STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

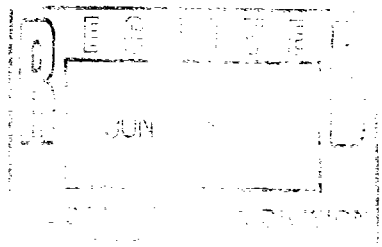
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATION OF STRATA PRODUCTION COMPANY

CASE NO. 11,295

ORIGINAL



REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

June 1st, 1995

Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Division on Thursday, June 1st, 1995, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, before Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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I N D E X

June 1st, 1995
Examiner Hearing
CASE NO. 11,295

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E X H I B I T S

Applicant's	Identified	Admitted
Exhibit 1	6	12
Exhibit 2	8	-

* * *

A P P E A R A N C E S

FOR THE DIVISION:

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FOR THE APPLICANT:

STRATTON & CAVIN, P.A.
320 Gold Avenue, SW
Albuquerque, New Mexico 87102
P.O. Box 1216
Albuquerque, New Mexico 87103
By: SEALY H. CAVIN, JR.

* * *

WHEREUPON, the following proceedings were had at 9:53 a.m.:

EXAMINER CATANACH: At this time I'll call Case 11,295.

MR. CARROLL: Application of Strata Production Company for a high-angle/horizontal directional drilling pilot project, special operating rules therefor, a nonstandard oil proration unit, and a special project allowable, Roosevelt County, New Mexico.

EXAMINER CATANACH: Are there appearances in this case?

MR. CAVIN: Yes, Mr. Examiner, my name is Sealy Cavin. I'm with the law firm of Stratton and Cavin in Albuquerque.

I represent the Applicant, Strata Production Company. I have one witness to call.

EXAMINER CATANACH: Any additional appearances?

Please swear in the witness, Mr. Carroll.

(Thereupon, the witness was sworn.)

MR. CAVIN: Mr. Examiner, the first witness is Mr. Bruce Stubbs.

BRUCE STUBBS,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CAVIN:

Q. Mr. Stubbs, I would ask that you please state for the record your name, address, employer and occupation.

A. My name is Bruce Stubbs. I'm employed by Strata Production Company as a consulting petroleum engineer.

Q. Mr. Stubbs, have you previously testified before the Division as a petroleum engineer?

A. Yes, I have.

Q. And have your credentials been made a matter of record?

A. Yes, they were.

Q. Okay. Mr. Stubbs, are you familiar with the Application in this case, 11,295?

A. Yes, I am.

MR. CAVIN: Okay. Mr. Examiner, are Mr. Stubbs' qualifications as a petroleum engineer acceptable?

EXAMINER CATANACH: Yes, they are.

MR. CAVIN: Okay. Mr. Examiner, unless there's some objection, we also plan to have Mr. Stubbs testify to certain land and geologic matters in this case.

EXAMINER CATANACH: Okay.

Q. (By Mr. Cavin) Mr. Stubbs, would you please state for the Examiner the purpose of your Application, or Strata's Application, in this matter?

A. Well, we have three things that we're requesting.

Number one, authority to re-enter the Sunrise Federal Number 1 and drill it directionally through the San Andres formation.

The horizontal section is going to penetrate three proration units, so we're requesting a nonstandard 120-acre proration unit.

And in conjunction with that, we'd like an allowable of 240 barrels a day.

Q. Okay. Mr. Stubbs, have you prepared or directed the preparation of any exhibits in connection with this Application?

A. Yes, I have.

Q. Okay. And is that Exhibit 1?

A. Yes, sir.

Q. Marked Applicant Exhibit -- Strata Exhibit 1?

A. Yes, sir.

Q. Okay. Mr. Stubbs, I would refer you to your Exhibit 1 and -- at page 1, and ask that you describe this page 1.

A. This is a land ownership map. The area outlined by yellow is the Strata lease or the Murphy Operating

lease, which is going to be farmed out to Strata, and it's a 640-acre lease which covers the east half of 21 and the west half of Section 22.

The well that we're talking about re-entering is located in Section 21, in the southeast of the northeast, and it's indicated "Reading and Bates R&B Federal 21 Number 2". It's now called the Sunrise Federal Number 1.

Q. Okay. Can you tell me what the yellow outline depicts?

A. The yellow is the lease. The orange is the area that we investigated to determine other operators and leasehold interest owners.

Q. Okay. And how did you determine who to give notice to?

A. Well, we pulled all the production history and determined if there was any operators in the area that had active wells, and then we obtained abstracts on those leases outlined by orange.

Q. Okay. To your knowledge, has proper notice been provided, or have you attempted to provide proper notice?

A. Yes, we sent out 21 certified notices to the indicated addresses, and out of those 21 we received seven of those back unable to be delivered. And I believe one or two of those people had passed away, and I'm not sure what happened to the other five or six.

Q. Okay. Are all the -- Are the parties that you were unable to deliver notice to identified at Exhibit Number 2, Strata Exhibit Number 2?

A. That's correct, I believe Exhibit B or Exhibit C.

Q. Yeah, Exhibit C to Exhibit 2?

A. Right.

Q. Okay, Mr. Stubbs. Do you know what the status of the subject lease is?

A. Yes, I do. You'll notice on the land plat that the lease expires today.

On May 10th, we made application to the BLM to extend that lease, and they granted a 60-day extension, plus 21 days that were remaining on the lease. So we have an extension until approximately August 20th.

Q. Okay, and is there common ownership throughout the lease?

A. I believe that's correct.

Q. Okay. Mr. Stubbs, next I would refer you to page 2 of your Exhibit 1 and ask that you describe that for the Examiner.

A. This is the existing wellbore diagram of the Sunrise Federal Number 1, which was originally the Reading and Bates R&B Federal 2-21.

And it's properly plugged, it has 8 5/8 casing set to 2142 feet, and it was originally drilled to 4803 and

tested the San Andres, and they elected not to complete the San Andres and plugged the well.

Q. Okay. Next, I refer you to page 3 of Exhibit 1 and ask you to describe that.

A. This is a well from the R&B Federal 21 Number -- or a log from the R&B Federal 21 Number 2, and the two zones of interest are the P-1 and the P-2. The log calculations indicate water saturations in the 30-percent range.

The good news is, the drill stem test they ran did not recover any formation waters, and they had a slight show of oil.

They ran a second drill stem test below the P-3 and did get some formation water out of that zone.

So we believe that the P-1 and P-2 are probably oil-productive; it's just real tight and doesn't have any natural fracture system at this particular point.

Q. Okay. Mr. Stubbs, at this time I would ask you to look at page 4 of Exhibit 1 and describe the diagram that's depicted there.

A. This is a schematic, indicating the approximate geometry that we hope to accomplish when we drill this horizontal well.

We're going to drill the horizontal section in an easterly direction. It will have approximately a 300-foot

radius, and it will extend horizontally approximately 2000 feet.

The end of the horizontal section should be approximately 1000 feet from the closest lease line.

Q. Okay. At this time I refer you to page 5 of your Exhibit 1 and ask that you explain the significance of the structure map to the proposed operation.

A. Well, the main reason we want to try to go east with the horizontal section is, we believe there could be a little high to the east.

There's a well in the southeast of the southeast of 15, which is essentially flat to our location, indicating that there may be a high in between those two wells.

Any other direction is a downdip location, and we think we have our best shot going east and trying to get a little updip.

Q. Okay. I refer you to page 6 of your Exhibit 1 and ask you to describe that schematic.

A. This is just a cross-section of what we envision the well to look like after we drill it.

The red intervals are the P-1 and P-2 zones, and the darker intervals indicate where the porosity is.

We want to drill the horizontal section down to the main porosity in the P-2, maintain a horizontal course

through the main porosity, and if everything is going as planned, we want to kick it back up and catch that upper part of the P-2, toward the end of the well.

Q. Okay. Mr. Stubbs, why do you believe a horizontal well is warranted in this case?

A. Well, there's been quite a bit of activity up in the Tom-Tom and Tomahawk that's indicated that horizontal drilling in the San Andres does enhance production.

At the existing location it appears that it's too tight to really be a commercial producer. If you ran pipe and completed it in the vertical wellbore, you would probably get a marginal well.

So the best hope for this lease in this particular project is probably a horizontal well, to try to intersect some natural fractures and get enough deliverability where it will be commercial.

Q. Okay. So in your opinion, a vertical well in this area is not a viable alternative to a horizontal well?

A. It doesn't appear to be.

Q. Do you believe that the drilling of the proposed well will prevent waste, both economic and actual?

A. That's correct.

Q. Mr. Stubbs, in your opinion will the correlative rights of any offset operators or interest owners be adversely affected by the drilling of the proposed well?

A. I don't believe so. The end of the horizontal section, like I said, is over 1000 feet from any lease line, so it's quite a distance away from anyone else's leases.

Q. Okay. And you believe that the allowable should be increased to 240 barrels of oil per day. What's the justification for that?

A. Well, we're basically developing three proration units, and on page 4 that's the area that's shaded in green.

The well starts out in the southeast of the northeast of Section 21, extends through the southwest of the northwest of 22, and into the southeast of the northwest of 22.

So we've developed three proration units.

Q. Okay. Mr. Stubbs, was Exhibit 1 prepared by you or under your direction or supervision?

A. Yes, it was.

MR. CAVIN: Okay. Mr. Examiner, I move for the admission of Exhibit 1.

EXAMINER CATANACH: Exhibit 1 will be admitted as evidence.

MR. CAVIN: Okay. Mr. Examiner, this concludes my direct examination of Mr. Stubbs.

EXAMINER CATANACH: Okay.

EXAMINATION

BY EXAMINER CATANACH:

Q. Okay. Now, Mr. Stubbs, the parties you've identified by Exhibit Number 2, those are offset operators you've identified or leasehold owners?

A. That's correct.

Q. Okay. Can you tell me what re-entry operations will consist of?

A. Well, we'll rig up a good-size pulling unit and we'll drill out the plugs to TD, and we'll spot a plug across the existing producing intervals, bring the top of the plug up to about 4100 feet, go back in, dress that plug off and kick the well off at about 4170 and then build our angle at about 19 degrees per hundred feet, which is an approximate 300-foot radius, and we hope to have the well horizontal at 4470, which is in that main porosity in the P-2 section.

And we'll extend the horizontal section for, say, 1000, 1200 feet, and if the drilling operations are smooth we'll try to kick it back up and go back through the top of that porosity in the P-2.

And the horizontal section will be approximately 2000 feet.

And once that's completed, we'll come back and run 5-1/2-inch casing to the top of the P-1, and we'll set

a formation packer shoe at about 4340 true vertical depth, which will be right on top of the P-1 zone.

Q. This is typically the way the wells have been drilled in the Tom-Tom field?

A. Pretty much, yeah. They're -- This is a little bit different.

They're using mostly slimhole over there, going through 5-1/2-inch casing.

In this one we're somewhat fortunate that it'll set casing, so we'll be able to use a 7 7/8 hole.

Q. Okay. Is the direction of the wellbore -- is that -- That's already been determined that's not going to change?

A. We don't think it's going to change. We want to drill it due east and try to move upstructure, yeah.

Q. You're not going to run any additional logs or anything once you get in the wellbore?

A. No, not the existing wellbore, no.

Q. Has there ever been any wells drilled to test what you've identified as that structure in Section 22?

A. No, the only well control we have is -- There's a well in, like I said, in the southeast-southeast of 15, our well in Section 21, and then just a few other scattered wells around there.

There's nothing other than geological projections

that indicate a structure, but there's either probably a structure there or it's flat between those two wells.

But if you go any other direction -- You can look at page 5. If you go any other direction you're moving downdip.

So east is the best direction.

Q. What's the closest production to this -- the wellbore?

A. Well, Exhibit 5, the Chaveroo Field, is about a mile away, there to the west.

Q. A mile to the west?

A. Yeah, uh-huh.

Q. The allowable in the Chaveroo is 80 barrels a day?

A. That's the statewide allowable, 80 barrels a day for a 40-acre proration unit.

Q. Okay. Do you propose to run a directional survey on the well?

A. That's correct.

Q. And this is a -- The project area you've identified, that's all commonly owned?

A. Right, it's common lease ownership. That federal lease 84,732 covers that 640-acre tract.

Q. So all the tracts in there are commonly owned?

A. Right, it's all one base lease.

A. Are you the only working interest owner in that project?

A. No, there's other partners, Strata has other partners.

Q. You're not -- Your wellbore should never be closer than 330 feet from the outer boundary of the project area; is that correct?

A. Yeah, I think -- Like it projects in page 4, I think the closest we'll ever be is 1000 feet to the eastern edge of the lease in Section 22.

Q. Shouldn't get really any closer than 660 from the south?

A. Right. It's 1980 from the north and 3300 feet from the south.

Q. Okay.

A. Closest place would be the end of the horizontal section, 1000 feet from the eastern edge.

Q. There is no offset production in any of these sections in the San Andres?

A. No, not right now.

I think the closest producer is up in Section 17, I believe. Yeah, Section 17.

EXAMINER CATANACH: Okay, I have nothing further of the witness, Mr. Cavin.

Do you have anything further in this case?

MR. CAVIN: No, Mr. Examiner, that concludes our presentation.

EXAMINER CATANACH: Okay. There being nothing further, Case 11,295 will be taken under advisement.

(Thereupon, these proceedings were concluded at 10:10 a.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 11295, heard by me on June 1, 1995.

David R. Catanach, Examiner
Oil Conservation Division

CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL June 3rd, 1995.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1998