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. 12,413

APPLICATION OF NEARBURG EXPLORATION COMPANY, L.L.C., FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

ORIGINAL

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REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

July 13th, 2000

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner on Thursday, July 13th, 2000, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, 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

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APPEARANCES

FOR THE DIVISION:

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FOR THE APPLICANT:

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Santa Fe, New Mexico 87504-2208
By: MICHAEL FELDEWERT

* * *

1	WHEREUPON, the following proceedings were had at
2	2:16 p.m.:
3	EXAMINER ASHLEY: The Division calls Case 12,413,
4	Application of Nearburg Exploration Company, L.L.C., for
5	compulsory pooling, Lea County, New Mexico.
6	Call for appearances.
7	MR. FELDEWERT: Michael Feldewert with the law
8	firm of Campbell, Carr, Berge and Sheridan for the
9	Applicant, Nearburg Exploration.
10	EXAMINER ASHLEY: Do you have any witnesses?
11	MR. FELDEWERT: We will have two witnesses.
12	EXAMINER ASHLEY: Additional appearances?
13	Will the witnesses please rise to be sworn in?
14	(Thereupon, the witnesses were sworn.)
15	MARK WHEELER,
16	the witness herein, after having been first duly sworn upon
17	his oath, was examined and testified as follows:
18	DIRECT EXAMINATION
19	BY MR. FELDEWERT:
20	Q. Would you please state your name for the record?
21	A. Mark Wheeler.
22	Q. And where do you reside?
23	A. Midland, Texas.
24	Q. And by whom are you employed?
25	A. Nearburg Exploration Company.

What is your current position with Nearburg 1 Q. Exploration Company? 2 Senior landman. Α. 3 Have you previously testified before this 4 Division? 5 Yes, I have. Α. As an expert witness in petroleum land matters? Yes. Α. At the time of that testimony, were your 9 credentials as an expert in petroleum land matters accepted 10 and made a matter of record? 11 Yes, they were. Α. 12 Are you familiar with the Application that's 13 Q. filed in this case? 14 Yes, sir. Α. 15 And are you familiar with the status of the lands 16 in the subject area? 17 Yes, sir. 18 Α. MR. FELDEWERT: Mr. Ashley, at this point I would 19 tender Mr. Wheeler as an expert witness in petroleum land 20 matters. 21 EXAMINER ASHLEY: Mr. Wheeler is so qualified. 22 (By Mr. Feldewert) Would you briefly state, Mr. 23 0. 24 Wheeler, what Nearburg seeks with this Application? 25 Α. Nearburg seeks an order pooling all minerals from

the surface to the base of the Morrow formation under the north half of Section 13, 19 South, 33 East, Lea County, New Mexico, in the following manner:

The north half for all formations developed on 320-acre spacing, being in the Undesignated North Quail Ridge-Morrow Gas Pool or the Undesignated East Gem-Morrow Gas Pool;

The northeast quarter for all formations or pools developed on 160-acre spacing in the Undesignated Quail Ridge-Yates Gas Pool;

And the southwest quarter, northeast quarter, for all formations or pools developed on 40-acre spacing in the Undesignated Tonto-Seven Rivers Pool, Undesignated Tonto-Wolfcamp Pool, the Undesignated Southeast Buffalo-Bone Spring Pool, and the Undesignated East Gem-Delaware Pool.

This would be dedicated to our Stetson 13 Federal Number 1 well, to be drilled at a standard location in the southwest quarter, northeast quarter of Section 13, 1650 feet from the north line and 1650 feet from the east line of Section 13.

- Q. I think the Application may have talked about a Fed Com well. Are you contemplating a name change to the well?
- A. Yes, sir, we will not need to communitize this well, as the entire north half is one federal lease. So

the "Com" should be stricken from the order.

- Q. Have you prepared some exhibits today?
- A. Yes, I have.

- Q. Would you turn to Nearburg Exhibit Number 1 and identify and review that for the Examiner?
- A. This is a land locator map showing the proposed north-half spacing unit, the proposed well location and the ownership in the area.
- Q. What is the status of the acreage in the north half of Section 13 that's shown on Exhibit 1?
- A. It's all federal acreage.
 - Q. And is your well shown on that exhibit?
- A. Yes, sir, it's shown with a red dot in the southwest-northeast.
 - Q. And what is the primary objective of your proposed well?
 - A. The Morrow formation.
- Q. Okay, I'd like to have you turn to and identify and review Nearburg Exhibit Number 2.
 - A. Exhibit Number 2 is an ownership breakdown as of July 10th on the north half of Section 13. It shows the owners in the various zones. There are three different horizons that have different ownerships. And then at the end on the right side, it shows the status of how many parties have signed our AFE and the party, EOG Resources,

that we have a pending farmout on.

- Q. Have you been able to contact all of the owners on this list?
 - A. Yes, we have.

- Q. Can you provide us with the percentage of the working interest owners that are voluntarily committed to the well?
- A. Currently, that percentage is approximately 67 percent, but we do have a farmout pending with EOG Resources that will bring that percentage close to 99 percent.
- Q. And you've identified Nearburg's interest on here as NEC; is that right?
 - A. Yes, we have.
- Q. Okay. And which of the interest owners on here, then, would be subject to your pooling Application at this point?
- A. At this point EOG would still be subject until we get our farmout in, along with all the parties that have nothing shown beside them in the status column. The parties that have signed an AFE will not be subject to this pooling.
- Q. Mr. Wheeler, in your opinion, has Nearburg made a good faith effort to locate all the individuals and obtain their voluntary joinder in this proposed well?

A. Yes, sir, we have.

- Q. Why don't you summarize your efforts to obtain a voluntary joinder of all the affected owners?
- A. We forwarded an AFE dated March 31st, 2000, to all the owners in the north half. We received all of the green cards back, certified mail, showing that everyone had received those, and we subsequently have had some conversations with some of the owners, and we have received in this Exhibit Number 3, which details our efforts, we have received AFEs, signed, back from a number of the parties.
- Q. Turning to Exhibit Number -- Is Exhibit Number 3 a compilation of your efforts to contact the working interest owners in this property?
 - A. Yes, sir.
- Q. Whose handwriting is that on the first page where it says "all green cards received"?
 - A. That is my secretary, Dee Dee Walton.
- Q. Okay, all right. Why don't you turn to Nearburg Exhibit Number 4 and identify and review that, please?
- A. This is Nearburg's AFE for the Stetson 13 Number 1 well.
- Q. And this is the AFE that you sent out to the working interest owners in the property?
- 25 A. Yes, sir.

What are the totals that are set forth on this 1 0. exhibit? 2 Dryhole total is \$877,119, and a completed well 3 Α. cost of \$1,279,607. 4 Mr. Wheeler, are those costs in line with what 5 Q. has been charged by other operators in the area for similar 6 7 wells? Yes, they are. Α. 8 Have you made an estimate of the overhead and 9 Q. administrative costs while drilling this well and also 10 while producing this well, if it is successful? 11 Yes, sir, \$6000 a month during the drilling phase 12 Α. and \$650 a month during the producing phase. 13 Mr. Wheeler, are these costs in line with what is 0. 14 being charged by operators in the area? 15 16 Α. For similar wells, yes, sir. Do you recommend that these figures be 17 Q. incorporated in any order that results from this hearing? 18 Yes, sir. 19 Α. Does Nearburg request that the overhead figures 20 Q. approved by the Division be subject to adjustments in 21 2.2 accordance with any COPAS guidelines applicable to other interest owners in the well? 23 Yes, sir. 24 Α. 25 Do you have Nearburg Exhibit Number 5 in front of Q.

1	you?
2	A. Yes, sir.
3	Q. Is this an affidavit with attached letters giving
4	notice of this hearing to the affected parties?
5	A. Yes, sir, it is.
6	Q. Does Nearburg Producing Company, L.L.C., seek to
7	be designated operator of the proposed well?
8	A. Yes, sir.
9	Q. How soon does Nearburg plan to spud this well,
10	Mr. Wheeler?
11	A. We plan to spud it on or before the 15th of
12	October in order to satisfy a term assignment expiring that
13	we have, covering the north half of Section 13 and some
14	other acreage.
15	Q. Because of that term assignment, would you
16	request that this order be expedited?
17	A. Yes, sir.
18	Q. Were Exhibits 1 through 6 prepared by you or
19	compiled at your direction and supervision?
20	A. 1 through 5.
21	MR. FELDEWERT: I'm sorry, 1 through 5, yes, sir.
22	Mr. Examiner, at this time I would move the
23	admission into evidence of Nearburg Exhibits 1 through 5.
24	EXAMINER ASHLEY: Exhibits 1 through 5 will be
25	admitted as evidence.

MR. FELDEWERT: At this time, this concludes my 1 examination of this witness. 2 EXAMINER ASHLEY: I have nothing further. 3 4 you, Mr. Wheeler. 5 THE WITNESS: Thank you. MR. FELDEWERT: Mr. Examiner, we would then call 6 7 Jerry Elger. 8 JERRY B. ELGER, 9 the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows: 10 DIRECT EXAMINATION 11 12 BY MR. FELDEWERT: 13 Would you please state your full name and place Q. of residence? 14 15 Jerry Elger, and I reside in Midland, Texas. Α. 16 Would you please state your full name and place Q. 17 of residence? Jerry Elger, and I reside in Midland, Texas. 18 Α. 19 Mr. Elger, by whom are you employed and in what Q. 20 capacity? 2.1 Α. By Nearburg Producing Company as exploration 22 geologist. 23 Have you previously testified before this Q. Division or one of its Examiners? 24 25 Α. Yes, I have.

Have you credentials as a petroleum geologist 1 Q. been accepted and made a matter of public record? 2 Yes, they were. 3 Α. 4 Are you familiar with the Application that was 5 filed in this case? Yes, I am. Α. 7 Have you made a technical study of the area which is the subject of this Application? 8 9 Α. Yes, I have. And are you prepared to share the results of your 10 work with the Examiner? 11 Α. Yes, I am. 12 MR. FELDEWERT: Are the witness's qualifications 13 acceptable? 14 15 EXAMINER ASHLEY: They are. (By Mr. Feldewert) Have you prepared exhibits 16 for this case, Mr. Elger? 17 Α. Yes, I have. 18 Would you turn to Nearburg Exhibit Number 6 for 19 me, please, identify it and review it with the Examiner? 20 Α. Exhibit Number 6 is a Morrow stratigraphic cross-21 section, the datum which is the top of the Morrow 22 formation, the red trace at the top of each of the well 23 The two wells incorporated in this cross-section are 24 both east and west of the proposed drill site, as indicated 25

by the plat at the bottom of the cross-section.

The better of the two wells is the Union Oil
Pipeline Deep Unit Federal Number 2, which is located to
the east in Section 18. The well to the west in Section 13
was drilled by Belco Petroleum, and that was a dry hole in
the Morrow.

The structure map, which is one of the exhibits we will review next, is on the basis of the top of the Morrow, which again is the red trace on the top of the cross-section. Each of the individual sand isopachs, which will also be reviewed, the sands which are the subdivisions of the Morrow formation itself, the sand packages which comprise those subunits are outlined adjacent to each of the two well logs, and they've been identified as the upper "B" sands, the lower "B" sands and the Morrow "C" sands.

We will look at isopachs of each one of these individual -- the sands developed within each of these individual units.

- Q. Mr. Elger, do you have any seismic data available across this area?
- A. Not immediately across this section, we do not. We do have some several miles to the north.
- Q. So your study in this matter is based on well-control data; is that correct?
- 25 A. Subsurface well control.

MR. FELDEWERT: Okay. Mr. Ashley, I would suggest we leave Exhibit 6 out on the table, and I'd like to move to Exhibit Number 7.

Q. (By Mr. Feldewert) Mr. Elger, if you could identify and review that for the Examiner?

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A. Exhibit Number 7 is a structure map on the top of the Morrow, which again on the cross-section is the uppermost datum, stratigraphic datum, for the two-well cross-section. Of importance is the fact that there is a structural high that has been interpreted in the northwest quarter of Section 18, just to the east of the proposed drill site, with a structural nose extending diagonally across Section 13 and the proposed drill site, down into the northwest quarter of 24 and the northeast quarter of Section 23.

The importance of that structural nose will be --We'll re-review this Exhibit Number 7 structure, because
it's important for the productivity of one of the sands in
particular that will be featured when we review the Morrow
"C" isopach.

- Q. Now, you have the Morrow gas producers shown in red here; is that right?
- A. That's correct. The Morrow gas producers in this two-mile radius around the spacing unit are indicated by the red symbols, and the total amount of gas in BCF is the

first set of numbers that you see in red adjacent to each one of these red wells.

For instance, the well in Section 18, the north half of 18, there's 2.40. That represents 2.4 billion cubic feet of gas recovered to date. The slash separates that, the gas produced, from the oil produced or condensate produced in each one of these wells. And in the instance of that well in the north half of Section 18, the 149 represents thousands of barrels of oil, so that would be 149,000 barrels of oil produced in association with the gas in that particular well.

The blue numbers set adjacent to each one of the well symbols represents the subsea top of the Morrow in that particular well, and that's what has been contoured on this Exhibit Number 7, is the structure of the top of the Morrow.

- Q. Has Nearburg drilled a well in Section 24, which is shown on this map?
 - A. Yes, they have.

2.2

- O. And which one was that?
- A. Nearburg drilled a Sagebrush 24 Number 1. It's located in the northeast quarter of Section 24. It shows as an uncolored gas well, just immediately south of the proposed location one mile. That particular well was drilled earlier this year. Production testing of the

Morrow indicated it was not commercial, and that well has currently been perforated and is producing from the Delaware sand section.

- Q. With your proposed well, Mr. Elger, what would you consider to be a commercial rate of production?
- A. For the depth that this well is being proposed to of 13,600 feet, we would think that reserves in the neighborhood of 2.5 to 3 BCF equivalent gas reserves would be deemed a respectable well or a respectable return on investment. Reserves less than that, of course you move through a whole range of noncommercial to marginal reserves. But we would think 2.5 would be a cutoff for us to justify the risk to drill to this deep.
- Q. Okay, why don't we move to Nearburg Exhibit Number 8? Would you identify and review that for the Examiner, please?
- A. Exhibit Number 8 is a net sand isopach, utilizing an 8-percent or greater porosity unit cutoff for each of the individual wells within the upper Morrow "B" sand interval. And those sands -- again, I would defer back to the cross-section -- have been identified and are sands which are developed within the interval that's been marked Morrow Upper "B" sands.

What this isopach indicates is that the upper "B" sands were deposited as stream events, in streams with the

orientation basically north to south. There's a number of wells to the north in Section 1 and 2 in the northwest of 12, to the north of us, which have in excess of 20 feet of sand developed in this upper "B" Unit, and that projects as a stream channel tying various other well logs to the south, across the proposed spacing unit. So it is one of the objectives for this particular proposed location, although it is not one of the major objectives.

Q. So this is a secondary target?

- A. This is kind of a secondary target within the Morrow.
 - Q. What happened to the Nearburg well in Section 24?
- A. That well drill stem tested sands within both the upper and middle -- or upper and lower "B" sand units, and flowed gas at 2.2 million cubic feet a day, but those were the sands that were subsequently production-tested and determined to be noncommercial.

On this particular isopach, as well as the next two isopachs that we'll review, if a particular well symbol has been shaded in red, that well has perforated and has contributed some Morrow gas reserves to the cums that are listed on Exhibit Number 7.

If the well symbol has not been colored in, then that well, particular well, has not been perforated in the respective isopach unit.

Q. Okay, and why don't we move to Nearburg Exhibit Number 9?

A. Exhibit Number 9, again, similar to the upper "B" sand package, sand unit, represents an isopach of the sands developed in the lower "B" unit, and again there's been a number of wells drilled to the north in Section 12 and the east half of Section 2 and to the south in Section 30, 29, which I have produced from sands developed within the lower "B" unit.

Again, it represents kind of a secondary target at the proposed location. We think there's -- again, there's -- The orientation of the sands that are developed in this particular township suggest that the sands were deposited relative to north-south-oriented stream systems.

And again it represents a rather high-risk target. The reserves are not exceptional from either the upper or lower "B" units in this entire mapped area, but they do represent secondary targets.

- Q. And your primary target here now is the Morrow "C" sand; is that right?
- A. That's correct. Exhibit Number 10 is an isopach of the Morrow "C" sands, and again I would defer back to the Exhibit Number 6, the cross-section, and if you notice that the well log on the right side of the proposed location, which is the Union Oil Pipeline Deep Unit Federal

Number 2, located in the north half of Section 18, has -the perforations on all of these well logs are marked in
red in the depth column, and you'll see a 32-foot sand
section developed in the Morrow C.

That's probably, looking at the quality of the other sands that were perforated in this wellbore within the Morrow, is responsible for the majority of the reserves produced by that particular well, which the 2.4 BCF and the 150,000 barrels of oil, probably from the Morrow "C".

If you look at wells that were drilled southeast of this well in 18, down in Section 20, you see a 9.3-BCF well and a 485,000-barrels-of-condensate well, a 2.25-BCF well. Those wells are producing from sands developed within this Morrow "C" package.

This particular isopach is a little different in that we now see some wells that show up with pretty good numbers to them, such as the wells in the west half of Section 7, just northeast of the proposed location, we have 24 feet of reservoir-quality sand and the notation that this well swabbed 130 barrels of water in eight hours of production testing, indicating to me that there's excellent reservoir quality developed in that well, but the reservoir is water-bearing.

Likewise in a well drilled south of the proposed location, in the south half of Section 24, a drill stem

test of the Morrow "C" sands indicated recovered 42 barrels of formation water, again indicating the presence of reservoir quality sands, but a water-bearing reservoir.

Q. These are the wells marked in blue; is that right?

2.0

- A. These are the wells that were marked in blue.

 Any wells that were production tested, this Morrow "C" unit and were deemed to be water-bearing rather than hydrocarbon are denoted as the blue symbols.
- Q. Okay, now why is that important to your proposed location?
- A. Well, it's important because we think that again, as with the Morrow "B" sands, the Morrow "C" sands were deposited in conjunction with north-south -- northeast -- or northwest-to-the-southeast-oriented stream channels, and the indication is, based on that well in 24, is that it appears to be a stream that bifurcates immediately north of the proposed spacing unit, with one leg of it going down and including the wells that intersected it down in Section 20 and were good economic wells, that there's another leg of it that branches off through the proposed drill site down into Section 24 to accommodate the reservoir sand being observed in that well that tested water in the south half of 24.
 - O. Does this follow the structural nose that's shown

on your Exhibit Number 7?

A. Well, the sand apparently crosses the structural nose that is displayed in Exhibit Number 7. And if you'll notice, the proposed location, the estimated structural top of the Morrow -- that is, we anticipate encountering at the proposed location, we expect to be above a minus 8950 subsea depth.

If you look at the subsea depth of the two wet wells immediately northeast and southwest of our proposed location, they are both structurally low to our proposed drill site. The well that swabbed water in 7 is subsea 8984, and the well that drill stem tested water in Section 24 is minus 9020 -- or 9070, I'm sorry, 9070. I believe that's a 7; it's contoured as a 70. But it is structurally low to where we're proposing to drill our Stetson 13 well.

There's obvious risk involved from the fact that if both our isopach maps and our structure maps are in error, then we could have a combination of events occur, one of which would be to encounter the "C" zone sand low and wet, or, two, not encounter reservoir-quality "C" zone sand and high, or encounter reservoir-quality "C" zone sand and high, which is what we are attempting to do, and thereby getting into a hydrocarbon column that's apparently related to this structural closure, as the sands drape over the top of that nose.

- Q. Okay, and I think you testified, looking now back at Exhibit Number 10, that the commercial rate production for your proposed well would be about 2.5 BCF.
 - A. Cumulative commercial reserves, correct.
- Q. We look at Section 18, we see one well there. The red figures indicate a 2.4 --
 - A. Right.

- Q. -- production; is that right?
- A. That's correct.
 - Q. Okay. What about the wells in Section 13?
- A. Well, the well in Section 13, that's drilled in the southwest quarter of Section 13, was a dry hole in the Morrow. They encountered very poor quality sands, none of which -- a drill stem test of those sands indicated -- in fact, they ran several drill stem tests -- indicated that there was nonreservoir-quality sands in virtually all of the units I've supplied isopach maps for.
- Q. Okay, and then you show a well in Section 12. How would you classify that well?
- A. Both of the wells in Section 12 appear to be -- I would deem as marginal wells. I don't think they're great wells. The well in the northwest quarter of Section 12, probably less of a quality -- probably a noncommercial-type well. And of course we drilled a well in the north half of Section -- well, both wells in Section 24, south of the

proposed spacing unit, were either dry or limited reservoirs, which were noncommercial.

- Q. And then you have two wells shown on Section 7?
- A. Two wells in Section 7. One was dry, and one I would determine to be probably a noncommercial well. It cum'd about a half a BCF gas and 44,000 barrels of condensate.
- Q. Are you prepared to make a recommendation to the Examiner as to the risk penalty that should be assessed against the nonconsenting interest owners?
 - A. Yes, I am.

- Q. And what is that?
- A. 200 percent.
- Q. Upon what do you base that recommendation?
- A. Based on the risk, again, of the combination of the isopachs and the structure, the necessity for structure for this particular proposed location, in order to obtain reservoir-quality sand at a structurally advantageous enough position to recover hydrocarbons. All of those factors have to meet, to really justify drilling this proposed location for the economic reserves that could potentially be there.
- Q. Do you think there's a chance that you could drill a well at your proposed location that would not be a commercial success?

1 Α. Absolutely. We just did that one mile to the 2 south. In your opinion, will granting this Application 3 be in the best interests of conservation, the prevention of 4 waste and the protection of correlative rights? 5 Α. Yes. 6 7 Were Exhibits 6 through 10 prepared at your direction? 8 9 Α. Yes, they were. Did you review them prior to the hearing today? 10 Q. 11 Α. Yes, I did. Can you testify to their accuracy? 12 0. Α. Yes. 13 14 Q. Are they accurate? 15 Α. Yes. MR. FELDEWERT: Mr. Ashley, I would now move the 16 admission into evidence of Nearburg Exhibit Numbers 6 17 18 through 10. EXAMINER ASHLEY: Exhibits 6 through 10 will be 19 admitted as evidence. 20 MR. FELDEWERT: And at this time, this concludes 21 my examination of this witness. 22 EXAMINATION 23 BY EXAMINER ASHLEY: 24 25 Q. Mr. Elger, of these Morrow sands, is there any

one of the three that you would consider a more likely candidate to be productive?

A. I think if you look at the upper "B" sands, every well -- virtually every well around us has encountered some degree of upper "B" sands, so I have a high confidence level that we will encounter some upper "B" sands. The problem is that even though you have some wells that have encountered considerable thickness of sands, that doesn't mean that they make great wells.

And I would defer back to the production maps and look at some of the wells drilled just to the north and just to the south. The cumulative production in those wells, the wells to the south of us in Section 30, a well down there made a quarter of a BCF, and the offset made 1.8 BCF. For this depth, that's either a noncommercial or a marginal well at best.

I would think this would be the most likely well, but again, we consider it to be one of the -- If it was the only target, we probably wouldn't drill this well. If either one of these "B" zones were the only targets, I would think we would not drill this well.

The romance to this project is the "C" zone and the potential to encounter the good reserves, if our interpretation of the structure and the isopachs are correct.

1 Q. Now, the two wells in Section 30, why is there such a discrepancy in the cums? 2 Well, each one of those wells perforated the "B" 3 zone. One well made 1.8, one .2. You can have two wells, 4 and one well had 20 feet of sand that met the cutoff 5 criteria, the other well had 25 feet of sand which met the 6 cutoff criteria. 7 It's all a function of how much -- not only the 8 amount of porosity above your cutoff, but how high is that 9 porosity? Is it -- One well might be 9 percent, and the 10 other well might be 14 percent. 11 12 Well, the 14-percent porosity is likely to be a better producer than one that encountered sands with just 13 9-percent porosity. Both wells meet the cutoff that's used 14 for the mapping criteria, but one has much greater porosity 15 than the other one. 16 So the variability of both porosity and 17 18 permeability relative to above and beyond what we use as 19 the standard cutoff to isopach each one of these units 20 generally dictates cumulative reserves. 21 EXAMINER ASHLEY: I have nothing further. Thank 22 you. 23 MR. FELDEWERT: Mr. Examiner, that concludes our 24 presentation.

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EXAMINER ASHLEY: There being nothing further in

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this case, Case 12,413 will be taken under advisement.
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                  (Thereupon, these proceedings were concluded at
 2
 3
      2:49 p.m.)
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                 I do hereby certify that the foregoing is
12
                  ■ complete record of the proceedings in
                 the Examiner hearing of Case No. 12413.
13
                 heard by me on
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                                           , Examiner
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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 July 19th, 2000.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 2002