STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT 1 OIL CONSERVATION DIVISION State Land Office Building 2 Santa Fe, New Mexico 3 31 July 1985 EXAMINER HEARING 5 6 IN THE MATTER OF: 7 Application of Rio Pecos Corporation CASE for an unorthodox gas well location, 8663 8 Lea County, New Mexico. 9 10 11 BEFORE: Gilbert T. Quintana, Examiner 12 13 TRANSCRIPT OF HEARING 14 15 APPEARANCES 16 17 18 For the Oil Conservation Jeff Taylor Division: Legal Counsel to the Division 19 Oil Conservation Division State Land Office Bldg. 20 Santa Fe, New Mexico 87501 21 For the Applicant: 22 23 24 25

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MR. QUINTANA: We'll call Case

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MR. TAYLOR: The application of Rio Pecos Corporation for an unorthodox oil well location,

> MR. KELLAHIN: If the Examiner

please, I'm Tom Kellahin of Santa Fe, New Mexico, appearing

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

MR.

OUINTANA: Are there other

appearances in Case 8663?

Lea County, New Mexico.

If not, would you have the wit-

ness stand and be sworn in at this time, please?

(Witness sworn.)

KELLAHIN: Mr. Examiner,

we're seeking an unorthodox oil well location in the Casey-Strawn Pool.

This 80-acre tract is immediately adjacent to the Casey-Strawn Pool. Mr. Wilson, while waiting for his case, has examined the nomenclature docket for today and finds that the Commission is taking his ac-

reage out of the Casey-Strawn Pool and proposes to put it in

the Northeast Lovington-Pennsylvanian Pool.

I think it would be most expedient to have you change the nomenclature case, 8670, and to change sub-paragraph (e), which says contract the Casey-Strawn Pool for this Section 27, northwest guarter.

MR. TAYLOR: You mean delete that?

MR. KELLAHIN: Delete that and leave that acreage in the Casey-Strawn Pool, and to delete (n), which would then extend the Northeast Lovington-Penn Pool to cover Section 27, the northwest quarter.

So if you strike 27, northwest quarter, from (n), then the balance of that ought to be correct.

MR. QUINTANA: Let me --

MR. KELLAHIN: It's not something you need to be aware of, that we are seeking to apply for an exception for acreage that apparently is not intended to be in the pool to which we seek the exception.

MR. QUINTANA: Let me take a quick five minute recess here and (not understood).

(Thereupon a recess was taken.)

1 Let the record MR. OUINTANA: 2 show that the Casey Strawn Pool and the Northeast Lovington 3 Pennsylvanian Pool have the same exact pool rules for a well location requirements, so we will proceed with the case and 5 under -- under the set pool that has been advertised and 6 when they do change it, we will change it in the order. 7 MR. KELLAHIN: We won't have to 8 readverstise our case? MR OUINTANA: Won't have to 10 readvertise the case. 11 12 TODD M. WILSON, 13 being called as a witness and being duly sworn upon 14 oath, testified as follows, to-wit: 15 16 DIRECT EXAMINATION 17 BY MR. KELLAHIN: 18 Α Mr. Wilson, for the record would you 19 please state your name? 20 Yes, sir. Todd Wilson. Α 21 0 Have you previously testified before the 22 Division, Mr. Wilson? 23 Α Yes, I have. 24 And what is your educational background? Q 25 Α Bachelor's degree from the University of New Mexico and a Master of Science degree from Oklahoma

State University.

Q You've testified as a petroleum geologist before the Division?

A Yes, I have.

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Q Pursuant to your employment with Rio Peco Corporation, have you prepared the geologic basis upon which Rio Pecos seeks the unorthodox oil well location advertised?

A Yes.

MR. KELLAHIN: We tender Mr.
Wilson as an expert petroleum geologist.

MR. QUINTANA: He's considered an expert petroleum geologist.

You may proceed.

Q Mr. Wilson, let me show you the landman's plat which is marked as Exhibit One and have you identify, first of all, the proposed unorthodox well location for us.

A Okay. The proposed location is 1470 feet from the north line, 660 feet from the west line, Section 27, Township 16 South, Range 37 East, Lea County, New Mexico.

Q And what is the proposed spacing and proration unit for the well?

A The proposed spacing is 80 acres. The proration unit will encompass the south half of the north-

1 west quarter, Section 27, Township 16 South, Range 37 East. 2 Based upon the Casey-Strawn rules are you Q 3 at a standard location to the west boundary of Section 27? Α Yes, we are. 5 And you are unorthodox as to the north 6 boundary of the proration unit. 7 Yes, we are. Α 8 Q And who is the operator that controls 9 that proration unit in the north half of the northwest quar-10 ter? 11 Α Yates Petroleum Corporation. 12 Do you have the consent of Yates to move 13 closer to the common boundary? 14 Α Yes. 15 All right. Let me have you identify for Q 16 us, Mr. Wilson, the significance of the various colored well 17 locations or wells on the plat. 18 Α The orange colored well plot indicates 19 Strawn oil production; the blue indicates Pennsyl-20 vanian oil production. 21 Would you turn now to Exhibit Number Two, 22 Mr. Wilson, and identify for us the well log? 23 Α Okay. Exhibit Number Two is a portion of 24 (not understood) No. 2 Carter Well, which is located 25 1330 feet from the north line, 1980 feet from the east line,

Section 28, Township 16 South, Range 37 East.

It's a portion to include the Strawn and the Atoka formations to display the correlations that we've used in our interpretation here.

Also indicated are the perforations of zone productive in the Lower Strawn formation.

Q What is the purpose of Exhibit Number Two?

A The purpose of Exhibit Number Two is just an example of the correlation.

Q All right, sir. Would you turn now to Exhibit Number Three and identify that for us?

A Exhibit Number Three is an Isopach map from the top of the Lower Strawn Limestone to the top of the Atoka. It displays a series of northwest/southeast trending algal mounds that have developed in the Lower Strawn Limestone.

These algal mounds are found productive to the northwest in the Northeast Lovington Field, immediately south of us in the Casey Field.

Additional data includes interpretations from dipmeters that we've run on the Shipman 1 and the Shipman 2 Wells, which are located in the north half of the northwest quarter, Section 27, and the Amerand No. 1 Carter Well located in the northeast of the northeast of Section

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This is our primary intention for picking unorthodox drill site is the fact that all three of this these dipmeters consistently confirm the development of the mound core facies to the southwest in the two Shipp Wells in Section 27 and to the south/southeast in the Amerand Carter Wells in Section 28.

Using Exhibit Number Three as a basis for 0 your explanation, Mr. Wilson, will you describe for the Examiner the reasons you have for choosing the proposed unorthodox location over the closest standard location?

The basic reason is essentially the Α meter data. It indicates in the Shipp No. 1 Well, which is located in the northeast of the northwest quarter of Section 27, that the dip has an orientation of north 60 degrees east with a magnitude of 20 degrees.

2 Well, The Shipp No. located in northwest of the northwest of Section 27 has a dip orientation of north 25 degrees east, a magnitude of 18 degrees.

If you triangulate the dipmeter data from these three wells, you come up with a location in Section 27 that we've picked that will maintain maximum algal mound thickness and, as we'll see later, maximum structural position.

> Q What happens in terms of your position on

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the Strawn mound if you have to move to the closest standard
location?

A Well, according to our dipmeter data and experience in drilling in here, we'd probably drill on a tight section. We would not be in the mound core facies.

Q Let's turn now to the structure map, Mr. Wilson, and have you identify that. I believe it's marked as Exhibit Number Four.

A Okay, the structure map just displays in here that the production that occurs in the north half of the northwest quarter of Section 27 and also the north half of the northeast quarter of Section 28, appears to be on the north flank of the structural closure, a portion of that structural closure which is situated in the northwest quarter of 27 at the drill site that we want to drill.

Q What is your timing for commencing this well. Mr. Wilson?

A As soon as possible.

Q Do you have an opinion as to whether or not this is the optimum location within this 80-acre tract from which to drill and test the Strawn formation?

A Yes. To move to the east I feel would be a detriment to trying to find a clean mound core facies that's productive.

Q Were Exhibits One through Four prepared

by you or compiled under your direction and supervision? 2 Yes. Α 3 That concludes MR. KELLAHIN: 4 our examination of Mr. Wilson. 5 We move the introduction of Ex-6 hibits One through Four. 7 MR. OUINTANA: Exhibits One 8 through Four will be entered as evidence in this case. Did you say you had a waiver 10 from the offset operator who you're crowding? 11 MR. KELLAHIN: We don't have a written waiver but Yates participates in this well and is 12 13 the operator of the 80-acre tract immediately to the north 14 of us. 15 He is partici-MR. QUINTANA: 16 pating in this well, also. 17 MR. KELLAHIN: That's my under-18 standing. 19 Yates operated the two wells in the north 20 half of Section 27 and we'll operate this unorthodox drill-21 site. 22 MR. KELLAHIN: They have an in-23 terest, though, in this well. 24 Oh, yeah, definitely. Α 25 QUINTANA: I have nothing MR.

further for the witness. He may be excused. Anything further in Case 8663? MR. KELLAHIN: No, sir. MR. QUINTANA: If not, Case 8663 will be taken under advisement. (Hearing concluded.)

CERTIFICATE

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.

Sneey W. Boyd Core

I do hereby contribut the foregoing is a complete a manage of the part of the fire of the in the Exercise of the contribution of the Exercise of Tuly 31 1985.

Silvet ? Quintana Examples.

Oil Conservation Division