

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

3 APPLICATION OF WPX ENERGY
4 FOR APPROVAL OF A 9,238-ACRE Case No. 15102
PROJECT AREA COMPRISED OF
5 ACREAGE SUBJECT TO A
COMMUNITIZATION AGREEMENT;
6 FOR A "REFERENCE CASE"
AUTHORIZING WITHIN THE
7 PROPOSED PROJECT AREA THE
DOWNHOLE COMMINGLING OF
8 PRODUCTION FROM THE ESCRITO
GALLUP ASSOCIATED POOL,
9 COUNSELORS GALLUP DAKOTA POOL,
AND LYBROOK GALLUP OIL POOL;
10 AND FOR AN EXCEPTION TO WELL
LOCATION REQUIREMENTS WITHIN
11 THE PROPOSED PROJECT AREA,
RIO ARRIBA AND SANDOVAL
12 COUNTIES, NEW MEXICO

ORIGINAL

13 TRANSCRIPT OF PROCEEDINGS
DOCKET EXAMINER HEARING

14 BEFORE: SCOTT DAWSON

15 March 20, 2014
16 Santa Fe, New Mexico

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17 This matter came on for hearing before the New
18 Mexico Oil Conservation Division, SCOTT DAWSON,
19 Deputy Director of the Oil Conservation Division, on
20 Thursday, March 20, 2014, in Porter Hall, Santa Fe,
21 New Mexico.

22
23 REPORTED BY: PAUL BACA, CCR #112
24 PAUL BACA COURT REPORTERS
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1 HEARING EXAMINER DAWSON: Is everybody
2 ready?

3 Good morning. Today is March 20, 2014.
4 We are located in Porter Hall of the Indochino
5 Building at 1220 South St. Francis, Santa Fe,
6 New Mexico.

7 My name is Scott Dawson. I'm the deputy
8 director of the Oil Conservation Division and
9 Hearing Officer for Case Number 15102.

10 I call Case Number 15102. It's continued
11 from the March 6, 2014, examiner hearing. And its
12 regarding the application of WPX Energy for an
13 approval of a 9,238-acre project area comprised of
14 acreage subject to a communitization agreement for a
15 reference case authorizing within the proposed
16 project area the downhole commingling of production
17 from the Escrito Gallup associated pool, Counselors
18 Gallup Dakota oil pool, and Lybrook Gallup oil pool;
19 and for an exception to well location requirements
20 within the proposed project area, Rio Arriba and
21 Sandoval County, New Mexico.

22 At this time I want to ask for appearances
23 and witnesses.

24 MR. FELDEWERT: May it please the
25 examiner. Michael Feldewert with the Santa Fe

1 office of Holland & Hart appearing on behalf of the
2 applicant. And I have three witnesses today.

3 HEARING EXAMINER DAWSON: Okay.

4 MR. BRUCE: Mr. Examiner, Jim Bruce from
5 Santa Fe representing JMJ Land & Minerals Company.
6 I may have a witness.

7 HEARING EXAMINER DAWSON: Okay.
8 Mr. Feldewert, would you like to call up your
9 witness please?

10 MR. FELDEWERT: Yes.

11 KEN MCQUEEN,
12 after having been first duly sworn under oath,
13 was questioned and testified as follows:

14 EXAMINATION

15 BY MR. FELDEWERT:

16 Q. Would you please state your name, identify
17 by whom you are employed, and in what capacity?

18 A. My name is Ken McQueen. I'm employed by
19 WPX Energy, and I'm the director of the San Juan
20 region.

21 Q. Mr. McQueen, how long have you been the
22 director of the San Juan region for WPX?

23 A. I've been in this job duty since March of
24 2008.

25 Q. And what did you -- prior to this

1 position, what was your position with, I guess,
2 Williams, the predecessor?

3 A. Yes. I was -- I started with Williams as
4 a senior staff engineer in 2002, was later the
5 manager of joint interest operations for Williams.

6 Q. Have you previously testified before the
7 Oil Conservation Division as an expert in petroleum
8 engineering?

9 A. I have.

10 Q. And, Mr. McQueen, have you also
11 participated in rulemaking proceedings before the
12 commission as an expert in petroleum engineering?

13 A. Yes, that's correct.

14 Q. I believe, Mr. McQueen, you actually
15 testified before the commission with respect to the
16 horizontal well rules back in 2011?

17 A. Yes. I was the technical witness on
18 behalf of industry at that hearing.

19 Q. Okay. Are you familiar with the
20 application that has been filed in this case?

21 A. I am.

22 Q. And are you familiar with the status of
23 the lands in the proposed communitized area?

24 A. Yes, I am.

25 MR. FELDEWERT: I would tender Mr. McQueen

1 as an expert witness in petroleum engineering.

2 HEARING EXAMINER DAWSON: Is there any
3 objection?

4 MR. BRUCE: No, sir.

5 HEARING EXAMINER DAWSON: He is so
6 qualified.

7 Q. (By Mr. Feldewert) Mr. McQueen, would you
8 turn to what's been marked as WPX Exhibit Number 1
9 in your notebook and explain to us what it shows,
10 and in particular the colors in the legend, please?

11 A. The CA that we are proposing consists of
12 9,237.3 acres, and it consists of federal, state,
13 and fee acreage.

14 The federal acreage, as shown in the green
15 portion of this map, constitutes about 90.5 percent
16 of the total acreage in the CA.

17 The state acreage, shown as brown on this
18 map, encompasses 480 acres, about 5.2 percent of the
19 total CA area.

20 And the fee acreage, as shown in blue on
21 this Exhibit 1, constitutes 400 acres, approximately
22 4.33 percent of the total area.

23 Q. Is it the area outlined in red that
24 identifies the area that has been preliminarily
25 approved for communitization?

1 A. That's correct. That would be the
2 exterior boundary of the proposed CA.

3 Q. Okay. And does that -- does the legal
4 description in the application match the area that
5 is enclosed in red?

6 A. That's correct.

7 Q. There -- if I look at the upper left-hand
8 corner, does it identify the working interest owners
9 in this acreage enclosed in red and the percentages?

10 A. That's correct. The legend identifies
11 both the working interest owners and the ownership
12 that's present in the proposed CA.

13 WPX owns approximately 93 and a half
14 percent of this area. There are two additional
15 non-operators that will participate in the CA. That
16 is Logos, with approximately a 6 percent working
17 interest, and Manana, with an approximate .4 percent
18 ownership.

19 Q. Okay. And then if I turn to what's been
20 marked as WPX Exhibit Number 2, I see a similar map
21 with the CA area outlined in red.

22 How does this differ from the prior
23 exhibit?

24 A. This Exhibit 2 shows all of the leases
25 that are encompassed in the CA. There were

1 questions raised in some of the prehearing meetings
2 about the extent of the leases.

3 And what this is intended to demonstrate
4 is that all of the federal leases are contained
5 entirely within the bounds of the proposed CA.

6 The 480 acres of the state lease that is
7 contained in the CA is part of a much larger state
8 lease that's shown in blue in this area.

9 And then additionally, some of the fee
10 acreage leasehold also extends outside of the CA
11 area.

12 Q. Now, the acreage in blue here is
13 signifying the state lease. It's contained in
14 various sections. Why is that?

15 A. Many years ago, my understanding is that
16 the state, in their leasing process, included
17 multiple sections of land in leases. So that's why
18 we see this particular lease covering parcels of
19 land in four or five different sections.

20 Q. And with respect to the CA area, this
21 state lease comprises just 480 acres?

22 A. That's correct.

23 Q. Okay. If I then turn to what's been
24 marked as WPX Exhibit Number 3, again we see the CA
25 acreage outlined in red, correct?

1 A. That's correct.

2 Q. Okay. Then how does this differ from the
3 prior exhibits? What does this show us?

4 A. Well, rather than showing the land
5 position, this Exhibit 3 is intended to show the
6 pool maps that are encompassed within the proposed
7 CA.

8 And the red pool here is the Lybrook pool.
9 The yellow is the Counselors pool. And the green is
10 the Escrito pool.

11 And portions of each of those three pools
12 will be included in this proposed CA.

13 Q. And does this also reflect the existing
14 development in this area?

15 A. Yes. All of the vertical wells that are
16 currently producing are shown by green dots on this
17 map.

18 And then the wells that we have drilled or
19 are currently drilling horizontally within the CA
20 are shown by the horizontal lines that appear on the
21 map.

22 To date, we have seven producing wells
23 that have been drilled within the CA area. We have
24 two that are waiting on stimulation, and we have one
25 that is currently drilling.

1 Q. So there's already a substantial amount of
2 existing development, both vertical and horizontal,
3 within the proposed -- within the CA area, correct?

4 A. That's correct.

5 Q. Okay. And did the company meet with both
6 BLM and the New Mexico state land office about
7 development of this area as a large communitized
8 area?

9 A. Yes, we have.

10 Q. And what was the BLM's reaction?

11 A. BLM felt that this proposal was the best
12 way to move forward for developing a horizontal play
13 in an area that had been previously developed by
14 vertical wells.

15 The reality is that all of the leasehold
16 within the CA is held by production today.

17 And so from the BLM's perspective, very
18 much underdevelopment.

19 Q. So they support the communitized area
20 concept?

21 A. Yes. And we'll be presenting an exhibit
22 later in my testimony that has their preliminary
23 agreement to the CA.

24 Q. Okay. Why don't we do that now.

25 Let's turn to what's been marked as WPX

1 Exhibit Number 4.

2 Does this contain, on the first page, the
3 letter from the Bureau of Land Management providing
4 preliminary approval for the communitized area?

5 A. That's correct.

6 Q. And then beginning on the second, and
7 continuing on to the third page, is that the letter
8 from the New Mexico state land office granting
9 preliminary approval of this communitized area?

10 A. That's correct.

11 Q. If I then turn to what's been marked as
12 WPX Exhibit Number 5, is this the most recent
13 version of the communitization agreement that has
14 been approved -- preliminarily approved by both the
15 BLM and the New Mexico state land office?

16 A. That's correct.

17 Q. If I turn to the second page of this
18 exhibit, does it identify the horizon -- first off,
19 it provides the acreage description, correct?

20 A. That's correct. On page 2, the first
21 paragraph describes the acreage that will be
22 encompassed within the CA.

23 And the second paragraph identifies the
24 number of acres. It identifies that this
25 development is for horizontal well development only.

1 And it also identifies the vertical
2 section for inclusion in the CA as the Mancos
3 formation. And the Mancos formation, in particular,
4 is defined in a stratigraphic section that will be
5 presented later by our geologist. It's from the
6 Rincon Number 20. It's a vertical well that
7 completely penetrates the vertical section, and
8 we're asking for a definition of this CA area to be
9 encompassed from the top of the Mancos formation to
10 the top of the Greenhorn formation.

11 (A technical recess was taken from 9:28
12 a.m. to 9:49 a.m.)

13 HEARING EXAMINER DAWSON: We're back in
14 session. Sorry about the problem there.

15 Go ahead.

16 Q. (By Mr. Feldewert) So, Mr. McQueen, I
17 think we were at WPX Exhibit Number 5 on the second
18 page. And you had pointed out that it contained the
19 acreage description and the amount of acreage.

20 Does it also identify the formation that
21 is being -- that is subject to the communitization
22 agreement?

23 A. That's correct. The communitization
24 agreement will cover the Mancos formation that would
25 be defined specifically. And we'll have a top log

1 to show later in the geologic presentation as the
2 base point lookout, which is the stop of the Mancos,
3 all the way through the Mancos formation to the top
4 of the Greenhorn formation.

5 Q. And I believe that one of the unique
6 provisions of this communitization agreement that
7 has been preliminarily approved by the BLM and state
8 land office is that it is prone for horizontal well
9 development, correct?

10 A. That's correct. And that's stated in
11 the -- in the paragraph there at the end of the
12 legal description:

13 "Shall include only the Mancos formation
14 as to horizontal wells only underlying second
15 lands."

16 Q. And as I continue through this exhibit, at
17 some point I get to what is the Exhibit A to the
18 agreement, correct?

19 A. That's correct.

20 Q. Which outlines the area subject to the
21 communitization agreement. And that matches your
22 prior exhibits that we reviewed, correct?

23 A. That's correct.

24 Q. And then this also contains the Exhibit B,
25 which comprises a large portion of this exhibit that

1 identifies the interest by tract and then their
2 respective percentages, correct?

3 A. That's correct.

4 Q. All right. When you met with the Bureau
5 of Land Management, Mr. McQueen, was commerciality
6 or the need for a continuation drilling obligation
7 an issue with the agency?

8 A. At the end of the day it was not an issue.
9 And there, I think, are several reasons that
10 contributed to that.

11 First of all, all of the acreage within
12 the CA is currently held by production.

13 Secondly, all of the horizontals that we
14 drill today have been commercial -- significant
15 commercial, I might add, if we look at what the BLM
16 requires for a commercial determination in their
17 participating area. Wells that we have drilled to
18 date have been significantly better than those
19 minimums required on the commercializations.

20 The other aspect here is that as we go
21 forward, all parties in the CA share equally in the
22 production. So even if there are wells that are
23 drilled subsequently that are wildly economic or
24 uneconomic, all of the parties in the CA share
25 proportionately in the production.

1 And finally, I think the reason the BLM
2 did not require a drilling commitment in the
3 formation of this CA is that we have a very active
4 drilling plan underway. As I indicated, we already
5 have nine wells drilled in the CA, and we're
6 drilling our tenth well.

7 And based on our drilling outlook and
8 permitting schedule, we expect to be substantially
9 complete with all 60 horizontal laterals that will
10 be drilled in this CA by the end of 2015.

11 Q. With that in mind, if I turn to what's
12 been marked as WPX Exhibit Number 6, does it -- is
13 this -- does this exhibit identify your scheduled
14 drilling program?

15 A. It does. Exhibit 6 consists of two pages.
16 The first page is the rate schedule for Aztec
17 Drilling Rig Number 980. This is the first drilling
18 rig that we brought on board for our Chaco
19 development program. It started working for us on
20 January 4th of last year.

21 And you can see the wells that is has
22 drilled and the wells that we're planning for it to
23 be drilled.

24 Also shown on this sheet is the date that
25 we have staked. The locations that we plan to drill

1 to date, we have staked every location that's on
2 this drilling rig's list through the end of 2015,
3 with the exception of three.

4 I've also added the information of when
5 the APD was filed for and when the BLM and the state
6 permit were received.

7 So you can see that we have a very good
8 inventory of permitting available here that gets us
9 through the end of the summer with the current
10 permitting. And since the bulk of the remaining of
11 the wells have been staked, we are well along in the
12 progress of securing permits for the rest of those.

13 Now the color scheme here is, those wells
14 that are in yellow are the wells that have been
15 drilled within the bounds of the proposed CA.

16 And if we look at the second page of
17 Exhibit 6, this is the rig schedule for Aztec
18 Drilling Rig Number 730. This is the second rig
19 that we just recently brought on board to help us
20 expedite the development of the play. This well
21 spud its first well on February 6, 2014.

22 As you can see, its drilling schedule
23 through the duration of completion of the wells and
24 the proposed CA is entirely dedicated to the CA
25 development with the exception of two wells, the 226

1 and the 272, which will be drilled on a nearby state
2 lease.

3 Q. So, Mr. McQueen, you have -- currently the
4 company has two rigs running?

5 A. Correct.

6 Q. And they are continuous drilling?

7 A. Correct.

8 Q. And they are -- it looks, based on your
9 exhibit there, at least a large focus of their
10 drilling is on the communitized area, correct?

11 A. That's correct. And that is very
12 intentional upon our part. This first CA was the
13 easiest area to put together because we own the
14 majority of the leasehold. There were no Indian
15 leases involved in this area, so we really focused
16 on this proposed CA area as the core of our primary
17 development, while it allows us to gain permitting
18 inventory in other areas of our leasehold.

19 Q. Now, I think you previously testified, in
20 looking at some of the prior maps, that all of the
21 federal leases involved are wholly contained within
22 a communitized area?

23 A. That's correct.

24 Q. But that the state lease involved was
25 partially in, partially out, correct?

1 A. That's correct. In fact, just a minority
2 of the state lease, 480 acres, is contained within
3 our CA.

4 Q. As a result, did the New Mexico state land
5 office desire a segregation clause for the
6 communitized -- or under the communitization
7 agreement?

8 A. That's correct. The SLO requested a
9 segregation clause included in our CA.

10 Q. And the company agreed to that?

11 A. We did agree to that.

12 Q. And is that actually contained within
13 what's been marked as Exhibit Number 5?

14 A. Yes.

15 Q. Okay. That deals with the BLM and the
16 state land office.

17 Has the company also discussed this
18 communitized area with the two other working
19 interest owners?

20 A. Yes. We have discussed it with both of
21 the other two parties.

22 Q. And have the companies discussed a -- the
23 development of a joint operating -- a joint
24 operating agreement that would govern the operations
25 of this communitized area?

1 A. Yes. A joint operating agreement has been
2 discussed. We prepared the JOA. We've circulated
3 it to both of our partners. They have reviewed the
4 JOA, and they supplied their comments back to us. I
5 would describe it as substantially complete. I
6 would anticipate having a signed document for the
7 JOA within the next two weeks.

8 Q. So in addition to the BLM and the state
9 land office, all of the other working interest
10 owners within this communitized area agreed to the
11 common development under this communitization
12 agreement?

13 A. Yes. Not only agreed, but were very
14 supportive of the approach, because they felt like
15 this was the best approach for the development to
16 ultimately recover the optimum amount of reserves
17 from the lease holdings.

18 Q. So that essentially provides the examiner
19 with the background of this case.

20 So now, let's get to what the company is
21 actually seeking from the division. Okay?

22 With all of these approvals in place, what
23 does the company need from the division in order to
24 move forward with this project?

25 A. There are three considerations we need

1 from the commission.

2 The first is that we are asking for this
3 entire proposed CA area to be designated as a
4 project area under the horizontal rules
5 consideration.

6 We are asking for permission to commingle
7 the production between and among the three pools
8 that are present in the proposed CA.

9 And we're asking for consistent setbacks
10 around the perimeter of the CA.

11 Q. Okay. Now, I want to address each one of
12 those separately as we move forward.

13 Let's turn first, then, to the request
14 that the division recognize this CA as a single
15 project area for horizontal development.

16 A. Okay.

17 Q. What is the advantage of having the
18 division recognize this area as a single project
19 area for horizontal development?

20 A. The project area across this 9,200-plus
21 acres will give us the ability to drill laterals in
22 any direction. It essentially relieves us of any
23 setback requirements internal to the CA.

24 Today we've been, because of the land
25 situation, pretty much forced to orientate our

1 laterals within 160-acre project areas.

2 All of the laterals that we have drilled
3 to date have been in the Lybrook pool, and the
4 Lybrook spacing is 40 acres. So we've assembled
5 four 40s together in 160-acre project areas.

6 And because of the land orientation, this
7 has pretty much forced us to orientate our laterals
8 in an east to west or west to east direction.

9 What we've found, with some of the
10 extensive microseismic work that we've conducted in
11 this area, is that the fracture orientation is
12 actually not perpendicular to that direction.

13 The fracture direction that we were seeing
14 out here, and we've run three microseismics to date,
15 ranging anywhere from 30 to 40 degrees east and
16 north.

17 So this suggests to us that an optimal
18 lateral direction should be 30 to 40 degrees north
19 of west; in other words, orthogonal to that fracture
20 initiation direction.

21 And so by relieving us from all of the
22 internal setbacks across the CA, we'll be better
23 able to orientate laterals so that they more
24 optimally recover the reserves presently in the
25 reservoir.

1 Q. And I believe, Mr. McQueen, we have .
2 examples of what you're talking about in terms of
3 your well orientation.

4 Is that correct?

5 A. That's correct. If you will look at
6 Exhibit 7, this is a well that we will be drilling
7 shortly on state acreage in Section 16. It's the
8 148H lateral.

9 And this demonstrates our orientation of
10 the completed interval pretty much from east to
11 west.

12 And if you will look at the next exhibit,
13 which is Exhibit 8, this demonstrates where we would
14 plan to move in the future with our well
15 orientation.

16 So in Exhibit 7, the dedicated acreage to
17 the project area would be 160 acres, four 40s. Had
18 we drilled this well with the preferred direction,
19 we would have had six 40s, or 240 acres dedicated to
20 this horizontal wellbore.

21 Q. And so if I look at Exhibit Number 8, for
22 example, is that -- does that represent the type of
23 filing that would be made with the division in the
24 event that the -- this area is approved as a project
25 area?

1 A. That's correct.

2 Q. And you would essentially -- if I look at
3 dedicated acreage, you would essentially file with
4 the division as the dedicated acreage the 40-acre
5 tracts that would be penetrated by the well?

6 A. That's correct.

7 Q. And that would be for filing purposes?

8 A. Yes.

9 Q. But with respect to the production from
10 that well, would that be shared with all of the
11 interest owners in the communitized area?

12 A. That's correct.

13 Q. Is this -- what we see on Exhibit
14 Number 8, is this similar to the filings that the
15 company currently does for its Rosa unit?

16 A. Yes, that's correct.

17 Q. When was the Rosa unit formed?

18 A. The Rosa unit was formed in 1948.

19 Q. Is that a federal exploratory unit?

20 A. That is correct.

21 Q. Why did the company and the BLM decide to
22 communitize this area for horizontal well
23 development rather than proceeding with a federal
24 exploratory unit like they did back in 1948 with the
25 Rosa unit?

1 A. The federal exploratory unit is designed
2 to have a first well drilled and deemed as
3 commercial, and then as subsequent wells are drilled
4 and deemed commercial those become part of the
5 participating area, so that the participating area
6 is continually expanding over time as long as the
7 wells are commercial and to the point in time when
8 the participating area fully expands to the outside
9 limits of the federal exploratory unit.

10 In this case, it was clear that the wells
11 that we have been drilling surpass commerciality
12 determination. And from the standpoint that all of
13 the wells are shared proportionately among the
14 owners, essentially what we're forming here is an
15 undivided interest across the CA.

16 The bookkeeping for BLM is really
17 immensely simplified by proceeding with an undivided
18 interest from the initial start.

19 Q. So if I go back -- let's flip back for a
20 moment to Exhibit Number 3.

21 If I'm understanding you correctly,
22 Mr. McQueen, when I look at Exhibit Number 3, one of
23 the unique aspects we have out here is that you have
24 a large amount of existing development both vertical
25 and horizontal, correct?

1 A. That's correct.

2 Q. Okay. And I believe you have testified
3 that all of the leases that are -- will be included
4 within the CA are currently held by production, that
5 would be another unique circumstance here, would it
6 not?

7 A. That's correct.

8 Q. Now in addition to this unique development
9 scenario, is there another aspect of this particular
10 acreage related to the ownership that resulted in
11 both the company and the BLM proceeding with a
12 communitized -- a communitization agreement rather
13 than a federal exploratory unitization?

14 A. That's correct. The original vertical
15 development that took place out in this area started
16 in the '70s and was largely completed in the '70s
17 and '80s. And as a consequence to that, the
18 ownership in these leases have changed a number of
19 times through history. And as is often the case,
20 overrides were carved out with these transactions
21 that happened.

22 Today, with the leasehold that we are
23 attempting to develop, we have approximately 80
24 overriding royalty interest holders out here.

25 And to form a federal unit you have to

1 achieve consent by not only the working interest
2 owners, but also the overriding royalty owners. And
3 if an override would elect not to commit their
4 acreage to the CA, that means they would be
5 continued to be paid on a lease basis.

6 And one of our big concerns was being --
7 we believe it would be virtually impossible to get
8 all overriding royalty owners committed to the unit.
9 And if we were unable to do that, then we would be
10 forced to pay some of the overrides on a lease basis
11 and some of the overrides on a CA basis, which would
12 be really a quite complicated accounting exercise
13 for us and prone to -- to errors as well.

14 So because of that consideration, that
15 really pointed us down the line to forming a CA
16 rather than the federal unit.

17 Q. Is it true, Mr. McQueen, given this large
18 group of overriding royalty interest owners, that
19 there are a few that the company has simply been
20 unable to locate?

21 A. That's correct.

22 Q. So you would not be able to get them to
23 sign an exploratory agreement?

24 A. That's correct.

25 Q. Is it true, Mr. McQueen, that with the

1 large group of overriding royalty interests that you
2 have here, and just the nature of some of the
3 parties that are involved, that there are royalty
4 overrides that just -- you can send them anything
5 you want, but they just don't act?

6 A. That's correct. Unresponsive.

7 Q. And so when you met with the BLM, did they
8 agree, then, that this was a better route to go,
9 rather than try to form an exploratory -- a federal
10 exploratory unit?

11 A. Yes, they did. They felt like -- they
12 felt that from the accounting perspective, that the
13 CA was really a superior method for paying and
14 keeping track of what was due to the overriding
15 interest owners.

16 Q. But was notice of this hearing provided to
17 the overriding royalty interest owners within the
18 CA?

19 A. Yes.

20 Q. Okay. And you're going to have a landman
21 that will attest to that?

22 A. That's correct.

23 Q. Okay. Do the division's horizontal well
24 rules currently recognize a -- currently recognize a
25 communitized area as a single project area?

1 A. They do not.

2 Q. If I turn to what's been marked as WPX
3 Exhibit Number 9, is this the current definition
4 within the division's horizontal well rules of a
5 project area?

6 A. That's correct. Under the commission's
7 Rule 19.15.16.7 there are two provisions for forming
8 a project area.

9 The first one of those requires a
10 collection of contiguous spacing units that are
11 penetrated by the horizontal wellbore.

12 And the second situation is an entirely
13 voluntary or statutory unit from an approved
14 enhanced recovery or pressure maintenance project or
15 an approved state exploratory unit or a
16 participating area in the federal unit.

17 Q. And currently, Mr. McQueen, the division's
18 rules don't expressly recognize a communitized area
19 as a single project area?

20 A. That's -- that's correct. And having sat
21 on the committee that rewrote these rules, and in
22 thinking about why CAs were not included explicitly
23 in this rule, I think the reason for that was that
24 at the time the rules were rewritten, CAs were
25 really not contemplated much larger than 320 acres.

1 And with CAs of that size they could
2 easily be accommodated as a project area under
3 Section 1 of this rule.

4 But with this much larger area,
5 functionally it looks and acts and feels very much
6 like the same reasons that a participating area in a
7 federal unit was given in that consideration as a
8 project area under the rules we wrote.

9 Q. So you were involved in the committee that
10 came up with the horizontal well rules?

11 A. That's correct.

12 Q. And you were involved in the testimony
13 before the commission in support of the horizontal
14 well rules?

15 A. That's correct.

16 Q. And you are also a petroleum engineer?

17 A. That's correct.

18 Q. Given that background, Mr. McQueen, in
19 your opinion, is a recognition of this large
20 communitized area as a single project area
21 consistent with the intent and purpose of a project
22 area expressed in the division's current rules?

23 A. I absolutely believe it is consistent with
24 the considerations that were given the PA under the
25 federal units.

1. Q. And would you consider this to be a
2 logical progression to recognize a communitized, or
3 a large communitized area like this, as a single
4 project?

5 A. I do.

6 Q. And in your opinion, is there any reason
7 not to treat a large communitized area like this any
8 differently from, for example, a federal or state
9 exploratory unit?

10 A. I don't believe so. I actually see, when
11 you look at the benefits and the downsides, the
12 benefits of the formation of this CA actually
13 greatly outweigh other alternatives that are
14 available to us to fully develop and exploit these
15 resources.

16 Q. In your opinion, Mr. McQueen, would the
17 recognition of this communitized area as a single
18 project area allow the company to more efficiently
19 locate and orient its proposed horizontal wells for
20 maximum recovery of hydrocarbons?

21 A. That's correct. The project area will
22 remove all internal setbacks so that we can
23 orientate the laterals for the best productivity in
24 the reservoir.

25 Q. In your opinion, Mr. McQueen, would the

1 recognition of this communitized area as a project
2 area impair correlative rights?

3 A. No.

4 Q. Why is that?

5 A. Well, all of the owners within the CA
6 share proportionately to their interests in the CA.

7 And we are asking for consistent setbacks
8 around the perimeter of the proposed CA.

9 And for those reasons, we see no impact to
10 correlative rights.

11 Q. And in fact, under the joint operating
12 agreement that is going to be executed by the
13 parties, WPX would be the only operator for
14 horizontal development within the communitized area,
15 correct?

16 A. That's correct. And our intent is to
17 propose only horizontal wells in this area.

18 Q. Okay. Now I want to move to the second
19 part of your application, which is the request to
20 commingle production from the different pools within
21 the communitized area.

22 And I think if we go back to WPX Exhibit
23 Number 3, I believe it provides a picture of what we
24 are talking about here, does it not?

25 A. That's correct.

1 Q. This is the exhibit with the communitized
2 area outlined in red and then identifying by colors
3 the three pools that are involved?

4 A. That's correct.

5 Q. Now, you show on here that the CA involves
6 part of the Counselors Gallup Dakota oil pool?

7 A. That's correct.

8 Q. It also involves part of the Escrito
9 Gallup associated pool?

10 A. That's also correct.

11 Q. And then the majority of the communitized
12 area is subject to the Lybrook Gallup oil pool,
13 correct?

14 A. That's correct. Almost two-thirds of the
15 proposed CA area is within the Lybrook pool.

16 Q. Now, are you familiar with the order that
17 created the Basin Mancos gas pool?

18 A. Yes. That would be Mr. Hayden's order
19 from the Aztec office, R-12984.

20 Q. Under that order, what has happened with
21 respect to each of these three pools?

22 In other words, is the Escrito and
23 Counselors pools, are they listed pools under that
24 particular order?

25 A. The Order R-12984 resulted in some of the

1 Gallup pools being listed and some of the Gallup
2 pools being unlisted in the order, which effectively
3 resulted in what we commonly refer to in the
4 industry as some of the pools being frozen and some
5 of the pools being allowed to expand.

6 So we have one pool -- the Lybrook pool is
7 a frozen pool, so it cannot expand beyond its
8 current boundary.

9 But the other two pools here involved,
10 Escrito and Counselors, are both expandable pools.

11 Q. And I believe under the division's rules
12 those pools would have a two-mile, in this area,
13 boundary around them?

14 A. That's -- that's correct. So under the
15 current rules when we, for example, would drill a
16 lateral in the south half of Section 17 here, which
17 is shown in the white acreage not currently within a
18 pool, under R-12984, that 320 acres would come into
19 the Counselors pool.

20 Q. Now, you were -- the existing horizontal
21 development within this CA, and as you've testified
22 earlier and as depicted on this exhibit, has been
23 solely within the -- what I'll call the frozen
24 Lybrook pool?

25 A. That's correct.

1 Q. Okay. And those are in the eastern
2 portion of the communitized area at this point?

3 A. Actually, the western portion.

4 Q. I'm sorry. The western portion. Thank
5 you.

6 As you proceed with your robust drilling
7 schedule, would you anticipate that at some point
8 the horizontal wellbores that you intend to drill
9 will cross from one pool into another and possibly
10 into all three pools?

11 A. That's correct.

12 Q. Now, are these -- yet, under your
13 communitized CA agreement, your unitized
14 communitization agreement, each interest owner in
15 each pool is going to share in the production from
16 the wellbore no matter where it is included in the
17 communitized area.

18 Is that correct?

19 A. That's correct.

20 Q. Are you -- are these pools all basically
21 at the same interval? I mean, are they all within
22 the Mancos formation?

23 A. Yes. The same reservoir is being produced
24 in all three of these, in the Mancos section of all
25 three of these pools.

1 I believe that the Counselors not only
2 includes the vertical section of the Gallup, but
3 also includes the Dakota. But for the section that
4 is identified as Gallup, within Counselors, is the
5 same reservoir that we're producing that is
6 identified in the Escrito Gallup and in the Lybrook
7 Gallup.

8 Q. And as I look at Exhibit Number 3, there
9 is the development -- the current development in all
10 three of these pools, correct?

11 A. Vertical development, yes, in all three
12 pools.

13 Q. Okay. Are you familiar with the
14 division's commingling rules?

15 A. I am.

16 Q. In your opinion, is there sufficient
17 information on these pools within the communitized
18 area to establish an area-wide reference case?

19 A. I believe there is.

20 Q. If I turn to what's been marked as WPX
21 Exhibit Number 10, is that the Subsection A of the
22 division's rule dealing with downhole commingling?

23 A. That's correct. And as you read through
24 these requirements that must be met for commingling
25 between or among multiple pools, what becomes

1 clearly evident is that these rules were written for
2 vertical wellbores that penetrate multiple stacked
3 pools. And that is why there is specification for
4 acknowledgment that the fluids are compatible and
5 the pressure regimes are similar so that we don't
6 have backflow between the formations.

7 In reality, what we are contemplating here
8 with a request for our commingling is really not
9 addressed in this section because this section is
10 really intended to work for vertical commingling.
11 And this is, I think, just another example in our
12 rules where the development in the horizontal realm
13 has outpaced maybe the review of the rules and
14 bringing those up to date.

15 But basically what we're asking is
16 approval to commingle between and among the three
17 pools that are within the CA. And the reason for
18 that is, in reality -- and our geologist will
19 testify to this fact later in the hearing -- is that
20 we are producing from the same continuous bench
21 across this entire CA.

22 So in fact, they are the same reservoir.
23 The oil and gas has the same properties, so there's
24 no reason not to approve the commingling of this
25 production from these three pools within the CA

1 area.

2 Q. So recognizing what you just said, but
3 knowing that this is the rule that we currently have
4 to work with, did you review it, and with respect to
5 the portions that would arguably be applicable here,
6 do these three pools meet the requirements?

7 A. They do, yes.

8 Q. For example, are the fluids compatible?

9 A. Yes.

10 Q. And the pressures -- I forget what term
11 you used. The pressure...

12 A. The pressure regime is essentially the
13 same across the reservoir.

14 Q. Okay. And in your opinion, you don't see
15 any harm resulting from the commingling of these
16 pools?

17 A. None at all.

18 Q. Now realizing that we have to work between
19 the current division rules, did you fill out a form
20 C-107A for this commingling request?

21 A. I did.

22 Q. And if you would, turn to what's been
23 marked as WPX Exhibit Number 11.

24 A. That's correct.

25 Q. Is this a copy -- a signed -- a copy of

1 the C-107A that has been signed by yourself?

2 A. That's correct.

3 Q. And did you provide the information on
4 this form, to the extent that you were able, given
5 the fact that some of these provisions really don't
6 apply?

7 A. Right. Given the limitation that this
8 form is really designed for a vertical wellbore,
9 yes, I completed this form.

10 Q. And finally, Mr. McQueen, in your opinion,
11 is it appropriate for the division to allow
12 commingling of production from these pools in
13 horizontal wellbores within the area encompassed by
14 the communitization agreement?

15 A. Completely appropriate in the CA area,
16 because it's essentially all the same reservoir.

17 Q. And so that's why you're seeking a
18 reference case that would be applicable just to this
19 area within the communitized -- subject to the
20 communitization?

21 A. That's correct.

22 Q. All right. Now having said all of that,
23 did you have an opportunity to visit with the
24 New Mexico state land office and the division prior
25 to this hearing about this commingling request?

1 A. I have, yes.

2 Q. And did the these agencies express
3 concerns about the limitations associated with their
4 existing reporting system?

5 A. They did.

6 Q. Okay. And did they indicate a concern
7 about the ability to report an allocation of
8 production from a well in a CA to these three pools
9 or the interests of these three pools?

10 A. That's correct. Essentially, my
11 understanding of the way that their accounting
12 system works is that a lateral, a horizontal
13 lateral, is tied to a pool or pools that it produces
14 from.

15 And production from -- if it crosses
16 multiple pools -- are allocated back to those
17 respective pools.

18 The problem we have, that arose in
19 particular in this CA, is we have three pools
20 present. And in some cases the lateral will not
21 cross into all three pools. In fact, all of the
22 laterals that we've drilled to date have been
23 entirely within the Lybrook pool.

24 So the question that came about is, how is
25 it possible to allocate the production to the

1 respective pools when the pool is not penetrated?
2 Because the real issue is, with the formation of the
3 CA, the intent is that all of the production be
4 shared according to the ownership.

5 And so the state really did not have a
6 mechanism in their current accounting system to
7 fully address that scenario.

8 Q. As a result, did the -- did the division
9 express a concept of creating what would be a
10 horizontal oil pool that would overlay the existing
11 oil pools in the CA just for horizontal development?

12 A. That's correct. After lengthy discussion
13 with both the OCD and the SLO, the solution that was
14 proposed was to create an oil pool consistent with
15 the proposed CA boundaries for horizontal
16 development only. And thereby, all of the
17 production within the proposed CA could be booked,
18 if you will, to that single pool.

19 And that greatly simplifies all of the
20 bookkeeping trauma which would otherwise be induced
21 by moving ahead with the three existing vertical
22 pools.

23 Q. Now looking at WPX Exhibit Number 3, with
24 respect to the existing vertical wells within the
25 communitized area, would they remain dedicated to

1 your current pools?

2 A. That's correct. All of the vertical wells
3 would remain dedicated to their current pool
4 designations. Only the new horizontal wells would
5 be a part of this new Mancos oil pool.

6 Q. So just the new -- the new pool would only
7 cover the area within the CA at this point, correct?

8 A. Correct.

9 Q. They would only cover horizontal wells
10 within that area?

11 A. Correct.

12 Q. And the vertical wells within the CA would
13 remain dedicated to their existing pools?

14 A. That's correct.

15 Q. Okay. Does the company agree with this
16 approach?

17 A. Yes. We concur that under the
18 circumstances this would be the simplest way to move
19 forward from an accounting and bookkeeping
20 standpoint.

21 Q. And in fact, that would allow --
22 essentially accomplish the objectives of both the
23 company, to BLM, as well as the vision in the state
24 land office with respect to reporting, because you
25 would still be able to allocate the production under

1 this new pool from the horizontal wells to all of
2 the interest owners within the CA, correct?

3 A. That's correct.

4 Q. And it would allow the reporting to be
5 done under that new pool?

6 A. Single pool, correct.

7 Q. Vertical wells would stay -- since they're
8 not part of the CA, could stay dedicated to their
9 existing pools.

10 Is that correct?

11 A. That's correct.

12 Q. Okay. If that were to occur, does that
13 eliminate the need for the company's commingling
14 request?

15 A. It would eliminate the need for the
16 preference case for commingling, yes.

17 Q. Now, did the company have an opportunity
18 to visit with the other two working interest owners
19 in the communitized area about the creation of what
20 I will call an overlapping oil pool for horizontal
21 development?

22 A. Yes. We have visited with both Manana and
23 Logos, our two nonoperating partners in this
24 proposed CA. And they are supportive of moving
25 ahead with the creation of this single oil pool for

1 horizontal development consistent with the
2 boundaries of the proposed CA.

3 Q. At this point, Mr. McQueen, do you
4 anticipate that allowables will be an issue if the
5 division proceeds to create a new horizontal oil
6 pool for the communitized area?

7 A. Allowables have not been a problem to date
8 of the seven producers that we have online.

9 Q. And in fact, if you look at the seven
10 producers, they are within the Lybrook pool?

11 A. Yes.

12 Q. And that's subject to the division's
13 statewide rules?

14 A. That's correct.

15 Q. So from that perspective, any new pool
16 subject to the division's statewide rules would not
17 create, at this point, an allowable issue for the
18 company?

19 A. We don't see any allowable issues on a
20 go-forward basis.

21 Q. And if in the future allowable became an
22 issue, the company could certainly come back and
23 address that issue with the division, correct?

24 A. That's correct.

25 Q. Okay. Now I want to turn, then, to your

1 final request.

2 A. Okay.

3 Q. Which is to allow the wells, the
4 horizontal wells, to be located anywhere within the
5 communitized area so long as they remain 330 feet
6 from the communitized area boundary.

7 A. Uh-huh.

8 Q. If I -- again, stay on WPX Exhibit
9 Number 3. So if we could go back and take a look at
10 that exhibit.

11 A. (Witness complies.)

12 Q. Now, I believe you've testified that the
13 Lybrook pool shown on this exhibit is currently
14 subject to division statewide rules?

15 A. That's correct. We have three pools
16 within the proposed CA boundaries. And each of
17 those three pools have different spacing and
18 different setbacks.

19 The Lybrook is under the statewide rules,
20 so it's a 40-acre-spaced unit with 330-foot
21 setbacks. The Escrito Gallup associated pool is an
22 80-acre spacing with 790-foot setbacks. And the
23 Counselors Gallup Dakota pool is a 160-acre-spaced
24 pool with 660-foot setbacks.

25 Q. Now, that would be in both the Escrito, at

1 790 from the quarter section, correct?

2 A. Correct.

3 Q. But -- and then 330 from the
4 quarter-quarter?

5 A. Correct.

6 Q. And then the Counselors is 660 to the
7 quarter and -- or to the boundary, and then 330 from
8 the quarter-quarter?

9 A. That's correct.

10 Q. But the point here is that the Lybrook
11 pool is under the statewide rules, which is 330
12 feet, correct?

13 A. Correct.

14 Q. Okay. With that in mind, what acreage is
15 really affected with respect to your request to
16 allow 330-foot setbacks around the entire
17 communitized area?

18 A. It's basically only that portion of the
19 proposed CA that is encompassed by either the
20 Counselors or the Escrito pools.

21 Q. So if I'm looking at WPX Exhibit Number 3,
22 for example, we see that that issue only exists with
23 respect to, basically, the -- towards the eastern
24 side of the CA area?

25 A. That's correct, the eastern side.

1 Q. And with respect to that issue where
2 you're butting up against the two pools, the Escrito
3 and the Counselors that have different setbacks
4 currently within the CA, and even out of the CA, the
5 division has a circumstance where the Lybrook pool
6 is butting up against the Counselors or the Escrito
7 pool, correct?

8 A. That's exactly the case. If you look at
9 the boundary between the Counselors pool and the
10 Lybrook pool, I can drill a well anywhere in the red
11 in the Lybrook pool as close as 330 feet to the
12 Counselors pool boundary.

13 But if I'm on the Counselors pool side of
14 that pool boundary, then I can only get as close as
15 660 feet from the Lybrook pool.

16 So essentially what we're asking to do is
17 to move this boundary that currently exists between
18 the Lybrook and the Counselors pool to the eastern
19 boundary of the proposed CA.

20 Q. And then if I look to the north of the CA,
21 we have the same circumstance, where the Lybrook
22 pool is butting up to the Escrito?

23 A. The Escrito, that's correct. It's
24 actually worse in the Escrito. Because at that
25 point -- in fact, you can see where a well was

1 drilled 330 feet off of the line from the Escrito
2 Gallup. And yet if you're on the other side of the
3 line and you're in the Escrito Gallup, 790 feet is
4 as close as you can get to the Lybrook pool.

5 Q. So under this application, again, we're
6 just moving that circumstance where they butt up
7 against each other to the east, correct?

8 A. To the eastern boundary, consistent with
9 the CA boundary, correct.

10 Q. Okay. Now, do the setback requirements in
11 the Escrito and Counselors pool -- does that, in
12 your opinion, currently interfere with the efficient
13 well development pattern that you hope to put in
14 place within this communitized area?

15 A. Yes, it does.

16 Q. And in your opinion, will allowing wells
17 to be located anywhere within the CA, so long as
18 it's no closer than 330 feet to the outer boundary
19 of the CA, is that going to impede correlative
20 rights?

21 A. We don't believe so.

22 Q. Okay.

23 A. Any operator who has acreage outside of
24 our proposed CA that is either in the Counselors
25 pool or in the Escrito pool can pursue an NSP to get

1 relief from their 790 or 660 setback to move closer
2 to our pool boundary if they so desire.

3 And WPX would have -- would not file an
4 objection to any offset operator adjacent to our CA
5 boundary for a nonorthodox location at 330.

6 Q. Okay. So the company is willing to put in
7 place a stipulation within this order that an
8 offsetting operator outside the CA would be allowed
9 to drill a well if they so desired at 330 feet from
10 the CA boundary?

11 A. We would stipulate that we would not
12 oppose that application at 330 feet from the --
13 outside the boundary of our CA.

14 Q. And if I -- again, looking at WPX Exhibit
15 Number 3.

16 If I look at the area affected by this
17 request to the north and to the eastern boundary of
18 the CA, is there much in terms of existing vertical
19 development?

20 A. There is not. Currently, there are six
21 wells that would fall into this category that are on
22 the eastern side of that proposed CA boundary.

23 Q. Okay. In your opinion, will allowing
24 wells to be located anywhere within this
25 communitized area, so long as it's no closer than

1 330 feet to the outer boundary, give the company the
2 flexibility of the need to put in place the most
3 efficient well patterns for the recovery of the oil
4 underlying this acreage?

5 A. I believe it will.

6 Q. And, Mr. McQueen, in your opinion, will
7 approval of this application be in the best interest
8 of conservation, prevention of waste, and the
9 protection of correlative rights?

10 A. Yes, it will.

11 Q. Were Exhibits 1 through 11 prepared by you
12 or compiled under your direction and supervision?

13 A. They were.

14 MR. FELDEWERT: Mr. Examiner, at this time
15 I would move the admission into evidence of WPX
16 Exhibits 1 through 11.

17 HEARING EXAMINER DAWSON: Are there any
18 objections?

19 MR. BRUCE: No, sir.

20 HEARING EXAMINER DAWSON: They will be so
21 admitted.

22 MR. FELDEWERT: And that concludes my
23 examination of this witness.

24 HEARING EXAMINER DAWSON: Okay.

25 Mr. Bruce?

1 MR. BRUCE: Just a few questions.

2 EXAMINATION

3 BY MR. BRUCE:

4 Q. Mr. McQueen, looking at your Exhibit 3,
5 what you have in front of you, I notice that the
6 horizontals you have drilled, or you have planned to
7 drill to date, are one-mile horizontals.

8 I would presume, from the shape of some
9 portions of the CA, that some of the wells would be
10 greater than one mile in length?

11 A. Correct.

12 Q. At this point are you planning only
13 laydowns, or might some be angled or standup wells?

14 A. I anticipate, with approval of this CA,
15 that our development direction will shift so that
16 the laterals are drilled more to the northwest than
17 to the due west.

18 Q. Okay. And at this point, are all of the
19 surface locations for your wells inside the CA?

20 A. No, they are not.

21 Q. Okay. There are a few outside just for...

22 A. That's correct.

23 Q. To maximize the length of the horizontal
24 well, probably?

25 A. Well, there are also challenges in this

1 area with topography and archeology, so we're not
2 always able to secure optimal surface locations.

3 So some of those surface locations are
4 outside of the CA. But of course with the rewrite
5 of the horizontal rules, the governing factor is
6 where the completed interval is located.

7 MR. BRUCE: That's all I have,
8 Mr. Examiner.

9 HEARING EXAMINER DAWSON: Okay.

10 At this point, we will take a 10-minute
11 break and then we'll continue at that point.

12 Thank you.

13 (A recess was taken from 10:36 a.m. to
14 10:49 a.m.)

15 (A recess was taken.)

16 HEARING EXAMINER DAWSON: Okay. At this
17 time we'll go back on the record, and I do have some
18 questions.

19 Going back to Exhibit 2 on this map that
20 shows the boundary.

21 THE WITNESS: Uh-huh.

22 HEARING EXAMINER DAWSON: Some of those
23 colors in there on the legend, it's really small,
24 and I just wanted to ask on that --

25 THE WITNESS: Yes. Mr. Dawson, I can

1 clarify for you there that there are two blue colors
2 there that are confusing.

3 The one that is inside the CA that's in
4 the shape of an L, that blue, is federal acreage.

5 HEARING EXAMINER DAWSON: Okay.

6 THE WITNESS: All of the remainder blue on
7 the map is the state lease.

8 HEARING EXAMINER DAWSON: Okay.

9 THE WITNESS: I apologize for those
10 colors. Unfortunately, some of the things we look
11 at on the screen do not print exactly as they appear
12 on the screen.

13 HEARING EXAMINER DAWSON: What about the
14 red color up there in Section 5 of 23 North, 6 West?
15 What is that? That looks like 80 acres in there,
16 that red.

17 THE WITNESS: Yes.

18 HEARING EXAMINER DAWSON: Is that
19 something I should maybe ask the land person?

20 THE WITNESS: The landman.

21 HEARING EXAMINER DAWSON: Okay. I can ask
22 him when he comes back up to the stand. I can ask
23 him about those colors. We can cover that when he
24 comes up.

25 MR. FELDEWERT: Or I can tell you right

1 now.

2 HEARING EXAMINER DAWSON: Okay. That's
3 fine.

4 MR. FELDEWERT: We are informed it's a
5 separate federal lease.

6 HEARING EXAMINER DAWSON: All right.
7 And then the yellow?

8 THE WITNESS: The yellow is a federal
9 lease.

10 HEARING EXAMINER DAWSON: Oh. It's also a
11 federal lease? Okay.

12 And then the purple on -- in Section 15 of
13 23/7.

14 THE WITNESS: That's federal as well.

15 HEARING EXAMINER DAWSON: That is federal.
16 Okay. Yeah.

17 Yeah, I see the USA there. Okay.

18 So on the date of the approval of this,
19 was that -- that was January 1, 2013?

20 THE WITNESS: Yes. It goes back to that
21 date. And that is -- that precedes any of our
22 drilling activity. So the working interest parties
23 have already agreed on how to allocate the
24 production and cost from that point forward.

25 HEARING EXAMINER DAWSON: Okay.

1 THE WITNESS: So that's the reason for the
2 creation of the date prior to our commencement of
3 drilling.

4 HEARING EXAMINER DAWSON: Okay.

5 And in your testimony, you've talked some
6 about roughly 80 overriding royalty interest holders
7 within the communitized area?

8 THE WITNESS: Yes, sir.

9 HEARING EXAMINER DAWSON: And you said
10 that some of them may elect not to commit or not
11 sign up or you can't find them?

12 THE WITNESS: If we went down the route of
13 forming a federal unit instead of a CA. Every part
14 of the federal unitization process is -- is to
15 request that every overriding owner commit their
16 override to the unitized area. That's not a
17 requirement under the CA.

18 And what I was trying to convey is that
19 signing up those 80 folks could be a real challenge,
20 because -- we had addresses for all of the
21 overrides, but some of them we didn't get the green
22 cards back on, which makes us think that they are
23 not locateable.

24 HEARING EXAMINER DAWSON: So whenever you
25 commence production, and the royalties associated

1 with those overriding royalty interest holders, are
2 you going to put those royalties in suspense or how
3 are you going to take care of that?

4 THE WITNESS: The ones that we cannot
5 locate will be held in suspense. That's right.

6 HEARING EXAMINER DAWSON: Okay. All
7 right.

8 So do you anticipate any compulsory or
9 forced pooling within the community?

10 THE WITNESS: We do not. We have
11 voluntary agreement from all of the working interest
12 owners.

13 HEARING EXAMINER DAWSON: Okay.

14 Have you drilled any other -- I'm going to
15 refer to them as diagonals. You said that the pool
16 was 30 to 40 degrees -- that the fracture pattern
17 within the pool is 30 to 40 degrees east of north.

18 THE WITNESS: Correct.

19 HEARING EXAMINER DAWSON: And you are
20 planning on drilling 30 to 40 degrees north of west
21 of perpendicular to that fracture pattern?

22 THE WITNESS: Correct.

23 HEARING EXAMINER DAWSON: That way, you
24 could -- it would enable you to maximize your
25 production?

1 THE WITNESS: Yes.

2 HEARING EXAMINER DAWSON: Have you drilled
3 any other diagonal wells in the area?

4 I know you haven't within this
5 communitized area.

6 THE WITNESS: We have not to date.

7 HEARING EXAMINER DAWSON: You have not to
8 date. Okay.

9 Do you have any anticipation of maybe how
10 much better a diagonally-oriented well may produce
11 compared to the existing east/west or west/east
12 wells?

13 THE WITNESS: It would be some
14 straightforward estimates that we would make. But
15 essentially, it's just a function of trigonometry.
16 So the more orthogonal you are to the fracture
17 initiation direction, you essentially get more bang
18 for your buck out of that wellbore.

19 In other words, if you're not going
20 orthogonal, depending on what the angle difference
21 is, you're going to have to drill an increasingly
22 longer lateral to intersect where those fractures
23 will initiate from.

24 So drilling orthogonal to the fracture
25 initiation direction is the way to get the best bang

1 for your buck from a drilling standpoint.

2 HEARING EXAMINER DAWSON: On Exhibit 6,
3 this has your wells that you have currently drilled
4 and the anticipated wells that you're going to
5 drill?

6 THE WITNESS: That's correct.

7 HEARING EXAMINER DAWSON: Are those -- are
8 most of those wells that you're filing APDs on, are
9 most of these mile-long laterals?

10 THE WITNESS: Most of these are. That's
11 correct.

12 HEARING EXAMINER DAWSON: And there are
13 some in there that are greater than a mile?

14 THE WITNESS: Well, we expect to file --
15 once this CA is approved we expect to file some
16 sundries to both lengthen some of the laterals and
17 to reorientate some of the lateral directions.

18 And of course the sundry process is much
19 briefer in time requirement as opposed to generating
20 an entire new APD. Typically, in two weeks or less
21 we can have a well sundried to change direction.

22 HEARING EXAMINER DAWSON: Does WPX have
23 any geological or engineering data to support the
24 330-foot setback for the proposed CA?

25 THE WITNESS: We did not propose any

1 reservoir engineering data to date to justify that
2 setback, because we received no objection from any
3 of the noticed parties over the 330-foot setback.

4 HEARING EXAMINER DAWSON: If you obtain --
5 as this goes along, if you obtain more geological
6 and engineering data to support the 330-foot setback
7 for the proposed CA, would you be willing to share
8 this data with OCD?

9 THE WITNESS: We would under the terms of
10 confidentiality.

11 HEARING EXAMINER DAWSON: Okay. Because
12 we may want some of that data for -- in case we go
13 forward with the development of a new horizontal
14 Mancos oil pool. We might want to utilize some of
15 that data.

16 THE WITNESS: We have an extensive
17 reservoir stimulation project currently underway.
18 So we're building the models to incorporate all of
19 the data that we've gathered.

20 And then once we have 18 months or so of
21 production, we can correlate that production back to
22 the model construction through a history matching
23 process. And at that point in time, I think we'll
24 have some fairly conclusive evidence of what the
25 optimal spacing is.

1 Because not only are we interested in what
2 the optimal spacing is from the boundary of the CA,
3 but we're also interested in what the optimal
4 spacing is between the laterals. We obviously want
5 to drill the laterals close enough together that we
6 recover all of the resource, but we don't want to
7 drill them so close together that they're
8 interfering with each other and capturing each
9 other's oil.

10 HEARING EXAMINER DAWSON: If there is
11 interference amongst the wellbores, we have a notice
12 on our website asking operators to provide that
13 information.

14 Would WPX be willing to provide that
15 information? Could they -- will they provide that
16 information to the OCD if there is wellbore
17 communication?

18 THE WITNESS: Yes, Mr. Dawson. We met
19 informally with both BLM and the Aztec OCD personnel
20 several weeks ago in Farmington and presented our
21 preliminary observations of inter wellbore
22 communication in the Gallup Sandstone development
23 area.

24 And BLM had some follow-up questions that
25 we have been running to ground. But we plan to

1 provide that information, as it stands to date, to
2 both OCD and BLM shortly.

3 HEARING EXAMINER DAWSON: I know you did
4 say that approval of this application would be in
5 the best interest of conservation, the prevention of
6 waste, and the protection of correlative work
7 rights.

8 THE WITNESS: That's correct.

9 Something we didn't mention in my previous
10 testimony, but another reason that we're forming
11 this CA, and in conjunction with our reservoir
12 stimulation work, is we're reviewing potential for
13 enhanced recovery in this CA area.

14 And so from that standpoint, that's
15 another attribute that I should probably mention
16 that works in favor of creating this large area.

17 Because we do believe, based on porosities
18 that are present and the type of oil and oil system
19 that we're dealing with, that there is an
20 opportunity for additional recovery here through
21 enhanced oil techniques.

22 HEARING EXAMINER DAWSON: At that point,
23 when you get into secondary or enhanced recovery,
24 would that -- how would that affect the super com
25 agreement? Did you want to just keep it the same as

1 it is at that point?

2 THE WITNESS: Yes. We would continue on
3 under the CA agreement.

4 HEARING EXAMINER DAWSON: Well, I
5 appreciate the thoroughness of this application. It
6 answered a lot of my questions, and I don't foresee
7 any questions at that point.

8 I will have some questions of the land
9 person, but I'm pretty much finished with my
10 questions.

11 Do you have any?

12 MR. BRUCE: I do not.

13 MR. FELDEWERT: Mr. Examiner, if I may, I
14 have one additional area of inquiry I would like to
15 go into real quick.

16 HEARING EXAMINER DAWSON: Okay.

17 FURTHER EXAMINATION

18 BY MR. FELDEWERT:

19 Q. Mr. McQueen, you talked about the
20 requirements for a federal exploratory unit, that
21 you have to go out and get all the overrides to
22 essentially execute the agreement; otherwise, they
23 are paid on a lease basis, correct?

24 A. They are. That's right.

25 The situation I was trying to describe is

1 we end up with overrides, some of which are
2 committed, some of which are uncommitted. And that
3 requires us, then, to pay the uncommitted on a lease
4 basis and the committed on a CA basis.

5 Q. And the problem you have here is you're
6 dealing with a large number of overriding royalty
7 interests, correct?

8 A. That's correct.

9 Q. And so the mechanical aspect of getting
10 the agreement to them, getting them to sign it, and
11 getting them to return it to you becomes a big
12 issue, does it not?

13 A. Very burdensome, yes.

14 Q. Okay. And in fact, based on your
15 experience, there's simply going to be some
16 overrides that pay absolutely no attention to what
17 you send to them?

18 A. That's correct.

19 Q. Other than a paycheck?

20 A. That's correct.

21 Q. Okay. Now in this case, keeping that in
22 mind, okay, did the company undertake an effort to
23 identify and then provide notice of this hearing to
24 all of those overriding royalty interest owners so
25 if they had an issue they could appear and object?

1 A. That's correct.

2 Q. Okay.

3 A. That's correct.

4 MR. FELDEWERT: That's all the questions I
5 have.

6 THE WITNESS: Thank you, Mr. Dawson.

7 HEARING EXAMINER DAWSON: Thank you. You
8 may be excused.

9 MR. FELDEWERT: With your permission,
10 Mr. Examiner, we'll call our second witness.

11 HEARING EXAMINER DAWSON: Okay.

12 Please be sworn in.

13 BRENNAN WEST,
14 after having been first duly sworn under oath,
15 was questioned and testified as follows:

16 EXAMINATION

17 BY MR. FELDEWERT:

18 Q. Would you please state your full name and
19 identify by whom you're employed and in what
20 capacity?

21 A. My name is Brennan West. I work for WPX
22 Energy and -- as a landman in the San Juan Basin.

23 Q. Okay. How long have you been employed by
24 WPX Energy as landman in the San Juan Basin?

25 A. I've been with WPX for two and a half

1 years. And prior to that I was with our
2 predecessor, Williams, for three years.

3 Q. And did your responsibilities throughout
4 that time include the San Juan Basin?

5 A. It does.

6 Q. Mr. West, have you had the opportunity to
7 previously testify before this division as an expert
8 in petroleum land matters?

9 A. I did, back in 2011.

10 Q. Given the passage of time, would you just
11 review for this examiner your educational
12 background?

13 A. I graduated from the University of
14 Oklahoma in 2008 with an energy management degree
15 and a degree in finance.

16 Q. And upon graduation did you commence your
17 work with Williams?

18 A. I did.

19 Q. And which then continued with WPX?

20 A. That's correct.

21 Q. All right. Are you a member of any
22 professional organizations?

23 A. I am. I'm a member of the AAPL, the TAPL,
24 which is the Tulsa Association of Petroleum Landmen,
25 and then Four Corners Association for Petroleum

1 Landmen.

2 Q. And how long have you been a member of all
3 three of these professional organizations?

4 A. For pretty much the duration of my career.

5 Q. So over five years?

6 A. Yes.

7 Q. Okay. Are you familiar with the
8 application filed in this case?

9 A. I am.

10 Q. And are you familiar with the status of
11 the lands in the subject area?

12 A. I am.

13 MR. FELDEWERT: I would tender Mr. West as
14 an expert witness in petroleum land matters.

15 HEARING EXAMINER DAWSON: Any objections?

16 MR. BRUCE: No, sir.

17 HEARING EXAMINER DAWSON: He's so
18 admitted.

19 Q. (By Mr. Feldewert) Mr. West, did you
20 undertake an effort to locate the interest owners
21 affected by this particular application?

22 A. Yes, we did.

23 Q. Okay. If I turn to what's been marked as
24 Exhibit Number 3 -- let's use that as an example.

25 What different groups of interest owners

1 did you seek to identify in connection with this
2 application?

3 A. We kind of broke it into three separate
4 groups.

5 One being the governmental agencies that
6 are involved within this unit, which are the state
7 land office and the BLM.

8 The second were the mineral interest
9 owners within the group within the CA, which are the
10 working interest owners, overriding royalty interest
11 owners, and royalty interest owners.

12 And then the third being the offsetting
13 working interest owners that -- and we went
14 640 feet -- I'm sorry -- 640 from the boundary of
15 our unit when we noticed the affected owners.

16 Q. Okay. So you -- out of an abundance of
17 caution, you basically notified all of the affected
18 parties in the section surrounding your proposed CA
19 boundary?

20 A. That's correct.

21 Q. Okay. Is there any of the acreage,
22 offsetting acreage, that is not subject to a current
23 operator or an existing lease?

24 A. There's one lease that's a 160-acre BLM
25 tract that has been unleased. But we did notify the

1 BLM as part of our notice.

2 Q. As the mineral owner?

3 A. That's correct.

4 Q. Okay. All right. And all of the
5 remaining 640 acres surrounding your proposed --
6 surrounding the CA is subject -- has either an
7 operator or an existing lease?

8 A. Right.

9 Q. And then you were able to identify and
10 notify those individuals?

11 A. That's correct.

12 Q. Okay. If I turn to what's been marked as
13 WPX Exhibit 12, is that an affidavit prepared by my
14 office providing notice of this hearing to the
15 parties that you were -- different groups of parties
16 that you were able to notify?

17 A. Yes.

18 Q. And have an address for?

19 A. That's correct.

20 Q. Okay. And if I look at that and I start
21 paging in, the fourth page of that Exhibit F, we
22 have notice letters. There is a list of parties.

23 Can you walk us through this list and how
24 it's broken down?

25 A. Well, for starters, we've got the

1 overriding royalty interest owners which, if we had
2 an address, we either notified the overriding
3 royalty interest owner or their designated agent
4 that collects their checks.

5 Q. How many was within this particular group?
6 How many separate interest owners?

7 A. 81.

8 Q. Okay. And as I page through this
9 extensive group, I go -- get to my next group, which
10 is what?

11 A. I'm sorry. Then we move into the working
12 interest owners, which there were two within our
13 unit, that we also notified.

14 Q. And that was whom?

15 A. Manana and Logos Resources.

16 Q. And Mr. McQueen testified that the parties
17 are in the process of executing a joint operating
18 agreement to govern the operations within this
19 communitized area?

20 A. That's correct. We've circulated the
21 agreement and have been working through it to try to
22 iron out some of the language issues, specifically
23 with Exhibit I, which deals with the existing
24 vertical -- or horizontal wells that have been
25 drilled within our unit. We hope to have a signed

1 agreement within the next three weeks.

2 Q. All right. Then if I continue through
3 this list, I get to a section that's a list of
4 royalty interest owners within the CA. That would
5 be a communitization agreement?

6 A. That's correct.

7 Q. Okay. And then your last group would be
8 the operators or lessees in the 640-acre spacing
9 units surrounding your communitized area, correct?

10 A. Right.

11 Q. All right. Now, what efforts did the
12 company undertake to find an address for all of
13 these affected parties?

14 A. We went off of our division order decs,
15 which we keep addresses for certain mailout -- our
16 division order checks.

17 Additionally, the ones that we could not
18 locate or did not have an address for we engaged a
19 broker to run a search on a search engine to see if
20 they could locate the addresses.

21 And finally, we did some research online
22 to try to identify if we could get an address for
23 the parties.

24 Q. Despite this effort, was there a small
25 group of interest owners that you could not -- for

1 which you were unable to locate an address?

2 A. That's correct.

3 Q. If I -- and what type of interest did they
4 represent?

5 A. They were all overriding royalty
6 interests.

7 Q. If I turn to what's been marked as WPX
8 Exhibit 13, is this affidavits of publication in two
9 separate local newspapers providing notice of this
10 hearing?

11 A. It is.

12 Q. And if I look at the ads --

13 MR. FELDEWERT: And I apologize,
14 Mr. Examiner, they are somewhat hard to read because
15 it's the left-hand side and it's darkened.

16 Q. (By Mr. Feldewert) But are these
17 advertisements directed by name to the overriding
18 royalty interests for which you could not locate an
19 address?

20 A. Yes, they are.

21 Q. Were WPX Exhibits 12 and 13 prepared by
22 you or compiled under your direction or supervision?

23 A. They were.

24 MR. FELDEWERT: Mr. Examiner, I would move
25 the admission into evidence of WPX Exhibits 12

1 through 13.

2 HEARING EXAMINER DAWSON: Any objections?

3 MR. BRUCE: No objection.

4 HEARING EXAMINER DAWSON: They are so
5 admitted.

6 MR. FELDEWERT: And that concludes my
7 examination of this witness.

8 HEARING EXAMINER DAWSON: Okay.

9 MR. BRUCE: I have no questions of this
10 witness, Mr. Examiner.

11 HEARING EXAMINER DAWSON: This Exhibit 13,
12 for me, is kind of hard to read.

13 But you said there was 81 overriding
14 royalty interest owners?

15 THE WITNESS: Correct.

16 HEARING EXAMINER DAWSON: How many of them
17 did you -- do you have a number of how many of them
18 you could not locate?

19 THE WITNESS: I believe there were three
20 that we couldn't locate, that we had to serve notice
21 by publication.

22 MR. FELDEWERT: Mr. Examiner, if you look
23 at the second page of that exhibit --

24 HEARING EXAMINER DAWSON: Okay.

25 MR. FELDEWERT: -- and if you go along the

1 dark column about halfway down --

2 HEARING EXAMINER DAWSON: Uh-huh.

3 MR. FELDEWERT: -- there's a line there
4 that says to the heirs and advisees of.

5 HEARING EXAMINER DAWSON: Yes.

6 MR. FELDEWERT: Okay. That would be -- I
7 hope you can read that. That would be -- I
8 apologize again for the darkness. But that would
9 be --

10 HEARING EXAMINER DAWSON: The three?

11 MR. FELDEWERT: -- the three, correct.

12 HEARING EXAMINER DAWSON: Okay.

13 Mr. West, did you prepare the
14 communitization agreement?

15 THE WITNESS: I worked with the BLM, our
16 consultant, and also the state land office in
17 preparing that communitization agreement.

18 HEARING EXAMINER DAWSON: Okay.

19 Mr. Feldewert, can you tell me which tab
20 it is that the communitization agreement is under?

21 MR. FELDEWERT: Exhibit 5.

22 HEARING EXAMINER DAWSON: Exhibit 5.

23 When I look at this communitization
24 agreement, I know that this is a -- this was
25 prepared by someone in your staff and typed out by

1 someone in your staff?

2 THE WITNESS: Actually, we pulled this
3 form off the internet. It's a standard form on the
4 BLM website. And from there we made some
5 modifications to kind of address the issues with
6 this larger communitization area, and working with
7 the BLM to do so.

8 HEARING EXAMINER DAWSON: So is this --
9 this communitization agreement here, was it
10 exactly -- I mean when I worked for the land office,
11 I used to approve communitization agreements. And
12 whenever we would have one that somebody had retyped
13 or redone, we always had to go through it
14 word-for-word --

15 THE WITNESS: Okay.

16 HEARING EXAMINER DAWSON: -- and compare
17 it to our existing communitization agreement.

18 And as I was going through this I saw some
19 typos and some things that may need to be addressed
20 within this communitization agreement.

21 Has this been signed by either the BLM or
22 the land office?

23 THE WITNESS: It has been reviewed by both
24 the BLM and the land office and they have given it
25 preliminary approval.

1 HEARING EXAMINER DAWSON: Preliminary
2 approval?

3 So when you propose to give them the
4 communitization agreement for final approval I would
5 just hope that you would go through this agreement
6 and look at some of these typos that I've seen in
7 the agreement and make sure it's word-for-word.

8 THE WITNESS: Okay.

9 HEARING EXAMINER DAWSON: Because this --
10 is this going to be a -- this could be a
11 precedent-setting case, and I just want to make sure
12 that this -- you know, everything is correct in the
13 typing and the wording in this agreement.

14 THE WITNESS: Absolutely.

15 HEARING EXAMINER DAWSON: And when I went
16 through this and reviewed it with the -- actually, I
17 reviewed it with the state land office com
18 agreement.

19 THE WITNESS: Uh-huh.

20 HEARING EXAMINER DAWSON: And I noticed
21 that there was some added language within this
22 agreement. And for instance Number 7 in here was
23 added, which I don't have any problem with it.

24 But towards the end of -- I know you don't
25 have this -- you have it in front of you, I guess?

1 THE WITNESS: I do.

2 HEARING EXAMINER DAWSON: I'm just going
3 to start at the first. And on the first page under
4 "Witness," that first whereas under witness.

5 THE WITNESS: Uh-huh.

6 HEARING EXAMINER DAWSON: It says "as
7 admitted and supplemented authorized."

8 That should be "authorizes" on that second
9 sentence.

10 THE WITNESS: Okay.

11 Again, we did take this straight from the
12 BLM website, so I didn't make any changes from the
13 form that they had.

14 I'll go back and double-check to make sure
15 that there isn't any discrepancies.

16 HEARING EXAMINER DAWSON: You know, I
17 think that the BLM's communitization agreement and
18 the state land office's communitization agreement
19 are very similar in the rough form.

20 But yeah, I would just go through this and
21 double-check on these typos.

22 And then on page 4 -- or I'm sorry.

23 Go back to page 3, I'm sorry.

24 In the second sentence, the royalties,
25 "operating" was taken out on that second, right

1 behind royalties.

2 THE WITNESS: On the second line?

3 HEARING EXAMINER DAWSON: Yeah. There
4 is -- on the...

5 Skip that last part that I was talking
6 about. That's okay.

7 On page 4 under Item 7.

8 MR. FELDEWERT: At the top of the page,
9 Mr. Examiner?

10 HEARING EXAMINER DAWSON: Yes, on the top
11 of the page.

12 The first two sentences it says:

13 "The division, as conforming to good
14 petroleum engineering practices, provided further
15 that such right of withdrawal shall terminate on the
16 termination of this" -- it says "unit agreement."

17 THE WITNESS: Okay.

18 HEARING EXAMINER DAWSON: Shouldn't that
19 be "communitization agreement"?

20 THE WITNESS: Yeah. What we did is we
21 took a provision, at the BLM's request, to take some
22 language from this standard exploratory unit
23 agreement and put in there.

24 So we can change that to communitization
25 agreement.

1 HEARING EXAMINER DAWSON: Yeah. And then
2 going on further down to like the last sentence it
3 says "consumed in unit operations."

4 THE WITNESS: Okay.

5 HEARING EXAMINER DAWSON: So that should
6 be "communitization."

7 And then going down to Paragraph Number
8 11, I'm looking at that. And it says "upon approval
9 by the secretary of interior," on the third
10 sentence, "or his duly authorized representative."

11 But I don't see any language in there -- I
12 mean this was some added language that you guys put
13 in there. And I don't see any language in there
14 after that saying "and the commissioner of public
15 lands or his duly authorized representative."

16 THE WITNESS: Okay.

17 We did not add that language in, so that's
18 just from a BLM communitization agreement.

19 But we certainly can visit with the state
20 land office and the BLM about updating that to
21 reflect those.

22 HEARING EXAMINER DAWSON: Yes. Because if
23 you didn't -- if this was from the BLM language that
24 you didn't -- you didn't alter this language in
25 here?

1 THE WITNESS: No.

2 HEARING EXAMINER DAWSON: If you look at
3 the state land office form, some of this language
4 under 11 I would suppose -- I mean it's a little
5 different than the one on the state land office
6 form. But if both of them have preliminarily agreed
7 to this, I mean, it would be fine.

8 But my question is, as you go in and
9 you're reading that Item 11, or paragraph 11, it
10 goes into some of the language that I thought was
11 taken out of a shut-in gas royalty provision.

12 And my question was, what is -- why is
13 there shut-in royalty provisions on this form if
14 this is a horizontal oil pool?

15 THE WITNESS: Again, we took the model
16 form CA. I really tried not to make any changes and
17 then ran this by the BLM.

18 I mean if there's some recommendation that
19 you have that you would like us to put into this,
20 we'll certainly...

21 HEARING EXAMINER DAWSON: When I saw that
22 shut-in royalty language on here it kind of made me
23 wonder why you have shut-in royalty language when
24 there's no shut-in royalties attributed to any oil
25 wells in the state of New Mexico.

1 So again, I would just make sure that the
2 land office and the BLM are in agreement in how this
3 is typed up, and you can go through it and make
4 sure, you know, that all the typos and stuff are
5 fixed within the agreement.

6 THE WITNESS: Okay.

7 HEARING EXAMINER DAWSON: And then going
8 further in 11, on the -- at the end of it, it talks
9 about lands owned by the State of New Mexico.

10 "There shall be no cessation of more than
11 20 consecutive days."

12 MR. FELDEWERT: You're on page 5,
13 Mr. Examiner?

14 HEARING EXAMINER DAWSON: Yes. I'm sorry.
15 The top of page 5 under paragraph 11 about the -- it
16 starts about the third line down.

17 That, again was from the federal?

18 THE WITNESS: Uh-huh.

19 HEARING EXAMINER DAWSON: I mean, because
20 this says the State of New Mexico. So this is the
21 kind of language that I see when I'm looking at an
22 oil and gas lease, of paragraph 14 of the lease
23 agreements for the state -- for the state land
24 office lease language.

25 And I suppose that if the BLM and the land

1 office are okay with this, then it looks fine with
2 me.

3 But again, I would just go ahead and
4 reiterate to look at that closer and make sure that
5 there's no typos or anything on it.

6 THE WITNESS: Okay. Will do.

7 HEARING EXAMINER DAWSON: Otherwise, I
8 don't have any more questions for you.

9 Do you have any questions, Mr. Bruce?

10 MR. BRUCE: No, sir.

11 HEARING EXAMINER DAWSON: Okay. You may
12 be excused. Thank you.

13 THE WITNESS: Thank you.

14 MR. FELDEWERT: Mr. Examiner, I will call
15 our last witness.

16 HEARING EXAMINER DAWSON: Okay.

17 AMY RICHARDSON,

18 after having been first duly sworn under oath,

19 was questioned and testified as follows:

20 EXAMINATION

21 BY MR. FELDEWERT:

22 Q. Would you please state your name, identify
23 by whom you're employed, and in what capacity?

24 A. My name is Amy Marie Richardson. I'm
25 employed by WPX Energy. And my title is geology

1 manager of the Appalachian and San Juan assets.

2 Q. And how long have you been working for WPX
3 in the San Juan Basin?

4 A. I've worked for WPX in the San Juan Basin
5 for a little over two years.

6 Q. And have you had the opportunity,
7 Ms. Richardson, to previously testify before this
8 division as an expert witness in petroleum geology?

9 A. I have not.

10 Q. Would you please provide a summary of your
11 educational background to the examiners, please?

12 A. Yes. I have a bachelor's degree in
13 geology from Kansas State University, that I
14 received in 1995, and a master's degree in geology
15 from the University of Tulsa, that I received in
16 1999.

17 Q. And what has been your work history since
18 you obtained your master's in 1999?

19 A. Actually, after I finished my coursework I
20 began working as a petroleum geologist. I worked
21 for Vintage Petroleum for six years as a geologist,
22 and then for Samson Resources as a petroleum
23 geologist for seven years, and then the last two
24 years at WPX.

25 Q. When you were working for Samson, did your

1 responsibilities at some point also include the
2 San Juan Basin?

3 A. They did not.

4 Q. Okay. But -- and so your work in the
5 San Juan Basin commenced with WPX?

6 A. Yes.

7 Q. And are you a member of any professional
8 organizations?

9 A. Yes. I'm a member of the American
10 Association of Petroleum Geologists, the Tulsa
11 Geologic Society, and then more recently the Rocky
12 Mountain Association of Geologists, and the Four
13 Corners Geologic Society.

14 Q. How long have you been a member of the
15 American Association of Petroleum Geologists?

16 A. I've been a member since I was an
17 undergraduate student, so since the mid '90s.

18 Q. And the same thing with respect to the
19 Tulsa Geologic Society?

20 A. Since I was a graduate student, so late
21 '90s.

22 Q. Okay. Are you familiar with the
23 application that has been filed in this case?

24 A. I am.

25 Q. Have you conducted a geologic study of the

1 area that is the subject of this application?

2 A. I have.

3 MR. FELDEWERT: Mr. Examiner, I would
4 tender Ms. Richardson as an expert witness in
5 petroleum geology.

6 HEARING EXAMINER DAWSON: Any objection?

7 MR. BRUCE: No objection.

8 HEARING EXAMINER DAWSON: She is so
9 admitted.

10 Q. (By Mr. Feldewert) Ms. Richardson, are
11 you familiar with the horizon that is being -- that
12 has been -- or being communitized under the
13 communitization agreement?

14 A. I am.

15 Q. And what is that?

16 A. We're looking at the Mancos interval. And
17 the top of it we'll define as the top of the Mancos,
18 and the base of our interval is the top of the
19 Greenhorn limestone.

20 Q. If I will turn to what's been marked as
21 WPX Exhibit 14, does this identify the interval
22 subject to the communitization agreement?

23 A. It does. This is the log from the
24 Rincon 20 well, which is inside the project area,
25 and it covers an entire interval.

1 And you can see the black arrow indicates
2 the project interval extending from the top of the
3 Mancos to the top of the Greenhorn limestone.

4 And also on the log we've marked with a
5 red arrow sort of our current target interval.

6 Q. Now, this particular pipe log, is this the
7 one that's actually referenced in the
8 communitization agreement?

9 A. It is. This is the well log and the top
10 set I referenced in the CA.

11 Q. And if I -- and just by reference, if we
12 return to Exhibit Number 5, on page 2, that's where
13 it identifies the pipe log, and this is the actual
14 pipe log that is referenced, correct?

15 A. Right.

16 Q. Have you prepared any structure maps for
17 this project interval?

18 A. I have. I've prepared two that I brought
19 today.

20 One is on the top of the -- the top of the
21 interval, so the top of the Mancos.

22 And then the second one is at the base of
23 the interval at the top of the Greenhorn limestone.

24 Q. And if I turn to what's been marked as WPX
25 Exhibit Number 15, is this the -- one of your two

1 structure maps?

2 A. Yes. This is the one at the top of the
3 interval, at the top of the Mancos formation.

4 Q. What does this show us?

5 A. Basically, the contour lines on here show
6 us that the structure is dipping down to the
7 northeast and up towards the southwest.

8 And the wells are all -- on here -- are
9 all wells that have either been drilled or permitted
10 in the area. And if they have a red number near the
11 well name, that's an actual data point for the top
12 of the Mancos. So you can sort of see our data and
13 distribution in the area.

14 Q. You have a fairly extensive dataset here,
15 correct?

16 A. There is for the top of the Mancos, yes.
17 Most of the wells were drilled to produce from the
18 Gallup Mancos interval.

19 Q. Now, there are two lines that cut across
20 here. One is green and one is blue.

21 What do they reflect?

22 A. The green line, A to A prime, reflects a
23 cross-section that we've also submitted.

24 And the blue line, B to B prime, is --
25 represents another cross-section we have also

1 submitted.

2 Q. And we'll be reviewing those shortly?

3 A. Yes.

4 Q. Okay. If I then turn to what's been
5 marked as WPX Exhibit Number 16, is this another
6 structure map?

7 A. This is. This is the second structure map
8 at the base of our project interval, or the top of
9 the Greenhorn limestone.

10 There, the tops of the Greenhorn are noted
11 in green lettering on here. And there are not
12 terribly many -- I think I counted yesterday about
13 three or four wells within the CA area that actually
14 reached the Greenhorn.

15 There are other wells surrounding it,
16 though, that do. But you can see the structure is
17 relatively similar to the top of the Mancos going
18 downdip to the northeast and updip to the southwest.

19 Q. And then again, it shows your
20 cross-section A to A prime and B to B prime?

21 A. Yes.

22 Q. Do you observe any geologic impediments
23 within this communitized area that would prevent
24 effective development by horizontal wells?

25 A. I don't. The structure is relatively

1 predictable and gentle, and there's no major faults
2 or pinch-outs in the area.

3 Q. Okay. Now with that, then, I'm going to
4 turn to the two cross-section maps that we have
5 developed.

6 MR. FELDEWERT: And, Mr. Examiner, we have
7 tried to create a smaller version of this but we
8 just couldn't capture it.

9 So I don't know if you both want to pull
10 out your maps. They are fairly large, or you could
11 just share one.

12 HEARING EXAMINER DAWSON: We can share
13 one.

14 Q. (By Mr. Feldewert) So let's go over the
15 first one first.

16 This one is marked as WPX Exhibit
17 Number 17. Is that right, Ms. Richardson?

18 A. Yes. And this is cross-section A to A
19 prime. So A is in the south, and it extends to the
20 north of A prime, and this extends through the
21 entire CA area.

22 And the Rincon 20, which is that pipe
23 well, is on this cross-section. It's the fourth
24 well from that --

25 Q. Let me stop you there for a minute,

1 because we were all rustling around with papers.

2 This corresponds to your cross-section A
3 to A prime, which was the green line on your
4 structure map, correct?

5 A. Yes. It's the line that -- and again, it
6 extends from the south of the CA area up to the
7 north.

8 Q. Okay. And then you mentioned that there
9 was a Rincon pipe log on here.

10 Is that the one we previously reviewed
11 that is referenced in the communitization agreement?

12 A. Yes, it is.

13 Q. And which well is that?

14 A. It's the fourth well from the left on the
15 cross-section.

16 Q. And that's the one that penetrates the top
17 of the Greenhorn?

18 A. Right. So again, we've marked the entire
19 project interval with a black arrow on here, which
20 is the top of the Mancos to the top of the
21 Greenhorn.

22 Q. And then I think you also identified on
23 here your initial target interval?

24 A. Yes. The two red lines and the red arrow
25 illustrate our gross target interval for the area.

1 This is, again, kind of our current target.

2 The blue lines on here are just other
3 correlation lines that I've made through the area.
4 And you can see that the stratigraphy is relatively
5 uniform throughout the CA, and there are not any
6 major -- any major changes, any major pinch-outs or
7 faults.

8 Q. How did you -- how did the company choose
9 its initial targeting?

10 A. We really looked at where the porosity
11 existed in the existing vertical wells and where
12 they were completed, but really centered on what we
13 thought we could drill with one lateral and produce
14 with a single lateral.

15 Q. Where is the porosity reflected on these
16 cross-sections?

17 A. In the third tract there's a red line
18 that's the density porosity on the sandstone matrix,
19 and it's been shaded in greater than 5 percent, I
20 believe, as peak. And that illustrates, again,
21 where there is porosity.

22 Q. Anything else about this particular
23 cross-section?

24 A. No, I don't believe so. It does -- it is
25 a structural cross-section, so it does illustrate

1 how the formation is going downdip to the north.

2 Q. And then, let's see. This one was south
3 to north. I believe you had, then, a cross-section
4 B to B prime that goes from west to east?

5 A. Yes.

6 Q. So let's pull that one out. That's been
7 marked as WPX Exhibit Number 18?

8 A. Yes.

9 Q. Okay. Why don't you give us a minute to
10 pull that out.

11 A. Okay.

12 Q. So this would correspond to the blue line
13 on your structure maps?

14 A. Yes. This coincides with the B to B prime
15 on the structure maps.

16 Q. Okay.

17 A. And again, just looking at some of the
18 wells in -- the vertical wells in the CA area. It
19 again has the Rincon 20 on the left-hand side, which
20 is our pipe well log -- pipe log well. And again,
21 it penetrates the entire interval.

22 The other wells on the cross-section do
23 not go all the way down to the Greenhorn.

24 But you can see how the stratigraphy,
25 again, appears to be very regular and correlatable

1 across the area, and how our target continues to
2 exist across the area.

3 Q. And in fact, on both of these maps you
4 were able to get an update of the map of your --
5 your target interval across the area, correct?

6 A. Yes, I did.

7 Q. Okay. And you have similarly, as in the
8 prior maps, you have these blue correlation lines?

9 A. Right. So again, the top and the base of
10 the interval are marked with black lines, the main
11 target interval with red.

12 And then there's just some other
13 correlation mark points marked with blue lines.

14 Q. Ms. Richardson, what conclusions have you
15 reached from your analysis?

16 A. Actually, that the stratigraphy through
17 the whole CA is very regular. I don't see any major
18 faults or pinch-outs that would be an impediment to
19 horizontal drilling as a way to reach this resource.

20 Q. In your opinion, will the approval of this
21 area as a single project area for horizontal
22 development allow for the most efficient well
23 patterns to develop the underlying reserves?

24 A. Yes, I believe so. I think with the
25 communitization area we will be able to take better

1 advantage of any natural fracture orientations or
2 any other geologic influences to -- to most
3 efficiently develop this resource.

4 Q. In your opinion as an expert in petroleum
5 geology, will approval of this application be in the
6 best interest of conservation and prevention of
7 waste and protection of correlative rights?

8 A. Yes, I believe so.

9 Q. Were WPX Exhibits 14 through 18 prepared
10 by you or compiled under your direction and
11 supervision?

12 A. Yes, they were.

13 MR. FELDEWERT: Mr. Examiner, I would move
14 the admission into evidence of WPX Exhibits 14
15 through 18.

16 HEARING EXAMINER DAWSON: Any objection?

17 MR. BRUCE: No objection.

18 HEARING EXAMINER DAWSON: They are so
19 admitted.

20 MR. FELDEWERT: That concludes my
21 examination of this witness.

22 HEARING EXAMINER DAWSON: Okay.

23 Do you have any questions, Mr. Bruce?

24 MR. BRUCE: Just one or two for
25 Ms. Richardson.

1 EXAMINATION

2 BY MR. BRUCE:

3 Q. On your cross-section -- we'll use the
4 last exhibit so that there's no rustling of papers
5 here. You have the gross target interval.

6 Do you see any potential to develop
7 horizontal wells outside of the current gross target
8 interval?

9 A. I do see some potential. I have to say
10 it's not as great. For the most part, there's other
11 horizons that have lower porosity and
12 permeabilities, we believe. But I would not rule
13 that out. You know in the future, we may find
14 better techniques to develop that.

15 MR. BRUCE: That's all I have.

16 Thank you.

17 HEARING EXAMINER DAWSON: Thank you.

18 So if you do see some potential outside
19 the target area of those three zones, how do you --
20 what do you anticipate -- at that time, how will you
21 address that situation? Will those be just on a --
22 will they be on a leased basis, since they are
23 outside the target area?

24 THE WITNESS: They are within our -- still
25 within our project interval. So I think what we

1 would do would be to just go back and drill a second
2 or third lateral at a different -- in a different
3 horizon. So it would be a stacked lateral type of
4 situation.

5 HEARING EXAMINER DAWSON: The way I look
6 at these cross-sections, and I see the Rincon 20
7 well on this cross-section --

8 THE WITNESS: Uh-huh.

9 HEARING EXAMINER DAWSON: -- is that a gas
10 well? Because it has a gas symbol above it, or
11 maybe that's the zone.

12 THE WITNESS: It's been classified as a
13 gas well. The Rincon 20 -- again, I chose it
14 because it extended all the way through this
15 interval, but it's actually a Dakota producing well.

16 HEARING EXAMINER DAWSON: Okay.

17 On the planned horizontal wells that
18 you're going to drill that are on the list
19 identified in the previous exhibit -- I believe it
20 was Number 6.

21 The wells that you are planning on
22 drilling within the super CA area, are they -- are
23 you going to drill a pilot hole to the Greenhorn on
24 those wells, or are you going to just probably drill
25 down beneath the target interval?

1 THE WITNESS: We've not drilled a pilot
2 hole all the way to the Greenhorn to date, and I
3 don't have one planned at this time. Right now
4 we're just planning to drill to develop that target
5 interval.

6 HEARING EXAMINER DAWSON: Okay.

7 And the porosity in most of those wells
8 was 3 to 6 percent, roughly in that range?

9 THE WITNESS: Actually, the porosity in
10 our target ranges from probably 3 to 10 or
11 12 percent on the -- on the upper side.

12 We have an average porosity usually around
13 3 percent or so, for what we consider as, you know,
14 the best quality reservoir.

15 HEARING EXAMINER DAWSON: On the Rincon 20
16 well --

17 THE WITNESS: Uh-huh.

18 HEARING EXAMINER DAWSON: -- on either one
19 of these cross-sections I don't see the perforated
20 interval on it.

21 THE WITNESS: Again, the Rincon 20 --
22 again, I selected it because it was a nice complete
23 log through the entire project interval, but it was
24 not completed in the Gallup. It's actually a Dakota
25 well.

1 HEARING EXAMINER DAWSON: Okay.

2 THE WITNESS: And you can see on --

3 HEARING EXAMINER DAWSON: And that's a
4 vertical well, anyway, right?

5 THE WITNESS: Right. And you can see on
6 the other vertical wells in the cross-sections, and
7 they do have the perforated intervals marked on
8 there with the pink boxes.

9 HEARING EXAMINER DAWSON: Okay.

10 THE WITNESS: With the exception -- I
11 think both cross-sections include one or both of our
12 pilot holes, the 191 and the 168. Those we did not
13 complete in the vertical section but, instead, went
14 back up and kicked off and drilled a lateral.

15 HEARING EXAMINER DAWSON: Okay.

16 So those are the only two horizontals, the
17 168H and the 191?

18 THE WITNESS: Those are the two pilot
19 holes that we've drilled in the area.

20 HEARING EXAMINER DAWSON: Pilot holes.
21 Okay.

22 Are you planning on reentering those --

23 THE WITNESS: We've --

24 HEARING EXAMINER DAWSON: -- and
25 recompleting those?

1 THE WITNESS: No. We've already -- we've
2 already set a plug or whipstock and drilled a
3 lateral from those pilot holes.

4 HEARING EXAMINER DAWSON: That is why you
5 have the H on there, I suppose. So...

6 Okay. From what I can tell from these
7 cross-sections, it does appear that that productive
8 interval is throughout the entire com agreement --
9 proposed super com agreement area.

10 Do you know what you guys are planning on
11 naming this com agreement? Is it going to have --
12 are you going to put a name on it or do you have
13 that figured out yet? What will it be?

14 THE WITNESS: Northeast Chaco CA.

15 HEARING EXAMINER DAWSON: Okay.

16 Any more questions?

17 No questions?

18 That should -- that pretty much concludes
19 the hearing process.

20 You can be excused. Thank you.

21 Does Counsel want to provide any kind of a
22 closing statement or do you have anything else to
23 add, Mr. Feldewert?

24 MR. FELDEWERT: No. The only thing I
25 would add, Mr. Examiner, I think in terms of the

1 analysis, given what has been discussed here today,
2 I mean certainly with the first aspect of the
3 application that's needed from the division is
4 approval of the communitized area as -- a
5 recognition of that as a project area. That's
6 really what we're seeking from the division here.

7 You know the CA, its form and whatnot, is
8 controlled by the BLM and the state land office.

9 From the division's perspective, we
10 need -- what we need to know is an order that
11 approves the CA as a single project area, which
12 allows the company, then, to orient their wells.

13 From that point, I think the issues, you
14 know, are really determined by how the division
15 would want to proceed with respect to the existing
16 pool or the new pool.

17 I would think that if the division does
18 proceed to create a new oil pool for horizontal
19 development, that really the issue associated with
20 the commingling is -- goes away, because that's no
21 longer needed.

22 And then depending upon what rules you
23 would adopt for that oil pool -- for example, if it
24 follows the statewide rules, then really our request
25 for, you know, 330 from the outer boundaries in the

1 portion that's affected goes away.

2 And then the only relief, then, comes in
3 the form of allowing, you know, to locate the wells
4 anywhere within the CA.

5 So that's kind of how I see the analytical
6 process moving forward. And so I think a lot of
7 what the -- of what the order would constitute
8 depends on how the division would want to proceed
9 with respect to the -- you know, the creation of a
10 new pool for purposes of dealing with some of the
11 reporting issues that arise.

12 HEARING EXAMINER DAWSON: Okay.

13 Can you please provide us a draft order
14 with the conclusions and findings within two weeks
15 from this date?

16 MR. FELDEWERT: Certainly.

17 HEARING EXAMINER DAWSON: Do you
18 anticipate providing --

19 MR. BRUCE: No, sir.

20 HEARING EXAMINER DAWSON: -- any kind
21 of -- okay.

22 MR. FELDEWERT: I guess, Mr. Examiner, I
23 think perhaps in terms of structuring the order, I
24 assume you would want me to initially draft it
25 dealing with all three requests.

1 And then if the division decides to
2 proceed with a new pool it could take out whatever
3 it would deem appropriate at that point from the
4 draft order.

5 HEARING EXAMINER DAWSON: We would, yes.

6 So that concludes this case. It will be
7 taken under advisement, and that will conclude this
8 hearing.

9 Thank you very much.

10 (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

CERTIFICATE

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I, Paul Baca, RPR, CCR in and for the State of New Mexico, do hereby certify that the above and foregoing contains a true and correct record, produced to the best of my ability via machine shorthand and computer-aided transcription, of the proceedings had in this matter.

Paul Baca

PAUL BACA, RPR, CCR
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