1 2 3	STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 5 February 1986			
5	EXAMINER HEARING			
6 7	IN THE MATTER OF: Application of TXO Production Corp. CASE			
8	for compulsory pooling, Lea County, 8784 New Mexico.			
10				
12 13	BEFORE: David R. Catanach, Examiner			
14 15	TRANSCRIPT OF HEARING			
16 17	APPEARANCES			
18 19 20	For the Oil Conservation Division: Legal Counsel to the Division Oil Conservation Division State Land Office Bldg. Santa Fe, New Mexico 87501			
21 22 23 24	For the Applicant: Chad Dickerson Attorney at Law DICKERSON, FISK & VANDIVER Seventh & Mahone/Suite E Artesia, New Mexico 87201			
25	For Cities Service: W. Thomas Kellahin Attorney at Law KELLAHIN & KELLAHIN P. O. Box 2265 Santa Fe, New Mexico 87501			

r			
		2	
1			
2	INDEX		
3			
4	STEVE PITTS		
5	Direct Examination by Mr. Dickerson	4	
6	Cross Examination by Mr. Kellahin	13	
7			
8	ANDREW T. O'HARE		
9	Direct Examination by Mr. Dickerson	24	
10	Cross Examination by Mr. Kellahin	31	
11			
12			
13			
14	EXHIBITS		
15			
16	TXO Exhibit One, Plat	5	
17	TXO Exhibit Two, Correspondence	8	
18	TXO Exhibit Three, AFE	10	
19	TXO Exhibit Four, Farmout Agreement	11	
20	TXO Exhibit Five, Plat	25	
21	TXO Exhibit Six, Structure Map	26	
22	TXO Exhibit Seven, Isopach	27	
23	TXO Exhibit Eight, Cross Section A-A'	28	
24			
25			
	,		

1

3

2

8784.

MR. CATANACH: Call next Case

MR. TAYLOR: The application of

5 TXO Production Corporation for a mpolecry : 1103, 100 Come

6 ty, New Mexico.

MR. CATANACH: Are there ap-

8 pearances in this case?

9 MR. DICKERSON: Mr. Examiner,

10 I'm Chad Dickerson of Artesia, New Mexico, appearing on be-

11 half of the applicant.

We have two witnesses.

MR. CATANACH: Are there other

14 appearances?

MR. KELLAHIN: Yes, Mr. Exa-

16 miner. I'm Tom Kellahin of Santa Fe, New Mexico, appearing

17 on behalf of Cities Service Oil and Gas Corporation.

MR. CATANACH: Are there other

19 appearances?

20 Will the witnesses please stand

21 and be sworn in at this time?

22

(Witnesses sworn.)

24

STEVE PITTS, 1 being called as a witness and being duly sworn upon his 2 oath, testified as follows, to-wit: 3 4 DIRECT EXAMINATION 5 BY MR. DICKERSON: 6 Will you state your name, your occupa-0 7 tion, by whom you're employed, please? 8 My name is Steve Pitts. I'm employed by 9 TXO Production Corp. in the West Texas office. 10 Q Mr. Pitts, you have not previously testi-11 fied before this Division as a landman, have you? 12 No, I have not. Α 13 Q Will you briefly summarize your 14 tional and employment experience for the examiner? 15 Α I graduated from the University of Texas 16 at Austin with a petroleum land management degree in May of 17 183. 18 I've been employed with TXO since June of 19 '83 to the present date. 20 Q And in your employment what 21 do your duties include? 22 Α They include acquiring oil and gas 23 leases, negotiating for them, contract work, and lease 24 25 titles.

```
And in what area do you work?
1
            Q
            Α
                        I work southeastern New Mexico and also
2
   the western part of Texas.
3
            Q
                       And in connection with your employment,
4
   Mr. Pitts, have you familiarized yourself with the land sit-
5
   uation involved in this application and surrounding acreage?
6
                      Yes, I have.
            Α
            0
                        And are you familiar with the facts
8
   volved in this Case 8784?
9
            Α
                       Yes, sir.
10
                                 MR.
                                      DICKERSON:
                                                   Mr. Examiner,
11
   tender this witness as a petroleum landman.
12
                                 MR. CATANACH: He is considered
13
   qualified.
14
                                 I'm sorry, I didn't get your
15
   last name.
16
            Α
                      Pitts, like in Pittsburgh.
17
                      Mr. Pitts, will you identify for the exa-
18
            0
   miner what we have submitted as TXO Exhibit Number One and
19
   describe what is shown on that map?
20
                       Exhibit One is a land plat with the loca-
21
   tion circled in red and the proration unit outlined in yel-
22
   low.
23
                      Mr. Pitts, briefly tell the examiner what
24
            Q
   the situation is, what acreage TXO controls in this case,
25
```

```
and what Cities Service has in this Section 14.
1
                      Okay.
                              TXO has approximately 83 percent
2
3
   of the interest -- leasehold; Cities has 1/6th mineral in-
   terest.
            Q
                       TXO does not control only the 40-acre
5
   proration unit in question, does it?
6
            Α
                      No, they do not.
7
                       Identify for the examiner the remaining
8
   acreage which TXO controls.
9
                      TXO controls approximately 60 percent of
            A
10
   the east three-quarters of Section 14, Township 18 South,
11
   Range 38 East.
12
                       And to your knowledge is the title the
13
14
   same throughout that 480 acres?
                      Yes, it is.
15
16
            0
                      So that Cities Service also has 1/6th in-
   terest in the balance of that acreage?
17
18
                      That's correct.
            Α
19
            0
                      What is the purpose of TXO's application
   in Case 8784, Mr. Pitts?
20
21
                       TXO seeks an order pooling all mineral
   interest in all formations from the surface through the base
22
   of the Queen formation underlying the northwest quarter of
23
   the northeast quarter of Section 14, Township 18
24
```

Range 38 East, Lea County, New Mexico.

1 In this order TXO seeks to have a 40-acre standard oil spacing and proration unit to be dedicated to 2 3 the TXO Taylor M No. 1 Well, to be drilled at a standard location. TXO also seeks to be considered the cost drilling and completing said well and the overhead char-6 7 ges to be assessed to the nonoperating parties and a charge for risk involved in drilling this well and to have TXO de-8 signated as operator of the Taylor M No. 1. Mr. Pitts, with the exception of Cities 10 0 Service Oil and Gas Corporation, has TXO been able to make 11 voluntary agreements with all the other working interest and 12 mineral interest owners in this acreage regarding the pro-13 posed well? 14 15 Α Yes, they have. 16 you know approximately how many 0 17 and gas leases, how many mineral interests there -- separ-18 ately owned mineral interests there are in this acreage? 19 Α There is approximately 30. 20 TXO has obtained leases from 0 And all 21 those --22 That's correct. A 23 -- mineral owners? 0 On what terms 24 these leases been obtained from the other mineral owners? 25 They range anywhere from 1/8th to a quar-Α

ter royalty; range anywhere from \$75 an acre to \$125 an acre; anywhere from a one year term to a three year term.

Mr. Pitts, with reference to what we have marked as Exhibit Number Two, and Mr. Examiner, that exhibit is in reverse chronological order. The oldest correspondence appears on the bottom of it, and Mr. Pitts, I think it would be clear if you would very briefly summarize what is reflected in Exhibit Number Two, beginning with the earliest contacts with Cities Service regarding voluntary agreement toward pooling its interest.

A Okay. TXO attempted -- starting January 24th, 1985, asked to -- Cities to either farmout or join in the drilling of the Taylor No. M No. 1 Well.

They requested that Cities deliver 75 percent net revenue lease with the option to convert their royalty interest to a 25 percent working interest proportionately reduced.

Cities replied on numerous occasions that they would deliver a 75 net revenue lease with the option to convert a 1/8th of 8/8ths to a 33 percent working interest at payout.

At a later date, being January the 3rd, 1986, in a letter to Cities Service, TXO requested Cities to either join in the drilling of the well or farmout with Cities delivering a 75 percent net revenue lease to TXO with

an option at payout to convert half of its 25 percent of 8/8ths royalty interest to a 25 percent working interest proportionately reduced.

Along with all this correspondence are return receipts indicating Cities did receive these proposals.

Q Have there been any other contacts, been any telephone conversations in addition to this, I presume?

A We have called on two or three separate occasions asking them to either join or farmout. We have continued the cases several times trying to get them to voluntarily pool themselves. They have stuck with their original offer throughout the course of a year, being a third back-in.

Q So the dispute in this case centers over the terms of the proposed farmout and whether or not 1/4 back-in after payout would be permitted or 1/3.

A That is correct.

Q Are there any other major oil companies, operators involved in this well with which TXO has had to deal in this case?

- A Yes, there is.
- Q Who is that?

- 24 A That is ARCO Oil and Gas.
- 25 Q And what agreement was reached with ARCO?

to

Α ARCO has approximately 8-1/2 percent of 1 the leasehold, which they have agreed to deliver a 75 per-2 cent net revenue lease with the option at payout to convert 3 a 1/8th overriding royalty interest to a 25 percent working interest proportionately reduced. 5 When TXO deals with, whether unleased 6 royalty owners or working interest owners, does it feel 7 obligation, to your knowledge, Mr. Pitts, to deal on the 8 same terms with all parties? Α You bet. 10 And why is that? 0 11 If we were to give Cities a third back-in 12 after ARCO has already accepted the 25 percent back-in, 13 would be hard for us to deal with ARCO on any other occa-14 sion. 15 You basically feel a need to treat Q 16 the parties the same in your negotiations with them? 17 Α That's correct. 18 Mr. Pitts, refer to what we have submit-0 19 ted as Exhibit Number Three and tell us what that is and who 20 prepared it. 21 Α Exhibit Number Three is an Authority for 22 prepared by our drilling department with a Expenditure as 23 copleted well cost as well as the dry hole cost. 24 And this represents TXO's opinion as

Q

the estimated cost to be incurred in the drilling and completion of this well.

A That's correct.

Q Mr. Pitts, refer to Exhibit Number Four and tell us what that is.

Exhibit Number Four is a farmout agreement with ARCO, which ARCO prepared, covering the northwest quarter of the northeast quarter of Section 14, Township 18 South, Range 38 East.

Per the farmout agreement, ARCO is delivering the 75 percent net revenue lease with the option at payout to covert their 1/8th overriding royalty interest to a 25 percent working interest.

Along with this farmout agreement are several letters amending the farmout.

ARCO has agreed to extend the commencment date for the initial well with the last one extending the date to March 1st, 1986.

There is another amendment which ARCO and TXO agreed to amend Section Five of the farmout agreement wherein the overriding royalty interest shall extend to any extensions or renewals of leases involved in this agreement if they are taken within one year of their termination instead of the five years that ARCO had in the farmout agreement, and ARCO agreed to both those amendments.

Now this joint operating agreement which 0 1 is attached, that is a part of the farmout to which you re-2 fer, is that correct? 3 Yes, it is. Α 4 0 And who prepared the joint operating 5 agreement? 6 ARCO. Α 7 And is it -- are its terms satisfactory 8 with TXO to drill this well as far as ARCO's farmout is concerned? 10 That's correct Α 11 For the cost -- or for the purpose of 0 12 hearing, Mr. Pitts, the operator is to be allowed a 13 certain charge for supervision, overhead incurred as opera-14 tor in drilling and operating a well. 15 Would you refer the examiner to the pro-16 vision in the joint operating agreement as part of Exhibit 17 Number Four which covers the cost of supervision? 18 Okay, in the -- in the Exhibit Two to the 19 farmout agreement, which is the operating agreement, and Ex-20 hibit C, Accounting Procedure, Joint Operations, page three 21 of this section lists the overhead fixed rate basis with the drilling well rate being \$5100 and the producing well rate 23 being \$510 which ARCO proposed and TXO accepted. 24

How do those rates compare to rates sug-

Q

13 1 gested by TXO's Accounting Department for wells of 2 depth in this location? 3 Basically the same. And what supervision rates does TXO Q 5 quest be imposed in a compulsory pooling order entered this proceeding for supervision? 7 Those rates would be satisfactory? 8 These rates would be satisfactory. Α MR. DICKERSON: Mr. Examiner, 10 this itme I will move the admission of TXO Exhibits One 11 through Four and I have no further questions of this wit-12 ness. 13 CATANACH: Exhibits MR. One 14 through Four will be admitted as evidence. 15 Mr. Kellahin? 16 MR. KELLAHIN: Thank you, Mr. 17 Examiner. 18 19 CROSS EXAMINATION 20 BY MR. KELLAHIN: 21 Pitts, I'd like to review with you Mr. 0 22 the status of the efforts that have gone on between your 23 company and Cities Service. 24 Were you the principal individual on be-25 half of TXO that attempted to negotiate the farmouts and

```
leases from the owners involved in this 40-acre tract?
1
            Α
                        I negotiated part of them but not all of
2
   them.
3
            Q
                       Were you the only TXO individual that had
   contacts with Cities Service about this subject?
            A
                       No, I was not.
6
            Q
                       All right, who were the others involved,
7
   do you recall?
8
            A
                       One of them was Mr. Jeff Bourgeois, who
9
   is still with TXO.
10
                       The
                            second individual is a
                                                      Mr.
                                                            Vance
11
   Hodge, who's employment has terminated from TXO.
12
            0
                       I'm sorry, I missed your answer. Who was
13
   Mr. --
14
            Α
                       The first one was Mr. Jeff Bourgeois --
15
                       Yes, sir.
            Q
16
                       -- who is still with TXO, who wrote
            Α
17
   initial letter back in January of '85.
18
            Q
                       All right, and who was the other indivi-
19
   dual?
20
            Α
                      Mr. Vance Hodge, who is no longer working
21
   with TXO.
22
            Q
                       Let's go back to the land plat so I
23
   see if I can understand how you put this together.
24
                      You said that the east half of 14 plus
25
```

the east half of the west half of 14 and apparently some ac-1 reage, I guess the west half of 13, is that all the same basic ownership that you're dealing with when you talked 3 about the 440-acre area? Α The 480-acre area consists of the east half of Section 14 and the east half of the west half of 6 Section 14. 7 I am not familiar with the west half of 8 Section 13. Q All right. Within that 480 acres, the 10 mineral interest owners are undivided for that tract? 11 Α That's correct. 12 Q All right, and the initial efforts that 13 TXO undertook in January of '85, according to the letter, 14 show a lease proposal for the whole 480-acre tract. 15 Α That's correct. 16 That's where we start. 0 All right, 17 that's '85, January 24, and it was at that point that you 18 offered Cities Service the 75 percent an the 25 percent. 19 Α That's correct. 20 Q All right. Cities Service's interest 21 you've told us was a 1/6th mineral interest. 22 Yes, sir. Α 23 Q Which means they own the minerals 24

they weren't operating as a lessee under some existing lease.

```
That's correct.
            Α
1
                                  Of the other people, some 30
                       All right.
2
   other mineral owners, were those unleased mineral owners
3
   that you are obtaining leases from?
4
                       That's correct.
             Α
5
                       And when you talked about the terms that
             0
6
   were offered and the range of terms, you were talking about
7
    lease terms that were offered to mineral owners.
8
                       That's correct.
                       When you got into negotiations with ARCO,
10
        ARCO a mineral owner or were they already a lessee of
11
    some existing lease?
12
             Α
                       They were a mineral owner. Oh, ARCO, I'm
13
    sorry.
14
             Q
                       ARCO.
15
                       They're a leasehold.
             Α
16
             Q
                       All right.
17
                       Right.
18
             Α
                       They had acquired leases from some of the
             O
19
    other mineral owners that you did not acquire leases from.
20
             A
                       That's correct.
                                         They have been held by
21
    production since the 1950's.
22
                       All right.
                                    Under their -- ARCO's lease-
23
             Q
    hold
          interest,
                                      ARCO, according to your
24
                      then,
                              they,
25
    testimony, had or has 8-1/2 percent leasehold interest.
```

```
That's correct.
1
            Α
                       Are you aware of any constraints
2
            Q
3
   leasehold interests that ARCO held that would cause them to
   need to have -- to participate in a well or reach a farmout
   in order to hold their leasehold in the interest -- lease-
   hold interest in the area?
7
            Α
                       I'm sorry, I don't understand your ques-
   tion.
8
9
            Q
                      All right. Were the ARCO leases held by
   production?
10
11
            Α
                      Yes, they were.
12
            Q
                      All of the leases that they have.
13
            Α
                       That's correct.
14
                       All right. Apart from ARCO and apart
         obtaining leases from mineral owners, were there any
15
16
   other companies that were in the position of Cities Service
17
   as mineral owners with whom you negotiated?
18
            Α
                      No, there were not.
19
            Q
                       All right.
                                    January of '85 we start off
20
   and you try to lease the whole 480.
21
            Α
                      Right.
22
                       And they come back to you with what?
23
   What happens next?
24
            Α
                      On April 10th we also sent them an AFE.
25
                       It looks like Vance Hodge had a conversa-
```

```
1
   tion with Mr. Dan Tidwell of Cities Service requesting an
   AFE.
3
                      They replied April the 26th of '85,
   ing that they would deliver a 75 percent net revenue
   with the option to convert an 1/8th of 8/8ths to a 33 per-
6
   cent working interest at payout.
7
            Q
                       All right, so in April of '85 we've got
8
   the Cities Service counter-proposal with regards to the
   whole lease area, the 480 acres leasehold --
10
            Α
                      I'm sorry, sir.
11
            Q .
                      All right, in April of '85 --
12
            Α
                      Yes.
13
                       -- we have Cities Service's
                                                      first
            Q
   sponse to TXO on their proposal for the 480-acre tract.
15
                      That's correct.
            Α
16
                       What then is TXO's next response
17
   the Cities Service letter of April 26th?
18
                      On November the 5th of 1985 a Mr.
19
   Hodge of TXO's office requested a farmout with Cities deliv-
20
   ering a 75 percent net revenue lease to TXO; the option at
21
   payout to convert it's royalty interest to a 25 percent wor-
22
   king interest.
23
                      All right,
                                  at this point is Mr.
                                                         Hodge's
24
   offer to Cities the same terms that were originally offered
```

to Cities back in the January 24th letter?

```
That's correct.
            Α
1
            0
                      All right. So I understand the sequence,
2
   then, what happens after the November 5th letter?
3
                       Cities replies November the 13th to our
            Α
   November 5th letter, delivering a 75 percent net revenue
5
   lease with the option at payout to convert their 1/8ths
6
   8/8ths royalty to a 33-1/3 percent working interest.
7
                      Both sides sticking with the original po-
            0
8
   sition --
                      Right.
            Α
10
                      -- apparently. I don't see --
            Q
11
                      That's correct.
            Α
12
                      -- any give and take here, do you?
            Q
                                                             A11
13
   right.
14
                      All right, what happens after
                                                       November
15
   12th, now? When did you get involved in this?
16
            Α
17
                      Okay, December 11th is my first letter.
   I requested that they join us on the drilling of the well or
18
   farmout under the same terms and conditions that we were of-
19
   fering
           in our previous letters, that being 75 percetn net
20
   revenue lease with the option to convert its royalty inter-
21
   est to a quarter back-in.
22
            Q
                      All right. Now on the December 11th let-
23
   ter have you not changed the acreage involved? Are you now
25
```

dropping the acreage request from 480 acres down to the interest in the 40-acre tract?

A That's correct.

Q All right. And what success did you have in terms of reaching an agreement with regards to this specific 40-acre tract?

A Received a -- excuse me. I called Mr. Danny Tidwell at Cities Service, who then explained to me the problems they were having with our proposal.

I immediately put another letter in the mail January 3rd, 1986, asking them to either join or farmout with Cities delivering a 75 percent net revenue lease to TXO with an option at payout to convert one-half of its 25 percent of 8/8ths royalty interest to a 25 percent working interest proportionately reduced.

Q How, if at all, is that offer different than the December offer?

A It's different in that they will be able to keep half of their 1/4th royalty interest after payout as a royalty interest and will be able to convert the other half of the 1/4th, being 1/8th, to a 25 percent working interest proportionately reduced.

Q And this represents your last proposal insofar as this hearing goes.

A That is correct.

Q How does this January 3rd offer to Cities

compare to the farmout of ARCO's leasehold interest that you were able to consummate with ARCO?

A Basically it's identical. Cities will be delivering a 75 percent net revenue lease as -- as ARCO was.

Cities will be able -- will be converting a 1/8th to a 25 percent working interest, their 1/8th being a royalty interest; Cities 1/8th -- excuse me, Cities 1/8th being a royalty interest; ARCO's 1/8th being an overriding royalty interest.

Cities will be able to retain 1//8th royalty before and after payout, whereas ARCO will have to account for their royalty owners for the other 1/8th.

Q Let's go back to your first involvement,
Mr. Pitts, and your letter of December 11th '85.

You indicated in the bottom of the first page that there were some rig scheduling and drilling obligations. TXO has filed a compulsory pooling application before the Division.

Do you recall, sir, in relation to the timing of the December 11th letter when the forced pooling case was filed before the Division?

A I don't know when -- I don't know when it was originally filed.

24 Q In time reference it would have been 25 sometime after the November 13th letter of Cities to TXO and before the December 11th letter?

A That is correct.

Q You indicated rig scheduling and drilling obligation. Are you under any type of drilling or rig scheduling constraints at this point, Mr. Pitts?

A Yes. We have -- the ARCO farmout has a "must spud", must spud the drilling of our well by March 1st, 1986.

Q Do you have any rig scheduling problems or conflicts in terms of rig availability?

A Sure. The -- we have an engineer who schedules our rigs for us, and they need to know some time in advance so that they can negotiate a rig from whatever company it may be, and they need some time to be able to schedule their rigs in accordance therewith.

Q You indicated that you, as a company, like to maintain a posture of dealing with the same parties on the same terms, and that was the reason that you had offered to Cities the same offer that ARCO received.

A That's correct.

Q In terms of your acreage position with regards to any further development within this specific section, Mr. Pitts, are you aware of offers to any other companies such as Cities Service, or like Cities Service, that are more favorable to that party than are currently being

```
23
   offered to Cities?
            Α
                       No, I'm not aware of any.
2
                       And at this point you've consolidated the
            Q
3
   voluntary arrangements for this well with the exception of
   Cities on this 40-acre tract?
            Α .
                       That is correct.
6
                       With regards to the rest of the northeast
7
   quarter of 14, is that also true?
8
            Α
                       No, it is not.
9
            Q
                        In what ways would it be different
10
   the balance of that 160 acres?
11
                        We don't have all the mineral interest
            A
12
   leased up in the remaining 120 acres.
13
            Q
                       The ARCO farmout, does that apply to more
14
   than this 40-acre --
15
            Α
                       No.
16
                       -- tract on the Taylor well?
17
            Q
18
            Α
                       No, it does not.
19
            Q
                       So you're right back where you start with
   ARCO, then.
20
                You'll have to have a new farmout with ARCO?
                       That's correct.
21
            Α
22
            Q
                       Thank you.
23
                                 MR.
                                      KELLAHIN:
                                                  I have nothing
   further.
24
25
                                 MR. CATANACH: Mr. Dickerson?
```

MR. DICKERSON: No. ١ MR. CATANACH: I have no ques-2 tions of the witness at this time. 3 4 ANDREW T. O'HARE. 5 being called as a witness and being duly sworn upon oath, testified as follows, to-wit: 7 8 DIRECT EXAMINATION 9 BY MR. DICKERSON: 10 Q Mr. O'Hare, will you state your 11 your occupation, and by whom you're employed? 12 Α My name is Andrew T. O'Hare. I'm a geol-13 ogist for TXO. 14 And have you previously testified before Q 15 this Division as a geologist, and how recently has that been 16 done? 17 A In the past month, on January 9th. 18 Mr. O'Hare, for the purpose of forming an 19 opinion as to the -- an appropriate risk penalty to be im-20 posed in any order issued by the Division in Case 8784, have 21 you made made a geologic study of the area in question? 22 Α Yes, I have. 23 24 0 And are you familiar with TXO's geological data in this area? 25

Yes, I am. 1 Α Is this witness 2 MR. DICKERSON: qualified, Mr. Examiner? 3 MR. CATANACH: Any objections? No objections. 5 MR. KELLAHIN: He is considered 6 MR. CATANACH: 7 qualified. Mr. O'Hare, refer to what we have submit-8 ted as TXO Exhibit Number Five, please, and tell us what you've shown on that map. 10 11 Α Exhibit Number Five designates the proposed location in red and the proposed 40-acre proration 12 unit in yellow. 13 14 There are five producing, or having pro-15 duced, wells shown. 16 There are fifteen total wells shown 17 the plat, and of that fifteen the entire -- well, the entire 18 fifteen wells penetrated the objective horizon, which is the 19 Queen. 20 Of those fifteen, two wells became Oueen 21 producers. They are designated in blue, and are in the 22 southeast corner of Section 11. One has produced in excess 23 of 164,000 barrels and the other more recent well has pro-24 duced almost 55,000 barrels from this projected Queen objec-25 tive.

Q When were those two Queen wells drilled,
Mr. O'Hare?

A The initial Queen well was drilled in approximately 1956 and the subsequent offset was drilled in 1967.

Q And you have indicated the three San Andres producers. Is the San Andres above or below this Queen formation?

A The San Andres is a deeper horizon, and is not proposed to be penetrated in our test. We'll just drill to the Queen.

Q Okay. Refer to your Exhibit Number Six,
Mr. O'Hare and show us what you've done by that map.

A Exhibit Number Six is a structure map on top of the Queen pay. It shows a structural nose, which is aligned roughly northest/southwest, going through the east half of Section 11 and continuing into Section 1.

The two Queen producers are on the south end of that nose and production, or porosity development, appears to be associated with that nose in question.

Our proposed location as mapped will be approximately 40 feet above the nearest producer, and the reason that we are proposing a well up dip is wells that have penetrated this same horizon at a structural level deeper than the initial producer have not been productive.

Q So do I understand your testimony to be that this porosity development in your opinion is the most significant factor in whether or not the Queen will produce in your proposed location?

A Yes, and I'll discuss that with my next exhibit.

Q Okay, turn to your Exhibit Number Seven and tell us about it.

A Okay, Exhibit Number Seven is a porosity Isopach map with the number of feet in excess of 15 percent designated. The porosity pod, as I have mapped, is aligned roughly northest/southwest in agreement, more or less, with the structural nose previously discussed.

As I have mapped, the proposed location should optimistically penetrate approximately 7 to 8 feet of sand with 15 percent, or greater, porosity.

The porosity data was taken from many different types of logs and many different -- and most of these logs are relatively old and they're the best estimates that I could make.

In the well previously discussed that was penetrated just west of the main Queen producer is in the southeast corner just west of that -- that main producer, as I said, and that penetrated twelve feet of porosity and came up dry, and I feel as if there is a structural as well as a

stratigraphic component to this trap, and we will be hoping ١ to be moving up-dip, and hopefully again encountering 2 producable porosity. 3

As can be seen, there's many wells that encountered the same interval and penetrated zero feet.

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Q Now I notice you have the trace of your cross section A-A' shown on there.

> Α Yes, that's my next exhibit.

Q Okay, turn to your Exhibit Number and describe that for us.

Α Exhibit Number Eight is cross section A-11 Α'. 12

It shows at the lefthand side one of the more recent wells drilled by Quanah Petroleum in 1982. The Queen pay is at approximately 4100 feet. This interval -this well is a San Andres producer and is presently inactive and has not been tested in the Queen pay.

The well that has produced the most in the area is the next well in question. There was no porosity log available for that and I've got a resistivity log there showing the basic correlation. It is slightly down dip from the Quanah well and the perforations and DST interval are indicated on the cross section.

last well on the cross section is in The 25 Section 14. It was a deeper test and it is, as designated,

up dip from our proposed location and the Queen objective was not tested and therefore considered to be uneconomic or not capable of producing.

Again I did not have a porosity log available for that well and I would therefore assume that this well probably has zero feet of porosity, and the porous lens in question, which we are hoping to penetrate appears to be present in the Quanah well and is definitely present in the Weaver well and we are hoping to extend this porosity pod south and up dip in our proposed well.

Q Based on your study of this data, Mr. O'Hare, have you formed an opinion as to the relative risk you anticipate encountering in the drilling of this well?

A Yes, I have.

Q And would you summarize your conclusion for us?

A I would recommend a 200 percent risk penalty mainly due to the nature of the porosity in these sandstones. They are, the porosity is very ephemeral and (not clearly understood) percent is definitely required for any type of production.

The producing wells in question are surrounded on many sides by dry holes and by wells that penetrated the interval but were proven nonproductive in even
more favorable structural positions than the producers.



Our test is only going to be to the Queen 1 objective and to my knowledge in the immediate area there is 2 no production from any horizons above the Queen and there-3 fore it would be a one objective well, which -- which again is a fairly risky venture and also due to the price -- due 5 to the nature of the falling oil and gas prices, I feel that this definitely warrants a 200 percent penalty. Q Mr. O'Hare, were Exhibits Five through 8 Eight prepared by you? 9 Α Yes. 10 Mr. Examiner, I MR. DICKERSON: 11 move admission of TXO's Exhibits Five through Eight at this 12 time. 13 MR. CATANACH: Mr. Kellahin. 14 objections? 15 MR. KELLAHIN: No objections. 16 17 MR. CATANACH: TXO's Exhibits 18 Five through Eight will be admitted as evidence. 19 MR. DICKERSON: And I have no further questions of this witness. 20 MR. CATANACH: Mr. Kellahin? 21 KELLAHIN: 22 MR. Thank you, Mr. Catanach. 23

24

CROSS EXAMINATION

2 BY MR. KELLAHIN:

Q Mr. O'Hare, have you assessed the chances to make a commercial well for this prospect, and I assume you have, what do you assess those chances are? Are they one in five, two to one, how would --

A Personally, I would consider this a wildcat venture, and so I'd say that the chance of success is less than one in ten.

Q What causes you to believe this to be a wildcat venture notwithstanding the fact that it's the 40-acre diagonal offset to a Queen producer?

A Just due to the nature of the wells surrounding those producers. That well just west of the -- the
big Queen well penetrated porosity which I gave the equivalent to of 12 percent and is only down dip 5 feet from that
main producer, and it came up dry.

And further north of that the Sinclair Forrest Well, which penetrated this Queen pay, proved not productive and again is up dip from the two producers.

And I have no porosity data for the Marlene Petroleum Well but it is also at a favorable structural position and again came up nonproductive, and it remains to be seen if the Quanah Well will be productive in this interval.

1 So I do consider that there's a very high risk for coming up with the number of feet necessary to make 2 a well, even to be equivalent to the C & C Operating Taylor. 3 Have you had experience with the develop-Q ment and exploration of the Queen sands in other areas of 5 Lea County? 6 I've worked a little bit further west 7 Α . of hered. 8 Is it typical of these Queen traps to be 9 Q small in areal extent and confined to two or three wells, as 10 we might see in this example? 11 There is some very large fields 12 the Queen and there's some very small fields in the Queen, 13 the porosity element is -- is varying depending on deposi-14 tional setting. 15 16 If we look at the wells to the north, Q south -- I'm sorry, to the north, west, and east of the big 17 18 producer, you've got good control around that well, do you 19 not? 20 Α . . Yes. 21 You've well defined the Ispach map, at 22 least in those directions. 23 As we go to the south to the proposed lo-24 cation, the information from the Sinclair Taylor Well in 14 25 doesn't tell us much one way or another, does it?

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33
1
            Α
                       No, it doesn't.
                       That wasn't drilled as a Queen test,
2
            Q
   it?
3
4
            Α
                       No.
                      What type of test was it?
5
            Q
6
            Α
                      It was a deeper objective, chances are the
7
   Devonian; I'm not really sure just offhand.
                       Will it still honor the available geology
8
9
   in your Isopach if we were to extend the 12-foot interval
10
   around the C & C operated Taylor Well, simply extend that on
   the same line straight to the south and not contour an end-
11
   ing point to it, but around the proposed location?
12
13
            Α
                        Again it can be construed in any manner
14
   with this little control available, but I do believe that
15
   this porous lens is limited, and that's why I mapped it as
16
   such.
17
            Q
                       Well, you were being very conservative in
18
   determining how to contour the Isopach.
                                              There's an absence
19
   of --
20
            Α
                       I'll give you that.
21
                        There's an absence of wellbore data to
            Q
22
   tell you what happens as we move south, isn't that right?
23
            Α
                       I agree --
24
                       All right.
            Q
25
            Α
                       -- entirely.
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1
                       So it could -- hopefully, it's 15
            Q
2
   thick through the location, maybe. We certainly don't know
3
   if it's going to be 5 feet, we simply don't know.
                      You're entirely correct.
            A
5
            0
                       All right.
                                    You made a reference,
6
   O'Hare, to an examination of I think you said about fifteen
7
   Queen attempts or wells in the area?
            Α
8
                      Yes.
9
            Q
                      Are those the wells depicted on the pro-
   duction map, Exhibit Number Five?
10
11
                      Yes.
            Α
                       In examining that information, did
12
13
   observe or find any of those wells that encountered any type
14
   of mechanical difficulty in the drilling or completion of
15
   those wells?
16
                      I can't remember offhand.
            Α
17
            0
                      Have you determined whether or not there
18
   is a mechanical risk involved in the drilling and completion
19
   of a Queen well?
20
            Α
                      I haven't considered that myself.
21
            Q
                      Your consideration, then, of the risk is
22
   the geologic risk that you have determined in seeing if you
23
   either drill a dry hole or a commercial well.
                                                    That's what
24
   you're talking about?
25
                      Entirely.
            Α
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1
            Q
                        Were you the exploration geologist
   developed the prospect and made the presentation to TXO's
2
   management in order to get drilling funds to drill the well?
3
            Α
                       No, I wasn't.
                       Who was that geologist?
5
            Q
            Α
                        He is no longer employed with
                                                                Ι
7
   think his name was John Tarbok (sic).
            Q
                       When was that proposal made, approximate-
8
9
   ly?
         Can you give me a time reference as to when your man-
   agement made the decision to drill the well?
10
            Α
                       I think it was in 1982; sometime in 1982.
11
   That -- it was quite awhile ago.
12
                       Is your presentation independent of what
            Q
13
   Mr. Tarbok presented to management?
14
                             I went in and remapped the area my-
            Α
15
                       Yes.
16
          although is maps were similar, but I remapped it and
   just contoured a little bit differently than he did.
17
18
            Q
                       Thank you, Mr. O'Hare. That's all.
19
                                 MR.
                                      DICKERSON:
                                                   I have no fur-
20
   ther questions, Mr. Catanach.
21
                                 MR.
                                      CATANACH:
                                                  I have no ques-
22
   tions for the witness.
23
                                 MR. DICKERSON:
                                                  I have nothing,
24
   Mr. Examiner, unless Mr. Kellahin has.
25
                                 MR. KELLAHIN:
                                                 Just a statment,
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36
   Mr. Examiner, that notwithstanding the hearing, Mr. Dicker-
1
   son and I are both encouraging our clients to try to reach a
   solution in this matter, and we will continue to do so.
3
4
                                 MR.
                                      CATANACH: Okay. Is there
5
   anything further in Case 8774?
6
                                 MR. DICKERSON:
                                                  No.
7
                                 MR. CATANACH: If not, it will
   be taken under advisement.
9
10
                        (Hearing concluded.)
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CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Saray W. Boyd

d do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6784. heard by me on February 5, 1986 -

Oil Conservation Division