

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY)
THE OIL CONSERVATION DIVISION FOR THE)
PURPOSE OF CONSIDERING:)
)
APPLICATION OF CHESAPEAKE PERMIAN, L.P.,) CASE NOS. 13,287
FOR COMPULSORY POOLING AND AN UNORTHODOX)
OIL WELL LOCATION, LEA COUNTY, NEW MEXICO))
)
APPLICATION OF CHESAPEAKE PERMIAN, L.P.,) and 13,288
FOR COMPULSORY POOLING AND AN UNORTHODOX)
OIL WELL LOCATION, LEA COUNTY, NEW MEXICO))
_____) (Consolidated)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

ORIGINAL

BEFORE: DAVID R. CATANACH, Hearing Examiner

June 24th, 2004

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, June 24th, 2004, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

* * *

STEVEN T. BRENNER, CCR
(505) 989-9317

2004 JUL 8 AM 10 08

I N D E X

June 24th, 2004
Examiner Hearing
CASE NOS. 13,287 and 13,288 (Consolidated)

	PAGE
EXHIBITS	3
APPEARANCES	3
APPLICANT'S WITNESSES:	
<u>LYNDA F. TOWNSEND</u> (Landman)	
Direct Examination by Mr. Kellahin	5
Examination by Examiner Catanach	14
<u>DAVID A. GODSEY</u> (Geologist)	
Direct Examination by Mr. Kellahin	17
Examination by Examiner Catanach	27
REPORTER'S CERTIFICATE	35

* * *

E X H I B I T S

Case 13,287

Applicant's	Identified	Admitted
Exhibit 1	6	14
Exhibit 2	7	14
Exhibit 3	10	14
Exhibit 4	11	14
Exhibit 5	18	27
Exhibit 6	21	27

Case 13,287

Applicant's	Identified	Admitted
Exhibit 1	12	14
Exhibit 2	12	14
Exhibit 3	-	14
Exhibit 4	-	14
Exhibit 5	25	27
Exhibit 6	26	27

* * *

A P P E A R A N C E S

FOR THE APPLICANT:

KELLAHIN & KELLAHIN
 117 N. Guadalupe
 P.O. Box 2265
 Santa Fe, New Mexico 87504-2265
 By: W. THOMAS KELLAHIN

* * *

1 WHEREUPON, the following proceedings were had at
2 9:44 a.m.:

3 EXAMINER CATANACH: All right, at this time I
4 will Call Case 13,287, which is the Application of
5 Chesapeake Permian, L.P., for compulsory pooling and an
6 unorthodox oil well location, Lea County, New Mexico.

7 Call for appearances in this case.

8 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of
9 the Santa Fe law firm of Kellahin and Kellahin, appearing
10 on behalf of the Applicant.

11 In addition to this case, for purposes of
12 hearing, Mr. Catanach, we would ask that you also call the
13 next case and that for purposes of hearing, the testimony
14 be consolidated with separate orders issued for each case.

15 EXAMINER CATANACH: Okay, at this time I'll call
16 Case 13,288, Application of Chesapeake Permian, L.P., for
17 compulsory pooling and an unorthodox oil well location, Lea
18 County, New Mexico.

19 Call for additional appearances in Case 13,287 or
20 13,288.

21 There being none, do you have witnesses, Mr.
22 Kellahin?

23 MR. KELLAHIN: Yes, sir, I have two witnesses to
24 be sworn.

25 EXAMINER CATANACH: Will the witnesses please

1 stand to be sworn?

2 (Thereupon, the witnesses were sworn.)

3 MR. KELLAHIN: Mr. Examiner, our first witness is
4 Lynda Townsend.

5 LYNDA F. TOWNSEND,

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

8 DIRECT EXAMINATION

9 BY MR. KELLAHIN:

10 Q. Ms. Townsend, for the record, would you please
11 state your name and occupation?

12 A. Lynda Townsend, I'm a senior landman for
13 Chesapeake Permian, L.P.

14 Q. Where do you reside, ma'am?

15 A. Guthrie, Oklahoma.

16 Q. On prior occasions have you qualified as an
17 expert petroleum landman before the Division?

18 A. Yes, I have.

19 Q. And you've testified in that capacity before?

20 A. Yes, sir.

21 Q. Have you been involved in prior compulsory
22 pooling cases?

23 A. Yes, sir.

24 Q. Pursuant to your employment for Chesapeake, have
25 you assumed the land responsibilities for consolidating

1 these interests for these wells from the prior interest
2 owner, which was Concho Oil and Gas?

3 A. Yes, sir, I have.

4 Q. There's been a transition from Concho to
5 Chesapeake?

6 A. Yes.

7 Q. When we look at the exhibits, have you satisfied
8 yourself as to the ownership within each of the 40-acre
9 oil-spacing units?

10 A. Yes, sir.

11 Q. And for both cases have you made yourself aware
12 of who the offsetting interest owners are towards whom each
13 of these two wells encroaches?

14 A. Yes, sir.

15 MR. KELLAHIN: Mr. Catanach, we tender Ms.
16 Townsend as an expert petroleum landman.

17 EXAMINER CATANACH: Ms. Townsend is so qualified.

18 Q. (By Mr. Kellahin) Ms. Townsend, let's look at
19 Exhibit 1 from Case 13,287, which is the State "22" 2 well.
20 Let's start with Exhibit 1 and have you identify for us
21 what we're seeing with this display.

22 A. Yes, sir. With the square red box in the middle,
23 that's the 40-acre spacing unit that will be dedicated to
24 this well, and it also shows the unorthodox well location
25 in the small red circle. The 40-acre units surrounding

1 that are the offsetting 40 acres and the people that own
2 those, the entities that own those.

3 To the direct north is Yates Petroleum, and
4 Chesapeake owns the other remaining units around us. And
5 those units around us have the very same interests.

6 Q. The red box is the standard location window
7 within the 40-acre spacing unit?

8 A. Yes, sir.

9 Q. So the black outline for that area has an
10 ownership that's the same as the other 40-acre tracts that
11 indicate Chesapeake as the operator?

12 A. Yes, sir.

13 Q. So we have common ownership as to two of the 40s
14 towards whom the well encroaches?

15 A. Yes, sir.

16 Q. Let's set that aside for a moment. Let's look at
17 Exhibit Number 2. Starting with the first page of Exhibit
18 Number 2, can you describe for us if we're looking at a
19 tabulation of all the interest owners within the proposed
20 40-acre spacing unit?

21 A. Yes.

22 Q. This well is intended to be drilled from the
23 surface down through the base of the Wolfcamp?

24 A. Yes, sir.

25 Q. And when we look at that ownership, it's as

1 represented on the first page of Exhibit Number 2?

2 A. Yes.

3 Q. Have you satisfied yourself to the best of your
4 knowledge that the names and addresses for these parties
5 are correct?

6 A. Yes, sir.

7 Q. And that you've tabulated to the best of your
8 knowledge the correct working interest percentage in the
9 spacing unit?

10 A. Yes.

11 Q. As we move across the display, there's a column
12 saying Participate.

13 A. Uh-huh.

14 Q. There's a series of yes's and then there's some
15 no's?

16 A. Uh-huh.

17 Q. What do those represent?

18 A. Those were the elections under the proposal
19 letter. The yes's have agreed to participate in the well,
20 the no's do not want to participate in the well.

21 Q. The no's are electing not to participate pursuant
22 to a contract?

23 A. It will be pursuant to a JOA that is being
24 negotiated right now.

25 Q. So the only interest owner on this list for which

1 you're seeking to force-pool their interest is the first
2 one, this Matrix Production Company and Matrix New Mexico
3 Holding, L.L.C.?

4 A. Yes, sir.

5 Q. Let's turn to page 2 of Exhibit 2 and have you
6 identify what we're seeing on that display.

7 A. This was the proposal letter that was sent out on
8 the State "22" Number 2 well. It was sent out by Michael
9 Braun, who's a consulting landman for us, and it was under
10 my direction.

11 Q. And when we look at page 3, there's a tabulation
12 of owners?

13 A. Yes.

14 Q. This represents all the owners, then, in the
15 spacing units?

16 A. Yes, sir.

17 Q. Following that, did Mr. Braun send these interest
18 owners a proposed AFE?

19 A. Yes, he did.

20 Q. Is it attached to this package?

21 A. Yes, it is.

22 Q. Is this AFE still the one intended to be used by
23 Chesapeake for drilling the well?

24 A. Yes, sir.

25 Q. And is it identical to the one that was used

1 under Concho's name?

2 A. Yes.

3 Q. When we look at the operator, we have a different
4 ownership entity from the entity that proposes to operate
5 the well?

6 A. Exactly.

7 Q. The ownership company is called what?

8 A. The ownership company is Chesapeake Permian, L.P.

9 Q. And the operating company that you asked to be
10 designated the operator is -- ?

11 A. Chesapeake Operating, Inc., who's the sole
12 general partner.

13 Q. To finish Exhibit 2, then, attached to that are
14 the return receipt cards --

15 A. Yes.

16 Q. -- for the well-proposal letters?

17 A. Yes.

18 Q. Let's turn to Exhibit 3 now, and explain to Mr.
19 Catanach the -- a summary of the merger whereby Chesapeake
20 Permian, L.P., acquired under this merger concept the
21 Concho interest.

22 A. In March of 2004, Chesapeake Permian, L.P.,
23 Chesapeake Permian Corporation, merged with Concho
24 Exploration, Concho Resources, Concho Oil and Gas, and
25 Concho Resources, G.P. As a result, the surviving entity

1 was Chesapeake Permian, L.P.

2 Q. And then when we look at the second page of the
3 certificate, down at the bottom we find that Chesapeake
4 Operating, Inc., is the sole general partner of the
5 Chesapeake Permian, L.P., limited partnership?

6 A. Yes, sir.

7 Q. And then finally with regards to this set of
8 exhibits, there's an Exhibit Number 4.

9 Have you reviewed this Exhibit Number 4 and
10 satisfied yourself that notice of this hearing has been
11 sent to all the parties for whom you seek to have force
12 pooling?

13 A. Yes, sir.

14 Q. And are you also satisfied yourself that notice
15 has been sent to Yates Petroleum Corporation for the well
16 location and, in addition, pursuant to Division Rules,
17 you've notified all your working interest owners in the
18 adjoining tracts that Chesapeake also operates?

19 A. Yes.

20 Q. Let's turn now to the second case, which is
21 13,288, and it deals with the Burrus "27" 9 well.

22 A. Yes, sir.

23 Q. Does your testimony as to the first case apply in
24 all respects to the second case?

25 A. Yes, sir.

1 Q. Again, let's illustrate for Mr. Catanach on
2 Exhibit 1, what are you demonstrating here?

3 A. This again is the plat that shows the 40-acre
4 spacing unit to be dedicated to this well, which is the
5 southeast northwest, it will be Unit F, and the 40-acre
6 surrounding units, which are all owned by Chesapeake and
7 have common ownership with the southeast northwest.

8 Q. On Exhibit 2, then, have you done in a similar
9 fashion as to the first case --

10 A. Yes, sir.

11 Q. -- a tabulation?

12 A. Yes.

13 Q. And when we look at the percentages, Chesapeake
14 has consolidated 69-plus percent of the working interest
15 owners?

16 A. Yes.

17 Q. The outstanding interest is this Matrix group?

18 A. Yes.

19 Q. Have you had conversations about both these wells
20 with representatives of Matrix?

21 A. We've had numerous conversations, both Michael
22 Braun and myself.

23 Q. As a result of your last conversation with them,
24 when did that take place?

25 A. It would have been last Friday.

1 Q. What did they advise you?

2 A. They advise that we would go ahead and pool them,
3 that they would use the pooling time as just an extension
4 of the proposal time and the election time.

5 Q. Is the drilling sequence for these wells such
6 that it creates the opportunity for the Matrix group to, in
7 effect, ride the well down?

8 A. Yes.

9 Q. So there's a possibility that they could learn
10 the results of the well before their 30-day election period
11 expires under the pooling order?

12 A. Yes, and that's already happened in the past.

13 Q. Do you have a recommendation to the Examiner for
14 a risk factor penalty to apply in this case?

15 A. Yes, sir.

16 Q. The Division allows a maximum of cost plus 200
17 percent; is that what you're seeking?

18 A. Yes.

19 Q. Do you have a recommendation to the Examiner for
20 overhead rates to apply to these two wells?

21 A. Yes, sir, we just pooled the Harris 3 C Number 1
22 and an order was issued on May 3rd, in which we had asked
23 for \$6500 drilling overhead and \$600 monthly.

24 Q. Does that order also include an escalator
25 provision --

1 A. Yes.

2 Q. -- for your overhead rates?

3 A. Yes.

4 MR. KELLAHIN: Mr. Catanach, for your
5 information, that is Case 13,247 and it is Order R-11,236.
6 And if I may approach your bench, I'll give you a copy.

7 EXAMINER CATANACH: Certainly. Thank you.

8 Q. (By Mr. Kellahin) Ms. Townsend, that prior case
9 involved pooling the same party that you're seeking to pool
10 in these two cases?

11 A. Yes, sir.

12 MR. KELLAHIN: Mr. Catanach, that concludes my
13 examination of Ms. Townsend.

14 We move the introduction of Exhibits 1 through 4
15 in each of those cases.

16 EXAMINER CATANACH: Exhibits 1 through 4 will be
17 admitted.

18 EXAMINATION

19 BY EXAMINER CATANACH:

20 Q. Ms. Townsend, in the case of the Burrus well, the
21 offset operators -- in that situation are they again
22 common --

23 A. Yes.

24 Q. -- with the spacing unit?

25 A. Yes, sir.

1 Q. But you did notify the working interest owners
2 anyway --

3 A. Yes.

4 Q. -- of that unorthodox location?

5 A. Yes.

6 Q. Okay. I'm noticing some discrepancy in the well
7 locations between -- if you go to the first case, your
8 initial letter proposal is a different well location than
9 what you have advertised in this case today?

10 A. Well, that was the original location before it
11 was staked off of the XY's, and we had to move it due to
12 some surface problems from the 300 to the 217, and all the
13 working interest owners are aware of that also.

14 Q. They are all aware of it?

15 A. Yes.

16 Q. So the location that's reflected in the
17 advertisement for the case, that is the true location?

18 A. That is the correct location, yes, sir.

19 Q. For both of the wells?

20 A. Yes.

21 Q. And all of the working interest owners and offset
22 operators are aware of the new location?

23 A. Yes.

24 MR. KELLAHIN: That's reflected in the
25 applications that were sent to all these parties.

1 Q. (By Examiner Catanach) Okay. And the only party
2 we're pooling in both cases is Matrix Production Company?

3 A. Yes, sir.

4 MR. KELLAHIN: It appears in two different ways.
5 They have a Matrix Production Company and then a Matrix New
6 Mexico Holdings, L.L.C.

7 Q. (By Examiner Catanach) Okay, and you wish to
8 designate Chesapeake Operating, Incorporated, the operator
9 of these wells?

10 A. Yes, sir.

11 Q. Okay. I just want to verify the overhead rates
12 as \$6500 drilling and \$600 producing?

13 A. Uh-huh, yes, sir.

14 Q. Okay. Have all the other interest owners that
15 have agreed -- have they actually signed agreements?

16 A. They have.

17 Q. Okay.

18 A. They have.

19 EXAMINER CATANACH: I think that's all I have,
20 Mr. Kellahin.

21 MR. KELLAHIN: Okay, thank you.

22 THE WITNESS: Thank you, sir.

23 EXAMINER CATANACH: Thank you.

24 MR. KELLAHIN: At this time, Mr. Catanach, we'd
25 call Mr. David Godsey.

1 DAVID A. GODSEY,
2 the witness herein, after having been first duly sworn upon
3 his oath, was examined and testified as follows:

4 DIRECT EXAMINATION

5 BY MR. KELLAHIN:

6 Q. For the record, sir, would you please state your
7 name and occupation?

8 A. David Godsey, I'm a geologist with Chesapeake
9 Energy.

10 Q. On prior occasions, Mr. Godsey, have you
11 testified as an expert geologist before the Division?

12 A. Yes, I have.

13 Q. Pursuant to your employment with Chesapeake, are
14 you the principal geologist that has recommended to your
15 management the drilling of these wells at these unorthodox
16 locations?

17 A. Yes, I am.

18 Q. And has management accepted your recommendations?

19 A. Yes.

20 Q. Are we about to look at a summary of the
21 technical reasons that cause you to believe that the
22 proposed unorthodox location is the optimum location in
23 each of these 240s in which to drill this well --

24 A. Yes.

25 Q. -- these wells?

1 MR. KELLAHIN: We tender Mr. Godsey as an expert
2 petroleum geologist.

3 EXAMINER CATANACH: He is so qualified.

4 Q. (By Mr. Kellahin) Let's turn to Exhibit 5 of the
5 first case, which is 13,287, and we're looking at the State
6 "22" 2. Start off and tell us what we're seeing before we
7 talk about the details.

8 A. Okay, this is a map essentially of the net
9 porosity isopach of this area, specifically Section 22 is
10 what's shown on this map. The yellow background is merely
11 a representation of the gross Chesapeake leasehold,
12 indicated in yellow. The colors from blue through green to
13 orange to red indicate increasing amounts of porosity as
14 gleaned from a combination of well control and 3-D seismic
15 interpretation.

16 Q. Let's step back a minute. Both of these wells
17 are targeted to be Wolfcamp oil wells?

18 A. Yes, they are.

19 Q. When we look at this kind of 3-D seismic
20 interpretation, we often see this displayed as an
21 indication of structure. Is that what we're seeing here?

22 A. No, it's not, this is not a representation of
23 structure at all. This is a representation of porosity
24 development in the Trinity, quote, unquote, Burrus pay,
25 which is the producing zone for this area.

1 Q. We'll come back and have you illustrate to Mr.
2 Catanach how you do that, but first of all let's look at
3 Exhibit 5 as the summary. If we look within the red
4 circle, what does that -- the red square, what does that
5 represent?

6 A. The red square is the orthodox box for that 40-
7 acre unit.

8 Q. While it's very difficult to see, Mr. Godsey, can
9 you describe for Mr. Catanach the approximate unorthodox
10 location as it would be reflected on this display?

11 A. Yes, the -- I do apologize, that location doesn't
12 show up very well on this display, but if you look very
13 closely, in the lightest green color immediately to the
14 northeast outside of the orthodox box, just inside there
15 you can very lightly see a very light red circle, which
16 would represent the unorthodox location we requested.

17 Q. On my display, Mr. Godsey, the red circle turns
18 out to be a very faint black line.

19 A. Very faint. I guess the red on top of the green
20 turns out to be more black in the display, I guess.

21 Q. Let's talk about the color code. When you're
22 looking at this type of color code, which is the best
23 possible color that will give you the greatest opportunity
24 to intersect the Wolfcamp with a zone of the greatest
25 potential porosity?

1 A. The hotter colors are the areas of greatest
2 porosity development. The cooler colors are the areas with
3 the least amount of porosity development. So in this color
4 scheme the dark blue which you see there would be poorest
5 porosity development, and it progresses up through the
6 light blue to the turquoise color, through the green phase,
7 into the orange, and then red would be the greatest amount
8 of porosity development.

9 Q. For this spacing unit, it appears from this
10 display that the greatest opportunity is going to be in an
11 area that's the light green?

12 A. That's correct, for this location.

13 Q. Is it appropriate for the Examiner in this case
14 to apply the maximum risk factor penalty of 200 percent?

15 A. I think so. This is a risky play where we're
16 utilizing, as well as we can, state-of-the-art seismic data
17 to pinpoint locations to give us the greatest chance of
18 making a commercial well.

19 Q. On this display there is a -- I would call it a
20 cross-section line. There's a dashed black line that runs
21 from the western portion up through the standard location
22 on up to the north. See that line?

23 A. Yes.

24 Q. What does that represent?

25 A. That line is a seismic line that we extracted out

1 of the 3-D seismic volume to illustrate what we're mapping
2 on and the relationship between the porosity development
3 and nonporosity development within the pay interval.

4 Q. Let's go to Exhibit 6. That line is, then, what
5 we're beginning to show on Exhibit 6?

6 A. Yes, Exhibit 6 is that line represented -- you
7 see on the map. It comes from the west -- in an east-west
8 direction to approximately just past the center point of
9 the 40-acre unit, and then turns to the northeast, goes
10 through our location and off the edge of the map.

11 Q. Let's start at the top of the map. There is a
12 rig displayed on the top, and then there's a red line
13 projected down from that point, going vertically through
14 the cross-section down. What does that line represent?

15 A. Right, where the rig falls on the seismic line
16 and the red line projecting below it, that is a
17 representation of the location that we're requesting to
18 drill.

19 Q. Can you use that line and take us vertically down
20 to where you see a point that represents the interpreted
21 top and the bottom of this Wolfcamp pay interval you're
22 trying to access?

23 A. Yes, as you follow that line down the page,
24 you'll come to a hotter-colored area with a red line
25 through it. It's labeled "Trinity 'Burrus' porosity" over

1 on the right side of the display. That hotter-colored
2 area, which the location is centered in, is the porosity
3 development that we interpret from the seismic data.

4 Q. Take us over to the left of that display, along
5 that point, and show us where you would be if the well is
6 required to be at the closest standard location.

7 A. Well, the closest standard location would fall,
8 really, just to the left of the red line, which is the --
9 what we glean to be the maximum extent of the commercial
10 porosity development. So it would fall, really, just into
11 the greenish color on the seismic line.

12 Now, let me back up with one explanation here.
13 The absolute color scheme you see on the seismic line and
14 the color scheme on the map are not necessarily identical
15 as far as blue being blue and green being green, et cetera.
16 The reason for that is, on the seismic line we're seeing
17 the entire color spectrum display of the amplitude of the
18 seismic data, whereas on the map we're looking and applying
19 color only to the portion that has an amplitude that would
20 represent porosity. Otherwise, we'd have color --
21 otherwise you wouldn't see the yellow part, you'd have
22 just, you know, bluer and bluer colors as you went through
23 there.

24 But it still holds in the relative sense that the
25 hotter colors are the more porous interval, and the cooler

1 colors are the nonporous intervals.

2 Q. Let's take this display, and starting with the
3 projection of the unorthodox well location wellbore, going
4 downward through the Trinity Burrus porosity, on downward,
5 there's a point at which that projection intersects a
6 horizontal line that's also red.

7 A. Yes.

8 Q. And below that, then, we have some shading of hot
9 reds and yellows. What does that represent?

10 A. Well, the red line you see drawn through the
11 seismic data is a seismic reflector that we can map on
12 regionally throughout the area. It would approximate the
13 well-known mapping horizon in New Mexico called the Double
14 X marker. It's just a very good horizon to map on
15 throughout the area. We can tie it continuously with the
16 well control.

17 Now, below that, in that hotter-colored region
18 that you see extending across the seismic line, that is an
19 interval of the lower Wolfcamp that we call this area.
20 There is some porosity development within it. There's also
21 shale within it.

22 Now, shale can give you a similar-looking
23 amplitude to porosity, so it is very -- well, it's very
24 important to stay within the interval that you're working
25 in, to interpret the porosity development. If you get off

1 into a different lithology, et cetera, then you could
2 confuse a hot amplitude with the porosity when it's really
3 not.

4 Q. So a standard location for this well, drilling
5 through the Wolfcamp, would not intersect a marker below
6 the red line that's indicative of Wolfcamp porosity?

7 A. Not in this case. Right in here there have been
8 -- in Section 22 I believe there were two or three -- three
9 other wells that went deep enough to see that lower
10 Wolfcamp section, and there's no commercial production in
11 that lower Wolfcamp section from those wells.

12 A case in point, the well that you see to the
13 west of our location, the Field Greathouse Number 1, you
14 see it -- it's depicted on the seismic line and on the map
15 area there. It went all the way through that Wolfcamp
16 section and found no commercial hydrocarbons in the lower
17 Wolfcamp.

18 Q. So for the spacing unit that's the subject of
19 this case, unless the well is drilled at the unorthodox
20 location, you're not going to be able to access this zone
21 of porosity in the Wolfcamp?

22 A. That is correct. A case in point here, if you
23 look at that seismic line and go from our requested
24 location in that hot-colored area, as you proceed to the
25 left on the line you'll see we come out of the hot color

1 into the greens and then into blues. If you follow that
2 all the way over to the Field Greathouse well, you'll see
3 in that equivalent interval of the Trinity Burrus porosity,
4 you'll see it's all blues and greens, and that is a
5 depiction of no porosity development, or no commercial
6 porosity development, within that interval, and that is
7 what that well found. It is a dry hole.

8 Now, just below that where you do start to see
9 some hotter colors below that blue and green, in that Field
10 Greathouse, you can trace that interval all the way across
11 the seismic line. It cuts -- and if you go actually below
12 where our porosity is depicted on our requested location --
13 that is essentially the contact between the -- say the
14 dolomite, which is the pay interval for this Trinity Burrus
15 pay and the typical Wolfcamp lime horizon, which many
16 workers will map on that contact between dolomite and
17 limestone.

18 Q. Let's move over into the second set of exhibits
19 for the second case and look at Exhibits 6 and 7 [sic] in
20 Case 13,288 for the Burrus "27" 9 well. Starting again
21 with Exhibit 5, it gives us the overview of the 3-D seismic
22 display.

23 A. Right, the color-scheme, the setup on both maps
24 are the same. Again in red, you see the orthodox box
25 depicted in the red square there on the map. You can see a

1 little more clearly this time the location that we're
2 requesting at this hearing for the Burrus "27" 9, and
3 again, you can see the porosity development depicted by the
4 color isopaching here that we're trying to target with our
5 location.

6 Again, you also see a seismic line on there
7 running from southwest of the orthodox box, through that
8 orthodox box and our location, turning and then going to --
9 in a north northwesterly direction, through the Burrus
10 Number 7, which is a producing well to the north of our
11 unit.

12 Q. Let's go to Exhibit 6 in this case and have you
13 describe for us what you see on this summary.

14 A. Okay, Exhibit 6 is a seismic line, again, that
15 you see depicted on Exhibit 5. Same color scheme and
16 format as we saw on the previous seismic line.

17 Again, you see a drilling rig in red with a red
18 line below that. That would be the representation of our
19 requested location. As you follow that line down the
20 seismic section, you'll see the hot-colored area with the
21 red line drawn through it, and that is the development of
22 the Trinity Burrus porosity we've interpreted in the
23 seismic data.

24 As you follow that from our location to the east,
25 you can see where that hot color disappears into greens and

1 then comes back in again, and then to the far right of the
2 line you see the dashed line, which is the Burrus Number 7,
3 which is a producing well in this Trinity Burrus porosity.
4 And basically that gives you a good look at what a
5 producing interval looks like in the seismic data.

6 Again, also, the deeper horizons below that in
7 red, you can see the Wolfcamp Double-X marker, so you can
8 see that this seismic section is very similar to the
9 previous one shown.

10 Q. In each of these cases, Mr. Godsey, is the
11 proposed unorthodox location superior to any location
12 within the standard drilling blocks?

13 A. Absolutely.

14 MR. KELLAHIN: Mr. Catanach, that concludes my
15 examination of Mr. Godsey.

16 We move the introduction of his Exhibits 5 and 6
17 in each of the two cases.

18 EXAMINER CATANACH: Exhibits 5 and 6 in each of
19 the cases will be admitted as evidence.

20 MR. KELLAHIN: That concludes our presentation.

21 EXAMINATION

22 BY EXAMINER CATANACH:

23 Q. Mr. Godsey, how thick is this Trinity Burrus sand
24 -- I mean, not sand but interval?

25 A. Well, the gross interval of pay gets up to

1 approximately 50 feet. The net porosity or net pay in
2 productive wells ranges from a few feet up to around 30 on
3 the high side, out of that 50-foot gross interval.

4 Q. What does the Burrus Number 7 have? Do you
5 recall?

6 A. I was afraid you were going to ask me that, since
7 I didn't bring the data. I'd be glad to get that
8 information and send it to you.

9 At this point I can only guess, and I can
10 guarantee you if I got the exact number right it would be a
11 pure guess. It's somewhere in the 15- to 20-foot range, is
12 my recollection, but I'd be glad to supply you that
13 information.

14 Q. How do you determine what the commercial cutoff
15 is for this porosity?

16 A. That's a good question. This is a -- it's not
17 always very easy, but in this case we have a pretty good
18 bit of well control to tie into the seismic data. We do
19 have sonic logs on numerous wells that have been drilled in
20 here, which help tie us very accurately to the seismic data
21 itself by creating a synthetic seismogram.

22 Then we take the porosity logs, and by that I'm
23 utilizing the neutron density logs, and look at the
24 porosity development with them, within them. And we look
25 at it -- it's kind of an iterative process where you look

1 at the amount of porosity that you have, and is the well
2 good, bad or dry, and compare that to the amplitude that
3 you see on the seismic data until you get something that
4 fits.

5 A case in point would be on Exhibit 5 for the
6 State 22 Number 2, that map. In the southeast corner of
7 the map, Unit P, is the Burrus Number 2 well, drilled in a
8 very large blue area. That was drilled by our predecessors
9 in this property, and the vertical well actually is a
10 noncommercial dry hole.

11 After attempting a completion and being
12 unsuccessful in making a commercial well, then they went
13 back in and cut a window and drilled a horizontal so that
14 the end of the horizontal leg ended up in the southeast, in
15 that hot color to the southeast quadrant of the map, made a
16 commercial well there.

17 Utilizing that well and some of the other wells
18 in here we can, you know, start figuring out what amplitude
19 would represent how much porosity.

20 So effectively for a -- in this field, for this
21 pay, effectively approximately a 10-percent porosity cutoff
22 seems to fit the best with a combination of the seismic
23 data, amplitude anomaly we see, and making a commercial
24 well.

25 Another example in the well control here would be

1 on that same map, the State 22 Number 1, which is in Unit H
2 on this. That well, again, is in a blue area. It had just
3 slightly more porosity than the Burrus Number 2.

4 The Burrus Number 2 actually had zero feet of
5 porosity greater than 10 percent, but it had about 8 feet
6 greater than 6 percent and did not make a commercial well,
7 whereas the State 22 Number 1 had just a few feet that
8 reached 10-percent porosity.

9 After several larger and larger acid jobs, they
10 did make a commercial well out of that -- this is our
11 predecessors -- but it was a very marginal well -- I think
12 it came in something on the order of about 30 barrels a
13 day; it's currently doing around 15 barrels a day --
14 whereas the typical other Burrus wells out here with better
15 porosity development and drilled in what we see as the
16 hotter color region, some of them are 200-plus-barrel-a-day
17 wells.

18 Q. Now, there's no scale on these maps. How do you
19 determine what you're looking at here in terms of -- is
20 this -- are you mapping porosity?

21 A. Correct. You're talking about no scale as far as
22 the contour interval?

23 Q. Right.

24 A. Right, this would effectively be about a 5-foot
25 contour interval.

1 Now, keeping in mind -- and I'm only giving that
2 an approximation, because the resolution of the seismic
3 data, when we're looking at a gross-interval of porosity
4 development that is 50 feet or less, then, you know, the
5 seismic data really limits you a little bit. When I say 5
6 feet, maybe it's more like 7 feet contour interval. It is
7 kind of approximate.

8 What we do have a good handle on is, where is
9 zero, which is depicted by the blue line there for
10 commercial porosity.

11 Q. Now, this is 10-percent or greater?

12 A. We are using a 10-percent porosity cutoff, yes,
13 and that ties in with wells that did or did not make
14 commercial wells.

15 If you don't have -- we have not found a well
16 right in here that has made a commercial well with less
17 than 10-percent porosity. It had to have some 10-percent
18 porosity or it did not make a well.

19 Q. So if you go by these maps, for instance, the
20 State "22" Number 2 would have -- Can you estimate how many
21 feet of porosity that would have?

22 A. I'm estimating it to have something in the order
23 of 20 feet.

24 Q. And that, to you, would make a commercial well?

25 A. Yes, it would.

1 Q. If you moved back to a standard location anywhere
2 in that window, you lose all of the effective porosity?

3 A. We might get anywhere from -- you know, we would
4 have either zero up to maybe two or three feet, is our
5 interpretation of that.

6 And if we have to drill there, my recommendation
7 to Chesapeake would be not to drill. We have found this is
8 another one of those plays that is very site-specific for
9 your location.

10 Q. Okay. And with regards to the Burrus "27" 9,
11 you're kind of looking at the same situation. Is that
12 about the same thickness?

13 A. That's the same thing there. What we have -- you
14 can see on that map just a small little segment of blue
15 color in there, and we'd be trying to get something that's
16 going to be on the order of, you know, two or three feet of
17 porosity. And again, if I have to drill there I would
18 recommend to Chesapeake not to drill the well.

19 Q. At your proposed location, what do you estimate
20 that to be?

21 A. At the proposed location, I'm expecting on the
22 order of 15 feet. I'd be glad to get 20.

23 Q. And a standard location you're probably looking
24 at -- did you say two or three feet maybe?

25 A. At best, yes.

1 Q. The same for the "22" 2?

2 A. Yes.

3 Q. Have you guys utilized this method of trying to
4 find the porosity, to drill wells?

5 A. Yes, we have. Utilizing this method we have
6 drilled -- let's see, this year we've drilled four wells
7 that -- we drilled two of them -- I'm sorry, three wells in
8 the hotter-color region, anything from green to orange to
9 red, and they're good wells.

10 One of them -- Let's see, we drilled in the
11 section to the east, Section 23, we drilled the Burrus "23"
12 3, the "23" 5, and we just drilled and are completing now
13 the Burrus "23" Federal Number 1, all in Section 23, and
14 they've made commercial wells.

15 We have also drilled just recently the Harris "3"
16 C Number 1 in Section 3 of the township immediately to the
17 south. This is just a mile and a half or so away. The
18 same stuff, the same horizons. There, we were in the --
19 kind of a blue-green color, and we have now temporarily
20 abandoned that well, which supports our interpretation that
21 we have to be in this green stuff, or we cannot find
22 commercial pay.

23 Q. Is this basically the only target in the well?

24 A. Yes, it is.

25 MR. KELLAHIN: Okay, that's all I have, Mr.

1 Kellahin.

2 MR. KELLAHIN: That concludes our presentation.

3 EXAMINER CATANACH: Okay, there being nothing
4 further, Cases 13,287 and 13,288 will be taken under
5 advisement.

6 (Thereupon, these proceedings were concluded at
7 10:27 a.m.)

8 * * *

9
10
11
12
13
14
15 I do hereby certify that the foregoing is
16 a complete record of the proceedings in
the Examiner hearing of Case No. 13287, 13288
heard by me on June 24, 2004.
17 David H. Catanch, Examiner
18 Oil Conservation Division
19
20
21
22
23
24
25

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 June 30th, 2004.



STEVEN T. BRENNER
CCR No. 7

My commission expires: October 16th, 2006