

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO

11 September 1985

EXAMINER HEARING

IN THE MATTER OF:

Application of Pennzoil Company for pool creation, special pool rules, assignment of a discovery allowable, and the contraction of the East Lovington-Pennsylvanian Pool, Lea County, New Mexico. CASE 8696

Application of Pennzoil Company for an unorthodox oil well location, Lea County, New Mexico. CASE 8697

BEFORE: Gilbert P. Quintana, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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1  
2 MR. QUINTANA: We'll call next  
3 Case 8696, the application of Pennzoil Company for pool  
4 creation, special pool rules, assignment of a discovery al-  
5 lowable, and the contraction of the East Lovington-Pennsyl-  
6 vanian Pool, Lea County, New Mexico.

7 MR. KELLAHIN: If the Examiner  
8 please, we would request that you for purposes of testimony  
9 also call the next case, 8697. The subject matter is the  
10 same in both cases.

11 MR. QUINTANA: Based on the ap-  
12 plicant's request, we'll also call 86 -- Case 8697, the ap-  
13 plication of Pennzoil Company for an unorthodox oil well lo-  
14 cation, Lea County, New Mexico.

15 Are there other appearances in  
16 Case 8696 and 8697?

17 If not, how many witnesses do  
18 you have?

19 MR. KELLAHIN: I have two.

20 MR. QUINTANA: I'd like them to  
21 stand and be sworn in at this time.

22  
23 (Witnesses sworn.)  
24

25 MR. QUINTANA: You may proceed.

1 MR. KELLAHIN: Thank you, Mr.  
2 Examiner.

3 I'm Tom Kellahin of Santa Fe,  
4 New Mexico, appearing on behalf of the applicant.

5 We are requesting in the first  
6 case, Mr. Examiner, the establishment of a new Strawn oil  
7 pool. We propose to call that the Shipp Pool, S-H-I-P-P.

8 We propose that the new pool be  
9 established on 80-acre spacing and that it have special pool  
10 rules that would provide for an operator to drill a well at  
11 a location no closer than 330 to any of the boundaries of  
12 that 80-acre spacing unit.

13 Our original application has a  
14 typographical error in it, in that it sought special well  
15 location no closer than 330 from the quarter quarter line.  
16 That should have been quarter line. It has not -- that er-  
17 ror has not been repeated in the advertisement. The adver-  
18 tisement is correct.

19 With regards to the unorthodox  
20 oil well location, that application is filed because cur-  
21 rently that well if commenced today would be an unorthodox  
22 well location under the statewide rules insofar as it's  
23 closer than 330 to any quarter quarter line.

24 We would like to commence this  
25 well as soon as possible and would request the Examiner

1 either to approve the unorthodox location or in the alterna-  
2 tive, if we can expeditiously adopt special rules, then we  
3 no longer need the unorthodox location.

4 Mr. Examiner, my first witness  
5 this morning is Mr. Greg Hair.

6  
7 GREGORY L. HAIR,  
8 being called as a witness and being duly sworn upon his  
9 oath, testified as follows, to-wit:

10  
11 DIRECT EXAMINATION

12 BY MR. KELLAHIN:

13 Q Mr. Hair, for the record would you please  
14 identify yourself and describe what it is that you do?

15 A My name is Greogry L. Hair, District Geo-  
16 logist for Pennzoil in Midland, Texas.

17 Q In the recent past, Mr. Hair, have you  
18 testified before the New Mexico Oil Conservation Division as  
19 a petroleum geologist?

20 A Yes, I've testified several times as  
21 such.

22 Q And pursuant to your employment have you  
23 made a geologic investigation of the facts surrounding both  
24 of these applications by Pennzoil?

25 A Yes, I have.

1 MR. KELLAHIN: We tender Mr.  
2 Hair as an expert petroleum geologist.

3 MR. QUINTANA: He's considered  
4 an expert geologist.

5 You may proceed.

6 Q Mr. Hair, I'd like to direct your atten-  
7 tion first of all to Exhibit Number One.

8 I'd like to use Exhibit Number One, Mr.  
9 Hair, to have you orient us generally as to who the operator  
10 and majority working interest owners are in this section and  
11 the adjoining properties.

12 A Okay. Exhibit One is a plat showing the  
13 area in question, centered primarily on Section 4, Township  
14 17 South, Range 37 East, in Eddy County.

15 It shows the current well which we have  
16 producing as the Viersen No. 1 as an oil well in the south-  
17 east quarter of Section 4, and it shows the current proposed  
18 location that we have, which is currently an unorthodox lo-  
19 cation.

20 Q The Viersen No. 1 Well, which you've  
21 identified, is that the discovery well for this pool?

22 A Yes, it is the discovery well for the  
23 pool.

24 Q And how would you identify the second  
25 well, which is the subject of the unorthodox oil well loca-

1 tion?

2 A It would be the Viersen No. 2. Also  
3 shown on this plat is the major working interest owners in  
4 each of the 160-acre units around this area. There are a  
5 few working interest owners that are not identified here;  
6 they are very minor and these are just major interest own-  
7 ers.

8 As you can see, Pennzoil has considerable  
9 interest around the area, along with several other com-  
10 panies.

11 Q All right, sir, let's turn to Exhibit  
12 Number Two.

13 MR. QUINTANA: May I interrupt  
14 a second?

15 MR. KELLAHIN: All right, sir.

16 MR. QUINTANA: What was the  
17 name of that second well?

18 A Viersen No. 2.

19 Q Mr. Hair, let's direct your attention to  
20 Exhibit Number Two and would you first of all orient the  
21 Examiner as to the relationship of this proposed Strawn Pool  
22 to the other Strawn Pools in the immediate area?

23 A Yes. This exhibit shows the outline of  
24 the proposed pool as well as the pools in the same general  
25 area. You can see it lies between the Casey Field on the

1 north/northeast; the Lovington Penn East Field on the north-  
2 west; the Midway Field on the southwest; and the Humble City  
3 Strawn Field on the southeast.

4                   These -- of these fields Casey is still  
5 producing. Lovington-Penn is, I believe, an abandoned  
6 field. Midway is a producing field and Humble City is, I  
7 believe a producing field. It's barely producing.

8                   The proposed Shipp Field is located in  
9 Section 4, 17 South, 37 East.

10               Q               Would you identify for the Examiner what  
11 the spacing is for the various Strawn pools in the immediate  
12 area?

13               A               The Casey Strawn Pool has 80-acre  
14 spacing, as does the Humble City Pool.

15                   The Lovington-Penn East and the Midway  
16 Pool are on statewide rules. No rules, field rules were  
17 ever adopted for those fields.

18               Q               Because of the close proximity of the  
19 proposed Shipp Pool to these other Strawn pools, Mr. Hair,  
20 do you have a recommendation to the Examiner as to how to  
21 set the boundaries or determine what area or acreage is  
22 affected and applicable to the proposed Shipp Pool rules?

23               A               Yes, I believe on the Examiner's copy of  
24 this exhibit there is a red outline around the proposed  
25 area, and we think that that area should be included under

1 the pool rules. A mile buffer doesn't interfere with the  
2 rest, some of the rest of these fields but we feel we can  
3 fit within that red outline and not hinder any other field.

4 Q If we look at the east half of the south-  
5 east quarter of Section 4, is that the proposed spacing and  
6 proration unit for the discovery well?

7 A Yes, that is an 80-acre proration unit.

8 Q And what would be the proposed spacing  
9 unit for the Viersen No. 2 Well?

10 A It would be the west half of the south-  
11 east quarter.

12 Q Would the Commission's standard one mile  
13 buffer area around that quarter section be in conflict with  
14 the one mile buffer area around the other pools?

15 A Yes, I believe it would.

16 Q In your opinion is the proposed limits,  
17 then, for the area to be affected by the Shipp Pool rules  
18 one that is reasonable in terms of the geology?

19 A Yes, I think so.

20 Q All right, let's look, then, at the geo-  
21 logy.

22 I direct your attention to Exhibit Number  
23 Three, Mr. Hair, and have you identify that exhibit for us.

24 A This is a structure map on the top of the  
25 Strawn limestone, showing the same general area as we've

1 shown before with the Viersen No. 1 and the proposed loca-  
2 tion of the Viersen No. 2 identified.

3 Q Is this a structure map prepared by you  
4 or compiled under your direction?

5 A Yes, it is.

6 Q What conclusions do you draw based upon  
7 this structure map?

8 A It's really -- structure is not a terrib-  
9 ly significant factor in this area. It shows a gently dip-  
10 ping structure. It dips gently off to the northeast.

11 Q All right, sir. Would you now turn to  
12 Exhibit Number Four, Mr. Hair, and identify this exhibit?

13 A Exhibit Number Four is an Isopach of the  
14 porosity in the Strawn Lime.

15 As you can see, there are numerous iso-  
16 lated porosity units on this map. We have identified our  
17 proposed location again and I can identify for you the other  
18 fiels, if necessary. They are ot identified on the exhibit.

19 Q Is the Isopach map one that was prepared  
20 by you or compiled under your direction?

21 A Yes, it is.

22 Q Based upon your study of the geology, Mr.  
23 Hair, do you have an opinion as to whether or not the Vier-  
24 sen No. 1 Well in Section 4 constitutes a new Strawn oil  
25 discovery?

1           A           Yes, I believe it does. The porosity  
2 units out here are very small, isolated pods and we feel  
3 that this well has definitely discovered a new unit since it  
4 is a considerable distance away from another producing well.

5           Q           In terms of identifying this Shipp Pool  
6 as being a separate pool, Mr. Hair, would you describe for  
7 us the reasons that you've concluded that this reservoir is  
8 not connected with the Casey Strawn Field to the north?

9           A           It is separated by two dry holes, one in  
10 Section 34 -- three dry holes -- and two in Section 33. All  
11 of those were dry in the Strawn and we feel that that effec-  
12 tively separates us from those -- from that field.

13          Q           What geologic evidence do you have, Mr.  
14 Hair, that this discovery pool -- well in this new pool is  
15 separated from the Hunble City Field to the south and east?

16          A           The two dry holes in Section 10, both of  
17 which are Strawn wells, neither of which produced, and we  
18 felt that effectively separates it from the Shipp Field.

19          Q           All right, sir, and as we move then to  
20 the south and west, what, if any, is the geologic separation  
21 between the Midway Field and the proposed Shipp Pool?

22          A           The Tipperary Well in the southwest quar-  
23 ter of Section 4, the dry hole, had no effective porosity  
24 and we feel that that separates us from the Midway Pool.

25          Q           And finally, as we look then to the north

1 and east at the Lovington-Penn East Pool, what, if any, geo-  
2 logic evidence have you determined separates that field or  
3 pool from the Shipp Pool?

4 A A well in the northeast -- northwest  
5 quarter of Section 4 has a considerably thinner Strawn sec-  
6 tion than the other wells in that field. It also was a very  
7 marginal producer; I believe it made 19,000 barrels to de-  
8 pletion, and we feel it's on the edge of a pod and I'll de-  
9 velop that later when we look at the cross sections.

10 Q In terms of looking at the reservoir un-  
11 der the discovery well, can you describe for us why Pennzoil  
12 seeks approval of the unorthodox oil well location in the  
13 west of the southeast quarter?

14 A Yes. We feel it's an optimum location  
15 for drilling another well. These porosity pods tend to have  
16 very steep sides. They can disappear in one standard prora-  
17 tion unit and we feel we'd like to get right in the middle  
18 of the pod to reduce our risk.

19 Q Under current statewide spacing rules for  
20 a well of this type, would this be at a standard location?

21 A No, it would not.

22 Q Is the proposed location a more optimum  
23 location in relationship to the reservoir than the closest  
24 standard location?

25 A Yes, it is.

1                   Q               With regards to special rules for this  
2 Shipp Pool, Mr. Hair, do you have recommendations to the Ex-  
3 aminer as to the number of acres to dedicate to a well?

4                   A               We feel 80 acres is the optimum proration  
5 unit.

6                   Q               And with regards to well locations under  
7 the special rules, do you have a recommendation to the Exa-  
8 miner?

9                   A               Yes, 330 feet from the proration unit  
10 boundaries.

11                  Q               What's the reason that you have for de-  
12 siring 330 feet from the edge of the spacing unit?

13                  A               Because of the limited extent and steep  
14 sides of these porosity pods, we feel you need quite a bit  
15 of flexibility in placing your wells so as to reduce your  
16 risk.

17                  Q               Do you have a recommendation to the Exa-  
18 miner as to whether or not there should be any requirement  
19 as to how the 80-acre units are oriented --

20                  A               No.

21                  Q               -- within a quarter section?

22                  A               No.

23                  Q               Let me now direct you to the cross sec-  
24 tion A-A', which we've placed on the wall, Mr. Hair. I be-  
25 lieve it's marked as Exhibit Number Five. Would you ident-

1 ify and describe that exhibit for us?

2           A           Yes, I will.    A-A' is a cross section  
3 that runs from the southwest on this end to the northeast on  
4 that end. It runs Midway Field, through our proposed dis-  
5 covery, over to Casey Field, and there are five wells shown  
6 here.

7                   The well in Midway Field which is closest  
8 to the proposed Shipp Field here. The porosity unit is  
9 shown in green; very marginal porosity in the top of the  
10 unit; somewhat better in the lower, but we feel that this  
11 shows significant pinchout of porosity as we move to the  
12 northeast.

13                   As you move to the Tipperary Well it has  
14 absolutely no porosity directly between the Viersen No. 1  
15 and the Midway Field. This well was drill stem tested, re-  
16 covered no oil, no gas, no show.

17                   This is the Viersen No. 1 recently com-  
18 pleted in the Strawn. Here's the porosity section for that  
19 well.

20                   As we move off to the northeast, the next  
21 well which we feel is a dry hole which separates us from the  
22 Casey is the TXO Carter. It has very marginal porosity but  
23 was not completed as an oil well. It was a dry hole.

24                   Then the next well is the C&K Shipp, and  
25 it shows excellent porosity build-up and was a Strawn pro-  
ducer.

1           Q           In terms of defining a separate reservoir  
2 for the Viersen No. 1 Well, Mr. Hair, have you drawn any  
3 conclusions in terms of the structurals relationship of the  
4 Viersen No. 1 as opposed to the David Fasken well in the  
5 Midway Field and the Shipp 34-A Well in the Casey, Pool?

6           A           The David Fasken well is located in part  
7 of the field which is also a Devonian field, Midway Devon-  
8 ian, and it's located on a significant structure which we  
9 feel is fault bounded.

10                   We are not going to purport at this time  
11 that that fault separates us from them, but it certainly had  
12 a tremendous influence on the sedimentation of this rock,  
13 and you can see how significantly up-dip you are. We feel  
14 that that also helps separate the two reservoirs, that there  
15 was such a significance difference in elevation that those  
16 reservoirs could not be connected.

17                   And as you can see, there's no huge drop  
18 up here but the Casey Field is significantly down dip, which  
19 we feel is separating us.

20           Q           Now I'll direct your attention to Exhibit  
21 Number Six, which is the B-B' cross section, and identify  
22 that describe that exhibit.

23           A           Okay. This cross section runs from the  
24 northwest to the southeast. It starts in the abandoned  
25 Lovington-Penn Field, goes through the Viersen Well again  
and down to the Humble City Field.

1                   This cross section better illustrates how  
2 we feel we're separated from the Lovington-Penn Field. We  
3 have a considerable thickness in porosity, very important  
4 porosity -- these are not porosity logs; none were available  
5 -- in the major well in that field, which is up in Section  
6 32, was the best producer.

7                   As you go out to the edge well in Section  
8 4, the porosity is considerably reduced and obviously per-  
9 meability must have been also, because the well was a mar-  
10 ginal producer even though it did have porosity in it, so  
11 we feel it was an edge well in that field.

12                   Come on over, porosity develops very  
13 thick again in the Viersen No. 1, thickness way up.

14                   Then as you drop down in the Humble City,  
15 we have a well here with some porosity but no completion at-  
16 tempt was made, again; it was a dry hole.

17                   Then you come into the Humble City Field,  
18 nice porosity development.

19                   Q           Were both of those cross sections, Exhi-  
20 bits Five and Six, prepared by you?

21                   A           Yes, they were.

22                   Q           What is Pennzoil's anticipated commence-  
23 ment date for the Viersen No. 2 Well, Mr. Hair?

24                   A           We feel the fourth quarter of this year  
25 on this well.

1 MR. KELLAHIN: That concludes  
2 my examination of Mr. Hair, Mr. Quintana.

3 We'd move the introduction of  
4 his Exhibits One through Six.

5 MR. QUINTANA: Exhibits One  
6 through Six will be entered as evidence.

7 I have a couple of questions.

8

9 CROSS EXAMINATION

10 BY MR. QUINTANA:

11 Q Let me reiterate some of your requests.  
12 You seek no orientation of the 80-acre  
13 spacing units?

14 A No.

15 Q And the reason you want 330-foot distance  
16 from the outer boundaries is you need a lot of flexibility  
17 for the wells because of the way the Shipp, the proposed  
18 Shipp Pool is designed, the way it's set up?

19 A Yes, the way the porosity in the units  
20 abruptly terminates; we need a lot of flexibility to be able  
21 to hit those small porosity units.

22 MR. QUINTANA: I have no fur-  
23 ther questions.

24 Are there further questions of  
25 the witness?

1                   You may be excused.

2                   MR. KELLAHIN: If the Examiner  
3 please, we'll call Mr. Ralph A. Williams as our engineering  
4 witness.

5  
6                   RALPH A. WILLIAMS,  
7 being called as a witness and being duly sworn upon his  
8 oath, testified as follows, to-wit:

9  
10                   DIRECT EXAMINATION

11 BY MR. KELLAHIN:

12                   Q           Mr. Williams, for the record would you  
13 please state your name and occupation?

14                   A           My name is Ralph A. Williams. I'm a Sup-  
15 ervising Petroleum Engineer for Pennzoil Company in Midland.

16                   Q           Within the last 18 months, Mr. Williams,  
17 have you testified before the New Mexico Oil Conservation  
18 Division as a petroleum engineer?

19                   A           Yes, I have.

20                   Q           And pursuant to your employment by Penn-  
21 zoil Company have you as an engineer made a study of the en-  
22 gineering facts and data surrounding this application?

23                   A           Yes, I have.

24                   MR. KELLAHIN: We tender Mr.  
25 Williams as an expert engineer.

1 MR. QUINTANA: He is considered  
2 an expert engineer.

3 You may proceed.

4 Q Mr. Williams, let me direct your atten-  
5 tion to Exhibit Number Seven and have you identify that ex-  
6 hibit.

7 A This exhibit is a Hoerner Plot of build-  
8 up data obtained from the Viersen No. 1 and it serves as a  
9 basis for permeability calculations and pressure informa-  
10 tion.

11 Q What is the purpose of such a calculation  
12 and the compilation of the parameters to make that calcula-  
13 tion?

14 A The purpose of obtaining these parameters  
15 from this type of analysis is for the drainage radius calcu-  
16 lations which we will submit.

17 Q And have you done such drainage radius  
18 calculations for the discovery well?

19 A Yes, I have.

20 Q Would you describe for us, then, the in-  
21 formation contained on Exhibit Number Seven?

22 A The information contained on Exhibit Num-  
23 ber Seven pertinent to the drainage radius calculations is  
24 the permeability using the calculation was obtained from  
25 Slope 1, the Hoerner straight line portion of the curve.

1                   The P-star, or P effective drainage rad-  
2 ius, or the static reservoir pressure, is extrapolated to  
3 2473 from this plot. And another point of interest on the  
4 plot is the -- is some type of a boundary anomaly which oc-  
5 curs at approximately .8 on the Hoerner time, and at a rad-  
6 ius of investigation of approximately 1200 feet.

7                   Q           What was the source of the data used from  
8 which to make the Hoerner plot?

9                   A           The source of the data was an Amerada-  
10 type gauge, which was run to a point -- to close to the bot-  
11 tom hole mid-perfs.

12                  Q           How long was the pressure information  
13 taken for the well?

14                  A           It was a 91-1/2 hour build-up.

15                  Q           In your opinion was the method for taking  
16 the test and deriving the pressure information reasonable in  
17 terms of methodologies used by a petroleum engineer?

18                  A           Yes, sir, it was.

19                  Q           All right. What are the points, then,  
20 shown on the Hoerner plot as the little dots on the graph?

21                  A           They are -- they are pressure points with  
22 the corresponding Hoerner time, which were read from the  
23 gauge recorder.

24                  Q           Based upon the calculation of the Hoerner  
25 plot, Mr. Williams, what do you conclude about the permeabi-

1 lity for the discovery well?

2 A The permeability of the discovery well  
3 calculates to an average permeability of 43 millidarcies.

4 Q In terms of the magnitude of that type of  
5 permeability, 43 millidarcies, can you give us a general  
6 range of what you anticipate would be the type of reservoir  
7 involved with such permeability?

8 A The permeability, this type of permeabil-  
9 ity is indicative of a -- of a well with high productivity,  
10 which is shown, which the well has shown.

11 Q Have you been able to confirm your Hoer-  
12 ner plot calculations of the permeability with any core in-  
13 formation?

14 A Yes, we have a slight amount of core in-  
15 formation, which we'll enter as the next exhibit.

16 Q Let's turn then to Exhibit Number Eight,  
17 Mr. Williams, and have you identify that exhibit for us.

18 A This is an exhibit of an analysis pre-  
19 pared by CORE Laboratories on a core that we had in the  
20 Viersen No. 1.

21 The core is a 58-foot core. The recovery  
22 on the core was only the top three feet and the remaining  
23 portion of the core was unrecovered. It was crumbling, or  
24 some of it.

25 And the permeability exhibited in the two

1 samples that did have permeability, were 218 millidarcies and  
2 17 millidarcies, and I feel these tie in with the -- if this  
3 permeability trend was continued across the whole interval  
4 would correlate with the 43 millidarcies obtained from the  
5 Hoerner build-up.

6 Q Would you now turn to Exhibit Number  
7 Nine, Mr. Williams, and describe for us the source of the  
8 reservoir parameters that went into the drainage calculation?

9 A The permeability of 43 -- .043 Darcies  
10 again was obtained from the Hoerner plot.

11 The thickness, H, of 74 feet was obtained  
12 from the (not understood) in the Garrison No. 1.

13 The static reservoir pressure,  $P_e$ , of  
14 2473 also was obtained from the Hoerner analysis.

15 Flowing bottom hole pressure of 2258 was  
16 obtained by measurement prior to the shut-in of the well.

17 The oil viscosity and the formation vol-  
18 ume factors were obtained from a similar oil from the Lov-  
19 ington Northeast Fields from the PVT analysis.

20 The wellbore radius is .33 feet and the  
21 flow rate of 878 barrels per day was the 24-hour average of  
22 the production prior to the shut-in.

23 Q Using these reservoir parameters, Mr.  
24 Wilson, have you conducted -- have you calculated a drainage  
25 for the discovery well?

1           A           Yes, I've calculated an effective drain-  
2 age radius of 9090 feet.

3           Q           Based upon your calculation of the drain-  
4 age radius and the permeability of the reservoir, do you  
5 have any opinions or conclusions about well spacing for the  
6 proposed pool?

7           A           Yes, I do. 80-acre spacing would be an  
8 adequate well spacing for this type of permeability.

9           Q           Have you made an investigation to deter-  
10 mine from an engineering point of view whether the Shipp  
11 Pool is separated from the Humble City Strawn Pool to the  
12 south and east?

13          A           Yes, I have.

14          Q           Let's turn now, sir, to Exhibit Number  
15 Ten, and have you identify that exhibit for us.

16          A           Exhibit Number Ten is a plot of produc-  
17 tion versus time of the Humble City Strawn Field, which il-  
18 lustrates the well began producing -- or the field began  
19 producing in 1972 and has -- is producing up until the pre-  
20 sent time and only the '84 is missing because it's below the  
21 scale of the -- and it's only produced 47 barrels of oil in  
22 1984.

23          Q           All right. For 1983 what was the total  
24 production?

25          A           It averaged 4 barrels per day.

1 Q In 1984 what is the reported production?

2 A 47 barrels for the whole year.

3 Q How would you use this information to  
4 reach a conclusion with regards to the separation of the  
5 Shipp reservoir, or the Shipp Pool from the Humble City  
6 Pool?

7 A If a similar type of permeability which  
8 is displayed by the Viersen No. 1 was continuous throught  
9 the Humble City Strawn Field, then the Humble City Strawn  
10 Field would have drained the proposed Shipp Field.

11 Q If the Humble City Strawn had been in  
12 communication with the Shipp Pool, would you have encoun-  
13 tered pressures to the magnitude displayed by the Viersen  
14 No. 1 Well?

15 A No, we would not. We would have -- we  
16 would have seen pressures of only several hundred pounds at  
17 the most.

18 Q When we look at the relationship of the  
19 Shipp Pool to the reservoir to the northwest, I believe  
20 that's the Lovington East?

21 A That's correct.

22 Q All right, let's turn now to Exhibit Num-  
23 ber Eleven, Mr. Williams, and have you identify that exhi-  
24 bit.

25 A This exhibit is a composite decline curve

1 of the Barton No. 1, the State P No. 1, the State U No. 1,  
2 and the State V No. 1, and it illustrates the production of  
3 -- in barrels per day plotted versus time.

4 It illustrates that the production began  
5 in 1951 and the last reported production was in 1982.

6 Q What was the average production in 1982,  
7 the last year of reporting?

8 A Approximately 5 barrels a day.

9 Q What is the relationship with this infor-  
10 mation to the information that you have studied for the  
11 Shipp Pool?

12 A This is also similar to the Humble City  
13 Field in that if a permeability connection would have  
14 existed between the Lovington-Penn East Field and the pro-  
15 posed Shipp Field that we would have -- this field would  
16 have effectively drained the Shipp Field.

17 Q Based upon your studies of the engineer-  
18 ing data available, Mr. Williams, what conclusion do you  
19 reach with regards to whether or not the Shipp Pool, the  
20 Viersen No. 1, has encountered a new Strawn pool?

21 A I believe from all the information that  
22 I've examined that the Shipp Field is a new Strawn oil  
23 reservoir.

24 Q Were Exhibits Seven through Eleven pre-  
25 pared by you or compiled under your direction and supervi-

1 sion?

2 A Yes, they were.

3 MR. KELLAHIN: That concludes  
4 my examination of Mr. Williams.

5 MR. QUINTANA: Do you want to  
6 enter those exhibits?

7 MR. KELLAHIN: Yes, would you,  
8 please, Seven through Eleven.

9 MR. QUINTANA: Exhibits Seven  
10 through Eleven will be entered as evidence in Cases 8696 and  
11 Case 8697.

12 MR. MARK MARTIN: May I ask a  
13 general question, please?

14 MR. QUINTANA: Yes.

15 MR. MARK MARTIN: My name is  
16 Mark Martin and I'm with Tipperary and we're involved in the  
17 land covered by this application and we don't -- we don't  
18 propose at this time to oppose it, but I was wondering if  
19 these exhibits would be available to us to use?

20 MR. QUINTANA: Yes, the exhi-  
21 bits are available to you.

22 MR. KELLAHIN: We have a  
23 limited number of copies of exhibits today, Mr. Quintana,  
24 but we will do our best to give you a set, Mr. Dickerson a  
25 set, and --

1 MR. QUINTANA: Pass around a  
2 piece of paper that people would like copies of that and  
3 put it down there and we'll have copies sent to the indivi-  
4 dual people.

5 MR. MARK MARTIN: If we con-  
6 cluded that we did want to oppose it, would we have to op-  
7 pose it here and now or could it be later?

8 MR. QUINTANA: It could -- we  
9 have -- it could go de novo, I guess, you have a month, is  
10 that right, Mr. Kellahin? A month to -- I think you have a  
11 month from the date of the hearing or date of the order to  
12 go de novo.

13 MR. KELLAHIN: There is an in-  
14 teresting little wrinkle in the statute, Mr. Quintana, that  
15 in my understanding would limit de novo hearings to those  
16 parties that had participated at the Examiner level and if  
17 Mr. Martin desires to participate in this case, I guess now  
18 is the time to oppose the proposed spacing.

19 I have not stated earlier, and  
20 I will state now, that we propose these rules to be in ef-  
21 fect for a temporary period of one year to give us an oppor-  
22 tunity to obtain additional information.

23 MR. QUINTANA: Was that a sat-  
24 isfactory answer?

25 MR. MARK MARTIN: Yeah, that's

1 fine.

2 As I say, we don't -- we don't  
3 foresee any problem but I would like to be able to (not  
4 audible).

5 MR. QUINTANA: Yes, I have a  
6 question dealing with -- and I'm not sure whether either one  
7 of you would answer this question -- dealing with the con-  
8 traction of the East Lovington-Pennsylvanian Pool, what por-  
9 tion do you wish to contract in?

10 MR. KELLAHIN: Mr. Examiner,  
11 that portion of the advertisement was not placed on the  
12 docket at our request. I believe Mr. Stogner made the de-  
13 termination that it was necessary to somehow contract the  
14 East Lovington-Penn.

15 We believe the way to address  
16 the possible overlap or conflict with the adjoining Strawn  
17 pools would be to declare the area outlined in red on Exhi-  
18 bit Number Two to be the area controlled by the Shipp Strawn  
19 Pool and correspondingly contract any of the adjoining pools  
20 or their buffer areas so that they're excluded from this  
21 Shipp Pool.

22 MR. QUINTANA: That's fine.  
23 And at this point in time the red outline does not overlap  
24 any area that I can see. Correct me if I'm wrong.

25 MR. KELLAHIN: That is correct.

1 I think Mr. Stogner's concern was about the Lovington East  
2 Penn dry hole in the northwest of the northwest of 4.  
3 There's a 40-acre tract there. We've excluded that from our  
4 pool and I think his concern was that there was an overlap  
5 in terms of the (not clearly understood).

6 MR. QUINTANA: Bear with me a  
7 second.

8  
9 CROSS EXAMINATION

10 BY MR. QUINTANA:

11 Q What is the producing depth of the dis-  
12 covery well?

13 A It's approximately 11,100 feet, I be-  
14 lieve.

15 MR. HAIR: 11,138 to 11,255.

16 Q And the official name of this pool you  
17 want to be the Shipp Pool or the Shipp Strawn Pool?

18 A Greg?

19 MR. KELLAHIN: Shipp Strawn,  
20 Mr. Examiner.

21 MR. QUINTANA: I have no fur-  
22 ther questions of the witness.

23 Are there further questions of  
24 the witness?

25 If not, he may be excused.

1 Is there anything further in  
2 Cases 8696 and Case 8697?

3 MR. KELLAHIN: Yes, Mr.  
4 Examiner, we have for your reference obtained and will sub-  
5 mit copies of the special rules where they are in effect for  
6 all the adjoining Strawn pools. That may be of some infor-  
7 mation to you.

8 In addition we have received  
9 from various working interest owners in the area affected  
10 letters indicating they have no objection to the spacing.  
11 We have waivers from David Fasken, Yates, et al, Superior,  
12 and Amerind Oil Company, Mr. Examiner. I submit those to  
13 you also for your file.

14 That concludes our presenta-  
15 tion.

16 MR. QUINTANA: Mr. Kellahin,  
17 based on the fact that you do like -- you would like this  
18 case expedited, would you submit to me a proposed order?

19 MR. KELLAHIN: I'd be happy to.

20 MR. QUINTANA: And let me clar-  
21 ify another point. If we do expedite Case 8696 then we're  
22 not going to need 8697.

23 MR. KELLAHIN: That's correct.

24 MR. QUINTANA: If there is no-  
25 thing further, these cases, Cases 8696 and Case 8697 will be

1 taken under advisement.

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(Hearing concluded.)

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## C E R T I F I C A T E

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

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 8696 & 8697 heard by me on SEPT. 11 1985

William P. Quintana, Examiner  
Oil Conservation Division