	Page 1
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2	STATE OF NEW MEXICO
3	ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
4	OIL CONSERVATION DIVISION
5	
6	IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR
7	THE PURPOSE OF CONSIDERING:  CASE NO. 14143
8	APPLICATION OF XTO ENERGY, INC. TO AMEND
9	SIMULTANEOUS DEDICATION AND AN EXCEPTION TO THE WELL DENSITY REQUIREMENTS OF THE
10	SPECIAL RULES AND REGULATIONS FOR THE
11	BASIN-DAKOTA GAS POOL
12	
13	REPORTER'S TRANSCRIPT OF PROCEEDINGS
14	EXAMINER HEARING
15	
16	BEFORE: David K. Brooks, Legal Examiner Richard Ezeanyim, Technical Examiner
17	Terry Warnell, Technical Examiner
	Turn - 26 - 2000
18	June 26, 2008
19	Santa Fe, New Mexico
20	This matter came for hearing before the New Mexico Oil Conservation Division, David K. Brooks, Legal Examiner, Richard
21	Ezeanyim, Technical Examiner, and Terry Warnell, Technical Examiner, on June 26, 2008, at the New Mexico Energy, Minerals
22	and Natural Resources Department, 1220 South St. Francis Drive,
22	Room 102, Santa Fe, New Mexico.
	Room 102, Santa Fe, New Mexico.  REPORTED BY: JOYCE D. CALVERT, P-03 Paul Baca Court Reporters
23	Room 102, Santa Fe, New Mexico.  REPORTED BY: JOYCE D. CALVERT, P-03

1	INDEX	Page 2
2		
ļ	Examiner Hearing CASE NO. 14143	
3		PAGE
4	APPEARANCES	3
5	APPLICANT'S WITNESSES:	
6	CHRISTOPHER SPENCER	_
7	DIRECT EXAMINATION BY MR. BRUCE	5
8	JOHN KLUTSCH DIRECT EXAMINATION BY MR. BRUCE EXAMINATION BY MR. WARNELL	8 15
9	MARY FLYNN	
10	DIRECT EXAMINATION BY MR. BRUCE	17
11	APPLICANT'S EXHIBITS 1 - 3 APPLICANT'S EXHIBIT	8 13
12		20
13		
14		
15		
16		
17		
18		
19	FOR THE APPLICANT:	
20	James G. Bruce, Esq. ATTORNEY AT LAW	
21	P.O. Box 1056 Santa Fe, New Mexico 87504	
22		
23		
24		2000
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- 1 MR. EZEANYIM: At this point, I call Case No. 14143.
- 2 This is on Page 3. This is the Application of XTO Energy, Inc.
- 3 to Amend Division Order No. R-12824 to Include Simultaneous
- 4 Dedication and an Exception of the Well Density Requirements of
- 5 the Special Rules and Regulations for the Basin-Dakota Gas
- 6 Pool.
- 7 Before -- go ahead. I call for appearances.
- 8 MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe
- 9 representing the applicant. I have three witnesses.
- 10 MR. EZEANYIM: Any other appearances? May the
- 11 witnesses stand up and state your names to be sworn, please.
- MR. SPENCER: Christopher Spencer.
- 13 MR. KLUTSCH: John Klutsch.
- MS. FLYNN: Mary Flynn.
- 15 [Witnesses sworn.]
- 16 MR. EZEANYIM: Mr. Bruce, before you start, let me
- 17 make a comment to make sure I understand what you guys are
- 18 looking for here.
- In this Case No. 14143, you say you want to amend
- 20 order number -- I know you got this case from another
- 21 attorney -- amend Order No. 12824. This is the
- 22 Blanco-Mesaverde sections. I don't think you are looking to
- 23 amend that order, if that is the correct information. I think
- 24 what you are asking for is the simultaneous dedication and an
- 25 exception to the special pool rules for the Basin-Dakota Gas

- 1 Pool. We're not going to amend Order No. 12824. That's a
- 2 different order, you know -- I mean, the Blanco-Mesaverde pool.
- 3 So is that what you want to do in this case?
- 4 MR. BRUCE: Mr. Examiner, the reason Mr. Kellahin did
- 5 that is because the well involved in this case is the same as
- 6 the well involved in Order 12824.
- 7 MR. EZEANYIM: I understand that.
- 8 MR. BRUCE: So since it involved the same well, he
- 9 was just seeking to amend the order. But you are correct, this
- 10 case does not involve the Blanco-Mesaverde because that's
- 11 already been approved.
- 12 MR. EZEANYIM: So I'm telling you I'm not going to
- 13 amend that order. We're going to consider an exception to the
- 14 special pool rules for the Mesaverde Dakota, not the
- 15 Blanco-Mesaverde. And I'm not going to change that order
- 16 because that's for Blanco-Mesaverde, not for the Basin-Dakota.
- 17 That's different pools.
- 18 MR. BRUCE: That's perfectly fine.
- 19 MR. EZEANYIM: Just before we started, I wanted to
- 20 make sure I cleared that up.
- 21 MR. BRUCE: And I just wanted to clarify it is the
- 22 same well involved that would test both zones.
- MR. EZEANYIM: Okay, now. Go ahead.

24

25

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MR. EZEANYIM: You are so qualified.

25

- Q. (By Mr. Bruce): Mr. Spencer, if you could turn
- 2 to XTO's Exhibit 1 and describe what you are seeking in this
- 3 application.
- A. We are seeking permission for a fifth well in the
- 5 Basin-Dakota Formation in an irregularly-sized section.
- Q. Okay. Maybe you should turn to Exhibit 2, and
- 7 that will give some idea of what this section is comprised of.
- 8 What acreage is in this well unit?
- 9 A. This well unit consists of the south half of the
- 10 south half of Section 19 and all of the north half of
- 11 Section 30. Both of those comprise 407.56 acres.
- 12 Q. Okay. So that was an out-sized unit approved
- 13 quite some time ago, I believe.
- 14 A. Yes.
- 15 Q. And not just for the original case regarding the
- 16 Gerk Com No. 2?
- 17 A. Correct.
- 18 Q. And what are the pool rules in the Basin-Dakota?
- 19 A. The pool rules in the Basin-Dakota by standard
- 20 rules, are four wells in a 320-acre standard sized units.
- 21 Q. Okay. So this well unit is approximately
- 22 87 acres greater than a standard well unit?
- A. Correct.
- Q. And so, in other words, under a current standard
- 25 unit, 320 acres, I believe you can't have two wells in the same

- 1 quarter/quarter section?
- 2 A. Correct.
- Q. But you can have two wells per quarter section?
- A. Yes.
- 5 Q. And this would just conform to the normal well
- 6 density of a four-well per 320-acre unit?
- 7 A. Yes.
- Q. As you noted when the Hearing Examiner was
- 9 talking, this concerns the Gerk Com B Well No. 2. Has that
- 10 well been drilled at this point?
- 11 A. No.
- 12 Q. Okay. Referring to Exhibit 2, does that identify
- 13 the offset operator?
- 14 A. Yes.
- Q. And was notice of this application given to all
- 16 of the offset operators?
- 17 A. Yes.
- 18 O. Is that reflected in Mr. Kellahin's certificate
- 19 submitted as Exhibit 3?
- 20 A. Yes.
- Q. Were Exhibits 1, 2, and 3 prepared by you or
- 22 compiled from company business records?
- 23 A. Yes.
- Q. And in your opinion, is the granting of this
- 25 application in the interest of conservation and the prevention

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- 1 A. Ft. Worth, Texas.
- Q. Who do you work for and in what capacity?
- A. XTO Energy. I'm a division geologist.
- 4 Q. Have you previously testified before the Division
- 5 as a geologist?
- 6 A. Yes.
- 7 Q. And were your credentials as an expert accepted
- 8 as a matter of record?
- 9 A. Yes.
- 10 Q. Does this area -- does your area of
- 11 responsibility at XTO include this part of the San Juan Basin?
- 12 A. Yes.
- Q. And you are familiar with the geology involved in
- 14 this application?
- 15 A. I am.
- 16 MR. BRUCE: Mr. Examiner, I tender Mr. Klutsch as an
- 17 expert petroleum geologist.
- 18 MR. EZEANYIM: Mr. Klutsch is so qualified.
- 19 Q. (By Mr. Bruce): Mr. Klutsch, we've marked all of
- 20 your geologic exhibits as just one Exhibit 4, and there are a
- 21 number of them. And rather than interrupting, why don't you
- 22 run through and tell the examiners a little bit about the
- 23 geology in these exhibits?
- A. Certainly. The first page of Exhibit 4 is
- 25 labeled Page 4. It's a regional structure map of the

- 1 Huerfanito Bentonite showing structural configuration of the
- 2 Basin. Up dip is to the southwest, and down dip is to the
- 3 northeast. I've got Bloomfield, New Mexico, blocked out for
- 4 location and an arrow pointing to the two sections in question,
- 5 Section 19 and 30 of Township 59 North, 9 West.
- 6 Next page, No. 5, is a location and production map
- 7 with a circle surrounding the spacing unit in question. The
- 8 wells are attributed with -- it looks like an orange, but it's
- 9 truly a pink -- our Dakota wells. Blue are Mesaverde producing
- 10 wells, and anything that has a red on it also produces from the
- 11 Chacra.
- 12 Next page, No. 2, is a little closer view of the
- 13 spacing unit with the topography included to let the Commission
- 14 know that we're not putting this well on the top of a mountain
- 15 or in the center of a stream. Same attribute --
- 16 Q. Well locations can be difficult in this area,
- 17 correct?
- 18 A. They can be. And the same attributes apply to
- 19 the wells here, the pink being Dakota, the blue Mesaverde, and
- 20 the red is Chacra.
- 21 Page No. 7, which is the next page, is a west to east
- 22 Dakota cross section. The location of this will be shown on
- 23 additional figures. Here I'm depicting the various Dakota
- 24 zones from the top to the bottom. DK 1 or Dakota 1 is
- 25 uppermost down to DK BC which abbreviates Burro Canyon.

- Below that is Morrison. And the purpose of these two
- 2 cross sections is to show the stratographic variance of the
- 3 various sands as they exist underneath the spacing unit. So
- 4 Page 7 is a west to east.
- 5 Page 8 is a north to south cross section. Same
- 6 purpose of this cross section as the previous, just to show the
- 7 variability of the sand thickness.
- Page 9 is a structure map on top of the Dakota 1.
- 9 Yellow acreage is XTO's. The locations of the cross sections
- 10 are in red lines, the west to east and the north to south. The
- 11 purpose of this figure is to show the complexity of the
- 12 structure in this area, and further depict how the reservoirs
- 13 are being compartmentalized by the faulting.
- An additional well in this area has the opportunity
- of encountering more of these small compartments and getting
- 16 otherwise unproduced gas.
- 17 Page 9 -- or Page 10. Excuse me. These next few
- 18 figures are a series of net sand isopachs. Starting near the
- 19 top, there was no sand in the Dakota 1 so it starts with
- 20 Dakota 2. And the purpose of these are just to show how the
- 21 thickness of the sand, these various sands, change laterally
- 22 over the area.
- 23 Attributes on each one of these figures around
- 24 the wells -- surrounding the wells -- indicate that that well
- 25 has been perforated for -- is proposed to be productive out of

- 1 this particular zone. So you've got little tan attributes
- 2 around each one that has been perforated. And the number next
- 3 to the well is the data that was used to draw the isopach. So
- 4 this is Dakota 2, and the well that we're talking about is in
- 5 the southeast quarter of Section 19, and it indicates it'll
- 6 encounter a little pod of Dakota 2 sand rated at 10 feet.
- 7 Page 11 is the next sand below. This is the
- 8 Dakota 3. Once again, the attributes indicate what wells have
- 9 been perforated in that zone, and the data is in red next to
- 10 the well. Again, the purpose of this is to show the
- 11 variability of the thickness of the sand.
- 12 Page 12 is the Dakota 4 net sand isopach. Sands are
- 13 becoming more channelized here and so the contours reflect
- 14 that.
- 15 Page 12 -- or 13, excuse me -- is the Dakota 5. And
- 16 this particular sand has a fairly high variability and
- 17 thickness over the area. It goes from upwards of 54 feet thick
- 18 down to four feet over the area, so it was quite variable.
- 19 Page 14 is Dakota 6. And once again, its isopach
- 20 shows a high variability of thickness over the area. The last
- 21 isopach on Page 15 is that of Burro Canyon. Often, the Burro
- 22 Canyon is wet in the San Juan Basin, but we've been fortunate
- 23 to find portions of it that has pay in it. And again, it's
- 24 totally variable in its thickness.
- 25 Last of my figures is Page 16. And once again, a

- 1 close-up of a topography map over the spacing unit with the
- 2 attributes showing what the well is produced from.
- Q. You mentioned, again, the topography. The well
- 4 location is already picked and has been approved, correct?
- 5 A. Yes, sir.
- Q. And from a geologic standpoint, is a fifth well
- 7 in this well unit necessary to adequately produce all of the
- 8 reserves?
- 9 A. Yes.
- 10 Q. Was Exhibit 4 prepared by you or under your
- 11 supervision?
- 12 A. It was.
- 13 Q. And in your opinion, is the granting of this
- 14 application in the interest of conservation and the prevention
- 15 of waste?
- 16 A. Yes.
- MR. BRUCE: Mr. Examiner, I move the admission of
- 18 XTO's Exhibit 4.
- 19 MR. EZEANYIM: Exhibit 4 will be admitted.
- 20 [Applicant's Exhibit 4 admitted into evidence.]
- 21 MR. BRUCE: And I have no further questions of the
- 22 witness.
- MR. EZEANYIM: Do you have any questions?
- MR. BROOKS: No questions.
- MR. EZEANYIM: You are just talking about that Gerk

- 1 well. I thought the well had been drilled. Why are you asking
- 2 whether it is in a standard location or not? The well has been
- 3 drilled already in the Blanco-Mesaverde, but you want to go to
- 4 Basin-Dakota. Is that --
- 5 MR. BRUCE: The well has not been drilled.
- 6 THE WITNESS: This well has not been drilled. There
- 7 was another well, the Snyder well, in the spacing unit to the
- 8 north that we got permission for the Mesaverde. We have
- 9 drilled that well and the Commission gave us permission to
- 10 drill that well to the Dakota before we got this approved. So
- 11 that well has been drilled. It just hasn't been completed yet.
- MR. EZEANYIM: Which well did you get Order No.
- 13 R-12824 for? Which well is that?
- MR. BRUCE: It's the same well.
- 15 MR. EZEANYIM: So it's already been drilled?
- MR. BRUCE: Correct.
- 17 MR. EZEANYIM: You got the order already but it
- 18 hasn't been drilled. Okay. I thought this had already been
- 19 drilled because the order was issued some time ago. Okay. And
- 20 the well is on this other location?
- 21 THE WITNESS: I believe so. Yes, sir.
- MR. EZEANYIM: Okay. I was of the opinion that the
- 23 well had already been drilled in the Mesaverde. Okay.
- 24 Any questions?
- MR. BROOKS: No questions.

Page 15

EXAMINATION

2 BY MR. WARNELL:

1

- Q. Mr. Klutsch, I have a question for you on your
- 4 isopachs. I believe two of them, Page 10 and 12, your contour
- 5 interval is based on five feet rather than 10 feet like all the
- 6 rest; is that correct?
- 7 A. That would be correct.
- Q. Okay. And it's your belief that the Burro Canyon
- 9 will not be wet in this area?
- 10 A. In this particular location, it's hard to tell,
- 11 sir. I'm not optimistic about the Burro Canyon at this point.
- Q. And your cross sections?
- 13 A. Yes, sir.
- Q. Those are difficult to read.
- 15 A. They are.
- 16 Q. Looks very nice at a glance, but -- I was going
- 17 to ask you what the PD's reading is on one of those, but I'm
- 18 not sure I can even see a PD.
- A. And I'd be hard to tell you.
- 20 Q. I don't know. Okay. But all of this is on that
- 21 CD, Mr. Bruce?
- MR. BRUCE: Yes.
- MR. WARNELL: Thank you.
- MR. EZEANYIM: You want us to decide today?
- MR. BRUCE: Yes.

- 1 MR. EZEANYIM: I want to use this opportunity to
- 2 clarify something. I don't know. I happen to come across --
- 3 when I see them and they are not right, I am not happy about
- 4 it. You said this case says -- maybe you have advice and maybe
- 5 you have it for here. You are asking for a decision for that
- 6 special Rule 1B of Order No. 10987, you know, B. I went there
- 7 and there's nothing like that, no Rule 1B. I started looking
- 8 for it. I called the attorney. And then I started hunting for
- 9 that. I wanted you to give us that information so I don't have
- 10 to waste a whole day looking for it.
- 11 The application says you want an exception to that 1B
- 12 of that rule. I went and it wasn't there. Now, when I go
- 13 to -- I found it. I found the 10987 B2. And it's not 1B you
- 14 are asking the exception for. You're asking the exception for
- 15 2B.
- MR. BRUCE: Okay.
- MR. EZEANYIM: That's really what it is, and that's
- 18 what I expect people to cite so that it's easy for us to go and
- 19 find it out and know what you are actually asking for.
- So during the process, we decide what, you know, if I
- 21 say, okay, Rule 1B, you will get an exception on Rule 1B. And
- 22 if I would write an order with the section there, it doesn't do
- 23 any good for you, because that's not the rule you cited.
- MR. BRUCE: Right. I understand. And you were
- 25 looking at the application, Mr. Examiner?

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- 1 A. Yes.
- Q. Does your area of responsibility at XTO include
- 3 this part of the San Juan Basin?
- 4 A. It does.
- 5 Q. Are you familiar with the engineering matters
- 6 involved in this case?
- 7 A. Yes, I am.
- 8 MR. BRUCE: Mr. Examiner, I tender Ms. Flynn as an
- 9 expert reservoir engineer.
- 10 MR. EZEANYIM: Ms. Flynn, you are a reservoir
- 11 engineer?
- 12 THE WITNESS: I am.
- MR. EZEANYIM: You are very well qualified.
- Q. (By Mr. Bruce): Ms. Flynn, your exhibits have
- 15 been marked Exhibit 5. Would you turn to the first page and
- 16 describe the reservoir characteristics?
- A. Well, over this 407.56 acres, I looked at each of
- 18 the logs that penetrate the Dakota, and that was -- well, the
- 19 average gas saturation was about 50 percent. The porosity was
- 20 7 percent. There's about 55 feet of average pay.
- 21 You'll see from the next page, Page 18, that the pay
- 22 varies from 22 to 93 feet with the average being 55. The
- 23 average drainage area of existing wells in those, based on the
- 24 expected ultimate recovery, is 55 acres. The average ultimate
- 25 recovery from those wells is 591 million cubic feet, with the

- 1 newer wells actually being better than the older wells. The
- 2 post-2000 wells are averaging about 599 million cubic feet.
- Q. Okay. Turn to the third page and discuss a
- 4 little bit about the economics of the well.
- A. Well, assuming that we'll get about 599 million
- 6 cubic feet on an average -- I rounded it up to 600 million
- 7 cubic feet -- using the average flow characteristics where we
- 8 have initial 75 percent decline and then it'll flatten out to
- 9 25 and then go to about 7 percent decline. And its economic
- 10 limit with pay out is determined to be about two years.
- The pay out was estimated to be about two years,
- 12 which is an acceptable rate of return at XTO.
- Q. With -- if this well is approved, you'll have one
- 14 well per every 80 acres or so on this well unit. But even
- 15 without that, with the drainage being 55 acres, you're not
- 16 asking for anything more than you'd otherwise be entitled to,
- 17 are you?
- 18 A. Correct.
- 19 Q. Was Exhibit 5 prepared by you?
- 20 A. Yes, sir.
- Q. And in your opinion, is the granting of this
- 22 application in the interest of conservation and the prevention
- 23 of waste?
- 24 A. Yes, it is.
- MR. BRUCE: Mr. Examiner, I move the admission of

	Page 22
1	STATE OF NEW MEXICO )
2	COUNTY OF BERNALILLO )
3	I, JOYCE D. CALVERT, a New Mexico Provisional
4	Reporter, working under the direction and direct supervision of Paul Baca, New Mexico CCR License Number 112, hereby certify
5	that I reported the attached proceedings; that pages numbered 1-20 inclusive, are a true and correct transcript of my
6	stenographic notes. On the date I reported these proceedings, I was the holder of Provisional License Number P-03.
7	Dated at Albuquerque, New Mexico, 26th day of June, 2008.
8	
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10	Joyce D. Calvert
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