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

ORIGINAL

IN THE MATTER OF THE HEARING CALLED  
BY THE OIL CONSERVATION DIVISION FOR  
THE PURPOSE OF CONSIDERING:

CASE NO. 14430

APPLICATION OF XTO ENERGY, INC.,  
TO EXPAND THE HORIZONTAL LIMITS OF  
THE UTE DOME-PARADOX GAS POOL TO  
INCLUDE ALL OF SECTION 27, T32N R14W  
AND THE CONCOMITANT CONTRACTION OF THE  
BARKER DOME-PARADOX POOL, THE BARKER  
DOME-AKAH/UPPER BARKER CREEK POOL, THE  
BARKER DOME-DESERT CREEK POOL, AND THE  
BARKER DOME-ISMAY POOL, SAN JUAN  
COUNTY, NEW MEXICO.

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REPORTER'S TRANSCRIPT OF PROCEEDINGS  
EXAMINER HEARING

March 4, 2010  
Santa Fe, New Mexico

BEFORE: DAVID BROOKS: Hearing Examiner  
WILLIAM JONES: Technical Advisor

This matter came for hearing before the New Mexico  
Oil Conservation Division, David Brooks, Hearing Examiner,  
on March 4, 2010, at the New Mexico Energy, Minerals and  
Natural Resources Department, 1220 South St. Francis  
Drive, Room 102, Santa Fe, New Mexico.

REPORTED BY: Peggy A. Sedillo, NM CCR No. 88  
Paul Baca Court Reporters  
500 Fourth Street, NW, Suite 105  
Albuquerque, NM 87102

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A P P E A R A N C E S

FOR THE APPLICANT:	W. THOMAS KELLAHIN, ESQ.
	Kellahin and Kellahin
	706 Gonzales Road
	Santa Fe, NM 87501

1 HEARING EXAMINER: Okay, At this time we'll call  
2 Case No. 14430, Application of XTO Energy to Expand the  
3 Horizontal Limits of the Ute Dome-Paradox Gas Pool to  
4 Include Section 27, Township 23 North, Range 14 West, and  
5 the Concomitant Contraction of the Barker Dome-Paradox  
6 Pool, the Barker Dome-Akah/Upper Barker Creek Pool, the  
7 Barker Dome-Desert Creek Pool, and the Barker Dome-Ismay  
8 Pool, San Juan County, New Mexico. Call for appearances.

9 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of  
10 the Santa Fe law firm of Kellahin and Kellahin appearing  
11 this morning on behalf of the applicant. I have three  
12 witnesses to be sworn.

13 HEARING EXAMINER: Any other appearances? Very  
14 good. Would the witnesses please stand and each state  
15 your name?

16 MR. JAMESON: Bradley Jameson, XTO Energy.

17 MS. FLYNN: Mary Flynn, XTO Energy.

18 MR. MEEK: Reed Meek, XTO Energy.

19 HEARING EXAMINER: Okay, you may proceed,  
20 Mr. Kellahin.

21 MR. KELLAHIN: Thank you, Mr. Examiner. XTO's  
22 case is a nomenclature case. We're asking to move  
23 Section 27 over into what is called the Ute Dome-Paradox  
24 Gas Pool. Currently, it's sandwiched between two  
25 structural features.

1           This case is very much like the case heard by  
2 Mr. Jones that I presented for ConocoPhillips back in  
3 October of last year. And this is the section that XTO  
4 operates in which I believe the appropriate rules are the  
5 ones for the Ute Dome-Paradox Gas Pool to apply to the  
6 entire section.

7           Our presentation book is organized in five  
8 subsections. Section 1 is simply a locator map.  
9 Section 2 is the Conoco Order which is similar to the  
10 Order that we're seeking to have you issue. And then also  
11 attached in Exhibit 2 is a copy of the current special  
12 pool rules for the Ute Dome-Paradox Gas Pool.

13           Section 3 is the geologic presentation that  
14 Mr. Meek is about to present to you. Section 4 will be a  
15 short presentation by the reservoir engineer for this  
16 project. And Exhibit 5, then, is my affidavit of  
17 notification, and if necessary, we'll call a landman to  
18 verify the notification for you.

19           With that introduction, Mr. Examiner, we'd like  
20 to begin our presentation with Mr. Meek.

21           HEARING EXAMINER: Very good. You may proceed.

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REED MEEK,

the witness herein, after first being duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Mr. Meek, for the record, sir, would you please state your name and occupation?

A. Reed Meek, I'm a geologist with XTO Energy.

Q. On prior occasions, have you testified and been qualified as an expert petroleum geologist before the Division?

A. Yes, I have.

Q. Pursuant to your employment by XTO, have you made a geologic study of the structural features that will demonstrate to the Examiner what we call the Barker Creek Dome and the Ute Dome?

A. Yes, I have.

Q. As part of that geologic study, have you come to geologic conclusions about the appropriate pool rules to apply to all of Section 27?

A. Yes.

MR. KELLAHIN: We tender Mr. Meek as an expert petroleum geologist.

HEARING EXAMINER: Well, there's nobody to object, so he's so qualified.

1 Q. Mr. Meek, if you'd turn to the exhibit book and  
2 turn to Exhibit Tab 1, and turn past the cover sheet and  
3 take a minute and orient the Examiner and Mr. Jones as to  
4 what we're depicting in this first display.

5 A. Section 27 is the section that we're applying  
6 for the change in pool rules.

7 Q. When we look at the area that's highlighted with  
8 the crosshatched green, what it does that characterize?

9 A. That is the area that's currently in the Barker  
10 Dome-Paradox Pool.

11 Q. Collectively, has the Paradox interval in Barker  
12 Dome been subdivided into four pools with four sets of  
13 rules?

14 A. Yes.

15 Q. And as the way the nomenclature stands now,  
16 Section 27 is subject to those collective rules for Barker  
17 Dome?

18 A. That's correct.

19 Q. When we look at the red hatched area, what is  
20 that structural feature known as?

21 A. That is the Ute Dome-Paradox Pool.

22 Q. Is XTO a principal operator in the Ute Dome  
23 Pool?

24 A. That's correct. And also the Section 27 which  
25 is currently in the Barker Dome Pool.

1 Q. If we look just north and east of 27, you see  
2 Section 23?

3 A. Yes.

4 Q. Is that the section that ConocoPhillips  
5 Burlington had moved out of Barker Dome into the Ute Dome  
6 set of rules?

7 A. Yes.

8 Q. With that introduction now, Mr. Meek, let's turn  
9 over to Exhibit Tab No. 3. If you'll turn past the tab,  
10 does this display represent your geologic work product?

11 A. Yes. This is my interpretation of the  
12 structural configuration of the Barker Dome and Ute Dome.

13 Q. Let's start first of all by having you describe  
14 for us what it is that we're seeing here with this  
15 display.

16 A. This represents the structure on top of the  
17 Ismay which is one of the upper members of the Paradox  
18 formation. The structural interpretation is based on a 3D  
19 seismic survey that XTO owns over the majority of this  
20 area.

21 The main features on the map that I would like  
22 the Examiner to notice is the fault that separates the two  
23 structural features highlighted in red. And we believe  
24 this fault represents the boundary between two separate  
25 geologic structures, the Barker Dome and the Ute Dome

1 structures.

2 Q. Will you look at the structure information  
3 that's displayed on your geologic map, and look  
4 specifically at Section 27? In your geologic opinion, in  
5 which structural feature is this section contained?

6 A. It is in the Ute Dome structure rather than the  
7 Barker Dome structure.

8 Q. From a geologist point of view, do you see any  
9 reason that Section 27 should remain subject to the set of  
10 four pool rules that are currently in place with the  
11 Barker Dome structure?

12 A. I do not.

13 Q. Conversely, do you see any geologic reason to  
14 not put Section 27 in the Ute Dome-Paradox Gas Pool?

15 A. I do not.

16 Q. Let's turn past that display -- Before we do so,  
17 there is a blue line running from northwest to southeast  
18 on your structure map; what does that represent?

19 A. That's the line of cross-section which is the  
20 next figure that I have in the book.

21 Q. Let's use that locator map then, and turn now to  
22 the cross-section. What type of cross-section are we  
23 looking at with this next display?

24 A. This is a stratigraphic cross-section and it's  
25 hung on the top of the Desert Creek Unit. About midway

1 through the page, you can see this straight line going  
2 across. That's the horizon that I've hung the  
3 cross-section on.

4 Q. When we get into the Ute Dome portion of the  
5 cross-section, is that Paradox interval collectively  
6 represented on this cross-section?

7 A. Yes. The Paradox interval is approximately a  
8 thousand feet thick and it's subdivided into a number of  
9 members. I've labeled those on the left starting at the  
10 bottom with the Alkali Gulch, the Lower Barker Creek, the  
11 Upper Barker Creek, the Akah Desert Creek, the Ismay and  
12 Honaker Trail members are all considered parts of the  
13 Paradox formation.

14 Q. Within the Paradox formation, then, these  
15 subdivisions, they are organized in such a way that you as  
16 a geologist can find the anticipated top and bottom of  
17 each of those intervals?

18 A. Yes. There are some shale beds that subdivide  
19 these units. These units that are labeled are the primary  
20 reservoirs which are generally carbonate units. That's  
21 where we find the porosity that we believe is the  
22 reservoir for the gas in the field.

23 Q. When you look at that porosity and go from well  
24 to well within an interval, how would you characterize  
25 that porosity?

1           A.    The porosity zones are very discontinuous. We  
2 find wells in adjacent proration units or adjacent quarter  
3 sections often do not have the same porosity zones present  
4 that you can correlate from one well to the other. So  
5 it's a very discontinuous or nonhomogeneous type of  
6 reservoir.

7           Q.    From a geologic point of view, if Section 27 is  
8 moved over into Ute Dome and you maintain 640 acre spacing  
9 with a density of four wells to the section, what does  
10 that allow you to achieve as a geologist that you can't do  
11 now?

12          A.    We believe that it will allow us to drill  
13 additional wells and recover additional gas that we can't  
14 with the current spacing rules as they are.

15          Q.    An existing single well on 640 spacing could not  
16 access and penetrate all these zones and collectively then  
17 deplete those intervals collectively within the section?

18          A.    That's correct.

19          Q.    It requires most of the wellbore?

20          A.    Right.

21          Q.    In order to give the Examiner a better snapshot  
22 of how this is put together, would you turn to the next  
23 display? Would you unfold that color map for us? Where  
24 did we borrow this from, Mr. Meek?

25          A.    This is an exhibit that was presented by

1 ConocoPhillips at the previous hearing in -- I believe the  
2 one in October.

3 Q. Yes. And have you reviewed and satisfied  
4 yourself that it's accurate for the purposes that you  
5 intend?

6 A. Yes, I have.

7 Q. Let's take a moment and summarize again for the  
8 Examiner how the Paradox intervals are subdivided in the  
9 Barker Dome versus how they are handled in the Ute Dome  
10 structural portion of these features.

11 A. Okay. I'll start with Ute Dome, because it's  
12 simpler. The entire Paradox formation is subject to the  
13 same pool rules, which at this time are 640 acre spacing  
14 and allowing one well per 160 acre unit, while in the  
15 Barker Dome structure, the pool rules are subdivided  
16 stratigraphically so that each of the different intervals  
17 has different rules that apply to it.

18 Q. When we start with the top interval, the Ismay  
19 and the Barker Dome, the spacing applicable to that  
20 formation is what, sir?

21 A. Is 160 acres.

22 Q. Then we move down into Desert Creek, and what's  
23 your spacing?

24 A. In the Desert Creek it's 320; in the Akah and  
25 Upper Barker Creek, it's 320.

1 Q. And then finally?

2 A. And then finally in the Paradox, which consists  
3 of the Lower Barker Creek and the Alkali Gulch members,  
4 it's 640 acre spacing.

5 MR. KELLAHIN: Mr. Examiner, that concludes my  
6 examination of Mr. Meek. At this point in time, we move  
7 the introduction of Exhibits 1, 2 and 3, those documents  
8 behind those tab numbers.

9 HEARING EXAMINER: Okay, Exhibits 1, 2 and 3  
10 will be admitted. Mr. Meek, have you discussed this  
11 proposal with Mr. Heyden? That's our geologist in Aztec.

12 THE WITNESS: Steve Heyden? I have not  
13 personally discussed it with him. I believe he was aware  
14 of the -- he was notified, he's on the notification list.

15 HEARING EXAMINER: That's my only question.  
16 Mr. Jones?

17 MR. JONES: Yeah. Did you look at the exhibits  
18 for the ConocoPhillips presentation of that section to the  
19 northeast of here and see about their fault, the location  
20 of their fault?

21 THE WITNESS: Uh-huh.

22 MR. JONES: It seems their fault was a little  
23 bit further southeast. To me it seemed that way. Maybe  
24 I'm remembering it wrong.

25 THE WITNESS: The location of the fault?

1 MR. JONES: Faults don't move, though.

2 THE WITNESS: Yeah. There may be a slight  
3 difference in the way we've interpreted the location of  
4 that fault. I don't believe that ConocoPhillips has the  
5 same 3D seismic survey data set that we possess. So they  
6 may not have as good of a data set.

7 Also, it's dependant on the horizon that the  
8 structure map is constructed on, because the fault, you  
9 know, moves horizontally. It's not a vertical fault, it  
10 has a dip to it. So if you were mapping on a different  
11 horizon, that -- the position of that fault on that  
12 surface would change.

13 MR. JONES: Does that have a lot of throw to it?  
14 How much throw does it have?

15 THE WITNESS: It appears from the seismic  
16 interpretation that the throw is variable by the horizon.  
17 There's more throw in the deeper part of the section and  
18 it seems to decrease as you get shallower.

19 It's, I guess, a little bit interpretive for me  
20 to say exactly how much throw is at the Ismay, which is  
21 the horizon that I've shown on the map. We don't have a  
22 well that penetrates the fault which is normally the way  
23 that we can accurately determine the amount of throw.

24 But clearly, from the seismic  
25 interpretation, there's a break in the reflectors that

1 indicates that there is a fault there.

2 MR. JONES: You sound like similar to what  
3 ConocoPhillips said. What age is it, what age did the  
4 fault get initiated at?

5 THE WITNESS: Well, it's affected the  
6 Pennsylvanian age rock, so it's at least moved, you know,  
7 after the Pennsylvanian age rocks were deposited.

8 MR. JONES: Okay.

9 THE WITNESS: As I recall, the shallower the  
10 cretaceous, which includes the Dakota section above it, is  
11 not faulted but is actually -- It would be more accurately  
12 represented as a fold that separates the two structures.

13 MR. JONES: Okay. I guess the biggest issue  
14 that comes to mind is, what's the difference  
15 stratigraphically or the discontinuity between the -- If  
16 you look as a geologist comparing the Ute Dome and the  
17 Barker Dome from the different intervals, why does one  
18 need 640 with four wells and the other one needs to be  
19 broken up in the different pools and the different pool  
20 rules and --

21 THE WITNESS: Right. Well, I was actually a  
22 party -- I was a witness when XTO applied to change the  
23 spacing rules in Ute Dome from 640 one well per section,  
24 and then to allow us to drill an additional four wells per  
25 section.

1           At that time, we thought that was the most  
2 appropriate way to handle the Ute Dome field. We don't  
3 operate the Barker Dome field, so I'm less familiar with  
4 the particular reservoir issues that would be involved.

5           MR. JONES: Mr. Kellahin has coached you well, I  
6 can see. Okay. That's all the questions I have. Thank  
7 you.

8           HEARING EXAMINER: I have nothing further for  
9 this witness. Any follow up, Mr. Kellahin?

10          MR. KELLAHIN: No, sir.

11          HEARING EXAMINER: Very good. The witness may  
12 step down and you may call your next witness.

13          MR. KELLAHIN: Mr. Examiner, we will call Mary  
14 Flynn.

15   MARY FLYNN,  
16 the witness herein, after first being duly sworn  
17 upon her oath, was examined and testified as follows:

18   DIRECT EXAMINATION

19 BY MR. KELLAHIN:

20          Q. Ms. Flynn, for the record, ma'am, would you  
21 please state your name and occupation?

22          A. Mary Flynn, I'm a reservoir engineer at XTO  
23 Energy.

24          Q. On prior occasions, Ms. Flynn, have you  
25 qualified as an expert reservoir engineer and testified

1 before the Division?

2 A. I have.

3 Q. Pursuant to your employment, have you made a  
4 reservoir engineering study of Section 27 that's the  
5 subject of this application?

6 A. Yes, I have.

7 Q. As a part of that study, have you also looked at  
8 the performance of wells in what is characterized as the  
9 Ute Dome-Paradox Gas Pool?

10 A. Yes, I have.

11 Q. And have you prepared certain exhibits for  
12 introduction today?

13 A. I have.

14 Q. And the opinions that you're about to express  
15 are your opinions?

16 A. They are.

17 MR. KELLAHIN: We tender Ms. Flynn as an expert  
18 reservoir engineer.

19 HEARING EXAMINER: She is so qualified.

20 Q. From an reservoir engineering aspect, Ms. Flynn,  
21 would you turn to Tab No. 4? And let's take the first  
22 color display of Section 27 and have you set the framework  
23 for our discussion.

24 A. Okay. In that section I've colored in yellow  
25 the portion that XTO is the operator of. So we have three

1 quarters of that section. Burlington operates one quarter  
2 of that section.

3 And there is one abandoned well in the northwest  
4 quarter that El Paso had drilled in 1950 that only  
5 produced 28 million cubic feet, which is the upper right  
6 number on that.

7 XTO currently operates two wells in the east  
8 half of that unit, the Ute Indians A-39 and A-36, and we  
9 currently have proposed one well in the southwest quarter.

10 Q. When you look at the data displayed on this  
11 exhibit page and associated with a well name and location,  
12 there's a series of additional numbers. Were any of those  
13 of particular significance to us?

14 A. The right-hand side of the well symbol would be  
15 gas related numbers, on the left-hand side would be oil.  
16 The top rows would be the cumulative production.

17 So, for instance, on the A-39, the cumulative  
18 production from the Akah-Barker Creek unit, which is  
19 labeled below the well, came to 193 million cubic feet.  
20 The current daily rate was 88 MCF per day.

21 The next unit was the Desert Creek, which was  
22 completed in 2007. Its cumulative is 334, and daily rate  
23 80. So, the top row is cumulative, the row below it is  
24 daily rates.

25 So what's kind of significant in this well is

1 how different the daily rates are between the zones. Like  
2 in A-39 from the Paradox zone, the farthest to the right  
3 zone, we're producing 2,678 MCF a day, whereas in the Ute  
4 Indians A-36, we weren't able to complete that zone, we  
5 have a fish in the hole on that zone.

6 The most productive zones in the A-36, a quarter  
7 section away, are the Akah-Barker Creek and the Desert  
8 Creek, which are small contributors in the Ute Indians  
9 A-39.

10 Q. Is all of Section 27 currently subject to the  
11 rules for the four pools associated with the Barker Dome  
12 structure?

13 A. Yes, sir.

14 Q. Let's turn to the next page and look at what the  
15 current affect of having those rules apply to Section 27  
16 is.

17 A. All right. So starting on the outside square,  
18 the green square is the Paradox dedication, which is the  
19 lowest member of the formation. We're only allowed one  
20 well per 640. So currently, the Ute Indians A-39 is  
21 completed in that zone.

22 So that's the only well that could be in that  
23 zone in that section. And then, the blue squares that are  
24 on the north half of the south half show the Desert Creek  
25 Akah and Upper Barker Creek dedication. So we could have

1 one well per 320, so we have A-39 and A-36 in those two  
2 units. Then the red squares --

3 Q. Let me interrupt you for a second.

4 A. Sure.

5 Q. For example, if you look at the A-36 in the  
6 southeast quarter of 27, that production has to be  
7 associated with Ismay? You could not take that wellbore  
8 and go down and now produce out of the lower portion of  
9 that which would be identified as the Paradox?

10 A. Correct. Right. The only well we could have in  
11 the Paradox would be that A-39, no other well could be in  
12 that, it's not completed in that.

13 Q. Please continue, then.

14 A. So the Ismay is on 160 acre unit; so the  
15 northeast quarter and the southeast quarter would be the  
16 dedications for producing the Ismay. So both of those  
17 wells are open in both the Ismay, the Desert Creek, the  
18 Akah-Barker Creek unit.

19 So if we wanted to drill one more well -- well,  
20 we actually would like to drill two more, but one more  
21 well -- any additional wells could only be open in the  
22 Ismay zone currently because of the spacing.

23 Q. Let's turn past this color display and look at  
24 the black and white to more completely identify the  
25 completion intervals for the A-37 and the A-36 wellbores.

1           A.     Okay.  So as you can see, each well is open in  
2     the Ismay, which is on 160 acres in the northeast quarter  
3     and southeast quarter.  Each well is also open in the  
4     Desert Creek on the north half -- or south half.

5                     And the same with the Upper Barker Creek and the  
6     Akah.  However, <sup>only D</sup> ~~all of~~ A-39 is open in the Paradox.  The  
7     A-36, we originally tried to open, and we had numerous  
8     cases of having a fish in the hole, and that prevented  
9     production from that zone.  So when we drilled A-39, we  
10    completed that lowest zone, the Paradox zone.

11           Q.     If you get approval for your request to take 27  
12    and move it into the Ute Dome-Paradox Gas Pool, what then  
13    can you do?

14           A.     Okay, so if that whole zone was done in the Ute  
15    Dome-Paradox, we would have two future wells that we could  
16    drill on the west half.  And in those wells, we would open  
17    any pay that we saw available.  And we could either drill  
18    a deeper well or try to recomplete that Ute Indians A-36  
19    where we currently have damage and a fish in the hole in  
20    order to get that lowest interval.

21                     Because as you can see, that lowest interval is  
22    our best interval in the A-39, and some of our upper  
23    intervals are our best intervals in the A-36.  And so,  
24    there's just a lot of variability in one well.  I mean, we  
25    never know when we're looking at these logs -- The payment

1 may not look very good, but it could be our most  
2 productive interval.

3 Q. From a reservoir engineering perspective, do you  
4 see any reason not to include all of Section 27 in the Ute  
5 Dome-Paradox Gas Pool?

6 A. No. It looks just like the other intervals we  
7 have in the Ute Dome.

8 Q. So it would allow you the opportunity to develop  
9 Section 27 the way you're currently developing the balance  
10 of the sections within the Ute Dome-Paradox Gas Pool?

11 A. Correct.

12 MR. KELLAHIN: That concludes my examination of  
13 Ms. Flynn. We move the introduction of the Exhibits  
14 behind Tab No. 4.

15 HEARING EXAMINER: No. 4 is admitted. I don't  
16 have any questions. Mr. Jones?

17 MR. JONES: The problems in the bottom of A-36,  
18 was that something that's normal in the bottom of the Akah  
19 or --

20 THE WITNESS: No. In each of those -- as we  
21 complete up the hole, we set a cast iron bridge plug and  
22 we do a pressure bond in the zone below before we complete  
23 the zone above. So we set a cast-iron bridge plug, do the  
24 next zone, acidize that zone, set another cast-iron bridge  
25 plug, acidize that zone, and we get pressures on each one.

1           And after we get to the top, then we go back  
2 through and drill out everything. So when we went back  
3 through and drilled out everything, sand and stuff had  
4 fallen in on some of the cast-iron bridge plugs. We  
5 couldn't drill it out, it started like turning and -- we  
6 just couldn't get a good bite on that bridge plug to get  
7 it drilled back out.

8           And in the process of doing that, it damaged the  
9 casing -- or else the casing was damaged, and that  
10 prevented us from getting a good turn on it. So we ended  
11 up having to leave two plugs in the hole in the lower part  
12 of the hole.

13           MR. JONES: So you used cast-iron bridge plugs,  
14 not those little rubber plugs that -- between frac? You  
15 leave them a long time, I guess.

16           THE WITNESS: It could be -- I mean, it would  
17 be -- These ones have taken a fair amount of time to do  
18 all the testings and everything, so it could be 45 days or  
19 two months between each one.

20           MR. JONES: And you have a pressure sensor below  
21 to see if you had got any communication --

22           THE WITNESS: Well, not for communication.  
23 We'll run the pressure bond before we do the next zone,  
24 and then we pull out the pressure bond and then set a  
25 plug, then do the next zone, pressure test that.

1 MR. JONES: Okay. So you see if your completion  
2 still has some problems before you --

3 THE WITNESS: And when we get a good idea where  
4 we think we're going to get our most amount of production,  
5 we'll just do a small acid job, then test the pressures.  
6 And so we get a pretty good idea -- You know, since this  
7 is sort of discontinuous, we could have much higher  
8 pressure in one zone than in another, and we'll see  
9 depletion from one to another if there had been or -- So  
10 you have normal -- not abnormal pressure, but a higher  
11 pressure than we might have seen in the adjacent well.

12 MR. JONES: So the logs are not definitive?  
13 What else do you use to decide where to --

14 THE WITNESS: Well, the logs are definitive but  
15 they're just so different than other things. Like 2  
16 percent porosity is pretty good in this carbonate. And  
17 so, it takes very, very little porosity for it to be a  
18 potential pay zone.

19 But then, sometimes I'll complete something and  
20 I'll go, Oh, this is doing really good in this well.  
21 We'll complete that. It looks almost the same on this  
22 next well, and then we get nothing from it. And then  
23 another zone that may have looked very good or very bad  
24 ends up being the better zone.

25 This is a really interesting area to work

1 because it's -- it's just hard to kind of figure out  
2 what's happening.

3 MR. JONES: But you don't use the drill stem  
4 tabs?

5 THE WITNESS: We have done a little bit of  
6 sidewall pressure on data, but it's so, so tight that  
7 sometimes it's hard to -- you can't -- we can't get a good  
8 enough seal for a long enough time to get a pressure, like  
9 a pressure express tool.

10 MR. JONES: Okay.

11 THE WITNESS: So, we've done that in maybe three  
12 or four wells, I guess. Our bottom hole pressure gauges  
13 after it's completed tend to be our better indicator.

14 MR. JONES: Do you see boundaries on those --  
15 you know, analyze those buildups, I guess, they would be,  
16 to see if it confirms your discontinuity?

17 THE WITNESS: We do. Like everything, sometimes  
18 it shows that it is continuous and sometimes it shows it's  
19 discontinuous. Like everything, it seems that there is  
20 not a rule to it, it will -- you know. We never know what  
21 we're going to see.

22 MR. JONES: Even in the lower zone, I mean, as  
23 compared to that bottom of the Paradox, that Lower Barker  
24 Creek, I guess you'd call it?

25 THE WITNESS: Yeah. What we would call the

1 Paradox or the Alkali Gulch, that is actually very  
2 discontinuous. It has a beautiful porosity zone in a few  
3 sections, and we're getting excellent production from it,  
4 and then it just disappears.

5 MR. JONES: But it's your best overall  
6 performing zone, is that correct, in the whole Ute Dome?

7 THE WITNESS: No, it would -- We can only see  
8 it -- We have it completed in about three or four wells  
9 right now.

10 MR. JONES: Okay, are we talking about the  
11 lowest zone?

12 THE WITNESS: Right.

13 MR. JONES: Oh. I thought that was the most --

14 THE WITNESS: Well, the Desert Creek tended to  
15 be what we felt was the best producing interval for a long  
16 time.

17 MR. JONES: Desert creek? Okay.

18 THE WITNESS: And then in the last few years,  
19 we've started doing the Alkali Gulch, which in the Barker  
20 Dome would have been called Paradox. And that has been  
21 the most prolific zone in that Barker Dome area. And they  
22 have that at one per 640.

23 But we don't have that interval as continuously  
24 in the Ute Dome, but where we do have it, it's very good.

25 MR. JONES: Okay. And your Barker Dome

1 production for XTO is pretty scant, you don't have a lot  
2 of that, it's mostly ConocoPhillips; is that correct?

3 THE WITNESS: Yes. In fact, we have nothing in  
4 the Barker Dome, we have only in the Ute Dome.

5 MR. JONES: Okay. So you're looking for the  
6 dolomites inside the limestone? I should have asked  
7 Mr. Meek that.

8 THE WITNESS: Sometimes we complete the  
9 dolomites, but normally it's just a pure carbonate, or  
10 sometimes it traps sand within the carbonates.

11 MR. JONES: Okay. So you see some gamma ray  
12 spikes --

13 THE WITNESS: Right, we'll see a little gamma  
14 ray, and sometimes we'll see pretty good porosity  
15 development. And so, there will just be, you know, some  
16 sand that will -- I'm probably a bad person to describe  
17 it, but the sand might invade there, and it gets charged,  
18 and so it's much better porosity and permeability. So if  
19 we can get the gas from the sand, that's excellent.

20 MR. JONES: And how is this fault going to  
21 affect you as you move closer to it? You want to drill a  
22 well close to it. This abandoned Paradox well, it looks  
23 like that was almost right on that fault in the northwest  
24 quarter.

25 THE WITNESS: I wouldn't expect that it will

1 affect it too much.

2 MR. JONES: I should have asked Mr. Meek another  
3 question, but basically, you're not expecting a problem  
4 from the fault as you move towards it with your drilling?

5 THE WITNESS: No, I wouldn't expect a problem  
6 from that, no.

7 MR. JONES: How come it hasn't been done in the  
8 past?

9 THE WITNESS: Well, we formally had it at --  
10 We've only been able to drill four wells per 640 since  
11 late 2005.

12 MR. JONES: Okay.

13 THE WITNESS: And permitting and all of that  
14 with the BIA takes about a year and a half.

15 MR. JONES: Oh, okay. This is Ute Mountain Ute?

16 THE WITNESS: Right, it's Ute Mountain Ute. So  
17 we've gone full bore on drilling for two years and now we  
18 really would like to drill that A-57 in every zone. But  
19 now, you know, gas prices have been lower, so we're not  
20 drilling as fast as we did a year and a half ago. So...

21 MR. JONES: Okay. Are you guys going to have a  
22 land witness?

23 MR. KELLAHIN: We can if you like.

24 MR. JONES: Well, I was just going ask -- The  
25 boundary of the -- I didn't pull the current boundaries of

1 the pools right now, and within Section 27, do you know  
2 whether the entire section now is not in the Ute Dome  
3 Pool?

4 THE WITNESS: The northwest corner is  
5 specifically named as part of the Barker Dome Pool.

6 MR. JONES: Barker Dome. Okay. So this would  
7 be a contraction and expansion?

8 THE WITNESS: Right. So the other three wells  
9 were just brought into the Barker Dome as a one quarter of  
10 the section, and they're within a mile, it was just  
11 brought in as part of the Barker Dome.

12 MR. JONES: Originally?

13 THE WITNESS: Originally, right.

14 MR. JONES: But right now, the Barker Dome  
15 does -- the Ute Dome does not include anything in between  
16 27, but the Barker Dome includes only the northwest  
17 quarter; is that correct?

18 THE WITNESS: Correct.

19 MR. JONES: So it's similar to what the other  
20 situation is. And as far as producing these, all of these  
21 zones in one well, you don't have any problem downhole  
22 commingling them, producing them together?

23 THE WITNESS: No.

24 MR. JONES: That's feasible and practical and --

25 THE WITNESS: It is.

1 MR. JONES: And economical?

2 THE WITNESS: Right. Normally if they're  
3 flowing, sometimes we'll use a plunger lift, but it's  
4 pretty acidic gas, it's solid gas.

5 MR. JONES: Oh, it is?

6 THE WITNESS: So we can't put too much metal  
7 downhole.

8 MR. JONES: Okay. But it's better to do it all  
9 downhole commingled in one well than have it spaced  
10 separately and drill different --

11 THE WITNESS: Well, it probably wouldn't be  
12 economical to do that because we don't know which zones  
13 we're going to find in each location.

14 MR. JONES: Okay.

15 THE WITNESS: And so if we were targeting only  
16 one interval, and then that happened to be where the  
17 carbonates didn't develop with porosity, then we'd be out  
18 on that.

19 MR. JONES: Okay. Do you do your economics for  
20 the project?

21 THE WITNESS: Yes.

22 MR. JONES: So you have to estimate what zones  
23 you're going to get, and how much for each zone, and the  
24 overall cost of the well, and...

25 THE WITNESS: I don't normally do it zone by

1 zone, I would just do it by average of adjacent wells that  
2 are of that vintage.

3 MR. JONES: Okay. Thank you very much.

4 HEARING EXAMINER: The No. 36 and the No. 39  
5 are the only wells that have actually been drilled in this  
6 section?

7 THE WITNESS: Correct.

8 HEARING EXAMINER: Okay. Thank you, that's all  
9 I have, Ms. Flynn.

10 MR. KELLAHIN: Mr. Examiner, behind Exhibit Tab  
11 No. 5 is another locator map.

12 HEARING EXAMINER: Okay. Is that all have you  
13 of this witness?

14 MR. KELLAHIN: Yes, sir. Exhibit 5 is a locator  
15 map, and behind that is my certificate of mailing of  
16 notification. I brought Mr. Jameson as a landman who  
17 helped me prepare this mailing list, and he can testify if  
18 necessary to the certification.

19 But his concept and mine was to take all the  
20 parties we notified in the Conoco case and adjust it so  
21 that we had all the operators in the Ute Dome-Paradox Gas  
22 Pool. And all the interest owners that had an interest in  
23 Section 27 is all Ute Mountain Ute tribal lands. And we  
24 notified, as Conoco did, all the various agencies  
25 associated with the Ute Mountain Ute Indians, plus the

1 BLM, plus Mr. Perrin and Mr. Heyden, and I've received no  
2 objections from anybody.

3 HEARING EXAMINER: This is for the offsetting  
4 sections?

5 MR. KELLAHIN: For everybody in the pool, all  
6 the operators in the pool, and every interest owner within  
7 27 received notice.

8 HEARING EXAMINER: Yeah.

9 MR. KELLAHIN: If there was an offset operator  
10 to Section 27, they also got notice. The only entity that  
11 was not an offset operator would have been ConocoPhillips.

12 HEARING EXAMINER: Okay. Is XTO the only  
13 working interest throughout Section 27?

14 MR. KELLAHIN: They are the only working --  
15 well, I'm sorry, they subdivided a number of the -- in the  
16 northwest quarter section of 27, that's a ConocoPhillips  
17 tract.

18 HEARING EXAMINER: Okay, so XTO doesn't own  
19 anything in the northwest quarter?

20 MR. KELLAHIN: Yeah. What they'll do, they'll  
21 own the balance of the section.

22 HEARING EXAMINER: Okay. Very good. Anything  
23 further, Mr. Jones?

24 MR. JONES: No.

25 MR. KELLAHIN: If you turn to the notification,

1 after the certification is the notice letter. Following  
2 that is a list that includes Mr. Dan Rabinowitz and all  
3 the other entities that we could find, as well as  
4 ConocoPhillips could find as a notice.

5 With your permission, Mr. Examiner, we would ask  
6 that you admit the documents behind Exhibit Tab No. 5.

7 HEARING EXAMINER: Okay, Exhibit 5 is admitted.  
8 Anything further?

9 MR. KELLAHIN: No, sir, that concludes our  
10 presentation. Thank you.

11 HEARING EXAMINER: Okay. Case No. 14430 will be  
12 taken under advisement.

13 (Whereupon, the proceedings concluded.)

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I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. \_\_\_\_\_  
heard by me on \_\_\_\_\_  
\_\_\_\_\_, Examiner  
Oil Conservation Division

1 STATE OF NEW MEXICO )  
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2 COUNTY OF BERNALILLO )

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REPORTER'S CERTIFICATE

I, PEGGY A. SEDILLO, Certified Court Reporter of the firm Paul Baca Professional Court Reporters do hereby certify that the foregoing transcript is a complete and accurate record of said proceedings as the same were recorded by me or under my supervision.

Dated at Albuquerque, New Mexico this 9th day of March, 2010.

  
\_\_\_\_\_  
PEGGY A. SEDILLO, CCR NO. 88  
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