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CHARLES E. NEARBURG

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2  
3 MR. STOGNER: We will now call  
4 Case Number 8446, which is the application of Chama Petro-  
5 leum Company for two unorthodox gas well locations, Lea  
6 County, New Mexico.

7 We will now call for appear-  
8 ances.

9 MR. CARR: May it please the  
10 Examiner, my name is William F. Carr, with the law firm  
11 Campbell and Black, P. A., of Santa Fe, appearing on behalf  
12 of Chama Petroleum Company.

13 I have one witness.

14 MS. AUBREY: Karen Aubrey, Kel-  
15 lahin and Kellahin, appearing on behalf of BTA Oil Produ-  
16 cers.

17 MR. CARR: May it please the  
18 Examiner, at this time we would request that this case be  
19 consolidated for purposes of hearing with the following  
20 case, Case 8447, and that separate orders be entered.

21 MR. STOGNER: Are there any ob-  
22 jections to this consolidation?

23 If not, at this time we will  
24 call now Case Number 8447, which is the application of Chama  
25 Petroleum Company to limit the Lea Pennsylvanian Gas Pool  
Rules, Lea County, New Mexico.

26 We will now call for appear-  
27 ances in this matter, also.

1  
2 MR. CARR: Mr. Stogner, my name  
3 is William F. Carr, with the law firm Campbell and Black, P.  
4 A., of Santa Fe, appearing on behalf of the applicant.

5 MS. AUBREY: Karen Aubrey, Kel-  
6 lahin and Kellahin, appearing on behalf of BTA Oil Produ-  
7 cers.

8 MR. STOGNER: Ms. Aubrey, do  
9 you have any witnesses?

10 MS. AUBREY: Yes, Mr. Examiner,  
11 I have one witness to be sworn.

12 MR. STOGNER: At this time will  
13 all the witnesses please stand to be sworn?

14 (Witnesses sworn.)

15 MR. CARR: At this time I would  
16 call Mr. Nearburg.

17  
18 CHARLES NEARBURG,  
19 being called as a witness and being duly sworn upon his  
20 oath, testified as follows, to-wit:

21 DIRECT EXAMINATION

22 BY MR. CARR:

23 Q Will you state your full name and place  
24 of residence?

25 A My name is Charles Nearburg. I live in

1  
2 Dallas, Texas.

3 Q Mr. Nearburg, by whom are you employed  
4 and in what capacity?

5 A I'm President of Chama Petroleum Company.

6 Q Have you previously testified before this  
7 Commission or one of its Examiners and had your credentials  
8 as an engineer accepted and made a matter of record?

9 A Yes, sir, I have.

10 Q Are you familiar with what Chama is seek-  
11 ing in each of these cases?

12 A Yes, sir, I am.

13 Q And are you familiar with the applica-  
14 tions filed in these cases?

15 A Yes, sir, I am.

16 MR. CARR: Are the witness'  
17 qualifications acceptable?

18 MR. STOGNER: If there are no  
19 objections his qualifications are so accepted.

20 Q Mr. Nearburg, would you briefly state  
21 what Chama seeks with each of these applications?

22 A The first -- we seek two things, an order  
23 limiting the pool rules governing the Lea Pennsylvanian Gas  
24 Pool to the present pool boundaries and, secondly, approval  
25 for two unorthodox well locations for wells that we propose  
to re-enter, the first of these being the No. 1 "L" Federal,  
Section 25, Township 20 South, Range 24 East, which is lo-  
cated 1650 feet from the north line, 1980 feet from the west

1  
2 line, and the second well being the Rett Federal No. 1, lo-  
3 cated in Section 23, Township 20 South, Range 24 East, 660  
4 feet from the south and 660 feet from the east lines.

5 Q And that's Range 34 East?

6 A 34, yes.

7 Q Would you now refer to what's been marked  
8 Chama Exhibit Number One and explain what this is and what  
9 it shows?

10 A Exhibit Number One is a plat, land owner-  
11 ship plat, showing the Chama 1-L Federal located in Section  
12 25, with a, basically a green dot, that now looks sort of  
13 blue, over the well location.

14 Also indicated on this exhibit, outlined  
15 in blue, are the boundaries of the Lea Pennsylvanian Gas  
16 Pool, which existed prior to the drilling of the BTA --  
17 what's the name of the well -- prior to the drilling of the  
18 BTA Lynch 8212 JVP No. 1 Well.

19 The brown or orange, red, I guess, on  
20 your exhibit, outline is the extension of the pool bound-  
21 aries which was made subsequent to completion of the Lynch  
22 -- the BTA Lynch 8212 JVP No. 1.

23 Q Mr. Nearburg, the present boundaries of  
24 the Lea Pennsylvanian Gas Pool include the acreage within  
25 the blue line and also the acreage within the red line on  
Exhibit One.

A That's correct.

Q What does the yellow acreage, the shaded

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yellow indicate?

A That is acreage which we have under lease, which we propose to include in our west half proration unit for gas production from the Chama 1-L Federal.

Q Now, when was this well originally drilled?

A This well was originally spudded in January -- on January 15th, 1964.

Q And by whom was it drilled?

A Shell Oil Company.

Q To what horizon was it originally drilled?

A This was originally a Devonian test and --

Q And what acreage is dedicated?

A For this Devonian test the northwest quarter of Section 25 was dedicated.

Q When did Chama acquire an interest in the acreage which is shaded yellow?

A We had been studying this area for some time but we acquired our first acreage in the KGS sale with a lease issued June 1st of 1983.

Q Now at the time you acquired the acreage, to be sure I understand the Exhibit, what were the pool boundaries at that time?

A At that time the pool boundaries, as relevant to our acreage, were the lower or the southernmost

1  
2 blue horizontal line, as on Exhibit Number One.

3 Q And when were the wells drilled that re-  
4 sulted in this expansion of the pool boundary, or the exten-  
5 sion of that boundary?

6 A The well which extended the pool boundary  
7 was the BTA Lynch 8212 JVP No. 1, which was spudded approxi-  
8 mately, almost one year after our purchase of the KGS lease.

9 It was spudded, according to the records  
10 of the Commission, on May 31st, 1984.

11 Q Would you now refer to Exhibit Number Two  
12 and identify that and review that for Mr. Stogner?

13 A Exhibit Number Two is basically the same  
14 as Exhibit Number One, except that it locates the -- the  
15 Rett Federal, which is to be a re-entry of the original  
16 Shell Sinclair Federal, and our purposes in this, this also  
17 shows the original pool boundaries prior to the drilling of  
18 the BTA Lynch 8212 JVP No. 1, outlined in blue, and the ex-  
19 tension caused by that well outlined in red.

20 Q When did Shell originally drill this  
21 well?

22 A This well was originally drilled in -- it  
23 was spudded April 25th of 1964.

24 Q And to what horizon was it drilled?

25 A It was originally drilled as Bone Springs  
test to a depth of -- reached a total depth of approximately  
10,600 feet.

Q As a Bone Springs well was 40 acres dedi-

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cated to that well?

A Yes, southeast quarter southeast quarter of Section 23 was dedicated to that well and --

Q Did Chama acquire its interest in this acreage at the same time it acquired its interest for the well in Section 25?

A Those interests were acquired a little bit later due to the timing of certain KGS sales. We made acquisitions in Section 23. Actually we acquired some of the acreage there, primarily being the southwest quarter, around May 3rd of 1984, and we acquired additional acreage in the -- in a lease that was -- KGS lease that was issued August 1st of 1984, and our intent on the Rett Federal is to deepen this from a Bone Springs test to a Morrow or a Devonian test.

Q What are the spacing requirements for the Lea Pennsylvanian Gas Pool?

A The spacing requirements for the Lea Penn Gas Pool are 160-acre spacing with wells -- excuse me -- with wells located 660 feet from the outer boundaries and 330 feet from the quarter -- from any quarter quarter inner boundary.

Q And when was this pool created?

A This pool was created back in November 1st of 1961.

Q Are there special pool rules for the Lea Pennsylvanian Gas Pool?

1  
2           A           No.    Under Rule 104-2A, Pennsylvania  
3 pools created prior to June 1st, 1964, are spaced or were  
4 spaced on 160-acre units.

5                        After that date Pennsylvania wells were  
6 -- gas wells were spaced on 320-acre units.

7           Q           Would you explain to Mr. Stogner why  
8 you're seeking to limit these rules to the present pool  
9 boundary?

10           A           Basically we have several reasons, the  
11 first being only at the -- only at the time of the pool  
12 creation being prior to June 1st of 1964 causes this acreage  
13 to be potentially developed on 160-acre tracts.

14                        As Mr. Stogner knows, 320-acre units are  
15 now standard for gas production of formations of this age.

16                        At the time that we formulated our plans  
17 Section 25 was under 320-acre spacing where it was more than  
18 a mile from the Lea Penn Gas Pool.

19                        We established agreements with partners  
20 based on developing this acreage on 320's and also at the  
21 time BTA's acreage acquired through an Exxon farmout, which  
22 we thought might expire as of 6-1-84, so we did not realize  
23 that there was much opportunity for these pool rules to be  
24 expanded.

25                        Further, 320 is now the standard spacing  
statewide for these formations and we believe that it's ap-  
propriate in this -- in these locations. We are moving away  
from the established producing area in this pool and the de-

1  
2 clining bottom hole pressures in the original Morrow test in  
3 the 1-L Federal and the Kell Oil dry hole in Section 30 of  
4 the adjoining township all indicate some higher risk and  
5 possibly indicates that these areas are not quite as good as  
6 the heart of the Lea Field.

7 Finally, we feel that trying to develop  
8 this Morrow gas and at this time on 160-acre tracts, would  
9 result in a lot more drilling being required and would lead  
10 to, basically, in our opinion, millions of dollars worth of  
11 unnecessary drilling, which would result in waste and would  
12 lead to wells to be drilled on too dense a development pat-  
13 tern; more than would be actually required to drain the gas.

14 Q Mr. Nearburg, with 320-acre spacing in  
15 this area outside the Lea Penn Pool, would it be possible  
16 for more than one well to be located on each of the spacing  
17 units?

18 A Yes. You can -- you could locate two or  
19 more wells on these spacing units.

20 Q Is this a prorated pool?

21 A No, it is not a prorated pool. Two wells  
22 on a 320-acre tract could be drilled and neither would have  
23 their allowable or their ability to produce restricted.

24 Q In your opinion would granting your ap-  
25 plication impair correlative rights of anyone in the area?

A No. We're -- we're trying to proceed in  
a responsible fashion in an area where there are two sets of  
equities.

1  
2 We don't want to have to drill an exces-  
3 sive number of wells or limit anyone else from not being  
4 able to develop on 160's if they desire.

5 We believe what we propose is the best  
6 way to protect correlative rights of all within the 320-acre  
7 spacing unit.

8 Q Now, I'd like to ask you a couple ques-  
9 tions about the well locations.

10 Are the proposed well locations standard  
11 locations for 160-acre spacing units?

12 A Yes. If these wells were drilled on 160-  
13 acre spacing units they would be in standard locations.

14 Q Are both of the locations such that they  
15 could be offset of offsetting operators at a point equidis-  
16 tant from the common leaseline?

17 A Yes.

18 Q What would the impact of a penalty on  
19 these wells due to their locations, what impact would that  
20 have on your plans to develop the area?

21 A It would -- it would be very destructive  
22 to our economics, given the current gas market and the --  
23 just the over all situation in the gas market and the ex-  
24 ploration risks.

25 Q In your opinion will approval of these  
26 locations impair correlative rights of any operator?

27 A No, since, as we have previously discus-  
28 sed, they could be offset equidistant from the common lease-

1  
2 line.

3 Q Would approval of these locations cause  
4 waste?

5 A No. One of the -- one of the factors in  
6 us being able to test some of these areas which have hereto-  
7 fore been considered a little bit -- or considered uneconom-  
8 ical, are the ability to re-enter these wells, and the eco-  
9 nomics associated with the re-entries.

10 Q Mr. Nearburg, were Exhibits One and Two  
11 prepared under your direction and supervision?

12 A Yes, sir, they were.

13 Q Are they accurate?

14 A Yes, they are.

15 MR. CARR: At this time, Mr.  
16 Stogner, we would offer into evidence Chama Exhibits One and  
17 Two.

18 MR. STOGNER: If no objections,  
19 these exhibits will be entered as evidence.

20 MR. CARR: And that concludes  
21 my direct examination of Mr. Nearburg.

22 MR. STOGNER: Ms. Aubrey, if  
23 you don't mind, I'd like to get a few things straightened up  
24 here before I turn the witness over to you.

25  
CROSS EXAMINATION

BY MR. STOGNER:

1  
2 Q Mr. Nearburg, concerning the [Platt]  
3 Chama 1-L Federal Well --

4 A Yes, sir.

5 Q -- what was that well's previous name?

6 A The Shell 1-L Federal.

7 Q And when was that plugged and abandoned?

8 A If you'll allow me to refer to some of my  
9 documents here, can I pull a plugging report from my file --

10 Q Sure.

11 A -- to give you an exact date?

12 Q You might as well pull it for the Rett  
13 Federal No. 1, because I'm going to ask you the same ques-  
14 tion.

15 A Okay. The Shell Federal 1-L was -- the  
16 report submitted to the Oil and Gas Conservation Division is  
17 dated September -- is stamped as approved on March 9th,  
18 1967; however, the report indicates that the work was ac-  
19 tually -- the well was actually plugged August 5th, 1965.

20 Q And how about for the Rett Federal No. 1?  
21 What was the plugged and abandoned date on that?

22 A Okay. The plugged and abandoned date is  
23 July 14th, 1964.

24 Q Mr. Nearburg, you kept referring back to  
25 the Lea -- BTA Leach 8212 JVP Well No. 1?

A Yes, sir.

Q What's the location on that well?

A The Lynch, it's Lynch, L-Y-N-C-H.

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From records I have obtained the well is located 1980 from the south and east lines of Section 24, 20, 34.

Q And that is not on this?

A No, sir, we didn't locate that on here.

Q And when was that well spudded?

A That well was -- let's see. That well was spudded May 31st of 1984.

Q And is that well completed?

A Yes, sir, it is.

Q What zone?

A According to records filed with the Commission, it's completed from the -- it says Pennsylvanian, which I presume as being Morrow formation.

Q Does it show to be producing from the Lea Pennsylvanian Pool?

A Yes, it does.

Q Mr. Nearburg, what is the standard proration unit for a Devonian gas well in this area?

A To that, I really don't know, sir.

I don't -- I don't think the Devonian wells, I don't have the actual detail of production. Well, maybe I do, let's see.

Q I don't need production. I just want to know if it's dedicated 160 or 320.

A I just don't know because I don't know that the Devonian has ever made that much. I think they've

1  
2 pretty much been classified as oil wells, not gas wells, out  
3 of the Devonian.

4 If we were to be -- it's certainly our  
5 understanding of the production in the area.

6 Q But you've requested for this well to be  
7 an unorthodox gas well location to the Devonian, also,  
8 didn't you?

9 A That would be -- it's -- it's -- we have  
10 permitted it to the Morrow; however, we have considered  
11 amending the application to take it on down to the Devonian.

12 That would be for an oil test, however.

13 The crux of this is for 320-acre spacing  
14 for a Morrow gas well.

15 Q Are both locations, are they standard for  
16 a 40-acre oil well location if it was an oil well in the  
17 Devonian formation?

18 A It was drilled as a Devonian well origi-  
19 nally. I, without checking, I wouldn't be able to say  
20 whether it was standard on a 40-acre location.

21 Q If this for some reason, both of them  
22 completed out as Devonian gas wells, would they be unortho-  
23 dox for 320-acres proration units?

24 A Never thought about that. I guess it  
25 would be unorthodox by about 330 feet if it were a Devonian  
gas well.

In other words, it's 600 -- the 1-L,  
being 1650 from the north line would actually, to be stand-

1  
2 ard would need to be 1980 from the north line, so it would  
3 be nonstandard by the difference between 1980 and 1650.

4 Q Are there any Devonian oil or gas pools  
5 within this area?

6 A The -- the original development of the  
7 Marathon Lea Unit was as a Devonian oil field and they en-  
8 countered multiple pays in the -- not only the Devonian for  
9 oil, but also as they drilled through the Devonian they dis-  
10 covered what they referred to at the time as "bend" gas pro-  
11 duction, and also in a number of locations Bone Spring oil  
12 production, so it was dual produced and from a number of  
13 different zones throughout the history of the Marathon Lea  
14 Unit.

15 Q You don't know what the pool's name is in  
16 this area for the Devonian?

17 A I could probably --

18 Q Oh, I think our records will show that.

19 A I'm sure I could find it here if you  
20 wanted for me to take time to look here.

21 Q No, that would be all right.

22 You referred back to Special Rule 1042-A,  
23 which created -- I'm sorry -- which states that any pool  
24 created prior to 6-1-64 were spaced on 160-acre -- 160 ac-  
25 res, is that right?

A Yes, sir, that's correct.

26 Q Where does that rule appear? Is that in  
27 our general rules?

1  
2 So that's actually part of Rule 104-B of  
3 our general rules.

4 Thank you, Mr. Nearburg.

5 MR. STOGNER: Your witness, Ms.  
6 Aubrey.

7 MS. AUBREY: Thank you.

8 CROSS EXAMINATION

9 BY MS. AUBREY:

10 Q Mr. Nearburg, my name is Karen Aubrey and  
11 I'm representing BTA here today.

12 So that I understand your exhibit, let me  
13 have you look at your Exhibits One and Two.

14 A Okay.

15 Q Am I correct in understanding that the  
16 red outline on Exhibits One and Two show what you believe to  
be the present limits of the Lea Penn Pool?

17 A No. The red outline, according to our  
18 counsel, indicates the extension of the Lea Penn Pool which  
19 was granted subsequent to the completion of the BTA Lynch  
20 8212 JVP No. 1.

21 If you incorporate the blue outline and  
22 the red outline, you would have an outline of the southern  
23 portion of Lea Penn Pool, as I understand it currently ex-  
ists.

24 Q Mr. Nearburg, on December 19th, 1984, the  
25 Oil Conservation Commission extended the Lea Penn Gas Pool

1  
2 to include all of Section 24.

3 Let me show you what I've marked as BTA  
4 Exhibit Number Four. It's about a third of the way down the  
5 page, Mr. Nearburg.

6 A Okay.

7 Q I'm sorry, about two-thirds down the  
8 page.

9 A Okay. Okay.

10 Q Would you agree that that now puts the  
11 southern boundary of the Lea Penn Pool along the section  
12 line between Sections 24 and 25?

13 MR. CARR: We'd be glad to  
14 stipulate that if that is in fact what it is, we called and  
15 that's what we were told it is, but if it includes all of  
16 24, it certainly does.

17 A This -- this exhibit does have the west  
18 half typed in with an addition symbol, which is fine. I  
19 just --

20 MR. CARR: We were working off  
21 of the docket and also called to confirm that and that's  
22 where we picked up the east half, Mr. Stogner, but certainly  
23 the exhibits can be incorrect in that respect and there is  
24 nothing intended to mislead.

25 It was just to indicate there  
was a recent extension of the pool.

MR. STOGNER: For the record,  
I'm looking at the docket for December 19th, and I show only

1  
2 the east half, also.

3 Would both of you clarify that and --

4 MR. CARR: I don't have any  
5 doubt that it includes the whole section, if Ms. Aubrey says  
6 so.

7 We just checked it against the  
8 docket and called to confirm that that was what had been  
9 done.

10 MS. AUBREY: Mr. Stogner, that  
11 was amended before the docket was called on the 19th and the  
12 exhibit I've given Mr. Nearburg, which I only have one copy  
13 of, was a formal order from your office.

14 MR. STOGNER: May I see that,  
15 Ms. Aubrey?

16 MS. AUBREY: You certainly may.

17 MR. STOGNER: We'll make ad-  
18 ministrative notice in this hearing for Case Number 8443 and  
19 its subsequent Order Number R-7763, which was of -- which  
20 was the application of the Oil Conservation Division to ex-  
21 tend, create, and subtract certain pools in Lea, Chaves, and  
22 Roosevelt Counties, New Mexico.

23 Q Let me have you look at your Exhibits One  
24 and Two again --

25 A Okay.

Q -- Mr. Nearburg.

On either of those exhibits do you show  
BTA acreage in Section 24?

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A No, we don't.

Q I believe you testified that you're aware that there is a BTA well in the southeast quarter of Section 24.

A That's correct.

Q Are you aware that there is also a BTA well which has been spudded in the southwest quarter of Section 24?

A Yes, I'm aware of that.

Q Now, I'd like to refer you down to Section 25.

Are you aware that BTA holds any acreage in Section 25?

A I have nothing in my possession that tells me what BTA's land position or their trades have been.

I can presume that as they obtained a farmout from Exxon on 240 acres in 24 that the 80 acres in the east half northeast quarter, which is also under that same Exxon lease, could very well be under farmout to BTA, but I don't have anything. BTA's not called me to tell me what their position is.

Q Again with regard to Section 25, do you know who owns the west half of the northeast quarter?

A Yes, Chama. I do, actually.

Q And the southeast quarter of Section 25, who does that belong to?

A We have it under lease.

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Q So with the exception of the north -- I'm sorry, the east half of the northeast quarter, Chama has ownership of the entire east half of Section 25?

A Yes, ma'am, that's correct, either Chama or Charles E. Nearburg, if you want to be specific.

Q Which puts you in an ownership position in all of Section 25 with the exception of the east half of the northeast quarter?

A Yes, ma'am, that's correct. The east half of the northeast quarter.

Q Mr. Nearburg, are you aware of how many wells have been completed in the Lea Penn Pool since the pool was designated in 1964?

A I could sit here and go through my records and count them up, but if you have a number I'd know whether I would probably agree with it.

Q Would you agree with me that it's approximately twenty?

A In the Morrow formation?

Q Yes, sir.

A Twenty Morrow wells in the Lea Penn Pool?

Q Well, maybe you'd better -- it might be better, sir, so your testimony is accurate, for you to count those.

A We'd be glad to stip --

Q Can you do that from your map?

A No, I cannot.

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MR. CARR: We'd be glad to stipulate that there are approximately twenty Morrow wells in there, subject to subsequent check. I --

A Yeah, I'm not interested in arguing with you. I just --

Q Thank you.

A There's been so many dual completed wells that it would be hard for me right offhand to say that there were twenty without checking exactly which was completed where.

Not all wells that were drilled in that pool were completed in the Morrow.

Q And the spacing has been 160 acres in the Lea Penn Pool for almost twenty years.

A To my understanding the reason it was on 160's is due to the time of creation of the pool, yes, ma'am.

Q Which was 1964, June, I believe, 1964 --

A Yes, ma'am.

Q -- approximately twenty years ago.

Mr. Nearburg, do you have an opinion as to whether or not the Lea Penn Pool constitutes a common source of supply?

A Not without an extensive detailed correlations and I would not be able to say that out of hand.

Q Mr. Nearburg, have you prepared for the Examiner any drainage calculations in order to justify

1  
2 limiting the Lea Penn 160-acre spacing to the present limits  
3 of the pool?

4 A No, we have not. We've based our case  
5 basically on the equities of what we feel the positions are  
6 in this area, and based on the fact that the Commission now  
7 spaces all new Morrow wells, or Pennsylvania aged gas wells  
8 on 320's.

8 Q Do you have an opinion, Mr. Nearburg, as  
9 to whether or not wells drilled in this formation will drain  
10 only 160 acres?

11 A In my opinion they'll drain 320.

12 Q Do you have any exhibits prepared for the  
13 Examiner to show that fact?

14 A No, ma'am.

15 Q Have you prepared any exhibits or do you  
16 have any proposed testimony on reservoir economics in con-  
17 nection with this reservoir?

18 A No.

19 Q As I understand the equities you're talk-  
20 ing about, Mr. Nearburg, they are that you acquired this ac-  
21 reage believing that it was spaced on 320's, is that cor-  
22 rect?

23 A Not believing that it was. At the time  
24 that we acquired it, it was.

25 Q And you believe that you no longer own  
26 this acreage, is that correct?

27 A No, I don't know where you got that.

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Q Have you made any sales of any interest in either one of these half sections to any --

A Yes, we have.

Q And on what did you base that sale?

A Well, our partners' understanding that the wells would be developed on 320's.

Q So that is a deal that's already been cut, is that right?

A Yes, ma'am, that's true.

Q And is that the equity you're talking about here today?

A No, the equity that we're talking about is that the Commission currently schedules all Morrow tests for 320-acre spacing.

At the time we acquired this acreage that was the spacing.

We are not trying to say that BTA shouldn't be allowed to drill their Lynch No. 1 and No. 2 Wells on 160's.

We are saying that we should be allowed to develop our acreage on 320's.

Q Let's talk about BTA's acreage position for a moment in Section 25.

If you will assume with me that BTA has a farmout from Exxon on the east half of the northeast quarter, 80 acre tract.

A Are we to be provided a copy of that

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farmout?

Q I don't have a copy of the --

A Okay, that's all right.

Q -- farmout for you, Mr. Nearburg.

A I'll take your word for it.

Q If you'll just assume it with me for the purposes of a few questions --

A Okay.

Q -- I won't be much longer with you.

A All right.

Q Assuming that they do have --

A Uh-huh.

Q -- a farmout on that 80-acre tract.

A Yes, ma'am.

Q You're clear with me which one we're talking about?

A Yes, ma'am.

Q Is it -- does it continue to be your testimony that by re-spacing on 320's you will not impair their correlative rights?

A No.

Q Are you saying that you will be impairing their correlative rights by re-spacing on 320's?

A No, we will not be impairing their correlative rights.

Q And how is that, sir?

A They will have the opportunity to drill

1  
2 on their own acreage or participate in drilling with us on  
3 the 320.

4 They can have half of one well or a quar-  
5 ter of two wells, you know, whichever they prefer to do.

6 Q Well, I --

7 A They have the opportunity which is the  
8 essence of the correlative right.

9 Q If the southeast quarter of Section 25  
10 remains spaced on 160's --

11 A Uh-huh.

12 Q -- BTA will then have 50 percent of a  
13 well on that acreage, right?

14 A Uh-huh. If they elected to drill it,  
15 yes.

16 Q If the east half of Section 25 is spaced  
17 on 320's --

18 A Uh-huh.

19 Q -- they will have 25 percent of that ac-  
20 reage, is that right?

21 A They would also have the -- that is cor-  
22 rect. They would also have the option, as we have discus-  
23 sed, of drilling two wells in the east half, which are non-  
24 prorated, and therefore they would have a quarter of two  
25 wells rather than just half of one.

26 Q Well, Mr. Nearburg, your testimony has  
27 been that a well to this formation in this area will only  
28 drain -- will drain 320 acres --

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A That's right.

Q -- one well. Why would they, then, as a prudent operator want to drill two?

A I don't think they'd want to.

Q So what they're going to end up with, if your application is granted, is 25 percent of a proration unit in the east half of Section 25.

A Well, BTA's already evidenced that they're willing to drill two wells to drain what 320 would, so I presume they might have the same desire to do so in 25, and they would have the opportunity to do that.

It's what they've done in 24, which is fine by me. I mean, I'm just saying, you know, that we're not impairing their correlative rights by what we ask.

Q And Chama owns --

A I can't help the fact that they've only got 80 and we've got 240. That's -- you know.

Q In the east half of Section 25.

A That's correct.

Q And the entire 320 in the west half of Section 25.

A Well, we have the entire 320 in the west half, yes, ma'am.

Q Both of which are within a mile of the limits, present limits of the Lea Penn Pool.

A As it exists now, yes, ma'am.

Q Is it your opinion, Mr. Nearburg, that

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the limits of the Lea Penn Pool follow the section line?

A           Would you state that again? I'm not sure

--

Q           Sure, I'd be glad to. Do you have an  
opinion as to the outer boundary of the Lea Penn Pool, of  
the common source of supply underlying the Lea Penn Pool?  
Does it follow the section line?

A           Are you asking about the boundary or are  
you asking me about where the reservoir goes?

Q           I'm asking where the reservoir goes, how  
far out?

A           I'll ask you the same thing. I don't  
know.

Q           It's not your opinion, though, that it  
follows the line between Sections 24 and 25.

A           Well, it's -- I don't have an opinion.  
I'd find it pretty unlikely.

Q           You testified, sir, that this is not a  
prorated pool.

            In the event that it becomes a prorated  
pool and the pool is re-spaced on 320 acres --

A           Uh-huh.

Q           -- won't that give Chama an advantage  
over the 20 or so operators whose wells are spaced on 160's?

A           We may have to take a minute to explore  
this. Who are the 20 operators?

Q           Well, let's assume that there are 20 or

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so operators of the 20 wells located in the Lea Penn Pool.

A Well, Marathon is the operator of the Lea Unit, so I don't think there's 20 operators.

Q Well, can we start again and assume that there are more than one operators of wells based on a 160.

A Okay.

Q And there are a certain number of wells based on 160's even though your exhibits don't show us how many wells there are.

A Okay.

Q Won't re-spacing this acreage on 320's in the event of gas prorationing give Chama a windfall over those operators whose wells are spaced on 160's?

A I kind of doubt it, you know, they're going to be in for, you know, the wells on the Marathon Lea Unit have producing, as you've already stated, since the early sixties, so I doubt that they're going to, you know, especially being as they're more than a mile from our locations, I doubt they're going to experience any drainage.

You know, it's likely to be strongly the other way around.

Q But they are going to have increased allowables, aren't they, the wells based on 320's?

A That I don't know.

Q Mr. Nearburg, can you give us any geologic reasons to treat Section 25 any differently from Section

1  
2 24 in terms of spacing?

3 A I don't have any geologic reason prepared  
4 at the present time. I would just basically bow to the con-  
5 ventional wisdom of the Commission since 1964, which is a per-  
6 iod, as you referred to, of twenty plus years, wherein all  
7 wells drilled in the last twenty years, you know, have been  
8 spaced on 320's.

9 I presume, as that practice has not been  
10 changed, that there has been over time in this -- in this  
11 body numerous applications for Pennsylvanian wells and that  
12 320 acre spacing has shown to be an effective and un wasteful  
13 method of producing the gas, and I really feel that that  
14 fairly well speaks for itself.

15 Q But the wells in Section 24 are spaced on  
16 160's.

17 A Yes. We're not saying that they  
18 shouldn't be.

19 MS. AUBREY: I have no more  
20 questions.

21 RE CROSS EXAMINATION

22 BY MR. STOGNER:

23 Q Mr. Nearburg, you referred to that Mara-  
24 thon operator of the Lea Unit.

25 A Yes, sir.

Q Does that unit include the Pennsylvanian  
formation?

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A Yes, sir, I'm quite sure that it does.

MR. STOGNER: I have no further questions at this time.

Mr. Carr, did you have any questions?

MR. CARR: I have nothing further of Mr. Nearburg.

MR. STOGNER: Are there any other questions of this witness?

MS. AUBREY: I have no further questions, Mr. Examiner.

MR. STOGNER: If not, he may step down for the time being.

(Thereupon a discussion was had off the record.)

MR. STOGNER: Let's go back on the record.

Mr. Nearburg.

A Yes.

MR. STOGNER: In Exhibit Number One --

A Yes, sir.

MR. STOGNER: Somewhere you mentioned the Platt Chama 1-L Federal as being 1980 foot from the south and east lines of Section 24, and that was completed May 31st, 1984, in the Lea Pennsylvanian Pool.

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A No, I think -- I think I was asked if I knew where the Lynch Well was located, the BTA Lynch Well was located, and I responded that it was 1980 -- I may have misstated the response.

That is the location of the Lynch -- the BTA Lynch JVP Well No. 1.

MR. STOGNER: Okay. Early in your testimony about Exhibit Number One you mentioned something about a Platt Chama 1-L Federal Well and you kept referring to that well several times.

Do you not remember?

A I was -- I probably was just saying this plat. I may have been referring to the map as a plat which showed the location of the Chama 1-L Federal. That may --

MR. STOGNER: So there is a Chama 1-L Federal.

A Yes, it's our re-entry of the Shell 1-L Federal, yes, sir.

MR. STOGNER: Okay, that's the name of your well you're proposing to re-enter.

A Yes, sir, that's correct.

MR. STOGNER: Okay. Got that clarified.

A I'm sorry to be --

MR. STOGNER: Mr. Carr, do you have any other questions?

MR. CARR: I have nothing fur

1  
2 ther on direct.

3 MR. STOGNER: Ms. Aubrey.

4 MS. AUBREY: Mr. Stogner, I  
5 have a motion to make.

6 We move that the Examiner dis-  
7 miss the application to limit the Lea Penn Pool to its  
8 present pool limits and to increase the spacing outside the  
9 pool limits to 320 acres.

10 This witness has given the Exa-  
11 miner no testimony on which to base an alteration of spacing  
12 within a mile of the Lea Penn Pool. He has no drainage cal-  
13 culations; no reservoir economics; no studies of production;  
14 has given you no opinion on whether or not a well can drain  
15 160 acres there or 320 acres.

16 He has talked to you about the  
17 equities of re-spacing this simply because it's an old pool  
18 and because of the Commission rules is spaced on 160.

19 The actual equity he's talking  
20 to you about, though, Mr. Examiner, is that he's sold this  
21 deal to his partners based on 320 acres being dedicated to  
22 this well.

23 He has not given you one shred  
24 of evidence on which to base a change in the rules now.

25 If Chama wishes to re-space the  
area within a mile of the limits of the Lea Penn Pool, then  
Chama has the burden of coming forward with a prima facie  
case of geological or engineering reasons to do so, not

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2 merely because they didn't read the rules and they've sold  
3 it based on 320's and would now like 320 acres dedicated to  
4 their well, notwithstanding the effect that his has on BTA's  
5 position in Section 25.

6 BTA has acquired 80 acres in  
7 the northwest quarter of Section -- the northeast quarter of  
8 Section 25. They acquired that acreage in reliance on the  
9 160-acre spacing and what Chama is asking you to do is to  
10 ignore BTA's correlative rights and to grant their applica-  
11 tion simply because of the equities of a deal that's already  
12 been cut.

13 I submit to you that they have  
14 given you no evidence. They have not submitted a prima  
15 facie case on which you can base any findings that the spac-  
16 ing should be changed.

17 Thank you.

18 MR. CARR: In response to Ms.  
19 Aubrey's closing statement, or statement with respect to her  
20 motion, I would hope she is not intentionally misstating the  
21 case when she states that the argument is that Chama didn't  
22 read the rules.

23 The fact is reading the rules  
24 at the time this venture was undertaken would have shown  
25 that the spacing was 320 acres.

26 The question here is one of  
27 correlative rights. The question here is one of an altera-  
28 tion of spacing. The alteration of the spacing is currently

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2 taking place since we step out from an existing pool, a pool  
3 that is spaced on 160-acre spacing or proration units be-  
4 cause in the early sixties an inappropriate spacing pattern  
5 was grandfathered in, and what is happening now is this is  
6 being extended in a fashion inconsisten with statewide rules  
7 for the Morrow formation.

8 We have come before you and we  
9 have given you our opinion, contrary to what Ms. Aubrey  
10 stated.

11 The testimony shows that corre-  
12 lative rights are being impaired; that a spacing pattern can  
13 result that will require excessive drilling, which will re-  
14 sult in waste, and that in so doing it will cause people to  
15 expend unnecessary funds, thereby affecting adversely their  
16 opportunity to produce their fair share of the reserves un-  
17 der their tract, thereby impairing their correlative rights.

18 We submit the motion should be  
19 denied.

20 MR. STOGNER: Ms. Aubrey, your  
21 motion is duly noted and on record; however, at this time  
22 I'm going to overrule it. We'll continue with the case and  
23 hear BTA's side.

24 MS. AUBREY: Mr. Examiner, may  
25 the record reflect that Mr. Zoller has already been sworn?

MR. STOGNER: The record will  
so show.

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MARVIN L. ZOLLER,

being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MS. AUBREY:

Q State your name for the record, please.

A Marvin Zoller.

Q Mr. Zoller, what's your occupation?

A I'm a Chief Operations Geologist for BTA Oil Producers.

Q And have you testified previously before this Commission or one of its examiners and had your qualifications made a matter of record?

A Yes, I have.

MS. AUBREY: Mr. Examiner, are the witness' qualifications acceptable?

MR. STOGNER: If there are no objections his qualifications are so accepted.

Q Mr. Zoller, are you familiar with BTA's opposition to Chama's application to limit boundaries of the Lea Penn Pool today?

A Yes, ma'am.

Q Have you prepared certain exhibits for the consideration of the Examiner?

A Yes, ma'am.

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2 Q Let me refer you to your Exhibit Number  
3 One. Will you look at that and on that exhibit located for  
4 us the two BTA wells in the south half of Section 24?

5 A The completed gas well 1980 from the  
6 south and east quarter -- corner of Section 24 is the BTA  
7 No. 1 Lynch.

8 The red dot 1980 from the south and west  
9 lines of Section 24 is the BTA No. 2 Lynch, which is  
10 presently drilling at about 3600 feet.

11 Q When was the BTA Lynch No. 1 completed?

12 A August of '84.

13 Q And do you know when BTA acquired its ac-  
14 reage in Section 24?

15 A Oh, I think it would have had to been in  
16 the fall of '83, or very early '84. I'm not sure.

17 Q Let me refer you now to Section 25. Can  
18 you tell the Examiner what BTA's acreage position in the  
19 northeast quarter of Section 25 is?

20 A We have a farmout from Exxon on the east  
21 half of the northeast quarter of Section 25.

22 Q And are you aware, sir, of the ownership  
23 of the remainder of the east half of Section 25?

24 A Yes, ma'am.

25 Q Who owns that acreage?

A According to testimony here this morning,  
Chama owns everything that we don't own.

Q When you acquired the acreage in Section

1  
2 24 and the 80 acres in Section 25, what was your understand-  
3 ing of the spacing at that location?

4 A Well, we never thought there was anything  
5 except 160-acre spacing for the Lea Pennsylvanian Pool.

6 Q And was that based on the proximity of  
7 the acreage to the limits of the Lea Penn Pool?

8 A Yes, ma'am.

9 Q And are your wells in Section 24 drilled  
10 at standard locations for 160-acre spacing?

11 A Yes, sir.

12 Q Now referring you still to Exhibit Number  
13 One, I'd like to refer you to the west half of Section 25.

14 Your symbol there shows an abandoned oil  
15 well. Is that -- is that the same wellbore that Chama is  
16 seeking to re-enter here today?

17 A Yes, ma'am.

18 Q And can you -- you don't have the other  
19 Chama proposed re-entry shown on this exhibit, do you?

20 A No. At the bottom of the map you'll  
21 notice that this map only includes wells that penetrated the  
22 Morrow.

23 The well that they propose to re-enter in  
24 the southeast quarter of Section 23 went to 10,500 feet, I  
25 believe, which is above it.

Q Let me refer you now to Exhibit Two, Mr.  
Zoller. This is a cross section which goes from A to A'?

A Yes, ma'am.

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Q And A' is the well in the west half of Section 25 that Chama intends to re-enter, is that right?

A The -- yes, the well on the righthand side of the cross section is that well.

Q Now looking at Exhibit Two, Mr. Zoller, can you form an opinion as to whether or not the Lea Penn Pool constitutes a common source of supply?

A Well, as I understand the term common source of supply, the Lea Penn Field includes a number of sands, all the Morrow in age, which have been prorated as the Lea Penn Pool and no doubt contains many reservoirs.

Q Do you have an opinion, Mr. Zoller, as to whether or not the sand quality varies throughout the area shown on your cross section?

A It varies immensely from well to well, even on 160-acre spacing.

Q Can you explain that for me by referring to the exhibit?

A Well, if we start with the sand colored yellow on the BTA Well, which is the center well on the cross section, you will see that we have some 80 or 90 feet of sand, the top 30 feet of which we believe to be gas productive.

If you go to the Shell 1-L Federal, the same yellow sand body is nothing more than a few streaks of sand and mostly shale.

Moving down a little lower to the laven-

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2 der color in the Shell Well, you'll see that they tested up  
3 to 3-million cubic feet a day out of perforations in that  
4 zone. They never produced it. They plugged back and com-  
5 pleted from the Pennsylvanian -- or from the Bone Spring and  
6 at some time or other they plugged the well.

7 That same lavender zone in our well cer-  
8 tainly doesn't look like a reservoir. It's very thin bed-  
9 ded, mostly dirty, and tight where it is clean.

10 Moving on to the left to the Marathon No.  
11 11, the lavender zone is almost completely gone.

12 Moving up the hole in the left Marathon  
13 No. 11 the yellow zone, again. You'll see that Marathon  
14 completed that well first from the perforations marked one.

15 From this zone over a two year period it  
16 only made 215-million cubic feet of gas.

17 They then plugged it back to the two per-  
18 forated zones labeled two in that depth column.

19 From that zone it made nearly 6-billion  
20 cubic feet of gas.

21 They have recently cleaned it all out and  
22 perforated the two zones labeled three and from that they  
23 tell us it will flow one to one and a half million cubic  
24 feet a day but it has not been put on line yet.

25 So taking the yellow zone in the Marathon  
well it certainly looks like they've got considerable clean  
sand. The sonic log would indicate that they've got some  
porosity, but obviously they didn't have too much permeabil-

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ity or they'd have produced more than 215-million cubic feet of gas from sands that thick, all of which adds up to the fact that the sands are very erratic from well to well.

Q Let me refer you to the perforations marked two on the Marathon Log.

A Uh-huh.

Q Do you find that zone present in the log of the BTA Well?

A Yes, ma'am, we not only did find it, we had slight gas shows when we drilled it.

Q Was it comparable to the zone in the Marathon Well?

A Well, I correlate them to be comparable.

Q Let me refer you back to Exhibit Number One, Mr. Zoller.

Will you look at that exhibit and tell us how many completions there have been in the Lea Penn Pool that are shown on Exhibit Number One?

A Yes, ma'am. Every gas well symbol on that map is or has been a Morrow completion at some time. I believe we counted twenty the other day.

We will follow in a minute with an exhibit which will have every one of those highlighted as to which are producing and which have produced in the past.

Q Can you look again at Exhibit Number one, Mr. Zoller, and tell me how many open locations based on 160-acre spacing there are?

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A Well, there would be two in the north half of 24. There would be one in the northeast quarter of Section 14. There would be one in the northwest quarter of Section 12. If I understand the boundaries exactly right, there would be two in Section 10, the northwest quarter and the southeast quarter.

Q So we're clear, Mr. Zoller, can you look at Exhibit One and tell the Examiner what the boundaries of the Lea Penn Pool are now?

A Well, except maybe a little bit -- I'm assuming that the south half of Section 3 at the north end of the map is in it; the east half of Section 9, all of Section 10, 11, 12, 13, 14, and now Section 24.

Q Let's go to Exhibit Three, Mr. Zoller.

Why don't you come around and put that up on the wall, Mr. Zoller.

Let me refer you to Exhibit 3, Mr. Zoller, which is on the wall. It's a cross section showing Penn wells, is that correct?

A Yes, ma'am.

Q From B to B'.

A Right.

Q Would you go to the exhibit, Mr. Zoller, and show us on the exhibit how you can conclude that wells drilled in this area will drain 160 acres?

A Well, to start off, I think I would have to conclude probably most of the sands don't extend for 160

1  
2 acres so they can only drain what's present.

3 First off, let me explain a little here  
4 about these Easter egg colors.

5 The top two colors, the flesh color and  
6 the pink, are mainly there for correlation purposes.

7 The green in the gamma ray down towards  
8 the bottom of the gamma ray appears on a number of wells.  
9 Again, that is there primarily for correlation purposes.  
10 It's a zone just above the Barnett Shale.

11 In between we have brown, gray, yellow,  
12 and lavender, all of which are attempts to correlate indivi-  
13 dual sands only and in some well or another each or all of  
14 those zones produce..

15 The map on the righthand side shows in  
16 solid lavender the wells that presently produce in the  
17 field. The wells that are circled in lavender are wells  
18 that have produced. Down at the south end there's one with  
19 a broken circle and that is the Shell 1-L Federal which did  
20 test gas and to my knowledge has never produced from the  
21 Penn, all of which is explained in the legend.

22 The well on the righthand end, the No. 10  
23 Well, is the same well that we looked at on the lefthand end  
24 of the cross section A-A', the Marathon No. 11.

25 As you can see, the Marathon No. 11 is  
26 producing from the two brown zones, three yellow zones.

27 We move to the next well, and oh, by the  
28 way, every one of these wells is a normal 160-acre offset

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except one case where there's two wells in the same 160, one of which is plugged and another well was drilled.

The second well produces from a gray zone, has perforations in a yellow zone and perforations in two lavender zones.

The next well, No. 8, all that's available from my office or your Hobbs Office of the Commission, is the top and bottom perforations. If you take the top and bottom, I think it's pretty logical to conclude that it's perforated in a brown zone, a yellow zone, and possibly the gray zone in the middle.

Well No. 7 has a couple of feet in a brown zone, three zones in the gray, two in the yellow, and one below the TD of the log. I don't know, it's below the lavender, it may be lavender.

Well No. 6 is back up in a zone that I didn't even find any color for, plus the gray zone, plus the yellow zone there.

No. 5 we're back up in a brown zone, which we haven't seen for four or five wells here, and there's perforations in the lavender zone, which Marathon tells me, at least, they do not think they ever got any gas out of the perforations.

Well No. 4, again it's in the brown, it's back in the gray again.

Well No. 3, 2, and 1, are the only consistency in the entire cross section. They all produce from

1  
2 what I correlated to be the gray zone. Part of this could  
3 be the Well No. 1 and 2 didn't go below the gray zone, so  
4 the last thing that they saw was the gray zone.

5 I think the cross section shows that from  
6 well to well on 160-acre spacing almost in every case the  
7 pay zone changes.

8 Q And based upon that, Mr. Zoller, can you  
9 conclude that 160-acre spacing is appropriate in this area?

10 A Not only appropriate, I think it's the  
11 only way we're going to get the gas out of there.

12 Q Let me refer you back to Exhibit Number  
13 One.

14 Do you have an opinion as to whether or  
15 not the Lea Penn Pool extends into Sections 23 and 25?

16 A I don't have a reason in the world to  
17 think that it doesn't.

18 Q Can you tell the Examiner what the effect  
19 would be of permitting Chama to re-space Sections 23 and 25  
20 on 320 acres? How would that affect BTA's acreage position  
21 in 25?

22 A Well, it's just as obvious that we put  
23 our deal together thinking 160 acres as it is that they put  
24 theirs together thinking 320, and it's going to cut us from  
25 a 50 percent interest in a well with a much better location  
than one in the southeast quarter, which we could have a 25  
percent interest and which --

Q Do you have --

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A -- by the way, we don't want.

Q Do you have an opinion as to how productive the acreage in the southeast quarter of Section 25 is?

A Only to the extent that the sand that we are presently producing from in our No. 1 Lynch, by everything we've got, should be wet, if present, in the southeast quarter of 25.

Q If you were able to drill a well in the east half of Section 25, can you tell me where you'd locate it?

A I've already recommended that it be located 660 from the north and east corner of Section 25.

Q And that would be on BTA's 80-acre tract in the east half of the northeast quarter?

A Yes, ma'am.

Q And were that to happen, BTA would have a 50 percent interest in that well.

A Yes, ma'am.

Q Do you have an opinion as to whether or not a well in the east half of the northeast quarter would likely be a better well than a well in the southeast quarter of Section 25?

A It is certainly my opinion that at this stage in the knowledge of the sands, that is the place to drill a well. It's the best place in the section to drill the well.

Q In the event that Section 25 is re-spaced

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on 320 acres, will BTA's correlative rights be impaired?

A Yes, ma'am.

Q Can you explain that, please?

A At best we can end up with a 25 percent interest in a well which we have justification to expect a 50 percent.

Q Do you see any geologic reason to change the spacing in Sections 23 and 25?

A Absolutely not.

Q Do you see any geologic reason, based on your exhibits and your testimony, to retain spacing in those two sections on 160 acres?

A Well, in our case it certainly affects our correlative rights, and I think it should be retained.

Q Can you tell the Examiner what dollar amount BTA has spent developing this acreage based on 160-acre spacing?

A Oh, from memory, I believe our first well cost, well, it's something like \$1,200,000, and we spudded the second one thinking the same thing.

Q And there is a potential for a third BTA well in Section 25.

A There was testimony earlier, Mr. Zoller, that this is not a prorated gas pool.

A Right.

Q Can you tell me first of all whether or not there are any pipelines in the area?

1  
2 A Yes, ma'am. I know there are two; how-  
3 ever, we have been approached by a third company to talk  
4 about buying the gas from our No. 2 Well, so I have to as-  
5 sume that there is either a third one or he's got a trade-  
6 off with someone else.

7 Q And do you know, Mr. Zoller, how many  
8 operators there are of the wells in the Lea Penn Pool?

9 A No, ma'am, but it wouldn't be that hard  
10 to count. There's Greathouse, Estoril, NCRA, Moran, Grace,  
11 BTA, Marathon, and even if the Morrow is unitized, there  
12 were certainly other operators involved in the Marathon Unit  
13 besides the operator. I didn't count that.

14 Q So at least seven.

15 A That we can count.

16 Q In the event of a change in gas market,  
17 Mr. Zoller, do you have an opinion as to whether or not this  
18 is a pool which would likely be prorated?

19 A Well, if it were to change and we had a  
20 few more wells like the BTA No. 1 Lynch, I would think  
21 there's a good possibility it will be prorated.

22 Q And there are a number of operators.

23 A Yes.

24 Q And a number of pipelines in the area?

25 A Right.

Q And can you tell the Examiner what effect  
it would have on BTA's position with its wells spaced on  
160's if the pool were prorated and Chame was successful in

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respacing Sections 25 and 23 on 320 acres?

A Certainly. They'd have a distinct advantage in selling a lot more gas than I personally think they're entitled to.

Q And why would that be, Mr. Zoller?

A Well, because they'd have proration based on 320 where we'd have proration based on 160.

Q And the number of acres goes into that formula, --

A Right.

Q -- is that what you're saying?

Let me finally refer you again to Section 25, the east half.

Do you have an opinion as to whether or not if the application of Chama is granted, the effect of that will be contribute totally nonproductive acreage in the southeast quarter of Section 25 to its spacing unit?

A I have no reason to think it would be totally nonproductive. I can look clear on the west end of -- edge of the field by the cross section that's on the wall, and there's certainly a well as low structurally as that, that did have a pay zone, all three of which produced from the same -- same zone.

Q Would contributing the southeast quarter of Section 25 to a proration unit dilute BTA's interest in a potential well in the northeast quarter?

A Well, I certainly think it would, if for

1  
2 no other reason, you can take the wells way out on the  
3 northwest edge of the field and most of them did not produce  
4 very much gas.

5 I see one here with 617-million; another  
6 one with a million-two; another one with 56-million; whereas  
7 wells back in the area where we've at produced 3, 4, 5, and  
8 6-billion.

9 MS. AUBREY: I have no more  
10 questions at this time.

11 MR. STOGNER: We're going to  
12 take a fifteen minute recess and we'll come back and resume.

13 MS. AUBREY: May I offer my Ex-  
14 hibits One through Three?

15 MR. STOGNER: Yes, I guess we  
16 should do that.

17 Do you wish to do that?

18 MS. AUBREY: Yes, I do, please.

19 MR. STOGNER: If no objection,  
20 Exhibits One through Three will be admitted into evidence.

21 At this time we'll now take a  
22 fifteen minute recess.

23 (Thereupon a recess was taken.)

24 MR. STOGNER: The hearing will  
25 now continue.

Mr. Carr, I guess it's your

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turn for cross examination.

CROSS EXAMINATION

BY MR. CARR:

Q Mr. Zoller, if we could look at your Exhibit Number One for a minute, please.

How important is structure in getting a successful well in this area?

A Well, that is going to vary all over the field as to which sand you're talking about.

In this immediate area, if you'll refer to Exhibit Number Two, I stated that we had about 90 feet of sand in the zone colored yellow. We perforated, I believe, 14 feet of it.

By the calculations we have the top 30 feet is gas productive. We have about 20 feet there that according to exhibits that we've already presented to the Commission shows that the water saturation is going up very fast but the porosity is going down, so we can't say that it's gas or water productive.

And then the zone colored blue is very definitely water productive.

Right now it's our feeling that we've got, I believe, a maximum of 44 feet that can be gas productive and below that we expect the yellow sand to be wet.

Q And so --

A Now, to talk about any other sand there,

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I remember specifically on the long cross section Number Three there is some water information relative to other sands.

Q And so I understand your testimony, as you move down structure, say, from the well in the southeast of 24 which you were just talking about --

A Yes, sir.

Q -- you get into a poor portion of the reservoir because you're increasing the chance of water saturation.

A Well, I wouldn't say it's a poor portion, but we're taking a chance on reducing the gas column, yes, sir.

Q You have a poor or a less -- you've reduced the chance by moving down structure.

A We've reduced the chance of a thick reservoir but no reason to think we've reduced the chance of a good reservoir.

Q So is structure an important factor in determining whether or not you have a good Morrow completion?

A In some zones it seems to be; other zones is does not seem to be.

Q And in other zones it would be more dependent on just the quality of the sand stringers intercepted. Is that a fair statement?

A Yes.

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Q Okay. Now this Exhibit Number One is your interpretation of the Morrow structure in this area, is that correct?

A It's my interpretation of the structure as it appears at the top of the Morrow Clastics section shown on both cross sections and also shown as the mapped point.

Q And in preparing this you looked at the logs on the wells that penetrated the Morrow in the area.

A Yes, sir.

Q And so your placing of the 9500 foot contour as it goes across, oh, down to Section 36, what control did you have for actually placing that line at that point?

A Well, obviously, the control is nothing more than the control at the top of the structure where you have a lot of control, and going off the west flank you have control almost to -9500.

Going off the southwest you have a control point at 9560 on the Pennzoil dry hole in Section 35.

Obviously it's interpretation. It could be done mechanically and come out with a different picture.

Q And if a well is drilled in the northeast of 25, that might provide data that would cause it to be modified in some respect. Is that not true?

A Certainly.

Q All right. Now, as you have looked at these sands as they appeared in the logs, did you prepare

1  
2 any Isopachous maps of any of the individual sand units?

3 A No, sir. I frankly don't think I'm cap-  
4 able or patient enough to accomplish that task.

5 Q Did you do any reservoir study well to  
6 well to determine whether or not the zone that appeared in  
7 the individual wells in fact was in communication well by  
8 well?

9 A No. I don't think I could because most  
10 wells are completed from more than one zone and if it is,  
11 there's very little chance you're going to prove anything  
12 for one zone.

13 Q So your maps show the presence of the  
14 sand bodies, that's what I --

15 A Yes.

16 Q Okay. Now to be sure I understood your  
17 testimony, you didn't testify, did you, that the southeast  
18 of 25 was nonproductive?

19 A No.

20 Q But you don't consider that as good a  
21 prospect as -- as the northeast. Is that a fair characteri-  
22 zation?

23 A Well, we all are sitting here trying to  
24 figure out a way to crowd just as close to the Lynch No. 1  
25 as we can because it's a fabulous well, and in our third  
well I'd like to do that.

On the other hand, if my map is right,  
it's going to be wet in the yellow zone, anyway.

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2 But all I've got to do is look over to  
3 the well you intend to re-enter, the Shell 1-L Federal tes-  
4 ted 3-million cubic feet a day, and I'd like to get up dip  
5 to that lavender sand.

6 Q Well, if thta's the case, if what we're  
7 trying to do is get as close to the Lynch No. 1 Well, why  
8 would a location 660 out of the northeast corner of 25 be a  
9 preferable location than, say, a location that's 660 or lo-  
cated in the northwest of the northeast of 25?

10 A I don't know that it will be that much  
11 preferable. There's two things involved.

12 One, we have the east half of the north-  
13 east and that's our lease.

14 Q Okay.

15 A Two, there's a fault over there with  
16 about 500 feet of throw, and if this map is off, I am bet-  
17 ting that it's going to be off in that that dip into that  
18 fault is going to be steeper than I've got it, and I think  
19 the northeast quarter of 25 will be higher than I've shown  
with this contour.

20 Q So this contour may not be correct as it  
21 crosses 25.

22 A That -- that goes for every contour on  
23 the map where it crosses any section.

24 Q If that contour is steeper than depicted  
25 as it crosses the northeast of 25, wouldn't that tend to  
mean that a location 660 out of the northeast corner would

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in fact be at a lower structural position than perhaps a well in the northwest of the northeast?

A I think the dip's deeper into the fault, and see if we can't imagine how easy it would be to draw the 9200 foot contour even further south than I've got it drawn.

In other words, what I'm talking about, an echelon fold in which you have a steep flank on the east and a very gentle flank on the west.

Q What we've got here is a -- your testimony was to locate 660 out of the northeast corner of Section 25, but your testimony is that that contour may not be placed where it is and that in fact might not be structurally lower than the northwest of 25. Is that right?

A I'll accept that, yes.

Q All right. Now, I believe you testified that the -- whether or not you got a successful Morrow well is really dependent upon the quality of the sand intersected.

A That's right.

Q And it is your testimony that they will drain 160 acres, these wells will drain 160.

A Yes, I think they'll drain 160 acres.

Q Is it possible that some of these would drain more than 160?

A Certainly.

Q Now, isn't it true that the source of the dispute today between BTA and Chama is really the develop-

1  
2 ment of the northeast quarter of Section 25?

3 A Well, the only thing that Chama is trying  
4 to do that we really care much about is as it relates to the  
5 northeast of 25.

6 Q And so that's the source of our dispute.

7 A Yes.

8 Q Now, the acreage in the northeast quarter  
9 of Section 25 is based on 160-acre spacing right now, is  
10 that correct?

11 A Acreage in the northeast of 25?

12 Q The spacing for the northeast of 25 is  
13 160 acres in the Morrow.

14 A Right now the northeast of 25 is not  
15 spaced at all, to my knowledge.

16 Q What would the rule -- what spacing rules  
17 would apply to that? Do you know?

18 A Well, it's within one mile of the limits  
19 of the Lea Pennsylvanian Field and it's my understanding  
20 that if you drilled a well within one mile of the present  
21 limits of the Lea Pennsylvanian Field, you have to drill it  
22 by the Lea Pennsylvanian rules.

23 Q And those pool boundaries were just ex-  
24 tended to include all of Section 24, is that correct?

25 A That's right, sir.

Q And prior to that extension, the pool  
boundaries only came down to the southern boundary of Sec-  
tion 13.

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A That's right, sir.

Q Prior to that extension wells in the north half of 25 would have been more than a mile from that pool boundary.

A Prior to the extension.

Q Yes, sir. Now, if we go to your Exhibit Number Three and we work back as you did, the 10, the 9, the number 8 wells, can you say from your study that the number 9 well and the number 10 well are producing from the same zone? And I'm talking primarily here about the yellow zone.

A The 9 and the 10?

Q Yes, sir, from the yellow zone?

A Well, number 9 well has some perforations in the yellow zone.

Q And number --

A As well as a number of others.

Q Doesn't the number 10 also have perforations in the yellow zone?

A Yes, sir.

Q Has there been anything in your study that would indicate that those zones are in communication?

A No. I haven't made a study to try to prove it and I don't think I could prove it if I did make one.

Q And if we look at the number 10 well, you have perforations, or there are perforations in the brown zone that's up in the Upper Morrow.

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A Yes, sir.

Q There are no corresponding perforations in the number 9 well in the brown.

A No, sir.

Q Nor in the number 8.

A No, sir.

Q In the number 8, I didn't understand your testimony. Do you know what zones were actually perforated or produced in the number 8 well?

A Only thing they've reported anywhere that I can find, and I ordered the records from the Hobbs office, was a top and bottom perforation.

That tells you that something in the brown has to be perforated. Something in the yellow has to be perforated, and possibly something in the gray is perforated.

Q I believe you concluded your testimony, or stated as part of your testimony on this exhibit, that 160-acre spacing was necessary to get the gas out of this area in the pool. Is that correct?

A I think the cross very vividly demonstrates that the sands have to be drilled on 160 acres because they obviously don't extend 320.

Q And all the sands that are depicted on Exhibit Three are within the present boundaries of the Lea Penn Pool.

A Yes, sir.

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Q And they're based -- and that's spaced on 160-acre spacing.

Now, the acreage outside the pool boundary, particularly the southeast quarter of Section 25, and I'm not trying to be -- work this point over again, I just want to be sure I understand your testimony, do you consider that as good a location or as good a prospect for a Morrow well as the northeast of 25?

A No, sir.

Q And is that because it is structurally at a lower position than the, say, northeast of that section?

A Primarily because it's a lower structural position and the sand that we're all interested in today is expected to be wet at that location.

Q Now, before you go sit down, look at the index map on Exhibit Number Three.

The solid blue wells are Morrow producers, is that correct?

A Producing today.

Q And the other wells that are just a circle not colored in, those are prior Morrow wells.

A Prior Morrow producers.

Q How many of those wells, do you know, were originally drilled as Devonian wells?

A No, I don't know. We can tell off this cross section about the ones that went through it, but everything there that's an oil well could have either been

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Devonian or Bone Spring, so that -- that alone won't tell.

Q Now, if I look at the wells that are not currently producing from the Morrow but are former Morrow producers, have you studied what zones they actually produced from?

A No, except for -- except for what's on that cross section or this cross section.

Q If we look at the ninth well and the eighth well, which are both in the south half of Section 14, even there we're not able to tell if in fact they may have produced from the same zones, is that correct?

A These two?

Q Yes, sir.

A Well, the ninth well has perforations in the yellow zone. The eighth well has perforations in the yellow zone.

The ninth well has no perforations in the brown zone; the eighth well does.

The ninth well has perforations in the gray zone and the eighth well very well might. It's got 10 feet of clean sand.

Q If we go up into Section 11, moving up the cross section, the first well in Section 11, (not clearly audible), the southernmost well in Section 11 --

A Well number 6.

Q -- is well number 6. Are there any zones in well number 6 that also appear to have been produced in

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well number 7?

A Oh, yes.

Q I mean, I'm sorry, I --

A The yellow --

Q I'm sorry, I directed you to the wrong well.

Are there zones in well number 6 that also produced in well number 5, which is the next well in Section 11?

A No.

Q So the point is that even if we locate multiple wells in a unit, the test is whether or not we intersect the producing sand bodies.

A That's the story of every Morrow well that's ever been drilled in the industry.

Q Now if I look at, say, Section number 10, there have only been two Morrow wells in that section, is that correct?

A Right.

Q If I look at Section 11, there are currently only two Morrow wells in that section.

A Right.

Q The same would apply for 14. There are only two producing Morrow wells in that section.

A Yes, sir.

Q There's only one in 13.

A Yes, sir.

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Q There's only one currently in 24 with another being drilled.

A Yes, sir.

Q If you dedicated laydown units in all of those you could have -- you could dedicate 320 acres to each of those wells, could you not?

A You mean we want to disregard the fact that there's been three wells already plugged out in the same reservoir and redesignate 320?

Q My question is, we could right now dedicate 320 acres to each of the wells in Section 11, could we not?

A Yeah, we could plug out a few more wells and dedicate 640, too.

Q And those in Section 11 are currently wells producing that have not produced from the same -- from sand bodies that have not appeared in any other wells; south half of Section 11.

A These two wells?

Q Yes, sir.

A No, we didn't. We didn't talk about the other two that are on there.

Q You want to talk about the other wells? Is it your opinion that the same stringer would have been drained by 11 if -- by the number -- let's see --

A We were talking about 6 and 7.

Q Okay. Okay, let's look at well number 4.

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A Well, weren't we talking about well number 5 and 6.

Q Yes.

A And they didn't have the same zone.

Q That's correct, and you stated we were only talking about two.

I'd like to direct your attention to the -- to well number 4 and ask you if it's producing from the same stringer that was present in either the 5 or 6 well?

A Well number 4 is producing from the gray and the brown.

Well number 5 is producing from the brown and the lavender.

Well number 6 is producing from the gray and the yellow and some zone that I didn't even color.

Q What about number 3?

A Well number 3 is producing from the gray only.

Q I believe it was your testimony that we have no idea if they were even in communication with one another based on the information that you had.

A I don't see any way to even generate that information.

Q And so there is nothing here that would show the fact that we don't have that section spaced on 320-acre spacing in zones that haven't been produced in any other wells.

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A I can't quite see what we're trying to prove here, but let's take 5 and 6 again, and they're both in the south half of 11.

If you had a laydown section in the south half of Section 11, you've got one producer and one abandoned producer.

Q Yes, sir.

A The producer is producing from a zone I didn't color, plus the gray and the yellow.

The number 5, the abandoned well, did produce from the brown and the purple.

Q So they're producing from different stringers.

A So how can you drain the gas that was produced by section -- by well number 5 when the zones don't exist or weren't perforated and to reason to think they should be perforated in well number 6?

MR. CARR: I don't have any further questions.

MR. STOGNER: Ms. Aubrey, any redirect?

MS. AUBREY: Thank you.

#### CROSS EXAMINATION

BY MS. AUBREY:

Q Mr. Zoller, based on your study and on your exhibits, do you see any geologic reason to treat the

1 spacing in Section 24 and 25 differently?  
2

3 A No, ma'am.

4 Q Or in Section 24 and Section 23 differ-  
5 ently?

6 A No, ma'am.

7 Q Mr. Zoller, do you have an opinion as to  
8 whether or not 160-acre spacing within a mile of the Lea  
9 Penn Pool is inappropriate?

10 A I have an opinion that it is appropriate.

11 Q And that's based on your geological stud-  
12 ies, is it not?

13 A Yes, ma'am.

14 MS. AUBREY: I have no more  
15 questions, Mr. Examiner.

16 CROSS EXAMINATION

17 BY MR. STOGNER:

18 Q Mr. Zoller, what BTA is actually propos-  
19 ing is adopting 320-acre spacing rules outside the Lea Penn-  
20 sylvanian Gas Pool, is that right?

21 A What we're actually proposing is that we  
22 adopt -- we continue to have 160-acre spacing within one  
23 mile of the limits of Lea Pennsylvanian Pool.

24 Q That's essentially what I was asking.

25 A I was trying to get off of 320.

Q Thank you, Mr. Zoller.

If the 160-acre proration units were up-

1  
2 held within a mile of the Lea Pennsylvanian Pool, does BTA  
3 have any objection with either one of the proposed Chama lo-  
4 cations or re-entries?

5 A Well, first off, if you adopt it within a  
6 mile, it affects both those locations.

7 Our feeling is that if they're both ap-  
8 proved, that they should be, if the field is every prorated,  
9 they should be penalized on the basis of their location.

10 Q If both wells were on 160-acre proration  
11 units?

12 A Well, if they're both on 160, they're  
13 both legal -- legal locations and we're playing all by the  
14 same rules. We don't object at all to they're 330 feet;  
15 doesn't bother me a bit.

16 Q Okay. We'll refer now to Exhibit Number  
17 Two.

18 In your opinion from the logs, the purple  
19 zones that are both -- that both show up in the BPL -- BTA,  
20 I'm sorry, Lynch Well No. 1 and the Shell Federal L No. 1,  
21 are they both the same sand stringer?

22 A I think they're the same aged sand and  
23 the thing is that everything that was clean in our well was  
24 also dense, and we have no gas shows drilling through them.

25 In other words, I don't think we have a  
chance of producing from the zone that made gas in the Shell  
1-L.

Q So you don't feel that the Lynch Well No.

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l's purple sand correlates with that in the Federal L No. 1?

A Oh, yes, I think it correlates. I just don't think it has any porosity in our well.

Q So you don't feel that the -- any production whatsoever that comes from the Federal L No. 1's purple zone would have any effect on the Lynch No. 1 zone?

A Not in the least. It may have an effect on what we do in the northeast of 25, but they're entitled to it.

Q Has BTA staked a location in the northeast quarter of 25?

A They haven't, but it's my understanding that they might do so today.

Q If not today, then how soon?

A Hopefully by Monday.

Q What zone do you hopefully to correlate in the northeast quarter of Section 25 with your Lynch No. 1 Well, the yellow zone or the purple, or the gray, or --

A Well, right at this stage, I would say that our number one shot in the northeast of 25 would be the purple zone and probably our number two shot would be the brown zone.

Q If the 160-acre proration units were done away with immediately outside the Lea Pennsylvanian Pool, what type of penalization should both wells that Chama proposed to drill have them?

A I assume it would be based on the percen-

1  
2 tage of how far they crowded the line. I don't know what  
3 the New Mexico procedure is.

4 Q But you feel they should --

5 A I don't think -- you don't have a proce-  
6 dure, as far as I know, that's called an actual productive  
7 acreage procedure, at least nothing that I've ever been in-  
8 volved in.

9 Q But you feel they should be penalized  
10 some way.

11 A Sure, if the field is every prorated. Of  
12 course, if it's not prorated, they won't ever be penalized  
13 any.

14 MR. STOGNER: I have no further  
15 questions of this witness.

16 Are there any other questions  
17 of Mr. Zoller?

18 MS. AUBREY: I have no ques-  
19 tions.

20 MR. STOGNER: Before we get to  
21 the closing statements, is there any redirect of either wit-  
22 ness?

23 Mr. Carr? Is that a yes or no?

24 MR. CARR: That's a no.

25 MR. STOGNER: Thank you, sir.

I guess at this time we're  
ready for closing statements.

MS. AUBREY: Mr. Stogner, be-

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fore I make --

MR. STOGNER: Ms. Aubrey, we'll go with you.

MS. AUBREY: -- my closing statement, I'd like to renew my motion to dismiss.

MR. CARR: I would renew my response to the renewed motion.

MR. STOGNER: I'll renew my overruling.

And we'll now have closing statements.

Ms. Aubrey, you may go first.

Mr. Carr, you may go last.

MS. AUBREY: Thank you, Mr. Stogner.

Chama comes here today asking you to change the rules with regard to the spacing within a mile of the Lea Penn Pool.

And Chama comes in here with two landmen and no geologic testimony to support that request.

The request that they're making is based on their own economics and not reservoir economics but the economics of the deal that they've put together on this acreage.

That testimony does not make a prima facie case for the changing of the spacing, and BTA's

1  
2 testimony has shown clearly that based on geology, retaining  
3 160-acre spacing within a mile of the pool limits is not  
4 only appropriate but necessary.

5                   The only geologic testimony  
6 you've heard today, Mr. Stogner, clearly shows that a well  
7 will drain 160 acres in this area; that the sands are erra-  
8 tic; that you cannot drain 320 acres with one well in this  
9 area. And that is the testimony you have before you upon  
10 which to make your decision.

11                   The only decision you can make  
12 based on the testimony that's been presented to you, is that  
13 the spacing is correct and that it should be retained and  
14 should remain 160 acres within a mile of the pool limits.

15                   MR. STOGNER: Thank you, Ms.  
16 Aubrey.

17                   Mr. Carr?

18                   MR. CARR: May it please the  
19 Examiner, the thrust of the problem today is that we have  
20 160-acre spacing units in an old pool in the Morrow forma-  
21 tion in an area where statewide rules other -- except for  
22 these old pools, would require development on 320-acre spac-  
23 ing.

24                   Had this pool not been created  
25 in 1961 it would be developed on 320 acres today. In fact,  
we submit, that's what is being done.

                  If you look at the geologic  
presentation of BTA, you will see as you look at the index

1  
2 map on their Exhibit Number Three that the wells are basic-  
3 ally producing from zones which do not correlate.

4 If we look at Exhibit Number  
5 Eleven, there are two wells completed in the Morrow. With  
6 laydown units they have one well for each 320 acres. If you  
7 look at the south half of the section, the Morrow well in  
8 the south half of Section 11 is producing from Morrow  
9 stringers that have not been produced in the south half of  
that section.

10 You may move right down there  
11 across the trace on their index map and you will see section  
12 by section that what we have is the fact of 320-acre spac-  
13 ing.

14 We submit the evidence pre-  
15 sented by BTA supports the argument that the spacing that is  
16 appropriate for the area is not 160 acres. That's a histor-  
ical fluke.

17 What in fact is the proper  
18 spacing for this area is 320 acres.

19 The testimony presented by BTA  
20 was that some stringers drain more than 160 acres; some  
21 drain less. Since it's not a prorated area, all we're pro-  
22 posing is a system whereby an operator wouldn't be required  
23 to drill unnecessary wells if that isn't warranted by the  
24 evidence obtained from the drilling that offsets it, and the  
25 evidence is still in the developing stage, as Mr. Zoller  
testified.

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2 When the -- when a well is  
3 drilled in Section 25 additional data will be obtained that  
4 can change the contours and can, in fact, change the outlook  
5 for the area.

6 If you -- Ms. Aubrey stated  
7 that the evidence presented was that a well would not drain  
8 320 acres. We submit that the only time that statement was  
9 made was by Ms. Aubrey herself.

10 We think that when we look at  
11 correlative rights we're talking about an opportunity to  
12 produce without waste our fair share of the reserves. Re-  
13 lief from 160-acre requirements are necessary if in fact you  
14 are to give us that chance to produce without waste.

15 If we are to develop the area,  
16 we would have to go, under present rules, on 160-acre spac-  
17 ing, drill wells that we submit will not be necessary, that  
18 would be wasteful, and therefore to produce the gas in these  
19 tracts we'd be locked into a wasteful situation, which is  
20 contrary to your statutory directive.

21 As to the well locations, BTA  
22 doesn't have an objection to them if they're on 300 -- if  
23 they're on 160-acre tracts, for they'd be at a standard set-  
24 back of 660 acres.

25 I think you should keep in mind  
that you're not required to impose a penalty on a well just  
because it's at an unorthodox location unless there is some  
advantage unless -- being gained by virtue of that location;

1  
2 unless there is drainage which cannot be offset by counter-  
3 drainage.

4 We submit that it would be in-  
5 consistent with this Commission's statutory directive to not  
6 approve those locations and then to, once they're approved  
7 -- or to impose a penalty once they are approved, because  
8 there would be in the same Morrow sand, if in fact it is in  
9 communication, an opportunity for the offsetting operator to  
10 drill a well in that sand body equidistant from the common  
11 lease line between the two.

12 We submit that the locations  
13 should be approved and a penalty is inappropriate, and that  
14 the only way you can carry out your statutory directive in  
15 this area is to recognize the de facto 320-acre Morrow spac-  
16 ing that exists in this pool and not require wasteful drill-  
17 ing outside the present pool boundaries.

18 MR. STOGNER: Thank you, Mr.  
19 Carr.

20 Mr. Carr, Ms. Aubrey, would you  
21 please submit to me a rough draft of an order for both  
22 Cases 8446 and 8447 within ten days? Would that be suffi-  
23 cient?

24 Is there anything further in  
25 either of these cases?

26 If not, both cases will be  
27 taken under advisement pending the ten days when I will have  
28 received, hopefully, the rough drafts.

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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 844629447 heard by me on 3 January 1985

Michael B. [Signature], Examiner  
Oil Conservation Division