}{2}$ -inch choke with a gas-oil ratio of 20 and an oil gravity of 43.30 API.
- 3. The productive portion of the new common source of supply is estimated to include the following described area:

All of Section 2, E/2 of Section 10, all of Section 11, W/2 of Section 12, W/2 of Section 13, all of Section 14, E/2 of Section 15, T-12-S, R-32-E, Lea County, New Mexico.

However, the above area is not necessarily the maximum limits of the pool. This new source of supply has been designated the East Caprock Devonian Pool.

4. In addition to the discovery well referred to above, the Amerada Petroleum Corporation's State of New Mexico EC"C", located in the SW/4 of the NE/4 of Section 11, T-12-S, R-32-E, has been completed as a producer from this common source of supply. The following wells are now drilling to the same common source of supply within the area described above:

The Texas Company State "BA" Well No. 1, NW/4 of the NW/4 of Section 14, T-12-S, R-32-E.

The T_exas Company State "BB" Well No. 1, NE/4 of the SW/4 of Section 11, T-12-S, R-32-E.

The Texas Company State "BF" Well No. 1, NW/4 of the NW/4 of Section 2, T-12-S, R-32-E.

Amerada Posey Well No. 1, SW/4 of the SE/4 of Section 11, T-12-S, R-32-E.

Amerada State EC"D" Well No. 1, SE/4 of the SW/4 of Section 2, T-12-S, R-32-E.

5. That in order to bring about the orderly and proper development of said common source of supply, prevent waste and to avoid the drilling of unnecessary wells, and to secure the greatest ultimate recovery therefrom, and to protect the correlative rights of the interested parties therein, it is necessary and proper for the Commission to enter its order providing for proration units of 80 acres

each, such being the area which may be efficiently and economically drained and developed by one well, and to provide for the uniform spacing of wells drilled into said common source of supply.

- 6. That all wells drilled into said common source of supply should be located in the center of the Northeast and Southwest 40-acre tracts of each quarter section, with a tolerance of 150 feet to avoid surface obstructions.
- 7. That The Texas Company's State wells "BA" and "BF" and the Amerada's State EC"D", these currently drilling, which are located off the spacing pattern herein requested, should be granted exceptions to the spacing order established by the Commission hereunder and should be considered as the wells for the proration units upon which they are located.
- 8. That the order herein requested should cover all of the common source of supply discovered in the producing formation of the State of New Mexico EC"A" Well No. 1 and the State of New Mexico EC"C" Well No. 1, and any additional wells drilled to said common source of supply should be drilled on a spacing pattern herein requested.
- 9. "The allowable assigned any well within the common source of supply shall be determined by multiplying the allowable for a normal 40-acre unit by the usual depth factor and by one; thus any well in the 80-acre pattern will receive the same allowable that would normally be assigned the well on a 40-acre proration unit of equal depth. Any wells drilled on proration units of less than 30 acres shall have an allowable calculated

as above and in the same proportion as the acres in the proration unit are to 80.

10. A plat showing the area described above and the location of the wells drilled or drilling in said area is attached hereto, marked Exhibit A, and made a part hereof.

Wherefor applicant respectfully requests that the Commission set this application for public hearing at a time and place to be fixed by the Commission, that due and proper notice be given as requested by law, and that at the conclusion of said hearing the Commission make and enter an order determining and defining the probable productive limits of the common source of supply referred to above to include all of Section 2, E/2 of Section 10, all of Section 11, W/2 of Section 12, W/2 of Section 13, all of Section 14, E/2 of Section 15, T-12-S, R-32-E, Lea County, New Mexico, said pool or common source of supply having been named the East Caprock Devonian Pool, establishing proration units of eighty (80) acres each, designating the location of all wells drilled to said common source of supply to be the center of the northeast and southwest 40-acre tracts of each quarter section, with exceptions for three of the presently drilling wells, with a tolerance of 150 feet in any direction from said described location to avoid surface obstructions, and to provide for an allowable equal to that of a normal 40-acre unit producing from equal depth, with the provision that wells drilled on proration units of less than 80 acres shall have an allowable calculated as above and in the same proportion as the acres

in the proration unit are to 80.

Dated this <u>19th</u> day of February, 1952.

THE TEXAS COMPANY

By 6. Jo Ray Jo.

CASE 353: Texas Company application re 80-acre spacing East Caprock-Devonian pool, T. 12 S, R. 32 E, Lea County