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 CIMAREX ENERGY COMPANY FOR A NONSTANDARD OIL SPACING AND PRORATION UNIT AND COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO

CASE NO. 14480

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID K. BROOKS, Presiding Examiner
TERRY G. WARNELL, Technical Examiner

June 10, 2010

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID K. BROOKS, Presiding Examiner, and TERRY G. WARNELL, Technical Examiner, on Thursday, June 10, 2010, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South St. Francis Drive, Room 102, Santa Fe, New Mexico.

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A P P E A R A N C E S

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WITNESSES: PAGE

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EXAMINER BROOKS: We'll call at this time Case Number 14480, application of Cimarex Energy Company for a nonstandard oil spacing and proration unit and compulsory pooling, Eddy County, New Mexico. Call for appearances.

MR. LARSON: Gary Larson, of Hinkle, Hensley, Shanor & Martin, for Cimarex. I have three witnesses.

MS. MUNDS-DRY: Ocean Munds-Dry, with the law firm of Holland & Hart, here representing Lynx Petroleum Consultants this morning. I have one witness.

EXAMINER BROOKS: Would the witnesses please stand, identify themselves and be sworn?

MR. SWAIN: I'm Michael Swain, a reservoir engineer for Cimarex Energy.

MR. CATALANO: Lee Catalano, geologist with Cimarex Energy.

MR. COMPTON: Mark Compton, landman for Cimarex Energy.

MR. SCOTT: Larry Scott, president of Lynx Petroleum Consultants.

EXAMINER BROOKS: Please swear the witnesses.

(Four witnesses were sworn.)

EXAMINER BROOKS: Thank you, Ms. Reporter.

I take it this is going to be opposed, since you have a witness.

MS. MUNDS-DRY: Yes, sir.

EXAMINER BROOKS: Do you wish to make an opening statement?

MR. LARSON: I'll waive opening statement.

EXAMINER BROOKS: Do you wish to make an opening statement?

MS. MUNDS-DRY: No, sir.

EXAMINER BROOKS: Very good. You may proceed.

MR. LARSON: I'd like to call Mr. Compton as my first witness.

MARK COMPTON

Having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. LARSON:

Q. Please state your full name for the record.

A. Mark Compton.

Q. Where do you reside?

A. Midland, Texas.

Q. By whom are you employed and in what capacity?

A. Cimarex Energy Company as a landman.

Q. How long have you been employed by Cimarex?

A. Almost two years.

Q. Could you briefly summarize your education and oil and gas employment background?

A. Degree in Finance from the University of Tennessee in Knoxville. I've been a landman for almost seven years, the last five years in Lea and Eddy Counties.

Q. Are you a Registered Professional Landman?

A. Yes, sir.

Q. Are you familiar with the land matters that pertain to Cimarex's application in this case?

A. Yes.

Q. Have you previously testified in a Division hearing?

A. Yes. Case Number 14418.

Q. And in that hearing, were you qualified as an expert in land matters?

A. I was.

MR. LARSON: Mr. Examiner, based on Mr. Compton's educational and professional experience, I move that he be qualified as an expert in land matters.

MS. MUNDS-DRY: No objection.

EXAMINER BROOKS: So qualified.

Q. (By Mr. Larson) Mr. Compton, what is Cimarex seeking in its application in this case?

A. We're seeking an order creating a standard

40-acre unit in the northeast half of the northwest half of Section 21, Township 19 South, Range 31 East, 2,500 feet to the base of the Bone Spring formation; a 160-acre nonstandard oil spacing and proration unit in the east half of the west half of Section 21; and a pooling of all mineral interests from 2,500 to the base of the Bone Spring in the east half of the west half of Section 21.

Q. Who holds the surface ownership in this proposed 160-acre project?

A. The BLM does.

Q. Are you aware of any disputed title issues pertaining to the proposed project area?

A. No.

Q. Does Cimarex own ownership interests in each quarter/quarter section of the proposed 160-acre project area?

A. We do.

Q. How did you acquire those interests?

A. We acquired our interests in the north half of this unit with a farmout from Devon Energy, 81 percent. We then picked up a term assignment from Marbob and EGL Resources. We then picked up -- executed operating agreements with the five companies that are part of the Bass Group, who own 40 percent of the south, and also with Seven Rivers, who owns 4 percent of the south.

Q. Did you also reach agreement with EGL?
A. Yes, we have. Thomson with EGL.
Q. And please briefly describe the well that Cimarex proposes to drill in the project area.
A. We plan to drill a Penny Pincher 21 Fed. Com. Number 2 as a horizontal well in the second Bone Spring sandstone formation, with an orthodox surface location in the northeast of the northwest and an orthodox bottom hole location in the southeast of the southwest.
Q. Is the second Bone Spring sandstone the only target for the proposed well?
A. Yes.
Q. At this time, I'd ask you to identify Cimarex Exhibit Number 1.
A. It's a C-102.
Q. Does the plat included in Exhibit 1 depict the location of the well that Cimarex proposes to complete?
A. Yes, it does.
Q. Does it accurately identify the surface and bottom hole locations of the well?
A. Yes, it does.
Q. And are both of those locations in an orthodox location?
A. Yes.
Q. Will the entire well be in an orthodox

location?

A. Yes.

Q. In your role as a landman, were you responsible for identifying all uncommitted interest owners in the proposed project area?

A. Yes.

Q. How did you accomplish that?

A. We initially retained Shaw Interest, a brokerage firm in Midland, to determine the ownership, and then also the Chappell Law Firm to do the title paperwork.

Q. Do these two firms work under your direction?

A. Yes.

Q. Please identify Exhibit 2.

A. A list of interest owners.

Q. These are uncommitted interest owners?

A. Correct.

Q. And did you prepare this list?

A. Yes. I prepared it on information I received from both Shaw and Chappell.

Q. Are all of the parties listed on Exhibit 2 working interest owners?

A. Yes.

Q. Are all of these listed addresses good addresses?

A. Yes, they are.

Q. Would it be correct to say that all the parties listed on Exhibit 2 are the parties that you seek to pool in this case?

A. They are.

Q. At least 30 days prior to the filing of Cimarex's application, did you attempt to obtain a voluntary joinder of all of these working interest owners?

A. We did.

Q. Please identify Exhibit Number 3.

A. That's a sample proposal letter that was sent to all of the working interest owners.

Q. You prepared and signed this letter?

A. Yes.

Q. Did you send this same identical letter to all the parties listed on Exhibit 2?

A. Yes.

Q. Did you enclose anything with this letter?

A. We enclosed an AFE and a proposed operating agreement.

Q. And if you'll next identify Exhibit Number 4.

A. That's the AFE that was sent with the well proposal.

Q. Who prepared the AFE on behalf of Cimarex?

A. Michael Swain, reservoir engineer.

Q. And he will testify later in this case?

A. Yes.

Q. After you sent the proposal letter with the AFE and proposed operating agreement, did you or anyone else at Cimarex communicate with any of the interest owners?

A. Yes.

Q. Did you personally?

A. Yes.

Q. And anyone else at Cimarex?

A. Yes. Jeff Goutcher who is the regional land manager of the Permian region of Cimarex.

Q. Were you unable to strike a deal with any of the interest owners?

A. No, we were not.

Q. In your opinion, did Cimarex make a good-faith effort to obtain the voluntary joinder of all interest owners before filing the application?

A. Yes.

Q. Please refer again to Exhibit 4. Does it identify the cost of the proposed horizontal well?

A. Yes. It has a dry hole cost of 1,863,990, and a completed well cost of 3,687,061.

Q. Does Cimarex have prior experience in the

drilling and completing of horizontal wells in the Bone Spring in Southeastern New Mexico?

A. Yes, sir. In the last 12 months, we've drilled 11 horizontal Bone Spring wells in Southeast New Mexico.

Q. Were you personally involved in the development of any of those wells?

A. Seven of them.

Q. And in your experience in this area, are the well costs set out in the AFE in line with the cost of other horizontal wells that Cimarex has drilled?

A. Yes.

Q. What entity are you requesting the Division to designate as the operator of the proposed well?

A. Cimarex Energy Company of Colorado.

Q. What is the relationship between Cimarex Energy of Colorado and Cimarex Energy Company which filed the application?

A. Cimarex Energy Company of Colorado is a wholly-owned subsidiary of Cimarex Energy Company.

Q. Do you have a recommendation for the Examiner for the amounts which Cimarex should be paid for supervision and administrative expenses?

A. We request 7,000 a month be allowed for drilling the well and 700 a month for the supervision and

administration after the well is completed.

Q. Are these amounts substantially equivalent to those previously approved by the Division for --

A. Yes.

Q. -- horizontal wells?

A. Yes.

Q. Please wait until I finish my question.

Is Cimarex requesting that the rates for supervision and administrative expenses be periodically adjusted, pursuant to COPAS accounting procedures?

A. Yes.

Q. And does Cimarex also seek a 200 percent charge for the risk of drilling and completing the proposed well?

A. Yes.

Q. Did Cimarex provide certified mail notices of its application and today's hearing to the interest owners listed in Exhibit 2?

A. Yes.

Q. Please identify Exhibit Number 5.

A. It's one of the letters to the interest owners providing notice of the application and hearing.

Q. Was the same notice letter sent to each of the interest owners?

A. Yes, it was.

Q. Were they all sent to good addresses?
A. Yes, they were.
Q. Please identify Exhibit Number 6.
A. It's a list of offset operators or working interest owners.
Q. Within a quarter section of the proposed 160-acre project area?
A. Yes.
Q. Who prepared this list?
A. The Hinkle Law Firm.
Q. Pursuant to your direction?
A. Yes.
Q. Were certified mail letters sent to each of the offset operators and interest owners notifying them of the filing of the application and today's hearing?
A. Yes.
Q. Please identify Exhibit Number 7.
A. That's one of the letters to the offset operators and interest owners providing notice of the application and the hearing.
Q. This same letter was sent to each of the offset operators and interest owners?
A. Yes, sir.
Q. To your knowledge, does any interest owner within the proposed project area have a permit to drill a

well within the project area?

A. No.

Q. Are you aware of any plans to drill a well in the project area?

A. No.

Q. And in your opinion, will Cimarex's correlative rights be violated if the Division denies its application?

A. Yes.

MR. LARSON: That's all I have for Mr. Compton. I move admission of Exhibits 1 through 7.

MS. MUNDS-DRY: No objection.

EXAMINER BROOKS: Exhibits 1 through 7 are admitted.

(Exhibits 1 through 7 were admitted.)

MS. MUNDS-DRY: I have a few questions.

EXAMINER BROOKS: Yes, Ms. Munds-Dry, you may examine the witness.

CROSS-EXAMINATION

BY MS. MUNDS-DRY:

Q. Good morning.

A. Good morning. How are you?

Q. Good. After your February 8th letter, you didn't call Mr. Scott to follow up on this letter, did you?

A. No, ma'am, I did not.
Q. You didn't email him?
A. No, ma'am, I did not.
Q. So no follow up after this February 8th letter?
A. No. Mr. Scott, as late as last week, word got back to me that he was refusing to speak with me. So I put him in touch with my manager, who spoke with him.
Q. Do you know if Mr. Scott and your manager spoke?
A. I do.
Q. And did they have a conversation?
A. I am told they had a conversation. Yes, ma'am.
Q. And are you aware of whether they reached any kind of agreement?
A. I am assuminging by the fact that we're here, they did not.

MS. MUNDS-DRY: Thank you. That's all the questions I have.

EXAMINATION

BY EXAMINER BROOKS:

Q. Mr. Compton, when you were speaking about mineral owners -- and you'll have to pardon my long-time habits of terminology which have no particular

significance, other than I've formed these habits. I think of mineral owners being a mineral fee owner.

A. Correct.

Q. But you're actually talking about lease owners?

A. Correct. Leasehold interest owners.

Q. You have to use the terminology that's more familiar to me. All of the people listed on Exhibit 2 are owners of interests in oil and gas leases?

A. They are the uncommitted.

Q. But none of them is an owner of an unleased interest?

A. No, sir.

Q. They're all owners of interests in oil and gas leases?

A. They are.

Q. Is this a Bone Spring prospect?

A. Yes, sir.

Q. And are you seeking -- you said you're seeking a 40-acre unit in the northeast of the northwest?

A. Yes, sir.

Q. Is that to be from the surface to the base of the Bone Spring?

A. That's from 2,500 subsurface to the base of the Bone Spring.

Q. Is there a depth severance at 2,500?
A. Yes, sir, there is.
Q. 2,500 to the base of the Bone Spring. Okay.
And then you're seeking the lateral in the Bone Spring only?
A. Yes, sir.
EXAMINER BROOKS: Okay. Very good. I believe that's all my questions.
Mr. Warnell?

EXAMINATION

BY EXAMINER WARNELL:
Q. Mr. Compton, just for clarification, I believe you stated your only interest -- your only target was the second Bone Spring sandstone?
A. That's correct.
EXAMINER WARNELL: No other questions.
EXAMINER BROOKS: Do you have anything further?
MR. LARSON: I have nothing further.
EXAMINER BROOKS: The witness may stand down. Call your next witness.
MR. LARSON: Thank you. I call Lee Catalano.

LEE CATALANO

Having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. LARSON:

Q. Please state your name for the record.

A. Lee Catalano.

Q. Where do you reside?

A. Midland, Texas.

Q. By whom are you employed and in what capacity?

A. I'm a senior geologist with Cimarex Energy.

Q. And how long have you been employed by Cimarex Energy?

A. About five years.

Q. Could you briefly summarize your professional experience in the oil and gas industry?

A. Thirty-two years working the Permian Basin in New Mexico, and I have a Master's degree from Oklahoma State.

Q. Do you personally have experience with the completion of horizontal wells in Southeastern New Mexico?

A. Yes. Primarily that's all I've done for the last two and a half years.

Q. Are you familiar with the geological aspects of Cimarex's application in this case?

A. I am.

Q. Have you previously testified before the

Division?

A. Yes.

Q. Were you qualified as an expert geologist in that case?

A. Yes.

MR. LARSON: Mr. Examiner, I move for the qualification of Mr. Catalano as an expert geologist for purposes of this hearing.

MS. MUNDS-DRY: No objection.

EXAMINER BROOKS: So qualified.

Q. (By Mr. Larson) Did you have a hand in Cimarex's analysis of the prognosis for the proposed Penny Pincher 21 Federal Com. Number 2 Well?

A. Yes.

Q. And I direct your attention to Exhibit Number 8 and ask you to identify it.

A. Exhibit Number 8 is a production map surrounding the Penny Pincher area.

Q. Did you prepare this exhibit?

A. Yes.

Q. Within the yellow shaded area, we see four lines with numbers at the tops of the lines. What are those lines intended to depict?

A. The four horizontal wells that we have proposed.

Q. And the subject of today's hearing is the one marked Number 2?

A. That's correct.

Q. What does is this exhibit intended to depict?

A. This exhibit is to show the producing intervals and reservoirs in the area surrounding the Penny Pincher lease, including the Bone Spring.

Q. And do you agree with Mr. Compton's testimony that the target of the proposed well is the second Bone Spring sand?

A. Yes, it is.

Q. Next I'll ask you to identify Exhibit Number 9.

A. That is a structure map on top of the second Bone Spring sandstone.

Q. Did you also prepare this exhibit?

A. I did.

Q. What is this exhibit intended to depict?

A. This exhibit is to show the structural dip of the second Bone Spring sand, which is the target interval for our horizontal proposal. It shows that the dip is off to the south/southeast.

Q. And when were you were analyzing the prognosis for the proposed well, did you also look at the first and third Bone Spring sands?

A. Yes. But our target is the second sand here.

Q. Next I'll ask you to identify Exhibit Number 10.

A. Okay. Exhibit 10 is a Net Porosity Isopach Map of the second Bone Spring sand.

Q. Again, we have the four lines depicting proposed well locations for horizontal wells?

A. That's correct.

Q. And the one marked Number 2 is the proposed well that's the subject of the hearing today?

A. That's correct.

Q. Did you have a hand in determining the surface and bottom hole locations of the proposed well?

A. Yes, I did.

Q. How were those determined?

A. Those were determined based upon trying to maximize the amount of pay that the horizontal well would encounter, in addition to being the legal locations.

Q. Okay. Did you review well data for other wells in the vicinity?

A. Yes. All of them.

Q. All publicly-available data?

A. Yes.

Q. And directing your attention again to Exhibit Number 10, what are the parameters that you used to

determine the porosity of the reservoir sand?

A. What I used for mapping purposes is a 10 percent density cutoff. That's what this map is based upon.

Q. In your opinion, is a 10 percent porosity cutoff a good indicator for a productive horizontal well in the second Bone Spring sand?

A. At this point, yes.

Q. In your opinion, will the proposed well encounter pay, based on this 10 percent porosity along the entire length of the wellbore?

A. It will.

Q. Next I direct your attention to Exhibit Number 11.

A. Exhibit 11 is an east/west cross-section, structural cross-section, across the Penny Pincher area.

Q. Is it intended to show the productive interval and the stratigraphic target for Bone Spring horizontal wells?

A. Yes, it is.

Q. In your opinion, is the overall target interval homogeneous?

A. The overall interval is homogeneous across that area, yes.

Q. In your opinion, are all four quarter/quarter

sections in the proposed 160-acre project area prospective in the second Bone Spring sand?

A. Yes, they are.

Q. Do you believe your opinion is supported by your Exhibit Numbers 10 and 11?

A. Yes.

Q. Could you explain why?

A. As you can see on the cross-section, I've got a well -- it's actually a vertical second Bone Spring producer there in Section 20 to the west. Then our pilot hole from the Penny Pincher Number 1 contains pay, as well as the Devon well in Section 22. As you can see from the cross-section, the horizontal target interval carries across the entire lease.

Q. And in your opinion, will the granting of Cimarex's application serve in the interest of conservation and preservation of waste?

A. Yes.

Q. Why do you hold that opinion?

A. By drilling a horizontal well, we'll recover many more reserves than individual 40-acre wells.

Q. Vertical wells?

A. Vertical wells. Yes.

MR. LARSON: Mr. Examiner, I move the admission of Exhibits 8 through 11.

MS. MUNDS-DRY: No objection.

EXAMINER BROOKS: Exhibits 8 through 11 are admitted.

(Exhibits 8 through 11 were admitted.)

MR. LARSON: I'll pass the witness at this time.

EXAMINER BROOKS: Ms. Munds-Dry?

MS. MUNDS-DRY: Can I have just one minute, please?

EXAMINER BROOKS: Okay.

(A discussion was held off the record.)

MS. MUNDS-DRY: Good morning. Nice to see you again this morning.

THE WITNESS: Good morning.

CROSS-EXAMINATION

BY MS. MUNDS-DRY:

Q. If we could turn to your Exhibit Number 10. If I understand your testimony this morning, you said that you used a 10 percent density cutoff; is that correct?

A. For mapping purposes. Correct.

Q. And you show your structural cutoff here -- I think that says 50; is that right? My eyes are not so great this morning. That's closest to the proposed Penny Pincher Number 2?

A. Are you referring to the 50-foot contour?

Q. Is that what it says, that there's a 50-foot contour there?

A. The green line. Yes.

Q. Is that green? I'm sorry. It looks black on my copy.

A. Yeah.

MS. MUNDS-DRY: I'm a little puzzled by this. May I approach, Mr. Examiner?

EXAMINER BROOKS: You may.

Q. (By Ms. Munds-Dry) Mr. Catalano, did you testify as the geologist in Case Number 14418?

A. I did.

Q. And is this -- what I've handed you, what's been marked as Lynx Exhibit Number 3, the Net Porosity Isopach Map that you prepared for that hearing?

A. Yes, it is.

Q. If we compare your -- I believe it was marked Exhibit Number 12 in that case and your Exhibit Number 10 in this case -- I notice a few differences. For example, do you see in Section 21, which is the subject of this hearing, your contour line that's marked 50? Do you see that?

A. Yes.

Q. And that appears to have shifted down --

A. It has.

Q. -- into this section; is that correct?

A. That's correct.

Q. And I also note here that in Section 22 you have a contour line that's marked 100 that's also shifted; is that correct?

A. Yes.

Q. Just out of curiosity, there appears to be more detail on your Exhibit Number 12 than your Exhibit Number 10 in this case. Was there a reason for that?

A. No. This exhibit you're looking at today is a revised map based upon the results of the Penny Pincher Number 1 and my re-interpretation of the data in the area.

Q. I see. Are you familiar with the Marbob Top Dollar Well that's in Section 16? I believe it's in the southwest quarter.

A. Yes.

Q. In fact, I think, if I'm correct, in Case Number 14418, you used that as a control well on that map; is that correct?

A. And it's used on this map, too, as a control. It's 34 there in Section 16.

Q. Okay. But you didn't use that in your cross-section; is that correct?

A. No. I didn't feel like it was pertinent. It wasn't pertinent to what we are trying to show today.

Q. Are you familiar with the second sand Bone Spring test that was done in the Marbob Top Dollar Well?

A. Yes.

Q. But you did not feel that that was pertinent; is that correct?

A. No.

Q. Why is that?

A. I have a well control point now that's only 40 acres away from this proposed well that we're going to drill.

Q. Yet you used this well here, Number 47, that is what, almost two miles away, instead of the Marbob?

A. Correct. What I'm trying to show with my cross-section -- I think I testified to that -- is the continuity of the productive sand across Section 21. So an east/west cross-section was appropriate to show that.

Q. I see. Mr. Catalano, do you know if it was the same sand that was tested in the Marbob Well that is the target in the Penny Pincher Well Number 1?

A. It would be within the same interval.

Q. So it was in the same sand; is that correct?

A. It was in the same interval.

MS. MUNDS-DRY: No further questions.

Thank you.

EXAMINATION

BY EXAMINER BROOKS:

Q. Okay. Mr. Catalano, Exhibit Number 12 that was tendered by Lynx, that is a previous structure -- previous isopach map that you drew?

A. Yes, sir.

Q. That was admitted in evidence in the previous case involving this section?

A. Yes, sir.

Q. I had one question that I should have asked preliminary to that. Exhibit Number 9 here is your structure map. What is the significance of structure with regard to this prospect?

A. It's important -- as far as trapping, it doesn't matter. It's important only when you drill your directional well to have an idea of what the dip is for steering purposes.

Q. Okay. Would it make any difference -- would the structure make any difference in telling you whether this well would be better developed by north/south or by east/west or some other pattern?

A. No.

Q. I didn't think so. But I wanted to be sure, since I'm not a geologist.

A. The trap is a stratigraphic trap.

Q. Okay. Then looking at your Exhibit 10 and Exhibit 12 that was shown, if you -- now, the Penny Pincher Number 1 has been drilled?

A. The pilot hole has been drilled.

Q. Okay. The lateral has not been drilled?

A. We have a rig moving in this week, actually.

Q. Okay.

A. We're using a different rig to drill the lateral.

Q. You're going to be back here next week to present that case to the Commission?

A. Apparently.

Q. Okay. That's what I thought.

When you drilled the pilot hole-- well, first of all, these bold numbers that are on Exhibit Number 10, are those feet of pay?

A. Correct.

Q. That were encountered in particular wells?

A. Correct.

Q. So since the Penny Pincher Number 1 is within the circle that's marked 75, which, if I interpret the map correctly, that means it was predicted to be above 75?

A. 75 or greater.

Q. Right. And it ended up being 32?
A. Right, using a 10 percent cutoff.
Q. I'm not surprised that you re-drew your map under these circumstances.
A. Correct.
Q. As was discussed in the previous hearing, you really don't have a lot of wells here to work with; right?
A. That's correct. That's the first well in Section 21 that gave us control, actually.
Q. So what is the basis for your drawing that 50 contour line as going -- what's the basis for the hump between Section 21 and into Section 20 in that 50-foot contour line?
MR. LARSON: Which exhibit are you referring to, Mr. Examiner?
Q. If you look at Section 21, this 50-foot contour line goes across Section 21 and into Section 20; right?
A. Correct.
Q. It goes on a -- something approaching a north/northwest direction?
A. In Section 20 there?
Q. Through Section 21, and then it turns sharply southward in Section 20. That's what I'm calling the

hump. What's the basis for drawing that hump, as opposed to drawing it straight along, since you have a 32 point in 21 and you have a 36 point in 20?

A. Just bringing it in closer to that well.

Q. No. Further south across 21, since you obviously see it as going far south in 20, what's the basis for the particular shape that you've drawn there?

A. This is part of a larger regional map that I constantly update every time wells are drilled, so my interpretation changes as new data, you know, comes about. And like I said, it's part of a bigger depositional system. I have other control that is influencing this.

Q. I'm just curious as to why you think that the -- well, why you think that the -- because it doesn't seem to be obvious, based on the points you have, why you think that the structure becomes thicker that quickly as you move from north to south in Section 21, as opposed to being more concentrated to the south.

A. I don't know, frankly.

Q. Okay. That's a good answer.

A. I don't know. That's my best estimate.

Q. That's not an answer that you often get from geologists.

EXAMINER BROOKS: Okay. That's all I

have. Mr. Warnell.

EXAMINATION

BY EXAMINER WARNELL:

Q. Mr. Catalano, I just wanted to verify on the Number 1 well, you say that the vertical has been drilled?

A. Yes, sir.

Q. And you've released that rig?

A. Yeah. It wasn't capable of drilling the horizontal portion of the hole.

Q. So you drilled that well, the vertical section, you logged it. Did you plug it back then?

A. We set casing, and it's -- all we've got to do now is go in and cut a window and take off -- build our curve.

Q. And none of the other wells have been spudded or drilled?

A. No, sir.

Q. The other three wells.

EXAMINER WARNELL: I have no further questions.

EXAMINER BROOKS: Mr. Larson?

MR. LARSON: No further questions for Mr. Catalano.

EXAMINER BROOKS: Very good. You may

stand down.

MR. CATALANO: Thank you.

EXAMINER BROOKS: You may call your next witness.

MR. LARSON: Mr. Swain.

MICHAEL SWAIN

Having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. LARSON:

Q. Please state your full name for the record.

A. Michael Swain.

Q. Where do you reside?

A. Midland, Texas.

Q. By whom are you employed and in what capacity?

A. Cimarex Energy as a reservoir engineer.

Q. And please summarize your professional experience.

A. I've worked eight years as a reservoir engineer in the industry.

Q. And how long with Cimarex?

A. Six years.

Q. And what is your focus as a reservoir geologist for Cimarex?

A. Reservoir engineer.

Q. Okay. I'm sorry.

A. I do economic and reserve analysis, and I also do drilling and completed plans for wells in southeast New Mexico.

Q. And did you have a role in evaluating prospects for the horizontal well proposed in this application?

A. Yes, I did.

Q. Have you previously testified before the Division?

A. Yes, I have.

Q. Were you qualified as expert in petroleum engineering in that hearing?

A. Yes.

Q. Do you recall the case number?

A. Case 14418.

MR. LARSON: Mr. Examiner, I move that Mr. Swain be qualified as an expert in petroleum engineering.

MS. MUNDS-DRY: No objection.

EXAMINER BROOKS: So qualified.

While we're interrupted here, a question that I didn't -- was Exhibit 12 admitted in evidence?

MS. MUNDS-DRY: Lynx Exhibit Number 3?

EXAMINER BROOKS: Yeah.

MS. MUNDS-DRY: I should have moved to admit it with Mr. Catalano, but I can also wait until Mr.

Scott.

EXAMINER BROOKS: Okay.

MS. MUNDS-DRY: Would you like me to move to admit it?

EXAMINER BROOKS: Yes, since it has already come up.

MS. MUNDS-DRY: We move to admit Lynx Exhibit 3 into evidence.

EXAMINER BROOKS: Lynx Exhibit Number 3 is admitted. I'm just going to X out "Exhibit 12" on here and suggest that the reporter do the same on the original so we won't get confused.

Okay. You may continue then, Mr. Larson.

(Exhibit 3 was admitted.)

Q. (By Mr. Larson) Did you hear Mr. Catalano's testimony that all four quarter/quarter sections in the proposed project area will be prospective in the second Bone Spring sand?

A. Yes.

Q. Do you agree with that opinion?

A. Yes.

Q. What is the basis for your opinion?

A. Based on my experience, each 40-acre tract has sufficient net pay to produce hydrocarbons in economic quantity.

Q. I'll direct your attention to Cimarex Exhibit Number 4.

Mr. Compton testified that you prepared this AFE; is that correct?

A. Yes, I did.

Q. In your opinion, are the costs stated for drilling and completing the proposed well in line with the costs of other horizontal wells that Cimarex has completed in this area of New Mexico?

A. Yes.

Q. Did you also hear Mr. Compton's testimony regarding the proposed administrative and supervision costs?

A. Yes.

Q. In your opinion, are those costs reasonable and in line with the costs for similar horizontal wells that Cimarex has drilled in southeastern New Mexico?

A. Yes, they are.

Q. I direct your attention to Cimarex Exhibit Number 12. Would you identify this exhibit?

A. It's a drilling prognosis for the Penny Pincher 21 Fed. 2H.

Q. Did you prepare this?

A. Yes, I did.

Q. What was your purpose in preparing it?

A. This document depicts the drilling plans for the Penny Pincher 21 2H.

Q. I'd ask you to identify Exhibit Number 13.

A. Yes.

Q. What is this exhibit?

A. This is a planned wellpath report for the Penny Pincher 2H.

Q. Who prepared this exhibit?

A. Baker Hughes, a directional well company.

Q. Did Baker Hughes prepare this planned wellpath report at your direction?

A. Yes, they did.

Q. And does Exhibit 13 demonstrate that the proposed well is entirely in an orthodox location?

A. Yes, it does.

Q. In your opinion, will the proposed horizontal drilling technique yield higher economics than would the drilling of four vertical wells in each quarter/quarter section of the project area?

A. Yes.

Q. Why do you hold that opinion?

A. Because you can drill one horizontal well to produce the same reserves as four vertical wells.

Q. And why would it be more productive?

A. Horizontal drilling, due to the exposure of

the reservoir, has shown to produce higher recovery factors than vertical wells.

Q. That's in your experience in drilling horizontal wells in Eddy County?

A. Yes, sir.

Q. And in your opinion, will the horizontal drilling technique recover oil that would not otherwise be recovered?

A. Yes, it would.

Q. If you could explain the basis for your opinion.

A. Horizontal drilling allows you to get much more exposure to the reservoir and allows for a lot more contact with the reservoir, thus allowing more reserves to be produced from each 40-acre tract along the wellpath.

Q. And in that regard, do you believe that the granting of Cimarex's application would serve the interest of conservation and the prevention of waste?

A. Yes, it will.

Q. And in your opinion, would the denial of the application violate Cimarex's correlative rights?

A. Yes, it would.

MR. LARSON: I move the admission of Exhibits 12 and 13.

MS. MUNDS-DRY: No objection.

EXAMINER BROOKS: 12 and 13 are admitted.

(Exhibits 12 and 13 were admitted.)

MR. LARSON: Pass the witness.

EXAMINER BROOKS: Ms. Munds-Dry?

CROSS-EXAMINATION

BY MS. MUNDS-DRY:

Q. Good morning, Mr. Swain. You just testified that the denial of the application would violate Cimarex's correlative rights. Could you explain the basis for that opinion?

A. We have interest in every spacing unit along the wellpath, and by not allowing us to drill and complete this well, we will not be able to recover those reserves underneath each 40-acre tract.

Q. I believe you testified, Mr. Swain, that you believe all four of the quarter/quarter sections in the proposed project area are prospective?

A. Yes, they are.

Q. Do you believe that each of the quarter/quarter sections will equally contribute to the project area?

A. No, ma'am, they won't.

Q. Why do you say that?

A. Based on the current mapping, wells with

higher net pay typically, in my experience, produce more oil than ones that have less net pay.

Q. What is the net pay that you're estimating to find in this proposed well?

A. It varies from the surface oil to the bottom hole of the well. Are you looking for the average along the wellbore?

Q. Let's go quarter section by quarter section. In the northwest, if we look at the northeast quarter of the northwest quarter, what do you estimate the net pay being in that quarter section?

A. Around 32 feet of pay.

Q. What about in the southwest quarter of the northwest quarter?

A. Somewhere between 30 and 50 feet of pay.

Q. Then as we go south, what about in the northeast quarter of the southwest quarter?

A. Over 50 feet of pay.

Q. And finally, in the southwest quarter of the southwest quarter?

A. Over 50 feet of pay.

Q. Cimarex plans to allocate on a straight acreage basis?

A. Yes.

Q. Did you perform any sort of volumetrics to

determine what the contribution will be of each quarter/quarter section?

A. Did I perform those?

Q. Did you prepare any volumetrics?

A. Not for this hearing, I did not.

Q. But did you prepare them?

A. Yes.

Q. But you did not provide them in this hearing?

A. No.

MS. MUNDS-DRY: No further questions. Thank you.

EXAMINATION

BY EXAMINER BROOKS:

Q. Your estimates that you gave to Ms. Munds-Dry with regard to the feet of pay thickness in various quarter sections, is that based on Mr. Catalano's mapping?

A. Yes.

Q. Is it based on anything else?

A. No, sir.

EXAMINER BROOKS: Thank you. That's all I have.

EXAMINER WARNELL: I have no questions.

EXAMINER BROOKS: Mr. Larson?

MR. LARSON: I have no further questions

for Mr. Swain. I'd like to reserve the opportunity to call any of my witnesses back on rebuttal.

EXAMINER BROOKS: Okay. You may stand down.

You may call your witnesses for rebuttal.

Ms. Munds-Dry, would you like to make a statement?

MS. MUNDS-DRY: No, sir. We'd like to call our first and only witness.

EXAMINER BROOKS: Okay. You may call your witness.

MS. MUNDS-DRY: We'd like to call Mr. Scott, please.

LARRY SCOTT

Having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MS. MUNDS-DRY:

Q. Good morning. Please state your full name for the record.

A. Larry R. Scott.

Q. And where do you reside?

A. Hobbs, New Mexico.

Q. And by whom are you employed?

A. Lynx Petroleum Consultants, Incorporated.

Q. What is your position with Lynx?

A. I am the president and a part owner of the company.

Q. Have you previously testified before the Division, and were your credentials made a matter of record and accepted?

A. On numerous occasions.

Q. Were you qualified as a petroleum engineer in the past?

A. As well as a practical oilman.

Q. Are you familiar with the application that has been filed by Cimarex in this case?

A. Yes.

MS. MUNDS-DRY: Mr. Examiner, we tender Mr. Scott as an expert witness in petroleum engineering.

MR. LARSON: And not as a practical oilman?

MS. MUNDS-DRY: We can throw that in, too.

MR. LARSON: No objection.

EXAMINER BROOKS: He is so qualified.

MS. MUNDS-DRY: Thank you.

Q. (By Ms. Munds-Dry) Mr. Scott, would you briefly summarize for the Examiners the basis for Lynx's objection to Cimarex's application today?

A. Well, this is a continuation of their Penny Pincher project we objected to in a hearing back in

March. We felt like the subsurface control for data in the area was insufficient to determine an accurate allocation of the contributions of each 40-acre tract to the total recovery of the well.

They presented I guess what's now called Exhibit 12-3, and I presented my own map at that hearing, and they were awarded compulsory pooling. I believe that the additional data that has been made available to us by the Penny Pincher Number 1 vertical well and the associated electronic log essentially confirms my earlier case and comments with regard to the Penny Pincher Number 1, and I believe that that inequity is greater than ever.

Q. Mr. Scott, what is Lynx's ownership in the proposed project area?

A. Well, we own interest in both the north half of Section 21, if I recall, about 4 percent, and approximately 9 percent in the south half of 21, and represent a large group of partners that essentially owned approximately 60 percent of the mineral leases in the south half of 21 in the Bone Spring.

Q. If you'll turn to what's been marked as Lynx Exhibit Number 1. Do you have that in front of you?

A. Yes.

Q. Identify and review that for the Examiners.

A. That is a structure map on the third Bone

Spring sand top and isopach sand contours on the second Bone Spring sand showing cross-plot porosity greater than 10 percent.

Q. And I believe you identified the Penny Pincher Number 1 and the proposed Penny Pincher Number 2, 3 and 4?

A. As we come west to east across Section 21, the Penny Pincher Number 1 is the westernmost well. The 2 is the next one to the east. The 3 is the next one to the east. And the 4 is the one on the far east side.

Q. If you would explain, first of all, your structural contour lines on the map here for the Examiners.

A. The control points, for example, one in Section 28 that indicates a minus 6,291, that substantially is similar to the structural contours provided by Cimarex on the second Bone Spring sand.

I mapped on the third sand in the area because I believe that that's a little more consistent pick available to us. But those are structural lines at the top of the third sand. The contour lines that are marked 10, 20, 30, 40, 50, 60, are second sand isopach lines based on control points in the area.

Q. Do you generally agree with the structure map provided by Cimarex?

A. Yes.

Q. And what about their isopach map?

A. Well, I strongly disagree with the isopach that they've provided. A log on the Penny Pincher Number 1 well using cross-plot --

MR. LARSON: Mr. Examiner, I object to any testimony about the log, and we request the opportunity to ask Mr. Scott about it.

EXAMINER BROOKS: Ms. Munds-Dry?

MS. MUNDS-DRY: I'm not sure I understand the basis for the objection that they object to the log.

MR. LARSON: It's proprietary information.

EXAMINER BROOKS: Well, I'm going to overrule the objection. You may continue. You may proceed. Perhaps it's a hearsay objection, but that's not admitted in any case. We need to get this testimony on the record, and we can appraise its value. You may proceed.

A. We provided a log section of the compensated neutron density log for the second Bone Spring sand in the Penny Pincher Federal Number 1. It's a little larger scale of the one that they provided.

Q. (By Ms. Munds-Dry) Mr. Scott, if I can interrupt you, is that marked as Lynx Exhibit Number 2?

A. Correct. And that log indicates neutron

density cross-plot porosity greater than 10 percent, which is admittedly somewhat perhaps more conservative than the Cimarex density porosity of 10 percent. That log indicates cross-plot porosity greater than 10 percent of only eight feet.

It would be my professional opinion that Cimarex has, in effect, drilled a dry vertical hole to the second Bone Spring sand at the Penny Pincher Number 1.

Q. Now, you say that, even out of all fairness, understanding that that was their pilot hole?

A. Absolutely. That well would not be commercial in that 40-acre tract as a vertical well in the second Bone Spring sand.

I can offer some additional data with regard to a well that is just a northeast, offset to the Penny Pincher 2, that is the subject of this hearing.

Marbob, with me as a working interest, tested 28 feet of density neutron cross-plot porosity greater than 10 percent with perforation and breakdown acid. The well was noncommercial in the second Bone Spring sand. The swab report on day two, after recovering tubing volume, was 500 feet of fluid entry with a skim of oil on the fluid.

The well was plugged back to higher zones with

no further stimulation. That well was very conveniently left off their cross-sections, but it is, in fact, the direct northeast offset to the surface location of the Penny Pincher Number 2.

Q. Mr. Scott, were you present for Mr. Catalano's testimony this morning?

A. Yes.

Q. Did you hear his testimony regarding why he did not use the Marbob Top Dollar Well in his analysis?

A. I am an engineer, not a geologist, and I tend to believe the datapoints that are closer to the spot where I'm considering drilling a well than those a mile and a half distant. That's why I consider the Top Dollar to be a significant data point. It's a diagonal offset.

Q. Let's go back to your Exhibit Number 1, if we could, for a moment. You indicated that the Penny Pincher Number 1 is shown in Section 21, I believe?

A. Yes.

Q. And I think you also indicated that that well has been force pooled?

A. Yes. Penny Pincher 1 was drilled pursuant to a force pooling order or compulsory pooling order R-13228, which was issued on March the 18th after a hearing.

MS. MUNDS-DRY: Mr. Examiner, I'd ask you

to take administrative notice of Order R-13228.

MR. LARSON: No objection.

EXAMINER BROOKS: So noticed.

Q. (By Ms. Munds-Dry) Mr. Scott, I have a copy of that order, and I can -- I have copies, if anyone is interested.

Would you review paragraph 11 on page 4 of that order?

A. Well, I believe that this is a legitimate statement. Few wells were drilled in the area. Control points were sparse. But the Division deemed, after the hearing, that Cimarex's technical presentation was the more convincing of the two presentations that were offered at that hearing.

Q. Mr. Scott, do you have in front of you what's been marked as Lynx Exhibit Number 3?

A. Yes, I do. That's their isopach map on the second sand that required revision as a result of the drilling and logging of the Penny Pincher Number 1.

I'd like to put also in the record that while my Exhibit 1 contains more detail than the map that was presented at that Number 1 compulsory pool hearing, it required no revision with regard to Bone Spring sand thickness.

Q. And on that Lynx Exhibit Number 3, what was

the feet of pay that was indicated by Cimarex in that former hearing?

A. Greater than 75 feet through all four quarter/quarter sections in the west half/west half.

Q. I believe you've testified to this, but just to make it clear for the record, on your Exhibit Number 2, how much feet of pay does that log indicate?

A. Eight.

Q. I'm Sorry. Eight feet?

A. Eight feet.

EXAMINER WARNELL: What depth are you basing that on?

Q. (By Ms. Munds-Dry) Mr. Scott, for the Examiners, if you could show the depth.

A. The sand in question would be right across 8,900 feet.

EXAMINER WARNELL: Okay.

Q. (By Ms. Munds-Dry) Based on your review of Exhibit Number 1, Exhibit 2 and Exhibit 3, what is your technical opinion as to the commerciality of the second Bone Spring in the north half of Section 21?

A. A strong case can be made with the best data that's available, being the Penny Pincher 1 log and the Top Dollar test, that the north half of Section 21 is barren or very nearly barren of cross-plot Bone Spring

second sand porosity greater than 10 percent, and that is is so shown on my isopach map.

Q. Were you present this morning for Mr. Swain's testimony?

A. Yes.

Q. And I believe Mr. Swain testified -- and I don't mean to try to characterize his testimony -- that he believed all four quarter/quarter sections were prospective. Do you agree with his testimony?

A. The vertical hole in the Penny Pincher Number 1 is a dry hole. The vertical hole in the northeast of the northwest is between the Penny Pincher Number 1 and the Top Dollar Number 1, which tested the second Bone Spring sand as noncommercial.

I have to believe that there is a strong technical argument to be made for that quarter/quarter section to also be barren or very nearly so.

Q. Mr. Scott, what opinion do you have in terms of Cimarex's application for forced pooling in this nonstandard spacing unit, if it were granted, what effect would it have on Lynx's correlative rights?

A. I can understand why Cimarex wants -- looking at my map and the data available to us, I can certainly understand why Cimarex is wanting to go north to south with this horizontal, as opposed to east to west, because

it appears as though the north half may be marginally productive, at best.

But the flip side of that is the compulsory pooling order on the Number 1 well pooled on a straight acreage basis. And that is an egregious infringement of correlative rights because it does not appear from the technical data that those 40s are anywhere near comparable in productivity.

Q. What is your opinion on the Division granting the application to form a nonstandard spacing unit in this case?

A. The Division formed -- took four 40-acre proration units and formed a 160-acre nonstandard proration unit utilizing very limited data to allocate production on a straight acreage basis.

This is more in tune -- rather than the compulsory pooling statute, it is more in tune with the unitization statutes, where multiple individual proration units are combined to form a single unit. And, in fact, the word "unit" was used several times in the order that was issued for the Penny Pincher Number 1.

Unitization statutes do -- now, under compulsory pooling, there is no provision for allocation of production on any other than a straight acreage basis. Under unitization, the best available geological data is

utilized to determine participation factors for each tract. And in this case, that is certainly more applicable than allocation on straight acreage.

Q. Mr. Scott, in Case 14418, what did Lynx request in terms of allocating production?

A. We asked for individual well tests. We asked for each separate interval to be tested to determine its total contribution to the horizontal well.

Q. How did the Division respond to that request?

A. The Division found in their order that that was not practicable. The Cimarex folks sort of ad hoc estimated that individual tests along that horizontal interval would cost somewhere on the order of a million dollars.

Now, I dispute that number, but I don't have any hard facts to dispute it because I don't know that it's ever been done. But it's possible, given my experience with Cimarex as a very high-cost operator, that they could spend the million dollars getting those individual 40s tested. That is a possibility that I have to conceive.

There are other remedies that might be available to us. I mean, Cimarex has proposed four wells in here. If we set the surface location of one of these in the south half and log it, they can determine porosity

feet of pay in the south half of the section and the north half of the section at no additional cost, and allocate on the basis of interpolated data between the points that are available to us.

It's important for me to note that I stand to lose here, possibly either way, because I own interest in the north half also. What I'm interested in is, win or lose, the most accurate allocation that we can come to on these projects.

Q. Mr. Scott, what you propose as an alternative here this morning, do you recommend that be a condition of any order that results in this case if the application is granted?

A. Absolutely.

Q. Based on the information and the testimony that you provided here today, what are your engineering conclusions?

A. Well, my engineering conclusions are that Cimarex's original maps are inaccurate. They misrepresented what they found on the ground, and that the maps that I prepared for that first hearing and that are presented here certainly did not need to be modified, other than to add additional detail. And there's simply not a sufficient amount of data to even reasonably ensure that correlative rights are being protected.

Q. With that, I'll ask you to put your practical hat on and provide for the Examiners your summary of what alternative or option you recommend be made a condition of the order.

A. Let's drill a vertical hole in the south half and log it.

Q. What cost do you estimate for that option?

A. None. They're going to do that anyway. Maybe some paperwork to change the location.

Q. Mr. Scott, were Lynx Exhibits 1 and 2 either prepared by you or under your direct supervision?

A. Yes.

MS. MUNDS-DRY: Mr. Examiner, we move the admission into evidence of Lynx Exhibits 1 and 2.

MR. LARSON: Same basis for my objection on the proprietary nature of the exhibit. I object to it. I have no objection to Exhibit 1.

EXAMINER BROOKS: I believe that at this point, any objection in proprietary has been effectively waived by the use of this log data in preparation of evidence that has been presented to us at the instance of Cimarex, so I will overrule the objection.

MR. LARSON: Mr. Examiner, Cimarex did not release this data.

EXAMINER BROOKS: But clearly Mr. Catalano

used this in preparation of his exhibit, and it was furnished, apparently, to Lynx. Perhaps it was furnished to Lynx under a protective order, although I didn't sign one. But anyway --

THE WITNESS: I can explain, if that helps.

EXAMINER BROOKS: It probably would help for the record.

THE WITNESS: Several people that normally are in my group of working interest owners, Mr. Examiner, participated in this well and requested the technical data that they were entitled to with that participation. They forwarded that to me for review for these additional projects that have been proposed because they are considering participating in them also.

EXAMINER BROOKS: Does anybody have any follow-up questions for Mr. Scott, in view of his response to my question?

MS. MUNDS-DRY: Mr. Brooks, I would just add -- and I can't tell what portion of the log -- but there was a portion of the log that Cimarex used in it's Exhibit Number 11.

EXAMINER BROOKS: That is what I thought. but I wasn't sure.

Mr. Larson. did you have any questions to ask

this witness?

MR. LARSON: Which parties provided you with this information?

THE WITNESS: Am I obligated to say?

MS. MUNDS-DRY: I think you have to answer that question.

EXAMINER BROOKS: Yes, I believe you do.

THE WITNESS: Mr. Gil Moutray provided that.

MR. LARSON: What company is he associated with?

THE WITNESS: Seven Rivers, Inc.

MR. LARSON: Did Mr. Moutray tell you that Cimarex gave him permission to give the data to you?

THE WITNESS: He did not.

MR. LARSON: That's all I have.

EXAMINER BROOKS: I believe that Mr. Scott's testimony establishes a further basis for waiver in that one of the owners of the alleged proprietary information has, in fact, made it available to a third party, so I will again overrule the objection. Lynx Exhibits 1 and 2 will be admitted.

(Exhibits 1 and 2 were admitted.)

MS. MUNDS-DRY: That concludes my direct examination of Mr. Scott.

EXAMINER BROOKS: Mr. Larson?

MR. LARSON: Can I have about five minutes?

EXAMINER BROOKS: Let's take a 15-minute recess.

(A recess was taken.)

EXAMINER BROOKS: Are we ready to resume?

MR. LARSON: I am, Mr. Examiner.

EXAMINER BROOKS: Back on the record in Case Number 14480. I believe that we had tendered Mr. Scott for cross-examination by Mr. Larson.

MR. LARSON: Thank you, Mr. Examiner.

CROSS-EXAMINATION

BY MR. LARSON:

Q. Good morning, Mr. Scott. What is the basis for your use of a 10 percent cross-plot porosity cutoff, instead of Mr. Catalano's 10 percent density cutoff?

A. It's a little more conservative. And I have 25 years of experience with vertical Bone Spring wells in the area, and that appears to be a pretty reasonable number.

Q. I believe you mentioned that you testified in Case 14418?

A. Um-hum.

Q. And during that case, Mr. Catalano also used a

10 percent density cutoff; did he not?

A. In reviewing that documentation today, I do see that he did.

Q. Did you object to his use or disagree with his use --

A. I don't guess I realized that he wanted to disregard that compensated neutron log data when -- in that first round of testimony, I guess I assumed that he was using cross-plot porosity, apparently incorrectly.

Q. Did he have the data back in February, during that hearing?

A. I didn't look at any logs back in that hearing. No, sir. I believe it was noted on his exhibits, though, that it was density porosity.

Q. To your knowledge, had the well been drilled before the hearing in February? The vertical well.

A. No.

Q. So you'd agree with me that he didn't have that data at that time?

A. I would agree.

Q. To your knowledge, you don't recall disagreeing with Mr. Catalano's use of the 10 percent density cutoff in that hearing?

A. I don't recall disagreeing with it.

Q. I'm going to refer you now to -- I'm sorry.

I've got too much paper. It's Cimarex Exhibit Number 10. It's the isopach. The exhibit number is down in the lower right-hand corner of the exhibit.

A. Got it.

Q. Okay. Are you familiar with the Federal Hanson Number 1 well in Section 20?

A. Yes.

Q. And on Mr. Catalano's isopach exhibit, he shows 36 as the number of pay on that well. Do you think that's a reasonable number?

A. My map had 34 feet, so he's certainly in the ballpark.

Q. Are you aware that that vertical well produced 100,000 barrels?

A. Yes.

Q. So you reviewed that data?

A. Yes, I have.

Q. And I'd next refer you to Number 32 on Exhibit 10.

A. Got it.

Q. And using the 10 percent density cutoff utilized by Mr. Catalano --

A. I would have to --

MS. MUNDS-DRY: Please wait until he's done.

THE WITNESS: Okay.

Q. (By Mr. Larson) Using the 10 percent density cutoff utilized by Mr. Catalano, do you think the 32 is a reasonable number?

A. Yes, I would.

Q. And has Lynx or any of its partners submitted a permanent application to drill a well in the proposed project area?

A. No.

Q. Have you ever attempted to drill a well?

A. It's an area we have some interest in. I have one well immediately to be drilled in that area. But we're taking a somewhat different approach with regard to prevention of waste than are the folks at Cimarex, in that we are not convinced that the horizontal technology is the panacea that it's being made out to be.

Q. When you say, "the area," do you mean the 160-acre project area?

A. No, no, not in this immediate vicinity. We're back to the north and east.

Q. If I understand correctly, if Cimarex's application is granted, you would ask that reserves be allocated based solely on each quarter section's contribution, rather than acreage within the project area?

A. What I'm asking for is that this horizontal project allocate the production to each 40-acre proration unit on the basis of the best available data that's out there.

Q. Okay. You wouldn't have it based on production? You'd have it based on available data now?

A. Well, obviously if we could get tests of each individual 40, we'd base the allocation on production.

Q. And are you aware of any provision in the Oil and Gas Act that would give the Division the authority to require that kind of allocation?

A. The unitization statute does, in fact, allow that kind of allocation.

Q. Anything in the Division's rules?

A. I'm not an expert on the Division's rules.

Q. I understand you're not an attorney. Are you aware of any Division order that's required that type of allocation?

A. With regard to unitization, yes.

Q. With regard to compulsory pooling?

A. I'm not aware of any.

Q. And I believe you testified you had a -- is it a 60 percent legal interest in the south half of the 160-acre project area?

A. No, sir. People that I would normally

represent have approximately a 60 percent interest. That's correct.

Q. Who you would normally represent? Could you explain what you mean by that?

A. I've been operating in southeast New Mexico for 30 years now with a group of local businessmen and independent producers that I would normally consider my group. A large number of these people are people that I brought into this acreage position and that have been participating with me for -- since I've been in business.

Q. And have any of those people informed Cimarex that they want to participate in this well?

A. Yes. A couple of them.

Q. Who's that?

A. I think Marbob did, Wes Perry, Gil Moutray. There may be a couple of others that I'm not aware of.

Q. Do you know the percentage of their interest in the south half?

A. Generally it would be very small.

MR. LARSON: Pass the witness.

EXAMINATION

BY EXAMINER BROOKS:

Q. Okay. I don't know much about log interpretation. Fortunately, I have a Technical Examiner who's an expert on it.

But the difference between the 32 feet that Mr. Catalano came up with from the log data in the vertical pilot hole of the Penny Pincher Number 1 and the eight feet that you came up with, I gather, is a difference in the method used to interpret the logs; is that correct?

A. That log that you have in front of you has two curves on it, Mr. Examiner.

Q. Okay.

A. One curve is the compensated neutron log.

Q. Okay. Now --

A. And the neutron porosity would be the dashed line, according to that legend at the bottom.

Q. Now, you're referring to Lynx Exhibit Number 2?

A. That is correct.

Q. And the dashed line -- it looks to me like there's a dashed red line that goes up and down.

A. No, no. We are over on the far right-hand side. There are three curves.

Q. Yeah, I see the three curves.

A. One of those is --

Q. These are all blue; right? No. Well, you're talking about -- are you talking about the three curves, the red one that appears to be real straight, and then

the wavy red one and then the blue one?

A. No, sir.

Q. Are you talking about the three blue ones that appear to be --

A. There's a blue and a couple of blacks over on the far right-hand side.

Q. They appear to be intertwined. They sometimes coincide and sometimes depart from --

A. That is correct. There are two different tools measuring porosity on those curves. And then the third curve is the cross-plot of those two tools, which is generally accepted to give a more accurate representation of the actual porosity than either of the tools by themselves.

Q. And the cross-plot is what you used to develop your -- to come up with your feet of pay --

A. Yes, sir.

Q. -- conclusion?

But you used the same cutoff, 10 percent porosity cutoff?

A. That is correct, both in the last hearing and this hearing and on all of the maps that I've presented.

Q. Did Mr. Catalano use only one of those tracers?

A. That's correct. He used the density curve

only, apparently.

Q. And you believe, I take it, that using the cross-plot produces a more accurate result?

A. Yes, I do.

Q. Okay. Now, you referred to a well -- was it the Top Dog or the Top Dollar?

A. Top Dollar.

Q. Okay. Looking at Mr. Catalano's Cimarex Exhibit Number 10, there are a couple of well symbols up in Section 16 that are above -- you said the Top Dollar was an offset to the proposed Number 2; is that correct?

A. Yes, sir. In fact, it's the gas well symbol immediately to the left of the 34 foot number on the exhibit.

Q. The 34 foot -- yeah. Okay. That's a little ambiguous because there's several spots on here. I want to be sure I know where I'm talking about.

Is it in the southeast of the southwest of 16, or is it in the northeast of the -- I mean the southwest of the southeast?

A. That's correct, southwest/southeast of Section 16.

Q. It's in the southwest of the southeast of Section 16. So that would be the spot that looks to be south of the 34 number?

A. No, sir. I believe it's the gas well symbol immediately to the left of the 34.

Q. It's actually closer to the 34 number than that other spot is?

A. That's correct.

Q. And the other one, is that the one that the 34 plot refers to?

A. I'm not sure. I think that's a shallow well. It might be a Delaware test. I'm not positive.

Q. Where is the well that the 34 number applies to?

A. It's the gas well symbol immediately to the left of the 34.

Q. So that 34 is Mr. Catalano's plot for the Top Dollar well?

A. I believe that's correct.

Q. What was your plot for the Top Dollar well?

A. It's 28.

Q. So as far as the porosity plot -- I mean the feet of pay plot, you weren't that far off from Mr. Catalano on that?

A. Well, those logs will occasionally overlay. And when they do --

Q. I understand. And down to 20, you were even closer?

A. Yes, sir. I believe that's correct.

Q. But you were quite far apart in the Penny Pincher Number 1?

A. That is also correct.

Q. You said the Top Dollar at 28 -- you plotted it at 28, and you said it was not commercial?

A. That is correct.

EXAMINER BROOKS: I think that really is all the questions I have for you. I have some questions for your attorney, but I think that's all the questions I have for you. Thank you.

Mr. Warnell may have some questions.

EXAMINATION

BY EXAMINER WARNELL:

Q. Let's go back again to the log.

A. Yes, sir.

Q. Around 8,900 feet?

A. That is correct.

Q. That's the second Bone Spring sand that's in question here?

A. Yes, sir. The top of that sand would be up there at approximately 8,734, and the base of the sand at 9,146.

Q. In your view, what's causing that crossover in the density neutron?

A. Generally, that is interpreted to be the hydrocarbon effect.

Q. Gas effect?

A. Yes.

Q. If there was no gas there, strictly oil, then there wouldn't be a crossover effect and, indeed, you would normally expect --

A. Not exactly correct, no. I've seen oil sands with crossover present also. It's a function of mud properties, the settings on the logging tools. There are some other factors that go into that.

Q. But normally, would you say that neutron reads higher than the density in an oil-bearing sand?

A. The neutron reads -- well, a gas effect or hydrocarbon effect tends to suppress the neutron log, thus creating the crossover.

Q. So there are some old-timers out there that I know that probably don't rely that much on cross-plot porosity because of that negative gas effect on the neutron. So it's not uncommon for some of the old-timers to look at a density neutron and steer away from using cross-plot porosity and just go with the density?

A. I guess the only answer that I would have for that is for years we've had density logs available and we've had neutron logs available, and no one runs an

individual tool without running the other in tandem. Cross-plot porosity has proven to be a very accurate predictor of being able to produce a sand. And that goes not only for the Bone Spring, but the Delaware down to Morrow.

Q. Is that the bottom of this log, 9,150 and a little bit deeper? How would you interpret that?

A. Which interval are we talking about here?

Q. At the bottom of the sand, 9,150. You see it's a lot tighter, but you've got a crossover.

A. Were they even logging at that point?

Q. It looks like their tool picked up way down there, about 9,200.

A. I would have no explanation. That's typically a limestone bank, occasionally productive.

Q. Do you know if this log was run on a limestone matrix or sandstone?

A. Almost all of the logs in this area would be run on limestone matrixes.

EXAMINER WARNELL: I have no further questions.

EXAMINER BROOKS: Ms. Munds-Dry, do you have anything?

MS. MUNDS-DRY: I have no redirect.

EXAMINER BROOKS: Mr. Larson?

MR. LARSON: Nothing further.

EXAMINER BROOKS: Very good. The witness may stand down.

Do you have a summation?

MR. LARSON: Actually, I'd like to call two rebuttal witnesses.

EXAMINER BROOKS: Very good. Call your witness.

MR. LARSON: First I'd like to call Mr. Compton.

REBUTTAL EXAMINATION

BY MR. LARSON:

Q. Mr. Compton, on your direct I neglected to ask you the percentage of the interest that Cimarex has throughout this 160-acre project area. And I'd like you to start at the northernmost quarter/quarter section and work your way south and tell me the percentage of interest Cimarex has in each quarter/quarter section.

A. We currently, as I sit here, own 81 percent of the northern quarter. We own 81 percent of the quarter below that. Moving into the south half, we own -- and the south half is all the same. The ownership is the same throughout the half section. We currently own 8.2 percent, which was assigned to us by Marbob and EGL, and another 44 percent of the south half have signed

operating agreements.

So as we sit here today, 66.6 percent of the owners in the spacing unit have committed to the well, and that includes 52.2 percent of the south half owners.

Q. Kind of responding to the Hearing Examiner's question earlier, what do you mean by "ownership"?

A. The leasehold percentage ownership throughout the entire 160-acre spacing unit, currently 66.6 percent of it has been committed to the well, either by term assignments directly to us or by executing operating agreements with us, and that include 52.2 percent of the south half. The biggest member of the south half of that member being the Bass Group, who owns 40 percent of the south half.

Q. And when you say, "the Bass Group," that's a number of entities collectively referred to as the Bass Group?

A. Yeah. They change names fairly regularly.

Q. Basically under the control of Bass?

A. That's correct.

MR. LARSON: That's all I have, Mr. Examiner.

MS. MUNDS-DRY: I have no questions.

EXAMINER BROOKS: Okay. Just to clarify, the percentages you've just given are gross working

interest percentages?

THE WITNESS: That's correct.

EXAMINER BROOKS: That was my understanding. Thank you.

MR. LARSON: I'd like to call Mr. Swain.

REBUTTAL EXAMINATION

BY MR. LARSON:

Q. Mr. Swain, did you hear Mr. Scott's testimony that in his opinion, the vertical well drilled on the west half/west half of Section 21 is a dry well?

A. Yes, I did.

Q. Do you agree with that?

A. No, I do not.

Q. Can you explain why?

A. If you refer back to exhibit -- the net porosity isopach.

Q. Exhibit 10?

A. Yes, sir.

Q. -- you can see the Federal Hanson Well to the southwest, which has approximately 36 feet of pay and produced 100,000 barrels. And you can see how the Penny Pincher Number 1 location has 32 feet of pay, using a 10 percent density cutoff, which is -- four feet of pay between the two wells is almost identical.

In my estimate, this vertical location should

be able to produce almost as much oil as the vertical location of the Hanson Federal.

Q. That's Number 36 in Section 20?

A. Yes, sir.

Q. And did you testify in Case 14418, which addressed the west half/west half as a project area, that the reserves were basically identical in each quarter/quarter section of the 160 acres?

A. Yes.

Q. As you sit here today, has that opinion changed?

A. No, sir, it has not.

Q. So based on this subsequently acquired log, you still believe that the reserves are functionally equivalent in each of those 40-acre sections?

A. Based on the data today, yes, I do.

MR. LARSON: Pass the witness.

EXAMINER BROOKS: Ms. Munds-Dry?

MS. MUNDS-DRY: I just have one or two questions.

EXAMINATION

BY MS. MUNDS-DRY:

Q. Mr. Swain, I believe you just testified that that Hanson Well in Section 20 has produced 100,000 barrels?

A. 98,000 barrels.
Q. Roughly speaking?
A. Yes, ma'am.
Q. For the Penny Pincher Number 1, you also testified, I believe, that you are now estimating 32 feet of pay in that well?
A. Yes.
Q. And how many barrels of oil for the Penny Pincher Number 1 are you estimating per quarter/quarter section will be produced?
A. It's hard to predict, until the well is actually drilled and completed, how much they actually will produce.
Q. Do you recall the testimony in Case 14418?
A. Yes.
Q. And at that time, how much oil was being predicted per quarter/quarter section would be produced?
A. Around 75,000 barrels per quarter/quarter.
Q. You're saying at 36 feet of pay, the Federal Hanson produced 100,000, but in the Penny Pincher Number 1, at the time you predicted 74,000 with 32 feet of pay?
A. Yes, I did.
MS. MUNDS-DRY: Thank you. No further questions.
EXAMINER BROOKS: Mr. Warnell, do you have

any questions?

EXAMINATION

BY EXAMINER WARNELL:

Q. Mr. Swain, I would be curious -- there seems to be a bit of a discrepancy between you and Mr. Scott on the porosity, whether it's density or cross-plot porosity. Do you have any comments on that?

A. Yes, sir. In our experience of drilling 15 second Bone Spring horizontals and studying the other 35, plus second Bone Spring horizontal wells drilled in southeast New Mexico, and using extensive core data that we have acquired in other areas, a 10 percent density cutoff is a conservative indicator of porosity. Our analysis to date shows somewhere around an 8 to a 9 percent density cutoff is probably the best porosity cutoff for this sandstone in this area.

Q. Do you have core data on the Number 1 well?

A. No, sir, we did not get core data on the Number 1. I have core data on offset wells in the same formation, the same second Bone Spring sand.

Q. That core porosity is pretty much in line with density porosity?

A. Yes, sir. We have oil saturations and sufficient perm in core plugs with density porosities as low as 8 percent to produce hydrocarbons.

EXAMINER WARNELL: I don't have any other questions. Thank you.

EXAMINER BROOKS: Ms. Munds-Dry, do you have any -- well, it's your witness. Do you have anything --

MR. LARSON: Nothing further.

EXAMINER BROOKS: Okay. Did you have anything in light of Mr. Warnell's questions?

MS. MUNDS-DRY: No, sir.

EXAMINER BROOKS: Okay. You may step down.

Now do you want to present a closing?

MR. LARSON: A brief closing, Mr. Examiner.

EXAMINER BROOKS: Go ahead.

MR. LARSON: Based on the evidence presented during today's hearing, I would submit that Cimarex has met its burden of proof, establishing its entitlement to all of the relief requested in this application.

I would further state that there is no basis in any statutory or regulatory provision for Mr. Scott's recommendation that the allocation of reserves be done on a percentage of ownership basis, rather than an acreage basis.

EXAMINER BROOKS: Okay. Ms. Munds-Dry, before you respond -- I assume you want to respond.

MS. MUNDS-DRY: Yes.

EXAMINER BROOKS: Before you respond, I am very concerned about the question if you are urging, as Mr. Scott did on the stand and as he did in the previous case, that the Division consider, in the event that it does issue a compulsory pooling order in this case, ordering the distribution of production in a method other than an acreage basis, I'd be very concerned about whether the Division would have the authority to do that. So with that, I'll let you respond.

MS. MUNDS-DRY: Mr. Brooks, I've been sitting here thinking about what I would say in closing, and I'll respond to your question briefly. But I think it might be helpful if you would allow us to submit written closing statements, because we are dealing with some fairly detailed legal positions.

EXAMINER BROOKS: I believe that's correct, that we're hearing intricate legal issues.

Would there be any objection to Ms. Munds-Dry submitting her closing in writing?

MR. LARSON: I would have no objection, if I have the opportunity to respond in writing.

EXAMINER BROOKS: You would have that

opportunity. If you wish to submit something in writing post-hearing, that's fine.

MS. MUNDS-DRY: I'll just say briefly that it has been Lynx's position, not only in the previous case but in this case, that the pooling statute addresses pooling for a spacing unit and not a project area, and that is where we go far afield. Because for whatever reason, the Division has allowed the formation of a nonstandard spacing unit, rather than a voluntary unit or some other mechanism, that would allow for appropriate allocation of production.

And we do not believe there is a basis for pooling if the applicant cannot prove that it would protect correlative rights and would prevent the waste of oil and gas, and we believe that has not been met in this case.

EXAMINER BROOKS: Obviously I don't disagree that that's a requirement for pooling, but go ahead.

MS. MUNDS-DRY: I would just say that the alternative that Mr. Scott has presented today in terms of drilling a vertical well and logging it and interpolating the data, as he suggested, which would be at no cost, as he testified, to Cimarex, adding that condition would protect correlative rights, which we

believe the Division has that duty to do.

In the previous hearing, as you may recall, the reason why Mr. Scott brought up the $1 million figure was because in that Division order it was indicated that that would be a waste issue by being required to spend that much more money.

Now, Mr. Scott is requesting something that will be no extra cost and that could not, therefore, be considered a waste issue.

That's, in very brief summary, why we think there's a basis for denial of this application.

EXAMINER BROOKS: In terms of the powers of the Division, I assume you would comment in your written remarks on the impact of the Rutter & Willbanks.

MS. MUNDS-DRY: As you like to refer to as the Bartles and Jaymes case.

EXAMINER BROOKS: That's one of the reasons I took a recess, was to check and be sure I was calling the case correctly. Okay. If there's nothing further, then Case Number 14480 will be taken under advisement.

* * *

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

_____, Examiner
Oil Conservation Division

REPORTER'S CERTIFICATE

I, JACQUELINE R. LUJAN, New Mexico CCR #91, DO HEREBY CERTIFY that on June 10, 2010, proceedings in the above captioned case were taken before me and that I did report in stenographic shorthand the proceedings set forth herein, and the foregoing pages are a true and correct transcription to the best of my ability.

I FURTHER CERTIFY that I am neither employed by nor related to nor contracted with any of the parties or attorneys in this case and that I have no interest whatsoever in the final disposition of this case in any court.

WITNESS MY HAND this 23rd day of June, 2010.

Jacqueline R. Lujan, CCR #91
Expires: 12/31/2010