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:	)	CASE NO. 12,795
APPLICATION OF CHAPARRAL ENERGY, INC. FOR AN UNORTHODOX GAS WELL LOCATION, LEA COUNTY, NEW MEXICO	)	

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

March 7th, 2002

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, March 7th, 2002, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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I N D E X

March 7th, 2002
Examiner Hearing
CASE NO. 12,795

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E X H I B I T S

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A P P E A R A N C E S

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By: WILLIAM F. CARR

* * *

WHEREUPON, the following proceedings were had at 8:29 a.m.:

EXAMINER CATANACH: At this time I'll call Case 12,795, the Application of Chaparral Energy, Incorporated, for an unorthodox gas well location, Lea County, New Mexico.

Call for appearances in this case.

MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe, representing the Applicant. I have two witnesses.

EXAMINER CATANACH: Additional appearances?

MR. CARR: May it please the Examiner, my name is William F. Carr with Holland and Hart, L.L.P., Santa Fe. We represent Pride Energy Company. I have no witnesses.

EXAMINER CATANACH: Any additional appearances?

Will the two witnesses in this case please stand to be sworn in?

(Thereupon, the witnesses were sworn.)

JIM WIGLEY,

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

DIRECT EXAMINATION

BY MR. BRUCE:

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

A. Jim Wigley, W-i-g-l-e-y.

Q. Where do you reside?

A. Oklahoma City, Oklahoma.

Q. Who do you work for and in what capacity?

A. I'm a landman for Chaparral Energy.

Q. Have you previously testified before the Division?

A. No.

Q. Would you please summarize your educational and employment background for the Examiner?

A. I have a BS in business from Oklahoma State University, and I've been employed as a petroleum landman for 24 years.

Q. Various companies?

A. Various companies.

Q. How long have you been with Chaparral?

A. About eight months.

Q. Eight months. Does your area of responsibility at Chaparral include this portion of southeast New Mexico?

A. Yes.

Q. And are you familiar with the land matters involved in this Application?

A. Yes.

MR. BRUCE: Mr. Examiner, I tender Mr. Wigley as an expert petroleum landman.

EXAMINER CATANACH: Any objection?

MR. CARR: No objection.

EXAMINER CATANACH: Mr. Wigley is so qualified.

Q. (By Mr. Bruce) Mr. Wigley, briefly what does Chaparral seek in this case?

A. Well, we have a well named the Crosby Deep 1-28 that produced in the Fusselman. It's been depleted, and we seek the right to go uphole and complete in the Devonian.

Q. What is the well's location?

A. It's 1980 feet from the west line and 330 feet from the south line of the southwest quarter of Section 28, 25 South, 37 East.

Q. And the well unit would be the southwest quarter of the section?

A. Yes, sir.

Q. What pool is the well in, or will it be in?

A. It will be in the Crosby-Devonian Gas Pool.

Q. And what is the spacing for that?

A. 160.

Q. For orthodox well locations, what is the requirement?

A. You should be 660 from the lease line --

Q. Okay.

A. -- from the unit line.

Q. Now, this well was drilled 330 feet off the south line. That was drilled by a previous operator; is that correct?

A. Correct, right.

Q. Mr. Wigley, briefly what is Exhibit 1?

A. That is a plat showing the unit boundary in yellow and the particular well in question in green, green dot.

Q. Okay. Now, in the north half of 33, looking at the offset operators, there's a well designated the G.W. Shahan Number 2 well operated by BC&D Operating, Inc. Is that a Devonian well?

A. Yes.

Q. And the northeast quarter of Section 33 is dedicated to that well, is it not?

A. That's correct.

Q. Is there a producing Devonian well in the northwest quarter of Section 33?

A. No, sir.

Q. Looking at this well, is the Gregory Federal 2Y a plugged and abandoned Devonian well?

A. Yes.

Q. Okay. And then there also refers to an El Paso Natural well with the black dot. Is that a producing Fusselman well?

A. Yes, that's our well. We operate that well.

Q. Okay, so Chaparral operates that well?

A. Yes.

Q. So you operated that well. Now, who did you notify for this hearing?

A. We notified the Devonian operator, BC&D, in the northeast quarter, and in the northwest quarter we notified everybody that had a right to production, mineral oil and gas rights, working interest overrides, royalties.

Q. Okay. So you operated that well, but rather than just give notice to yourself you notified every interest owner in the northwest quarter of Section 33?

A. Yes, sir.

Q. Okay. And is Exhibit 2 your affidavit of notice?

A. Yes.

Q. And we don't have a listing of the interest owners, but an individual letter went out to each and every interest owner in the northwest quarter of Section 33, did it not?

A. That's right.

Q. Now, just a couple of final questions. Pride Energy is here objecting to this Application. They own a working interest in the northwest quarter of Section 33, do they not?

A. Yes, sir.

Q. Just for the record, what is their approximate working interest?

A. 9.375 percent.

Q. Okay. Were Exhibits 1 and 2 prepared by you or under your direction or compiled from company business records?

A. Yes, sir.

Q. In your opinion, is the granting of this Application in the interest of conservation and the prevention of waste?

A. Yes, sir.

MR. BRUCE: Mr. Examiner, I'd move the admission of Chaparral Exhibits 1 and 2.

EXAMINER CATANACH: Any objection?

MR. CARR: No objection.

EXAMINER CATANACH: Exhibits 1 and 2 will be admitted as evidence.

Mr. Carr?

EXAMINATION

BY MR. CARR:

Q. Mr. Wigley, the location you're proposing is 330 feet from the south line of Section 28, correct?

A. Right.

Q. The standard setback would be a 660 location?

A. Correct.

Q. So you're 50 percent closer than allowed if you were at a standard location?

A. I guess you could put it that way, yeah.

Q. You indicated there was a plugged Devonian in the northwest of 33?

A. Yes.

Q. Where is that? Could you point it out? I didn't -- I was looking, I guess, at the Fusselman well. Which well is the Devonian well?

A. Okay, if you see the black dot, that's our well, just practically right above it, right to the left of it. Do you see the "2Y" and a "P&A"?

Q. Yes, right between the "A" and the "2"?

A. Right.

Q. That was the Devonian well?

A. I'm pretty sure that's it.

MR. CARR: Okay. Thank you, that's all I have.

EXAMINATION

BY EXAMINER CATANACH:

Q. Okay, Mr. Wigley, that was a previous Devonian well. Who operated that, do you know?

A. No, I really don't know. The engineer would be more acquainted with that.

Q. Okay.

A. Right offhand, I just don't remember.

Q. But that's plugged and abandoned?

A. Yes.

Q. And you currently operate the well just to the

right of that, the El Paso -- I'm sorry, is that the Gregory Federal?

A. We call it the Crosby Deep Number 4-33, is what we call it.

Q. And that's a Fusselman?

A. It's a Fusselman, yes, sir.

Q. And now, Chaparral has Devonian rights in the northwest quarter; is that correct?

A. Of 33, yes.

Q. Right, but you went ahead and notified all the other working interest owners who had a --

A. Yes.

Q. -- right?

A. Yeah, we notified all the -- everybody in the well and in that quarter section.

Q. In the quarter section.

A. All royalty owners, overrides, working interest, everybody.

Q. Okay.

A. There's 49 of them.

Q. And as far as you know, Pride is the only one that's expressed any concern over that well location?

A. Well, we had two people call, Pride and then the operator of the Devonian well in the northeast quarter of 33. He just wanted to know what we were and he just wished

us luck. He actually wanted us to buy his well, but...

(Laughter)

EXAMINER CATANACH: Okay, I have nothing further of this witness. He may be excused.

ROBERT K. McELHANEY,

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

DIRECT EXAMINATION

BY MR. BRUCE.:

Q. Would you please state your name and city of residence for the record?

A. Robert Kelly McElhaney, last name is spelled M-c-E-l-h-a-n-e-y. I reside in Norman, Oklahoma.

Q. Who do you work for?

A. I'm employed with Chaparral Energy, Inc.

Q. What's your job with Chaparral?

A. I'm a reservoir engineer.

Q. Have you previously testified before the Division?

A. No, I haven't.

Q. Would you please summarize your educational and employment background?

A. I hold a bachelor's degree in petroleum engineering from the University of Oklahoma. I've worked for various oil companies in Oklahoma City for the last 14

years as a petroleum engineer, primarily as reservoir engineering work.

Q. How long have you been with Chaparral?

A. Three years.

Q. Does your area of responsibility at Chaparral include southeast New Mexico?

A. Yes, it does.

Q. And are you familiar with the engineering matters involved in this Application?

A. Yes, I am.

MR. BRUCE: Mr. Examiner, I tender Mr. McElhaney as an expert reservoir engineer.

MR. CARR: No objection.

EXAMINER CATANACH: Mr. McElhaney is so qualified.

Q. (By Mr. Bruce) Mr. McElhaney, could you identify Exhibit 3 and briefly discuss its contents for the Examiner?

A. Exhibit 3 is a structure map based on the top of the Silurian-Devonian interval for the area of interest of this Application. It was based on interpretations. Our predecessor in title from this had a geologic study done. I have reviewed that data and prepared this exhibit based on that data showing the structure of the reservoir.

There's cross-lines on here showing the cross-

sections that I have later exhibits showing through the wells.

Q. Okay. Just briefly on these Devonian reservoirs, structure is usually relatively important?

A. Yes.

Q. Could you identify Exhibit 4 for the Examiner?

A. Exhibit 4 is a cumulative production map for wells that are produced from the Silurian-Devonian in this area. Primarily again in the northwest quarter, the Gregory Federal Y2 well was produced from the Devonian and Silurian reservoir. It has been P-and-A'd.

I think there was a question of Mr. Wigley, the previous -- I believe the operator was El Paso, of that well.

It shows in the northwest quarter of 33 the G.W. Shahan, operated by BC&D.

Q. The northeast quarter?

A. Northeast quarter, I'm sorry. Yeah, the northwest of the northeast quarter. That produced from the Devonian. There's also wells in 28 that produce from this --

Q. So the Shahan well produced what, 17.8 BCF?

A. 17.8 BCF, based on the public data that I have reviewed.

Q. Okay, and the Gregory Federal 2Y, the Devonian

well in the northwest quarter, produced about what, 12 1/4 BCF?

A. Yeah, 12 1/4 BCF, based on the public data that I had available.

Q. Okay, and that well is P-and-A'd?

A. Yes, it is.

Q. And in the southwest quarter of Section 28, which we're concerned about here, the American Republic well, that well -- what, is that inactive?

A. Yes, it's --

Q. It's no longer producing from the Devonian?

A. Correct.

Q. And it produced approximately 12 BCF?

A. Yes.

Q. Okay. Is the Shahan well the only active Devonian well in this area at this time?

A. Based on the records I was able to pull together, there's a well in the southeast of 33 that I believe produced from the Silurian, that we operate, the Gregory El Paso Federal. That's the only other well besides the Shahan in this area that I could find that produces from anything of the Devonian-Silurian interval.

Q. Okay. Do you have anything further on this exhibit, Mr. McElhaney?

A. No.

Q. Okay. What does Exhibit 5 show?

A. Exhibit 5 is a bottomhole pressure versus time of all the wells in this area, based on the available data from public -- *P.I. Dwight's* information.

It shows the pressure history of the reservoir, beginning with, you know, reservoir pressures of -- it looks like about 3300 pounds on the original wells that were produced from it back in 1956, through the pressure history, up through -- I'd say somewhere about 1994 was the last recorded pressure that was in public data, and those blue stars would be the pressure data from the Shahan well.

Generally showing somewhat of a communication between wells in the pressure history, showing all the wells have seen dramatic depletion of reservoir pressure.

Q. Okay. What does Exhibit 6 -- Maybe do Exhibit 6 and 7 together and tell what they show.

A. Exhibit 6 and 7 are rate-time representations of the production history from 1970 forward on the two wells in the north half of 33.

Exhibit 6 is for the G.W. Shahan Well Number 2. It shows the production history from 1970 forward, basically showing cumulative production. Based on the forecast, I've put on it remaining reserves, ultimate recovery. The upper graph is the rate/time, the bottom graph is a representation of the bottomhole pressure over Z

versus cumulative and interpretation of that data, showing again that the Shahan has cum'd 17.7.

Based on the analysis I did at this time, I was estimating somewhere in the range of .8 of a B remaining on that well. Since I prepared this document and some conversations with the operator, these wells make high water cut. Those remaining reserves may be somewhat in question, because they're saying that they're basically becoming uneconomic at this point because of the water production.

Exhibit 7 is the same --

Q. Before we move on --

A. Okay, sorry.

Q. -- on the second page --

A. Oh, I'm sorry.

Q. -- of that exhibit?

A. The second page of the exhibit on both 6 and 7 is a volumetric analysis based on my estimate of remaining ultimate recovery from those wells, using the reservoir parameters of porosity and water saturation, reservoir pressure, I guess an estimate of the drainage area required to deplete and recover that amount of reserves.

On the Shahan well, based on its feet of pay, porosity and water saturation, I calculated a drainage radius -- drainage area of 404 acres, which would give us

on an estimated, just a cylindrical drainage -- drainage radius of 2363 feet from that wellbore.

Exhibit 7 is the same representation for the production, pressure history for the Gregory Federal Y2 well. Again, the well had cum'd 2.2 BCF, 2 1/4 BCF. That well has been P-and-A'd. The information I have is that it did water out. Pressure data, again, the P/Z data for that well showing, you know, some kind of confirmation of the rate-time -- or the amount of reserves recovered.

The second page is again a volumetric analysis for that reservoir, for as far as an estimate of the area required to be depleted to cum that amount of reserves. Again, based on the porosity and water saturation, I estimate a drainage area of 421 acres, which would equate to a drainage radius of 2419 feet from that wellbore.

Q. Now, what does Exhibit 8 show?

A. Exhibit 8 is a drawing I prepared to show the distance from the Crosby Deep 1-28 to the existing wells in the north half, the two Devonian producers and the Crosby Deep Number 4. Based on positions from the lease line I calculated the distance between wellbores.

Q. Okay, comparing this to the drainage radius calculations, both the Gregory Federal 2Y and the Shahan Number 2 have drained potentially a portion of the southwest quarter of Section 28, have they not?

A. Based on my analysis, yes, they have.

Q. Okay. Now, there is, as we've discussed, an inactive Devonian well in the southwest quarter of Section 28. That is in the northeast quarter of the southwest quarter, is it not?

A. Yes.

Q. What was the footage from the south line of that well?

A. I believe it's 1980 feet, but let me verify that.

Q. Okay.

A. The Union Texas Petroleum-operated American Republic Federal shows a footage location of 1980 feet from the south line, 1980 feet from the west line of Section 28.

Q. Okay, so even though that produced a fair amount of reserves, it was quite a distance from the south line of the section, as -- correct?

A. Yes.

Q. And the Gregory Federal 2Y is only what, 760 feet from the common section line?

A. Yes.

Q. So there's always competing drainage among these things, but again, doesn't it appear that the Gregory Federal 2Y would have been draining from the south half of the southwest quarter of Section 28?

A. That's my belief, yes.

Q. Finally, let's move on to your last two exhibits, the cross-sections which were noted on a prior exhibit.

A. Exhibit 3.

Q. Yes. Would you discuss those cross-sections briefly and talk about what Chaparral plans to do in its re-entry, its proposed re-entry of the Number 1 well, Crosby Number 1 well?

A. Exhibit Number -- I believe it's Number 9, is cross-section A-A', which goes from the El Paso Gregory Federal Y2 through the Crosby Deep Number 4-33 to the Shahan D Number 2, all these wells in the north half of Section 33. Basically it's showing the structural feature of the Silurian-Devonian interval, going from west to east across the north half of 33.

Perforations in the Gregory Federal and the Shahan are marked on the logs, showing the intervals they've produced from. Again, the center well is the 4-33, which has produced from the Fusselman, which was to be deeper than what's shown here on the log.

Q. Okay. Now, you've indicated that the Shahan Number 2 well, that well is producing an increasing water cut, isn't it?

A. That was the information we got from the operator, yes.

Q. And the Gregory Federal 2Y has watered out, did

it not?

A. That was the information from our -- people I've talked to about that well.

Q. Okay. Why don't you go to your Exhibit 10 now?

A. Exhibit 10 is a B-B' cross-section with B' being to the south. So reading from left to right, it's a north-to-south cross-section across the feature. Then going from the American Republic well in 28 through our Crosby Deep 1-28 well, then to the 4-33, then going on to the south, again showing the structural feature of the reservoir.

And just noting, I believe I calculated the top of the zone at the Crosby Deep 4-33 as -- it's kind of hard to read there -- as minus 4990, the top of the zone in the 1-28 well would be at minus 5024, so we're approximately 34 feet downdip from the well in 33. That well is slightly higher than the existing producer that had been P-and-A'd in that northwest quarter from the -- going back to the -- referencing the cross-section A-A'.

Q. What intervals do you plan to perforate in the 28-1 well?

A. The 28-1, we plan to perforate approximately from 8030 down through 82- -- looks like about -20. And I know that there is some question because of the high water cut of this reservoir, and we're looking at the possibility of maybe eliminating some of those deeper perforations because

of water, and maybe only perforating more the upper portion. I think we probably would test the lower portion, but if it produced -- is water productive, we would set a plug and then come uphole and just perforate the -- try to find the zones with the least amount of water production.

Q. The upper zones that you're planning to perforate, are they present in the Gregory Federal 2Y well or in the Crosby Deep Number 4, which are in the northwest quarter of Section 33?

A. The zone -- on these cross-sections there's a -- I guess what I'm saying, the base of the Woodford shale, and then there's a second area here with a line, and then there's another grouping that's the Devonian. Between where it says the base of the Woodford shale and that first line is Devonian interval. That zone is not perforated in the Y2 well in the northwest, and it appears -- on the A-A' cross-section it appears to be a similar zone in the 4-33, so I would question whether or not that portion is productive.

That zone is perforated in the Shahan well in the northeast, and it was also perforated in the American Energy well in the northeast of the southwest of 28. So we believe we have a portion of the reservoir that may be productive in our 1-28 well, that may not be present in the wells in the northwest of 33.

Q. As far as drilling new wells to test the Devonian in this area, would anyone do that?

A. No, I believe with the remaining reserves that's potential here, it would not be an economic venture to drill a new well for this reservoir.

Q. Now, Pride is here, and Chaparral has had discussions with Pride, and Pride has requested a 50-percent penalty on this well. Are you aware of that?

A. Yes, I am.

Q. Economically, will this well be recompleted if there's a 50-percent penalty?

A. That would really deter the economics of this venture. Limiting the production available would limit the rate of return of recovering our investment to recomplete the well, and I feel that would be detrimental to the economics of doing this.

Q. Okay. Looking at the production in this area, has the northwest quarter -- for that matter, the north half of Section 33 already recovered its fair share of reserves?

A. Based on the analysis I prepared, I believe so.

Q. Okay. Do you believe a penalty should be imposed upon your recompletion?

A. I would believe that a penalty shouldn't be at this point because, like I said, we're in a very depleted

reservoir, we're trying to just go back and recover a well that is currently inactive. I don't believe we're going to significantly impact the offset area by doing what we're planning on doing.

Q. And again, it appears that the zone, your primary zone of interest, is not present in the northwest quarter of 33?

A. That's the interpretation that we have, yes.

Q. Were Exhibits 3 through 10 prepared by you, under your supervision or compiled from company business records?

A. Yes.

Q. And in your opinion, is the granting of Chaparral's Application in the interests of conservation and the prevention of waste?

A. Yes, it is.

MR. BRUCE: Mr. Examiner, I'd move the admission of Chaparral Exhibits 3 through 10.

EXAMINER CATANACH: Any objection?

MR. CARR: No objection.

EXAMINER CATANACH: Exhibits 3 through 10 will be admitted as evidence.

Mr. Carr?

EXAMINATION

BY MR. CARR:

Q. Mr. McElhaney, you're recommending no penalty be

imposed on the well because of its location; is that correct?

A. Yes.

Q. Do you see any potential for additional recompletions in the northwest quarter of Section 33?

A. At this time, the information I have, basically comparing the 4-33 well to the Gregory Federal Y2, those look like they have comparably the same zones.

Essentially, the Gregory Federal has -- all the information I have is watered out, and I don't feel that we will have productive pay in the 4-33 well, based on the interpretations I've looked at.

Q. So you don't see a recompletion candidate in the northwest of 33?

A. At this point in time, no.

Q. And depending on what you get with this recompletion, that could change, could it not?

A. If -- the data we acquire from recompleting in the well at the 1-28, yes, it could change that.

Q. And the zones you're looking at in the well you're intending to recomplete, the 28-1, I believe you testified that there were certain intervals that you believe were not present in the tract offsetting to the south?

A. Yes.

Q. And again, that might change once you recomplete and get in that zone; isn't that right?

A. Until we -- You know, once we complete that zone we could find that there is some information that tells us something different than what we know now.

Q. The two wells that you testified to about the area or the drainage radius, both of those wells, the Shahan and the Gregory Federal, had drainage radii in excess of 2000 feet, did they not?

A. Yes.

Q. You're proposing to be 330 feet from the common lease line; isn't that correct?

A. Yes.

Q. And if you get into a zone that hasn't been produced in the Gregory that you're able to complete, and you could be draining reserves from the northwest of 33; isn't that right?

A. That possibility does exist, yes.

Q. And we don't know that until --

A. We don't know that --

Q. -- until you get down there; isn't that right?

A. I believe you're going to have a very low-pressure, or a pressure-depleted reservoir, and the effective drainage radius may not be significantly large based on our counting the reservoir at -- I believe the

reservoir pressure is in the range of 800 pounds now, when the original pressure was over 3200 pounds.

So until, like I said, until we start producing and we perforate this, my belief is, it's going to be probably a very limited area that will drain.

Q. If you're producing from a zone that isn't present down in the northwest of 33, it doesn't make sense that that would have been drained in the past by the Gregory, does it?

A. Well, it's been produced in the Shahan well, and it's also been produced in the American Republic well, so I think it's going to be a depleted reservoir.

Q. Isn't it a fact that we just really aren't certain what we're going to get until you get down there and complete a well in the Devonian?

A. Ultimately that's true, yes.

Q. And yet we're trying to address a penalty question today, when we don't really know how the well is going to perform or what intervals are going to be contributing to production?

A. That's true, yes.

Q. And you're 50 percent closer than a standard location would allow you to be?

A. That is correct, yes.

MR. CARR: That's all I have, thank you.

EXAMINER CATANACH: Mr. Carr, in fact, is Pride recommending a 50-percent penalty in this case?

MR. CARR: We'll recommend a 50-percent penalty.

EXAMINATION

BY EXAMINER CATANACH:

Q. Okay. Mr. McElhaney, in the proposed recompletion you plan to perforate that upper Devonian interval, plus some additional interval below that?

A. I believe we're planning to test the lower intervals to see if they're high water cut. If they aren't, they would be deemed as productive. At this point we don't know, until we perforate them.

Like I said, the reservoir that's produced down in 33 and what we've seen, believe, in the other wells, there's a high -- over time you have a high water production with these -- with the gas production, and depending on, I think -- you know, like I said, the information we have now is that the Shahan well is high water production, and it may be becoming uneconomic.

We would test the zones, but if they are high-water-cut zones, we would probably set a plug and not try to produce those. We would try to be at the zones that produce the highest amount of gas and the lowest volume of water.

Q. Okay, the information you have is that the

Gregory Federal Y Number 2 watered out --

A. Yes.

Q. -- in the lower zone?

Is your well structurally lower than that well?

A. Essentially -- I gave the top of the Silurian in the 1-28, so I've calculated 5024 subsea, and I believe the top in the Y2 well, I have -- well, what I've noted here was 4943, which would be significant, but that doesn't sound right because I'm saying that the 1-28 was -- or the 4-33 was shallower -- or deeper than that.

Based on the structure map that I've prepared, it would be slightly downdip from the Y2 well.

Q. So there's a good chance that those lower zones might be water-productive in your well?

A. Yes. I'm not sure about what I've written on the log, because that doesn't seem right to me at this -- what I'm talking right now. I'd have to go back and recalculate those to tell you exactly off the logs. But based on the structure map, I'd say it's slightly downdip.

Q. There's no way to tell -- In the Shahan well, there's no way to tell whether or not -- or where the reserves in that well were drained from, whether they predominantly came from the lower Devonian or upper Devonian?

A. No, I have no information to tell me that.

Q. But that was perf'd -- that Shahan well was perf'd in the upper Devonian?

A. Yes, that upper section, just below the base of the Woodford.

Q. And you also stated that the well in Section 28 was also perf'd in that upper section?

A. Yes.

Q. So looking at the log for the current -- which is the -- The 4-33 is the current Fusselman well?

A. Yes, it is.

Q. Okay.

A. And that's one of the highest structurally wells on the Devonian.

Q. And did you testify you don't see the upper Devonian so present in that well?

A. The zone that's not perforated -- I guess the zone that I'm referring to on the cross-section is perforated in the Shahan well and perforated in the American Republic well, is not perforated in the Y2 well.

And looking at logs, it's kind of hard to look -- these aren't comparable logs, but based on what I can see, comparing the 4-33 to the Y2, it looks like the reservoir is just a little bit tighter, to me, in that interval from -- it looks like 7910 or -14 through about -44, and it also has a -- the gamma-ray kind of goes back to the right in

that area, indicating that -- not as quality of reservoir, could be shaly.

Q. Do you know why that interval was not perf'd in the Y2?

A. No, I don't.

Q. Could it have been, in your opinion?

A. It does appear that it may have a little bit better porosity than what's in the 4-33. The gamma-ray indicates it's a little bit cleaner. But appears, like I said, they perforated what looks to be the cleanest sand, which is that lower section of the Devonian that produced that.

Q. So there's -- Do you feel like there's any potential in that northwest quarter for producing that upper Devonian?

A. Without testing it -- I mean, I can't definitely say it's not productive, so I would say this, that it is true, there is a potential force in production out of that.

Q. Okay, the American Republic well, you said, was currently inactive?

A. Yes.

Q. Is that operated by you?

A. No, the last operator I show in the records for that well was Union Texas Petroleum. And I don't know, that would be from public data, the last information they

had. I'm sorry, I don't have a curve for that well to tell you when that well went inactive, but I think it has been for some time period not produced.

Q. Okay, but that has been a previous Crosby Devonian producer, was it not?

A. Yes, it was.

Q. And was it dedicated to the southwest quarter of that section?

A. I don't know -- I believe it was, but I don't know definitively the answer to your question. It was the only Devonian producer in the southwest quarter of 28.

Q. Now, I assume that -- if Chaparral wants to dedicate that acreage, I assume that you have all the interests consolidated for your well; is that correct?

A. I'm not the person to --

MR. BRUCE: Mr. Wigley --

EXAMINER CATANACH: Yeah, we may have to ask the landman that question.

THE WITNESS: I wouldn't know the answer to that.

MR. WIGLEY: We have the entire Devonian rights in the farmout, in the southwest of 28.

EXAMINER CATANACH: Did you acquire some of those from the current operator of that well?

MR. WIGLEY: Well, actually, as you say, you knew Texas doesn't own any interest in there. It was owned by

two parties, and we took a farmout from those two parties. They had sold their interest in the Devonian to a company called Greathouse and Lovelady, and we have taken the farmout from Greathouse and Lovelady on the Devonian.

EXAMINER CATANACH: Do you know who operates that well?

MR. WIGLEY: I think it's plugged. There's no -- if it's the operator, Greathouse and Lovelady would be the operator, but they don't operate a well.

EXAMINER CATANACH: So you think that well is plugged?

MR. WIGLEY: Yes. It's not producing, it's not inactive, it doesn't show up. I didn't check to see if there was a plugging report, but it's not producing. It hasn't produced in years and years, 1972 or something.

EXAMINER CATANACH: Okay, but you have consolidated all the interest --

MR. WIGLEY: Yes.

EXAMINER CATANACH: -- in the southwest quarter?

MR. WIGLEY: I have the --

EXAMINER CATANACH: Okay.

MR. WIGLEY: I have the farmouts here, if you'd like a copy of them.

EXAMINER CATANACH: I don't.

MR. WIGLEY: All right.

EXAMINER CATANACH: Thank you.

Q. (By Examiner Catanach) Have you calculated what the reservoir pressure that you may encounter in your well is?

A. (By Mr. McElhaney) Based on what I've got from the data, I estimate about 800 pounds. That was what the Shahan well has seen over its -- The last reported pressures on that well, looks like, like I said, it was -- you know, seems slightly higher than 800 pounds, maybe about 1000 pounds. Last reported pressure was about -- looks like about 94.

Based on that, I've estimated the reservoir pressure would probably be in the 800-pound range.

Q. Now, have you calculated any reserves based on that pressure?

A. I've prepared -- Well, I've calculated a couple of different ranges of reserves. You know, I think right now, the data I have, we estimated anywhere from 60,000 to 150,000 MCF potential to be produced from this reservoir out of the 1-28 well.

Q. Okay. I believe you testified that if you were assigned a 50-percent production penalty on that well, that it would be uneconomic?

A. At this point in time, it would be detrimental to the economics, I think is what I actually said. That's

what I meant to say.

As far as affecting the ability to recover our investment in a timely manner, I'm not 100-percent familiar with New Mexico rulings for allowables and penalties. My understanding is whatever the well is -- if it's correct, is, what is the well capable of doing, and then the penalty is applied to that, that quantity.

Based on that, you know, our investment of, I think, somewhere in the range of $50,000 to $80,000, penalized production would affect the ability to recover that amount in a timely manner and would make us more concerned about doing this venture.

Q. But you can't say at this point that you would not undertake it with a penalty?

A. We would have to analyze what that penalty is, be it -- a 50-percent penalty would be very stringent on it, we think. Some penalty may -- we may still be able to accept some penalty on the well and still have economic recovery of our investment.

Q. Have you estimated -- Is there any way to estimate what kind of rates you may obtain in that well initially?

A. I think -- The information I think we got from BC&D was, their well was doing -- Mr. Wigley talked to them, but I believe it was about 250 MCF a day was what its

current production was.

MR. WIGLEY: Right, but it was uneconomical because of water production.

THE WITNESS: And I would estimate somewhere in the area of 150 to 200 MCF a day, potential, would be reasonable.

MR. WIGLEY: This is sort of the last-ditch effort to keep a well from being plugged, is what it is.

And also while dealing with Pride Energy on this well we offered him the chance -- we said we'd work a deal out with you if you want your interest in our well, we'd be glad to put you back in it. But he didn't want it, so...

EXAMINER CATANACH: Sorry, to put his interest back in the --

MR. WIGLEY: Yeah, he had it -- you know, he had a 9-percent interest in this well in the Fusselman, but on the Devonian there wasn't any interest. We didn't own it; we took a farmout. We offered that interest to him on some basis, but we never did -- This was verbal, and we never did talk about the basis, but he wasn't interested in getting in the well at all with us --

EXAMINER CATANACH: I see.

MR. WIGLEY: -- in the Devonian. Plus, we have a problem with payment. He owes us about $75,000, so that might have been part of it.

EXAMINER CATANACH: Okay. I have nothing further.

Mr. Carr, do you have anything further?

MR. CARR: I just have a very brief statement.

EXAMINER CATANACH: Mr. Bruce, do you have anything?

MR. BRUCE: I have nothing further in this matter.

EXAMINER CATANACH: Okay, Mr. Carr?

MR. CARR: Mr. Catanach, there are certain things we know about this proposal and a number of things we do not. What we do know is that the well is 330 from the common line, therefore it's 50 percent closer than allowed by the Division Rules.

We also know that the Devonian wells that have produced in this area have a drainage radius in excess of 2300 feet. A well 330 from the line with that kind of a drainage radius clearly is going to drain reserves in the northwest quarter of Section 33.

What we don't know is what zones are going to contribute to these reserves. We can't say how much of the northwest quarter may or may not be productive, we can't tell you what volumes will be produced. And without this knowledge, Chaparral recommends no penalty. They say a penalty wouldn't prevent the well necessarily, it would be

detrimental. Well, of course a penalty is detrimental, but they wouldn't say they wouldn't drill, they wouldn't say they wouldn't recover the reserves.

We believe the penalty should be imposed based on what we know. They're 50 percent too close. As such, we believe they've gained an advantage on acreage in which we own an interest, and we believe a 50-percent penalty should be imposed.

EXAMINER CATANACH: Thank you, Mr. Carr.

Mr. Bruce, anything?

MR. BRUCE: Mr. Examiner, Pride Energy is requesting a simple, mechanistic approach to this Application. The well is 50-percent closer to the section line, so a 50-percent penalty should be imposed.

However, the purpose of a penalty on unorthodox locations is to offset any advantage gained by the location. Simply put, Chaparral is gaining no advantage on the north half of Section 33, and no penalty is appropriate.

First, it's questionable whether the interval which Chaparral primarily seeks to produce from is present in the northwest quarter of Section 33. The north half of Section 33 has also recovered approximately 30 BCF, it has recovered its fair share of reserves, and has probably drained a portion of the south half of the southwest

quarter of Section 28, based on the drainage information presented by Mr. McElhaney.

If a severe penalty is assessed on the 28-1 well, it's questionable whether Chaparral can afford to go in there, and reserves may be wasted.

Again, I'd note what Mr. Wigley just said. Pride Energy wants a penalty on this location, but they don't want an interest in the 28-1 well. That seems kind of contradictory. As a result, we think that no penalty should be assessed.

If a penalty is assessed, and if you are going to use a mechanistic approach to this, I'd refer you to Chaparral's Exhibit 8, which shows that the distance between the Crosby Deep 28-1 well and the only other potential recompletion candidate in this area, the Crosby Deep Number 4 well in the northwest quarter of Section 33, is 1115 feet. The footage locations required by the pool rules are 660 feet off a quarter-section line, so the total distance between wells should be 1320 feet. If you divide 1115 by that 1320 feet, you'd come up with approximately a 15-percent penalty. And if a penalty is imposed, based on what we know, we think that should be the maximum.

Thank you.

EXAMINER CATANACH: 15 percent?

MR. BRUCE: 15 percent.

EXAMINER CATANACH: Would you summarize that calculation in a subsequent exhibit and supply that to me, please?

MR. BRUCE: No problem.

EXAMINER CATANACH: Thank you.

Okay, is there anything further?

There being nothing further in this case, Case 12,795 will be taken under advisement.

(Thereupon, these proceedings were concluded at 9:15 a.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 12795, heard by me on March 7, 2012.

David K. 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 March 11th, 2002.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002