							Page 1	
3	BY THE O	IL CO	OF THE HEARI NSERVATION DI F CONSIDERING	VISION FOR				
5	APPLICAT	ION O	F XTO ENERGY, INC. RACTION, POOL EXPANSION RD SPACING AND PRORATION ULSORY POOLING, SAN JUAN	INC.			E NO. 15020	
6	AND NONS	TANDA		ORIGINAL				
7	COUNTY,		•					
8								
9	REPORTER'S TRANSCRIPT OF PROCEEDINGS							
10	EXAMINER HEARING							
11			July	12, 2013				
12			Santa Fe	, New Mexico		(C)		
13						3		
14	BEFORE:			CHIEF EXAMINE LEGAL EXAMINER				
15			•	ECHNICAL EXAMI		رد ب	<b>3</b> 3	
16						5	Secretary Control of the Control of	
17								
18	This matter came on for hearing before to New Mexico Oil Conservation Division, Richard Ezeanyim							
19	Chief Ex	amine	r, David K. Brooks, Legal Examiner, and e, Technical Examiner, on Friday, July 12, New Mexico Energy, Minerals and Natural artment, 1220 South St. Francis Drive,					
20	2013, at	the						
21		-		ta Fe, New Mex				
22								
23	REPORTED	BY:	Mary C. Hank New Mexico C	ins, CCR, RPR CR #20				
24	Paul Baca Professional Court Reporters 500 4th Street, Northwest, Suite 105							
25			Albuquerque, New Mexico 8710					

1	APPEARANCES	Page 2
		!
2	FOR APPLICANT XTO ENERGY, INC.:	
3	JAMES G. BRUCE, ESQ. Post Office Box 1056	
4	Santa Fe, New Mexico 87504 (505) 982-2043	
5	jamesbruc@aol.com	
6		
7	INDEX	PAGE
8	Case Number 15020 Called	3
9	XTO Energy, Inc.'s Case-in-Chief:	
10	Witnesses:	
11	Cy Zimmerman:	
12	Direct Examination by Mr. Bruce	3,18
13	Cross-Examination by Examiner Ezeanyim	12
14	Charles Musekamp:	
15	Direct Examination by Mr. Bruce Cross-Examination by Examiner Goetze	19 27
16	Cross-Examination by Examiner Ezeanyim Cross-Examination by Examiner Brooks	27 35
17	Proceedings Conclude	36
18	Certificate of Court Reporter	37
19		
20	EXHIBITS OFFERED AND ADMITTED	
21	XTO Energy, Inc. Exhibit Numbers 1A, 1B through 11	11
22	XTO Energy, Inc. Exhibit Numbers 12 through 16	26
23		
24		
25		
1		

## PAUL BACA PROFESSIONAL COURT REPORTERS

- 1 Q. And what is your job with XTO?
- A. I'm an associate landman.
- 3 Q. Have you previously testified before this
- 4 Division?
- 5 A. Yes, I have.
- 6 Q. And were your credentials as an expert
- 7 petroleum landman accepted as a matter of record?
- 8 A. Yes.
- Q. And does your area of responsibility at XTO
- 10 include this portion of northwest New Mexico?
- 11 A. Yes, it does.
- 12 Q. And are you familiar with the land matters
- 13 involved in this case?
- 14 A. Yes, I am.
- MR. BRUCE: Mr. Examiner, I tender Mr.
- 16 Zimmerman as an expert petroleum landman.
- 17 EXAMINER EZEANYIM: Mr. Zimmerman is so
- 18 qualified.
- 19 Q. (BY MR. BRUCE) Mr. Zimmerman, would you please
- 20 identify Exhibit 1A?
- 21 A. Yes. Exhibit 1A is a C-102 which shows our
- 22 nonstandard unit in the Mancos Formation. It is
- 23 comprised of the north half of Section 16 and the
- 24 northeast quarter of Section 17 of Township 29 North,
- 25 Range 14 West, which is the project area for XTO's Ropco

- 1 16-1H well. The well is located in the
- 2 northeast-northeast quarter of Section 16, and then it
- 3 will be drilled south and to the west in the terminus of
- 4 the southwest-northeast quarter of Section 17.
- 5 Q. What pools are currently involved in this well
- 6 unit?
- 7 A. (There are two pools) In the south half of the
- 8 northwest quarter of Section 16, there is the
- 9 ChaCha-Gallup pool, which is an oil pool spaced at 80
- 10 acres. The remaining acreage in the well unit is the
- 11 Basin Mancos pool, which is spaced on 320 acres.
- 12 Q. What does XTO seek in this case?
- 13 A. We seek to contract the ChaCha-Gallup pool by
- 14 removing the south half of the northwest quarter of
- 15 Section 16 and expand the Basin Mancos pool by adding
- 16 that 80 acres. That way all the acreage in the well
- 17 unit will be on one pool to satisfy the terms of Order
- 18 R-13714. And we also seek approval of the nonstandard
- 19 unit and point of all interests in the nonstandard unit.
- Q. And the order you just mentioned, R-13714,
- 21 denied pooling because there were two different pools in
- 22 the project area, correct?
- 23 A. That is correct.
- Q. If you look at the other acreage in Sections 16
- and 17, who is the primary working interest?

- 1 A. XTO owns or controls that acreage, so nobody's
- 2 being excluded from the well unit due to land ownership.
- 3 Q. I refer you to Exhibit 1B, and could you
- 4 discuss any other reasons for the nonstandard unit?
- 5 A. Yes. Exhibit 1B is an aerial photo of the well
- 6 unit. As you can see, we're placing the well near an \_\_
- 7 exiting well site located in the northeast-northeast
- 8 quarter of Section 16, and it's also near the highway,
- 9 (which minimizes surface disturbance.
- In addition to drilling the well as we
- 11 propose, it will allow us to access reserves without
- 12 disturbing farmland and residential area.
- 13 Q. And the residential area is more into Section
- 14 17?
- 15 A. That is correct.
- Q. And where the surface location is, it looks
- 17 like it is somewhat hilly, so there is no farming on
- 18 that land either?
- 19 A. That is correct. Yes.
- 20 Q. What is the working interest ownership in the
- 21 well unit? And I refer you to Exhibit 2.
- 22 A. Exhibit 2 is Exhibit A to the JOA. It lists
- 23 the interest owners in the well and their working
- 24 interest percentages.
- Q. Who do you seek to pool?

## Page 7

- 1 A. We seek to pool the two\_unleased mineral owners
- 2 that are listed at the bottom of Exhibit A. It's the
- 3 State Highway Department and West American Corporation,
- 4 and they own fee minerals in the northeast quarter of
- 5 Section 17.
- 6 Q. What about the other parties of the JOA?
- 7 A. The other parties to the JOA, they've either
- 8 signed the JOA, or we've entered into a term assignment.
- 9 Q. Could you summarize your contacts with the
- 10 parties being pooled?
- 11 A. Yes. First, West American Corporation is
- 12 unlocatable. The records of the Public Regulation
- 13 Commission show that its corporate charter was revoked
- 14 in 1958. When Lance Oil & Gas Company drilled the
- 15 Fruitland Coal and Pictured Cliffs wells in 2004 and
- 16 2005, in Section 17, it tried to locate the company, and
- 17 it found out that it had filed for bankruptcy. And
- 18 there are also no known successors.
- 19 Q. What about the Highway Department?
- 20 A. The Highway Department, we sent a proposal
- 21 letter, marked as Exhibit 3. We sent that on March
- 22 11th, 2013. And I also followed up with the e-mail
- 23 marked as Exhibit 4, and I then called and spoke to the
- 24 Department's attorney. And they were not interested in
- 25 joining or leasing the well, so they told us to go ahead

- 1 and force pool them. And they also were force pooled in
- 2 2005 by Lance Oil & Gas Company.
- 3 Q. In your opinion, has XTO made a good-faith
- 4 effort to obtain the voluntary joinder of the interest
- 5 owners in the well?
- 6 A. Yes, we have.
- 7 Q. And would you identify Exhibit 5 and discuss
- 8 the cost of the well?
- 9 A. Yes. Exhibit 5 is the AFE for the well. The
- 10 well has an estimated dry-hole cost of approximately
- 11 2,775,000 and a completed well cost of about 3,746,000,
- 12 totaling around 6,521,000.
- 13 Q. And are these costs in line with the cost of
- 14 other horizontal wells drilled in northwest New Mexico?
- 15 A. Yes, they are.
- 16 Q. Do you request that XTO be appointed operator
- 17 of the well?
- 18 A. Yes.
- 19 Q. Do you have a recommendation of the overhead
- 20 rates?
- 21  $\nearrow$  A. Yes. We request that \$10,000 a month be
- 22/ allowed for drilling the well and \$1,000 a month be
- 23 \allowed for producing the well, which matches our JOA
- 24 in which the other working interest owners signed off
- 25 on.

- 1 Q. And are these amounts equivalent to those
- 2 normally charged by XTO in this area?
- 3 A. Yes, it is. It's what we used in the two
- 4 previous horizontal wells that we drilled earlier this
- 5 year.
- 6 Q. Do you request that these rates be adjusted
- 7 periodically as provided by the COPAS accounting
- 8 procedure?
- 9 A. Yes.
- 10 Q. And do you request that the costs -- the
- 11 maximum cost plus 200-percent risk charge for the
- 12 interest owners who have nonconsent in the well?
- 13 A. Yes.
- 14 Q. Were the parties being pooled notified of this
- 15 hearing?
- 16 A. Yes. Exhibit 6 is an Affidavit of Notice to
- 17 the Highway Department, and on the next page, Exhibit 7,
- 18 is the Affidavit of Publication from the Farmington
- 19 paper regarding West American.
- Q. And as to the nonstandard unit, who was
- 21 notified?
- 22 A. Exhibit 8 is a list of interest owners in the
- 23 northwest quarter of Section 17. We notified these
- 24 parties, as shown on Exhibits 9 and 10 on the following
- 25 pages.

- 1 Q. Now, you notified the northwest quarter of
- 2 Section 17. Conceivably, the well could, I suppose, be
- 3 extended over to that, but as to other acreage
- 4 surrounding your proposed nonstandard project area, who
- 5 (is the operator?
- $6 \setminus A.$  XTO is.
- 7 Q. As to contracting the ChaCha-Gallup pool, who
- 8 is the mineral owner of the south half of the northwest
- 9 quarter of Section 16?
- 10 A. That would be state land, and XTO is the
- 11 lessee. And we gave notice to the Land Office, as shown
- 12 on Exhibit 11.
- 13 Q. Were Exhibits 1 through 11 prepared by you or
- 14 under your supervision or compiled under company
- 15 business records?
- 16 A. Yes.
- Q. And in your opinion, is the granting of this
- 18 application in the interest of conservation and the
- 19 prevention of waste?
- 20 A. Yes.
- Q. And, for example, if we can't get this
- 22 accomplished, there would be no way to join West
- 23 American in the well unit?
- 24 A. Correct. They're not locatable.
- 25 O. Not locatable.

- 1 they bought easements; sometimes they condemned them.
- 2 Sometimes when they got the easement, there was actually
- 3 a deed, and they conveyed the minerals under the
- 4 highway. And so the State Highway Department owns
- 5 little bits and pieces of minerals.
- 6 I've had to force pool them several times
- 7 in Eddy County, up in Colfax County, places like that,
- 8 and they have never responded to any lease offer or any
- 9 other thing. They just refuse to do anything. I don't
- 10 know why. They could get a better deal if they would
- 11 lease.
- 12 And under state law, it's not treated like
- 13 the Land Commissioner. You can't force pool the Land
- 14 Commissioner. But this is treated, essentially, as fee
- 15 land, which is why we're pooling.
- EXAMINER EZEANYIM: Oh, okay.
- 17 CROSS-EXAMINATION
- 18 BY EXAMINER EZEANYIM:
- 19 Q. Okay. Let's talk about ownership in those two
- 20 sections. I know you mentioned -- what's your name
- 21 again?
- 22 A. Cy Zimmerman.
- 23 Q. Zimmerman. Okay.
- 24 In Sections 16 and 17, can you describe the
- 25 \ nature of the land ownership?

- 1 A. Yes. XTO is primarily the working interest
- 2 owner in the south half of Section 16 --
- 3 MR. BRUCE: North half.
- 4 A. -- the north half of Section 16 and also the
- 5 northeast quarter.
- 6 Q. (BY EXAMINER EZEANYIM) And your working
- 7 interest is in the north half of Section 16, right?
- 8 A. Correct.
- Q. And then, obviously, the north half of 17?
- 10 A. Correct.
- 11 Q. You don't own anything in the south half of the
- 12 section?
- 13 A. We have some working interest in the south
- 14 half. In both sections, we're primarily the interest
- 15 ,owner.
- 16 Q. My question is: You know the Mancos -- you are
- 17 going to deplete that ChaCha-Gallup. Presume you
- 18 deplete it. You deplete it, and then you go to the
- 19 Basin-Mancos, and the Basin-Mancos is developed in the
- 20 320. And you can't drill your horizontal gas well on
- 21 the 320. I just want to know. Is this because of the
- 22 land, geology or engineering that you added that quarter
- 23 section to the 320 in Section 17?
- 24 A. I believe it's because we wanted to maximize
- 25 our leasehold interest and to maximize with the

- 1 intervals that we're going or the length of the
- 2 wellbore. That's why we chose this project area.
- Q. What do you mean by maximize the leasehold
- 4 interest?
- 5 A. To where we don't have to add on more acreage \
- 6 within the well unit. You know, we'll -- to shorten the
- 7\ project area, we are able to maximize our leasehold
- 8 interest in the wellbore.
- 9 Q. So you are saying -- you are a land person,
- 10 right?
- 11 A. Yes, sir.
- 12 Q. And you are saying it's because of a land
- issue, so not really geology or anything else?
- 14 A. Well, there might be -- our geologist can
- 15 testify as to why there are geology reasons.
- There is an existing well pad that we
- 17 wanted to use in the northeast-northeast of Section 16.
- 18 Q. I understand that.
- 19 A. And so we wanted to be able to use that one,
- 20 and that's why we chose that surface location. And
- 21 that's primarily the reason.
- 22 Q. Yeah, I know. I know you have an interest.
- 23 You have the right to drill where you want to drill, but
- 24 I want to determine the exact reason why you want to do
- 25 that. Don't get me wrong. Any operator has, you know,

- 1 the right to drill where they want, but the manner of
- 2 the drilling is where I come in. And that's why I'm
- 3 asking this question, to determine whether -- what you
- 4 are doing is best by engineering, land or geology. And
- 5 if I can get that, that would help in determining what
- 6 to do.
- 7 The standard unit is 320 in the
- 8 Basin-Mancos, and if the standard unit is 320 -- I know
- 9 you are outside that, I know. That has nothing to do
- 10 with what we're talking about. But if you can drill
- 11 that 320, it seems like -- I mean, I don't know. Since
- 12 you own an interest in both sections -- you own in
- 13 Section 16 and Section 17, so maybe -- I don't know --
- 14 you have a geologist in here who can say why you want to
- 15 do that, so we can begin to look at it.
- You say it's because of the land, but now
- 17 we need to evaluate that situation on whether it's
- 18 engineering or geology-wise --
- 19 A. Okay.
- 20 Q. -- because all we're looking at to be able to
- 21 explore the most hydrocarbons, the most -- project from
- 22 those things, and how do we do it in an orderly manner.
- 23 That's what we're doing, you know. And that's why --
- 24 the operators and the OCD, because the operator -- if I
- 25 were you, I would do what you're doing. But if you're

- 1 in my shoes, you would do what I'm doing. Okay? So
- 2 don't get me wrong. I'm trying to ask all these
- 3 questions because I want to know how best to exploit
- 4 these minerals to be a win-win situation for everybody.
- 5 A. Okay. And I'll --
- 6 Q. You understand why I'm asking the question?
- 7 A. Yes, sir, I do. And our engineer's not here
- 8 right now, and I can get back with you at a later date
- 9 regarding the engineering reasons.
- 10 Q. You don't have any -- you have a geologist, but
- 11 no engineer?
- MR. BRUCE: Mr. Examiner, we do have a
- 13 geologist. And I would state that we did have an
- 14 engineer at the prior hearing to discuss these matters,
- 15 and I would refer you to Case -- I forget the case
- 16 number, but the one that resulted in Order R-13714, and
- 17 you did question the engineer about the engineering
- 18 reasons.
- 19 EXAMINER EZEANYIM: In this general area?
- 20 MR. BRUCE: This specific well unit.
- 21 EXAMINER BROOKS: It was the same well?
- 22 EXAMINER GOETZE: We're back again.
- 23 EXAMINER EZEANYIM: Oh, the same well.
- MR. BRUCE: Same well.
- EXAMINER EZEANYIM: Why are we here, then?

```
Page 18
                   MR. BRUCE: This well, this exact well.
 1
                   EXAMINER BROOKS: Same one.
 3
                   EXAMINER EZEANYIM: Okay. Now, if pooling
     is granted, is it from the surface of the Mancos?
 5
                   MR. BRUCE:/
                               Just the Maneos.
 6
                   EXAMINER EZEANYIM: You may step down.
 7
                   MR. BRUCE: Just one question,
     Mr. Zimmerman.
                   CONTINUED DIRECT EXAMINATION
10
     BY MR. BRUCE:
11
              Mr. Ezeanyim did ask you about mineral owners.
     If Section 16 includes the underlying mineral owners --
12
              XTO.
13
         Α.
              No, no. The mineral owner of the fee --
14
         Q.
15
              Oh.
                  The state.
         Α.
             The State of New Mexico?
16
         Ο.
17
             Uh-huh.
         Α.
18
              And in the northeast quarter of Section 17,
19
     what type of land is that?
20
         A. Fee.
21
         Q. Okay. Thank you.
22
                   EXAMINER EZEANYIM: So 16 is state land,
     and 17 is fee?
23
24
                   MR. BRUCE: Yes.
25
```

- 1 Mr. Musekamp as an exert petroleum geologist
- 2 EXAMINER EZEANYIM: So qualified.
- 3 Q. (BY MR. BRUCE) Mr. Musekamp, tell the Examiner
- 4 why you want to drill -- why XTO chose this
- 5 particular-shape wellbore for this well. First of all,
- 6 could you identify Exhibit 12?
- 7 A. This is a location map of Township 29 North, 14
- 8 West, around Sections 16 and 17. It shows our wellbore
- 9 trajectory going towards the west. S-H stands for
- 10 surface hole, and B-H stands for bottom hole. Also,
- 11 shown are offset wells. Those shown in yellow are
- 12 Gallup producing wells.
- 13 Q. And that particular zone that those Gallup
- 14 producing wells produce from is what you're attempting
- 15 to duplicate in the Ropco 16-1 well?
- 16 A. Yes.
- 17 Q. Let's move on to your type log, Exhibit 13.
- 18 EXAMINER EZEANYIM: Let me clarify one
- 19 thing on this map. The yellow dots are -- which ones
- 20 are producing from the Mancos?
- 21 THE WITNESS: Gallup is a formation within
- 22 the whole Mancos interval, so Gallup is technically a
- 23 Mancos producer.
- 24 EXAMINER EZEANYIM: This is very confusing.
- THE WITNESS: For me, too.

```
Page 21
                   EXAMINER EZEANYIM: I don't know which one
1
     is which.
 3
                   THE WITNESS: The nomenclature is very
     confusing.
 5
                   EXAMINER EZEANYIM: So those yellow are
 6
     producing from where this well is going to be produced
     from?
                   THE WITNESS:
                                 Correct.
                   EXAMINER EZEANYIM: But when you said the
     Gallup, you're talking Basin-Mancos. Then you are
10
     talking about the Gallup. So it is confusing.
11
12
                   THE WITNESS: Yes.
              (BY MR. BRUCE) Mr. Musekamp, on this plat, are
13
         Q.
     there any Basin-Mancos wells?
14
              These are ChaCha-Gallup wells.
15
         Α.
16
         Q. Right. Okay.
17
                   EXAMINER EZEANYIM: No Basin-Mancos here?
18
                   THE WITNESS: No.
19
                   EXAMINER EZEANYIM: That is what you call
20
     the Gallup pool?
                   THE WITNESS: Correct.
21
                   MR. BRUCE: Well, that's what the Division
22
     calls it.
23
24
                   EXAMINER EZEANYIM: Yeah. We use them
     interchangeably, right?
25
```

```
Page 22
                                       Under the -- 1 forget
 1
                   MR. BRUCE:
                               Yeah.
     the order numbers. Everything outside the ChaCha-Gallup
 3
     is Basin-Mancos.
                   EXAMINER BROOKS: Or 12984.
 5
                    (Laughter.)
                   EXAMINER EZEANYIM:
                                       You wrote it.
                                                       That's
 7
     why you say that.
                   EXAMINER BROOKS: Well, not just because I
     wrote it, but there are other reasons why I remember it
10
     (laughter).
11
         Q.
              (BY MR. BRUCE) Let's move on to your type log,
12
     and maybe we can discuss for Mr. Ezeanyim a little
13
     further the specific zone you're looking to test in the
14
     Ropco 16-1 well, and what these other Gallup wells have
     tested. And going back a little bit, what is the
15
16
     vintage of these Gallup wells?
17
              Vintage, '50s, '60s.
         Α.
              They were drilled quite sometime ago?
18
         Q.
19
              Yeah, before my vintage.
         Α.
20
         Q.
              Go ahead with the type log.
21
         Α.
              The type log is the Kirtland State 1 in the
22
     southwest quarter of the northwest quarter of Section
23
          It's just southwest of our wellbore, if you look
24
     down on the location map to the left. On the right,
25
     it's a type log. Gamma ray curve on the left-hand side;
```

- 1 resistivity curve on the right-hand side. And if you
- 2 look approximately at 4,675, you'll see a nice yellow
- 3 sandstone developed. It's about six feet in thickness.
- 4 It's called the Tocito interval, and that is the target
- 5 we will be targeting.
- 6 Q. And then move on to Exhibit 14.
- 7 A. Exhibit 14 is -- this is a two-part exhibit.
- 8 Exhibit 14 is an A to A prime, west to east
- 9 stratigraphic cross section. It's just south of our
- 10 wellbore, as you can see.
- The following page is that stratigraphic
- 12 cross section. It's hung on the upper Gallup marker.
- 13 It's the first marker you see on that cross section.
- 14 And you can see that this sandstone, the target
- interval, is laterally continuous across the area, and,
- 16 again, that is the target we are choosing.
- Q. And when you're looking at these wells, in
- 18 particular the Kirtland State, that well was marginally
- 19 productive, correct?
- 20 A. Yes. Uh-huh.
- 21 EXAMINER EZEANYIM: Which well?
- 22 MR. BRUCE: The middle one, Mr. Examiner.
- 23 EXAMINER EZEANYIM: Oh, you're looking at
- 24 the wells now.
- MR. BRUCE: The cross section.

- 1 EXAMINER EZEANYIM: Okay.
- Q. (BY MR. BRUCE) And that well is the one that
- 3 was located on that 80 acres that you seek to move from
- 4 one pool to the other, correct?
- 5 A. Correct.
- 6 What is Exhibit 15?
- 7 A. Exhibit 15 is a structure map. It's a 25-foot
- 8 subsea structure map on top of one of the Gallup markers
- 9 shown on the type log. You can see it's about a one,
- 10 one-and-a-half degree dip towards the west.
- 11 Q. And does XTO prefer to have the bottom-hole
- 12 location updip from the surface location?
- CX

- 13 A. Correct.
- Q. And let's move on to your final exhibit. You
- 15 have a production bubble map at Exhibit 16. Could you
- 16 discuss that briefly?
- 17 A. This is a production bubble map of the
- 18 surrounding Gallup wells. Green is oil. Red is gas.
- 19 And the bubbles are scaled to the amount of oil
- 20 produced. The numbers in (green) next to each well is the
- 21 cumulative (oil production.) The numbers in black next to
- 22 each well is the cumulative gas production.
- You can see that we're trying to maximize
- 24 the length of our wellbore by going horizontally in
- 25 these two sections, as well as getting as close to these

- 1 producers as we can to maximize our production.
- 2 Q. So you wouldn't want to be drilling down to the
- 3 south and the north parts of 20 and 21, would you, at
- 4 this point, because they have produced substantial
- 5 amounts already?
- 6 A. Right. Right. Correct.
- 7 Q. But you would like to be near them -- somewhat
- 8 near them?
- 9 A. Correct.
- 10 Q. From a geologic standpoint, will each quarter
- 11 section in the well unit more or less contribute to
- 12 \_production?
- 13 A. Yes.
- Q. Regarding the request to excise 80 acres from
- 15 the ChaCha-Gallup pool, I think you already answered
- 16 this, but are there any geologic differences in the
- 17 productive portion of the ChaCha-Gallup in Section 16
- and the Basin-Mancos in the rest of the acreage?
- 19 A. No. The geology is very homogeneous. It's
- 20 very consistent across this area.
- 21 Q. If the acreage was removed, would you ever
- 22 recommend to -- if the ChaCha-Gallup pool wasn't
- 23 contracted, would you ever recommend to XTO's management
- 24 to drill a vertical Gallup well in that 80 acres or even
- 25 a 80-acre horizontal well?

## CROSS-EXAMINATION

2 BY EXAMINER GOETZE:

1

- 3 Q. On your thickness of you're a, what's your
- 4 average thickness you're looking at?
- 5 A. Six to eight feet thickness.
- 6 Q. Six to eight feet. And that's consistent
- 7 across there?
- 8 A. It gets thicker as you go towards the south,
- 9 approximately 15 to 20 feet, as you get in the gut of
- 10 that ChaCha-Gallup pool.
- 11 Q. No other questions. Thank you.
- 12 CROSS-EXAMINATION
- 13 BY EXAMINER EZEANYIM:
- Q. Since you don't have your engineer here, let's
- 15 look at geology, because you say you added a quarter
- 16 section. I want to know really whether the quarter
- 17 section is supposed to be added to that 320. You are
- 18 the land person, so you are going to answer the
- 19 question.
- 20 So the question I want to ask is why we
- 21 added that quarter section to the 320. I know I'm going
- 22 to read the other case that was on this, that I'm going
- 23 to read. I haven't read it. But I want to hear from
- 24 you, as the geologist, why we wanted -- okay. Now, we
- 25 can see that formation is very thin, six to eight feet.

- 1 So is this six to eight feet across given that bond --
- 2 or that variation from Section 16 to Section 17?
- 3 A. It'll vary somewhat, but on average, it'll be
- 4 six to eight feet across the wellbore trajectory. The
- 5 thickness, like I said before, decreases as you get to
- 6 the north, so we are looking at six to eight feet.
- 7 Q. So if we were to drill the holes, how would
- 8 that -- you couldn't drill the 320. You have to drill
- 9 the 480. I want to know why you want to drill that 480
- 10 as opposed to -- you know, I asked the land person, and
- 11 he told me you were going to answer that question. So I
- 12 wanted to know why we added that quarter section there
- 13 to make the 480.
- 14 A. From a geologist --
- 15 Q. He said he's land. Because, you know, he's a
- 16 land person. All he has to do is go: I'm working for
- 17 XTO; my land is 480. Then you, as the geologist, are
- 18 the one who is going to convince me that that 480 is
- 19 really well worth to be drilled, because I'm looking at
- 20 the variability of that section -- of those sections.
- 21 Ownership is not identical. There are a lot of working
- 22 interests in there. I know you did your public notice,
- 23 but I wanted to see from the geology and engineering --
- 24 unfortunately, there is no engineer here to tell me
- 25 anything. But from the geology, I want you to convince

- 1 the Division why we added that quarter section.
- 2 A. We're trying to maximize our production to make
- 3 this -- make this well economical. So to add another
- 4 / section, we'll get more feet per horizontal, adding mor $oldsymbol{arphi}$
- 5  $\setminus$  production and making this well economical.
- Q. Did you do any calculation to demonstrate that?
- 7 A. The engineer has.
- Q. Who did?
- 9 A. The engineer, reservoir engineer.
- 10 Q. If you can convince me now that if you drill
- 11 320, you are going to lose money, but if you drill 480,
- 12 you're going to make money and demonstrate the
- 13 calculations, whatever you are going to expect in this
- 14 formation, we might start looking at it.
- 15 A. Uh-huh.
- Q. (But we can't just make the decision in a
- 17 vacuum.
- 18 A. Right.
- 19 Q. You see the point I'm trying to make?
- 20 A. Yeah. But, I mean, research suggests, the
- 21 longer the lateral, the more stages you have, the better
- 22 production.
- Q. I understand that. Yeah, I do understand that.
- 24 A. Uh-huh.
- Q. And, again, I understand 320 is a long lateral.

- 1 That's one mile, right?
- 2 A. Uh-huh.
- 3 Q. You added another half mile to that, making it
- 4 480. I know you can do that, but now if we do that, I'm
- 5 concerned about the movement of the acreage around the
- 6 area.
- 7 A. Repeat your question. I'm sorry.
- 8 Q. I mean, I'm concerned about the movement of the
- 9 acreage around your -- the one you are developing.
- 10 Ownership is not identical, so other applicants will
- 11 have to come here. I want to know how they are going to
- 12 drill the areas around, you know, the 480 acreage. You
- 13 are trying to let OCD form a project area of 480. So I
- 14 want to understand why the operator wants to do that so
- 15 that we can begin to consider the information. Is it
- 16 land? Is it geology? Is it engineering? And we can
- 17 take all of them into consideration and make a
- 18 recommendation.
- 19 A. Uh-huh.
- 20 Q. Don't get me wrong. I'm not being hard on you.
- 21 I'm just trying to do my job to make sure we do it
- 22 right. We have to see all the development of this area.
- 23 You have the right to drill, because you own interest
- 24 there, but now that's why we are here, to make sure we
- 25 do it right.

- 1 A. I understand.
- Q. I have looked at the geology. The geology has
- 3 demonstrated the formation is very thin, and I don't
- 4 know how much you can get out of that. I don't have any
- 5 calculations to demonstrate that when you cross that
- 6 section boundary, you're going to get more. Of course,
- 7 I know longer laterals produce more than short laterals.
- 8 A one-mile lateral is long. This is gas. And two miles
- 9 / is okay, you know. Three miles, you can do that. But
- 10 \ the question is: How do you do it? Do you just do it
- 11 and violate other people's correlative rights?
- 12 EXAMINER EZEANYIM: Counselor, I'm sorry
- 13 you didn't bring the engineer. I have to go back and
- 14 read that previous case.
- MR. BRUCE: Mr. Examiner --
- 16 EXAMINER EZEANYIM: I wanted to listen to
- 17 the engineer tell me why.
- 18 MR. BRUCE: I believe you asked those
- 19 questions the last time, which is why we didn't bring
- 20 her back. But I would point out that all of Mr.
- 21 Musekamp's map, if you look -- and I will ask him a
- 22 question.
- Q. (BY MR. BRUCE) Is the <u>yellow</u> acreage the
- 24 acreage which XTO owns or operates?
- 25 A. Yeah, operates.

for any land reason or any other purpose in this matter.

25

- 1 If XTO is successful in this well, I'm sure they will
- 2 develop offsets, but you've got to get the first well
- 3 drilled.
- 4 EXAMINER EZEANYIM: Yeah, Counselor, I
- 5 understand what you're saying. Yes, the rule says that.
- 6 The rule says that you can form that standard -- yeah,
- $\lambda$  you can form it. But if you want me -- if you want us
- 8 to compulsory pool it, that's a different thing. If you
- 9 formulate [sic] everybody participates in drilling the
- 10 well, you shouldn't be here. But now you are asking the
- 11 Division to compulsory pool that nonstandard project
- 12 \ area.
- MR. BRUCE: And Mr. Musekamp has stated
- 14 that the reservoir is pretty -- is six to eight feet
- 15 across the entire length of the wellbore, and that's
- 16 what they're looking to get. If that's the case and
- 17 that's what his geology shows, you know, then the
- 18 wellbore will be similar in each quarter section. And I
- 19 just -- I guess I'm kind of getting frustrated at this
- 20 point.
- 21 EXAMINER EZEANYIM: You don't have to get
- 22 frustrated, but you didn't bring your engineer to answer
- 23 those questions. I wanted to take into consideration
- 24 whether those (- all those units contribute equally to
- 25 \the well.

- 1 MR. BRUCE: And I would ask that the
- 2 administrative record from -- I forget the case number,
- 3 but that Order R-13714 be adopted into the record. And,
- 4 like I said, this is the second time we've been through
- 5 this.
- 6 EXAMINER EZEANYIM: 13714?
- 7 MR. BRUCE: Yes.
- 8 EXAMINER EZEANYIM: And then you had your
- 9 engineer here that day?
- MR. BRUCE: Yes.
- 11 EXAMINER EZEANYIM: I mean, we do a lot of
- 12 these; I can't have it in my head.
- 13 MR. BRUCE: Well, I understand that,
- 14 Mr. Examiner. I have a hard time remembering these
- 15 cases, too, but we did have an engineer here last time
- 16 to answer all of your questions.
- 17 EXAMINER EZEANYIM: Okay. I will look at
- 18 that.
- 19 Do you have anything?
- 20 EXAMINER GOETZE: I have no more questions.
- 21 EXAMINER BROOKS: I would like to ask more
- 22 questions. Do you have any questions?
- 23 EXAMINER GOETZE: No. I'll pass.
- 24 EXAMINER BROOKS: I thought of something.
- 25 CROSS EXAMINATION

- 1 BY EXAMINER BROOKS:
- Q. What was the reason why this well was not
- 3 extended into the northwest quarter since XTO owns that
- 4 also, northwest quarter of 17?
- 5 A. Based off interest, perhaps.
- 6 Q. Not a geologic reason, then?
- 7 A. Not from a geology perspective, no.
- 8 O. I assume there is some limitation. You
- 9 expressed the proposition that the longer you drill the
- 10 lateral, the more efficiency you get, because, of
- 11 course -- and that makes sense, because if you end at
- 12 330 from the western boundary of 660 -- 660 from the
- 13 western boundary of Section 16 and then you didn't start
- 14 the next one, 660 eastern boundary of 17, you'd be
- 15 losing 1,280 feet of horizontal penetration.
- 16 A. Uh-huh.
- 17 Q. That makes sense. But, of course, there is
- 18 some limit to it because you can't -- it's not economie
- 19 to drill horizontals beyond some point.
- 20 A. Right.
- Q. And my impression is of the industry that
- 22 length is getting longer, but it's not infinite. So I
- 23 was wondering if that was the reason you stopped at the
- 24 middle of Section 17 or -- but as the geologist argued,
- 25 really, or told us, it's not a geologic --