

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

19 March 1986

DIVISION HEARING

IN THE MATTER OF:

Application of Pennzoil Company
for an unorthodox oil well loca-
tion, Lea County, New Mexico.

CASE
8860

BEFORE: David R. Catanach, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division:

Jeff Taylor
Attorney at Law
Legal Counsel to the Division
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Santa Fe, New Mexico 87501

For the Applicant:

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I N D E X

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GREGORY L. HAIR

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Direct Examination by Mr. Kellahin

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Cross Examination by Mr. Catanach

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E X H I B I T S

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Pennzoil Exhibit One, Plat

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Pennzoil Exhibit Two, Map

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MR. CATANACH: We'll call next

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Case 8860.

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MR. TAYLOR: The application of

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Pennzoil Company for an unorthodox oil well location, Lea

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County, New Mexico.

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MR. KELLAHIN: If the Examiner

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please, I'm Tom Kellahin from Santa Fe, New Mexico, appear-

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ing on behalf of the applicant, and I have one witness to be

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sworn.

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MR. CATANACH: Are there other

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appearances in this case?

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Will the witness please stand

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and be sworn in?

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(Witness sworn.)

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GREGORY L. HAIR,

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being called as a witness and being duly sworn upon his

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oath, testified as follows, to-wit:

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DIRECT EXAMINATION

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BY MR. KELLAHIN:

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Q

Mr. Hair, would you please state your

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name and occupation?

1 A Gregory L. Hair. I'm a District Geolo-
2 gist for Pennzoil Company in Midland, Texas.

3 Q Mr. Hair, have you previously testified
4 before the Division as a petroleum geologist?

5 A Yes, I have.

6 Q Pursuant to your employment by Pennzoil,
7 have you made a study of the geologic factors surrounding
8 Pennzoil's application for an unorthodox oil well location
9 in the Shipp Strawn Field?

10 A Yes, I have.

11 MR. KELLAHIN: We tender Mr.
12 Hair as an expert geologist.

13 MR. CATANACH: Mr. Hair is con-
14 sidered qualified.

15 Q Let me direct your attention, Mr. Hair,
16 to Exhibit Number One, which is the lease ownership plat,
17 and have you refresh the Examiner's recollection about the
18 specific spacing and well location rules that are adopted
19 and utilized by the Division for the Shipp Strawn Oil Pool.

20 A Yes. The proposed location is in the
21 southwest quarter of Section 3, 17 South, 37 East, and that
22 falls under the field rules of the Shipp Strawn Pool, which
23 was established last year.

24 I believe the rules currently state that
25 a standard oil well location will be located 150 feet from

1 the center of a quarter quarter section. And I believe that
2 is the only rule at this time.

3 We have made application for a spacing
4 outside that 150-foot radius and therefore it's nonstandard.

5 Q What is the proposed orientation of the
6 80-acre spacing unit to be dedicated to the well?

7 A It would be a stand-up unit, a
8 north/south unit, and it would cover the east half of the
9 southwest quarter.

10 Q What is the requested footage location
11 for the well?

12 A 1310 feet from the south line, 1980 feet
13 from the west line.

14 Q That would place the well, then, in the
15 southeast of the southwest 40 acres and it would be approxi-
16 mately 10 feet south of the 40-acre line separating the
17 southeast/southwest from the northeast/southwest?

18 A That's correct.

19 Q Would you identify for us your under-
20 standing of the offset ownership to determine whether or not
21 you're encroaching towards any other operator other than
22 Pennzoil?

23 A Okay. The only other offset operator
24 that we would be moving anywhere near towards is probably
25 Inexco in the northeast quarter of 3. In reality we could

1 have a standard location closer to them. So we're moving
2 closer to no one. We're just moving closer to the center of
3 our own proration unit.

4 Q Let's turn now to Exhibit Number Two, Mr.
5 Hair, and have you identify the geologic basis that causes
6 you to conclude that the proposed unorthodox location is the
7 optimum location from which to drill and penetrate the Shipp
8 Strawn Pool for this spacing unit.

9 A Okay. To refresh your memory, it's been
10 previously testified in this area that limestone thickness
11 determines the reservoir quality of the rock; the thicker
12 the limestone, the better the reservoir quality.

13 It's essential to try to hit the thickest
14 part of the Strawn limestone.

15 Based on seismic data, primarily, this
16 map was constructed to show that we feel we have a thicken-
17 ing under the proposed location and that if we move off of
18 the nonstandard location that we're requesting, the risk in-
19 creases considerably because the lime thins abruptly as you
20 go north and south.

21 Q The proposed location puts you closer to
22 the center of the 80-acre spacing unit than you would be
23 permitted under the existing rules.

24 A Yes.

25 Q In your opinion is the proposed location

1 the best location from which to drill and produce this spac-
2 ing unit?

3 A Yes, I think it is. As you can see, it
4 occurs in the thickest part of the limestone as we have it
5 mapped.

6 Q Okay, and if you're required to move to
7 the closest standard location, you would then be moving to
8 the south?

9 A That is correct.

10 Q And you would have to move a distance of
11 about 500 and -- about 500 feet to the south?

12 A Approximately 510 feet, yes.

13 Q All right, and that will place you in an
14 interval that you anticipate to have a lesser thickness than
15 you've mapped for the Strawn limestone.

16 A That is correct, and while it may still
17 be productive, it would have considerably higher risk.

18 Q Was Exhibit One and Two prepared under
19 your direction and supervision, Mr. Hair?

20 A Yes, they were.

21 Q And the geologic conclusions that you
22 have expressed to the examiner are your own?

23 A That's -- that is correct.

24 MR. KELLAHIN: We move the in-
25 troduction of Exhibits One and Two.

1 MR. CATANACH: Exhibits One and
2 Two will be admitted into evidence.

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4 CROSS EXAMINATION

5 BY MR. CATANACH:

6 Q Mr. Hair, I understand this well location
7 is kind of in between the two pools, is that correct, the
8 Undesignated Humble Strawn and the Undesignated Shipp
9 Strawn?

10 A I believe that this falls under the field
11 rules for the Shipp Strawn.

12 Q For the Shipp Strawn?

13 A Yes, I believe we included the west half
14 of Section 3 in those field rules.

15 Q Mr. Hair, how was the geologic Exhibit
16 Number Two prepared? What control points were used?

17 A Okay. Primarily subsurface control
18 points as shown on the map. There are three Pennzoil wells
19 shown in Section 4, a Pennzoil well shown in Section 3, and
20 one Exxon location in Section 9. There are other locations.
21 I do not remember the operators.

22 The control pod itself, what we're look-
23 ing for, was primarily based on seismic data, which we have
24 used extensively in this area.

25 Q How successful have you been in using

1 seismic data that would isolate these pods?

2 A Okay, currently we have three producing
3 wells in the Shipp Strawn. We have one dry hole and we have
4 one well which is pending. We don't -- it's not -- no deci-
5 sion has been made on it yet, and that is the location shown
6 in the northern part of Section 4.

7 Q Have you -- have the three wells that
8 have been produced or completed, are they pretty good wells?

9 A They're very good wells.

10 Q Mr. Hair, on the lease map you have four
11 different names in the southwest quarter of Section 3.
12 What's the significance of that?

13 A Okay, those are, I believe, undivided in-
14 terests under that quarter. We did not show the percentage
15 and I don't even believe we've shown all the owners. We've
16 shown the major owners here in these quarter sections.

17 The major owners there are Pennzoil,
18 Superior, Amerada Hess, and Sabine. I think there are a few
19 other parties subject to this but we didn't list every par-
20 ty.

21 For example, I'm a little more familiar
22 with the northeast of Section 4. I believe there are like
23 22 working interest owners under that, but most of them have
24 less than one percent interest, so we didn't show everybody
25 here, but those -- this is the major interest owners.

1 Q So these are your partners in the well?

2 A Yes, they are. I believe they've been
3 notified of this hearing, also. I'm sure they have.

4 MR. CATANACH: I have no
5 further questions of the witness.

6 Is there anything further in
7 Case 8860?

8 MR. KELLAHIN: No, sir.

9 MR. CATANACH: If not, it will
10 be taken advisement.

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12 (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 the foregoing Transcript of Hearing before the Oil
Conservation Division (Commission) 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 copy of the transcript of the hearing held in
the presence of the following parties: BBW
heard by me on March 19, 1986

David R. Catano Examiner
Oil Conservation Division