NEW MEXICO OIL CONSERVATION DIVISION

STATE LAND OFFICE BUILDING

STATE OF NEW MEXICO

CASE NO. 10861

IN THE MATTER OF:

The Application of Collins & Ware, Inc., for a High Angle/Horizontal Directional Drilling Pilot Project and Special Operating Rules Therefor, Lea County, New Mexico.

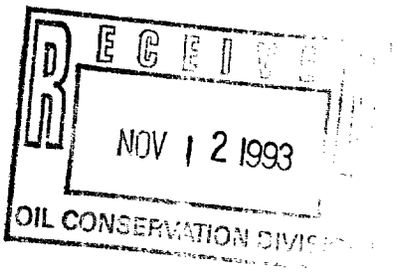
BEFORE:

DAVID R. CATANACH

Hearing Examiner

State Land Office Building

November 4, 1993



REPORTED BY:

CARLA DIANE RODRIGUEZ
Certified Shorthand Reporter
for the State of New Mexico

ORIGINAL

A P P E A R A N C E S

FOR THE APPLICANT:

CAMPBELL, CARR, BERGE & SHERIDAN, P.A.
Post Office Box 2208
Santa Fe, New Mexico 87504-2208
BY: **WILLIAM F. CARR, ESQ.**

I N D E X

E X H I B I T S

EXAMINER CATANACH: At this time, we'll call Case 10861, which is the application of Collins & Ware, Incorporated, for a high-angle/horizontal directional drilling pilot project and special operating rules therefor, Lea County, New Mexico.

Are there appearances in this case?

MR. CARR: May it please the Examiner, my name is William F. Carr with the Santa Fe law firm Campbell, Carr, Berge & Sheridan. We represent Collins & Ware, Inc., and I have one witness.

EXAMINER CATANACH: Any additional appearances?

Will the witness please stand to be sworn in.

RANDALL FORD

Having been first duly sworn upon his oath, was examined and testified as follows:

EXAMINATION

BY MR. CARR:

Q. Will you state your name for the record, please?

A. My name is Randall Ford.

Q. Where do you reside?

A. Midland, Texas.
Q. By whom are you employed?
A. Collins & Ware.
Q. And in what capacity?
A. As a consultant, a drilling engineer consultant.
Q. Mr. Ford, have you previously testified before this Division?
A. Yes.
Q. And, at the time of that prior testimony, were your credentials as a drilling engineer accepted and made a matter of record?
A. Yes, they were.
Q. Are you familiar with the application filed in this case on behalf of Collins & Ware?
A. Yes, I am. I put the drilling program together for them.
Q. Are you familiar with the status of the lands involved in this case?
A. Yes.
Q. Have you prepared certain exhibits and testimony to present here today, for the purpose of reviewing with the Division, Collins & Ware's plans to horizontally drill the well, which is the subject of this hearing?

A. Yes, I have.

MR. CARR: Are the witness' qualifications acceptable?

EXAMINER CATANACH: They are.

Q. Mr. Ford, would you briefly state what Collins & Ware seeks with this application?

A. We're seeking authorization to reenter and horizontally drill the TD Pope No. 5 in the Devonian formation.

Q. At the September 9, 1993 Examiner hearing, you testified for Collins & Ware in a case seeking authority to horizontally drill three wells in this area, is that correct?

A. That is correct.

Q. Could you, just briefly, state what the status of that part of this horizontal drilling project is?

A. We tried to reenter two of those wellbores with a slick line, a waterline unit, and we encountered some obstruction, and we weren't too sure whether it was packers or plugs. So, investors were pushing them to get one of these done before the end of the year, so we decided to come back to the Pope No. 5, because we knew we could get to the bottom of the

well on that one for sure.

Q. So this would be the first well in this immediate area in which you anticipate being able to complete the horizontal well?

A. Yes, it is.

Q. You're trying to do that before the end of this calendar year?

A. That's the plan, yes.

Q. Are you seeking an exception to the existing well location requirements for this well?

A. It's a standard 40-acre tract, but we're going to possibly go back to 100 foot of boundary of the tract, outer boundary, so we'll need an exception to that rule.

Q. So you would be within a hundred feet of the outer boundary of the dedicated acreage, you would need an exception for that?

A. Yes, sir.

Q. The surface location is at a standard location?

A. Yes, it is.

Q. Is that not correct?

A. Yes, it is.

Q. You're not seeking an exception to the

acreage dedication requirements?

A. No, we're not.

Q. Just a standard 40-acre tract will be dedicated?

A. Yes.

Q. Accordingly, you're not looking for any special allowable consideration?

A. No, we're not.

Q. Could you just summarize Collins & Ware's reason for bringing this application?

A. This Devonian field hasn't been productive since the late 70s. The wells all watered out about the same time, at an accelerated rate. We believe that it's a coning problem. With this new technology of high-angle, horizontal drilling, we think that we can recover substantial reserves.

Q. You'll be able to stay in the upper portion of the formation?

A. That's our plan, to stay in the top hundred foot of it.

Q. And then be away from the water that was the problem in the wells previously?

A. Yes.

Q. What results is Collins & Ware hoping

for, if the application is granted and this well is drilled?

A. We hope to have a commercial well that's a top allowable producer.

Q. Let's go to the exhibits. Would you identify what has been marked as Collins & Ware Exhibit No. 1 and review that for Mr. Catanach?

A. That's a landowner's map, and this location is in the east half of Section 35.

Q. What is the status of the ownership of the acreage in this area?

A. Collins & Ware has got a farmout from S & J Operating, on this half-section.

Q. They also have a farmout on the west half of 36?

A. Yes.

Q. And the south half of 26, to the north?

A. Yes, they do.

Q. What direction are you proposing to take the horizontal portion of this well?

A. We're going to be drilling this well north/northeast.

Q. So you're actually moving the horizontal portion of the wellbore toward acreage that is controlled by Collins & Ware?

A. Yes, we are.

Q. What is the current status of the Pope No. 5, the well you plan to reenter?

A. OCD reports the well is shut in and it has been since the late 70s.

Q. Could you provide Mr. Catanach with a general description of the Devonian formation in this area?

A. The Devonian here is a highly fractured dolomite, and we think this is part of the problem that it coned out so fast.

This horizontal drilling in the past has been successful in the fractured formations, and that's another reason we think the horizontal well will be a success--will be productive.

Q. How thick an interval are we talking about in this field?

A. In this field, the Devonian varies from 500 to 600 feet. In this particular well, it was open-hole completed and the original operator only drilled it 12,340 something, but we anticipate that it is as thick as the offsetting wells.

Q. How much did the wells in this field originally produce, on an average, before they

were shut in?

A. Average well out here produced approximately a million barrels of oil.

Q. Per well?

A. Per well.

Q. Let's go to Exhibit No. 2. Could you identify that, please?

A. That's a structure map. You can see the No. 5 well is at the edge of the highest part of the structure. We're going northeast, we're going back towards the center of the highest part of the structure.

Q. So, from a structural position, this is a good location for a horizontal well?

A. Yes, it is. We think it's one of the best candidates.

Q. Let's go now to Exhibit No. 3, could you identify this, please?

A. This is a schematic of the way the wellbore sits right now.

Q. Could you review the current makeup of the well for the Examiner?

A. It has 13-3/8" casing set at 430 feet. The cement was circulated on it. It has 8-5/8 set at 4820, and the cement was tied back inside

the surface.

It was drilled to a depth of 12,010, which is approximately 10 foot in the Devonian formation, and 5-1/2" casing was set there on a liner, hung back on the 8-5/8. Then they went and open-hole drilled this 5-1/2 to a depth of 12,342, for a 4-1/2 hole.

Q. Why don't we go to Exhibit No. 4. Using this exhibit, would you review for Mr. Catanach exactly how Collins & Ware proposes to drill this horizontal well?

A. The bottom of our casing right now is set at 12,010, and our plans is to go in and do a gel cement squeeze on the entire open hole section.

We're going to go back and drill to a depth of approximately 12,080 and set a good, solid concrete plug to do our kickoff on. We will dress it off to a depth of approximately 12,030 to 12,040. And that's when we'll go in with our building assembly and build our curve, which will be 90 degrees in 40 feet, 45 feet.

Q. What company are you proposing to utilize to actually drill this well?

A. We'll use--Baker-Hughes-Inteq will be

the service company to furnish the directional equipment.

Q. Using this company and this short radius curve, you would be able, you think, to keep the well in the top 100 feet of the formation?

A. We think that we should be able to. We can't anticipate any problem by doing that.

Q. What acreage do you think will be drained by the wellbore?

A. The 40 acres dedicated to it.

Q. Would you anticipate any excess drainage from offsetting tracts?

A. No, we do not.

Q. In fact, they would be, also, as we noted earlier, toward acreage that has the same working and royalty interest as the tract on which the well is located, is that not correct?

A. That is true.

Q. These are fee leases. What do you anticipate to be the producing life of this well to be?

A. We're thinking it would be a good producing well for at least 10 years.

Q. Collins & Ware will run a directional

survey on the well?

A. Yes, we will.

Q. And they'll provide that to the Oil Conservation Division?

A. Yes, we will.

Q. Is Exhibit No. 5 an affidavit confirming that notice of today's hearing has been provided to offsetting owners, as required by Oil Conservation Division rules?

A. Yes, it is.

Q. Could you identify what has been marked as Collins & Ware Exhibit No. 6?

A. This is the more detailed plan that myself and Baker-Hughes-Inteq have put together to do this horizontal well. It's a cost estimate, and just our basic plan.

Q. And this exhibit contains diagrammatic sketches that show the proposed direction and location of the horizontal portion of the wellbore?

A. Yes, it does, and it shows other wells that they've done typical of this, and how the well is tracked.

Q. Basically justifies the use of this short radius curve technique that you're

proposing to employ?

A. Yes, it does.

Q. In your opinion, will approval of this application be in the best interest of conservation, the prevention of waste, and the protection of correlative rights?

A. Yes.

Q. Will approval of the application and the drilling of this well result in the recovery of hydrocarbons that otherwise would be left in the ground?

A. Yes, that's what we believe.

Q. Were Exhibits 1 through 6 either prepared by you or compiled under your direction?

A. Yes, they were.

MR. CARR: At this time, Mr. Catanach, we move the admission of Collins & Ware Exhibits 1 through 6.

EXAMINER CATANACH: Exhibits 1 through 6 will be admitted as evidence.

MR. CARR: That concludes my direct examination of Mr. Ford.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. Ford, the entire east half of

Section 35 is farmed out or Collins & Ware controls the east half of that section?

A. Yes, they do.

Q. As far as you know, the interest is common in that whole half-section?

A. Yes.

Q. You stated before that there were three wells previously approved for directional drilling?

A. Yes.

Q. You tried to reenter two of them and could not?

A. Yes.

Q. What is the status of the third well?

A. We have not done anything to it. We tried drilling the first two and we encountered packers or plugs, and they decided to sit back and look the situation over.

And, from the start, they thought maybe the No. 5 was the best candidate because they knew it had been reentered as late as 89 or 1990, so we decided to run a slick line in it, to make sure we would get to bottom, and we did. And we ran a casing inspection log on it and a bottomhole pressure test.

Q. That's on the No. 5, you said?
A. Yes.
Q. So you're sure you can get back into that one?
A. Yes.
Q. What's the approximate lateral distance the well will be drilled horizontally?
A. Do what now?
Q. What's the approximate lateral distance or what's the distance the well will be drilled horizontally?
A. Hopefully we're going to try and go out to that hundred-foot setback.
Q. To within a hundred foot of the 40-acre tract?
A. Yes, but in this formation there has not been a lot of success getting that far. We hopefully think we can get 6- or 700 feet, but we may not get but four or five.

There was one other well that was done south of there, several miles, and they got less than 500 feet before they encountered either hole problems or drilling problems, and they couldn't go any further.

Q. That wasn't in the same field, that

well?

A. No.

Q. Was that well successful?

A. I don't know. They just finished--the operator just finished drilling it either two or three days ago, and they haven't had time to swab it or produce it.

Q. I see. Just briefly going over your procedure again, you're going to cement the whole open-hole interval?

A. We're going to try to squeeze it off. The well has made so much water, and we're going to try to squeeze it off with a gel cement squeeze, and then we're going to go in and set another plug, drill down to approximately 12,080 or maybe as deep as 12,100, and set a good, hard concrete plug to kick off of.

The type of cement plug that you do a kickoff of is of different quality of cement than the one you do a squeeze with.

Q. So your kickoff point will be about 12,100, around there?

A. We'll set our kickoff plug inside that interval that we drill out, and we'll have to dress it back off to a depth of 12,030 to 12,040,

and that's where we'll start trying to do our kickoff.

Q. How would you go about completing this well?

A. The production techniques are lagging behind the drilling, as far as the availability to get in this high-angle/horizontal wells and do completions and stimulations. So, we feel that we'll just set a packer at the bottom of that 5-1/2 casing and produce it from right there. We won't do any kind of stimulation.

Q. This is real similar to the case you put on three or four months ago, is that right?

A. Yes. The only difference is, those ones had casing set through the interval, and we're going to have to mill up 50 foot of the casing. This one we will not.

EXAMINER CATANACH: I don't have anything else.

MR. CARR: Nothing further in this case, Mr. Catanach.

EXAMINER CATANACH: Okay. There being nothing further in this case, Case 10861 will be taken under advisement.

(And the proceedings concluded.)

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 10861, heard by me on November 1993.

David R. Catanach, Examiner
Oil Conservation Division

CERTIFICATE OF REPORTER

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

I, Carla Diane Rodriguez, Certified Shorthand Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I caused my notes to be transcribed under my personal supervision; 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 November 15, 1993.

CARLA DIANE RODRIGUEZ, RPR
CSR No. 4