

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

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

APPLICATION(S) OF KAISER-FRANCIS OIL	CASE NOS. 15821,
COMPANY TO RE-OPEN CASE NUMBERS 15821,	15822,
15822, 15823 and 15824 FOR POOL CREATION	15823,
AND SPECIAL POOL RULES, LEA COUNTY,	15824
NEW MEXICO.	

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

February 22, 2018

Santa Fe, New Mexico

BEFORE: SCOTT DAWSON, CHIEF EXAMINER
WILLIAM V. JONES, TECHNICAL EXAMINER
DAVID K. BROOKS, LEGAL EXAMINER

This matter came on for hearing before the New Mexico Oil Conservation Division, Scott Dawson, Chief Examiner, William V. Jones, Technical Examiner, and David K. Brooks, Legal Examiner, on Thursday, February 22, 2018, at the New Mexico Energy, Minerals and Natural Resources Department, Wendell Chino Building, 1220 South St. Francis Drive, Porter Hall, Room 102, Santa Fe, New Mexico.

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1 APPEARANCES

2 FOR APPLICANT KAISER-FRANCIS OIL COMPANY:

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1 (12:00 p.m.)

2 EXAMINER DAWSON: At this point we'll go on
3 to Kaiser-Francis.

4 Do you want to consolidate all these?

5 MR. BRUCE: Yes. I'll consolidate.

6 THE COURT: So case number 24 on the list,
7 15821; case number 25, 15822; case number 26, 15823; and
8 case number 27, 15824. These are all applications of
9 Kaiser-Francis Oil Company to re-open previous cases,
10 the same case numbers, for pool creation and special
11 pool rules, Lea County, New Mexico. These will all be
12 consolidated.

13 Call for appearances on these four cases.

14 MR. BRUCE: Jim Bruce of Santa Fe
15 representing the Applicant. I have two witnesses who
16 are making their way into the room.

17 EXAMINER DAWSON: Okay. Can your witnesses
18 please stand and be sworn in by the court reporter?

19 (Ms. Courtney and Mr. Raines sworn.)

20 MR. BRUCE: Mr. Examiner, Mr. Jones well
21 knows that these cases were heard a while ago, and this
22 concerns the Bell Lake Unit. The first order came out.
23 And there were some things we said in the first hearing
24 that should be corrected. It's more just a verbiage
25 correction, and we'll get into those with Exhibit 2.

1 And there is one item in the first order
2 that came out that would change the drilling plans for
3 the unit, and that was the -- that's really the only
4 objectionable item in the order that we'd like to
5 discuss here today, and that required the first well in
6 the well unit be drilled in the center of the well unit,
7 more or less. And we would like to discuss why it
8 shouldn't -- we shouldn't have to have that in the
9 order.

10 BARBARA COURTNEY,
11 after having been previously sworn under oath, was
12 questioned and testified as follows:

13 DIRECT EXAMINATION

14 BY MR. BRUCE:

15 **Q. First off, would you please state your name and**
16 **city of residence for the record?**

17 A. Barbara Courtney, Tulsa, Oklahoma.

18 **Q. And who do you work for and in what capacity?**

19 A. I'm a landman for Kaiser-Francis Oil Company.

20 **Q. Have you previously testified before the**
21 **Division?**

22 A. Yes, I have.

23 **Q. And were your credentials as an expert**
24 **petroleum landman accepted as a matter of record?**

25 A. Yes.

1 Q. And are you familiar with the land matters
2 involved in the Bell Lake Unit?

3 A. I am.

4 Q. What is Exhibit 1?

5 A. Exhibit 1 is a plat Bell Lake Unit. The Bell
6 Lake Unit is one federal unit with two separate blocks.

7 Q. I believe in the original hearing I was
8 referring to it as the North Bell Lake Unit and the
9 South Bell Lake Unit, but it's really just the Bell Lake
10 Unit with north and south blocks; is that correct?

11 A. That's correct.

12 Q. Now, the original Bell Lake Unit covered
13 probably most of what's on this plat right here?

14 A. It covered 37,000 acres, and over the years, it
15 was contracted down to two separate blocks with nine
16 sections in between being contracted out.

17 Q. And the legal description is given on page 2,
18 correct?

19 A. Yes.

20 Q. Now, it's all -- and we'll get to this with
21 Mr. Raines, our next witness.

22 When -- when -- after -- the intention or
23 the plan is -- and Mr. Raines will get to this -- once
24 you start drilling these wells, the BLM will approve a
25 PA for each block, correct?

1 A. Yes, that's correct.

2 Q. Covering the entire block even though a couple
3 of wells only have been drilled?

4 A. That's what we've been led to believe.

5 Q. And at that point, in essence, the north block
6 will be one big well unit and the south block will be
7 one big block unit?

8 A. Yes, two separate participating areas.

9 Q. And what is Exhibit 2?

10 A. Exhibit 2 is just the order where I red-lined
11 the changes we would like to make to clarify that it's
12 one big federal unit.

13 Q. Now, this particular order covered the Bone
14 Spring Pool in the north block?

15 A. That's correct.

16 Q. Okay. So, obviously, on some of the other
17 orders, it should be "Bell Lake Unit-South Block"?

18 A. Correct.

19 Q. And when you go through, it's pretty much just
20 language corrections in the order; is that correct?

21 A. Until the third page, to just clarify, that the
22 operating agreement covers depths below 9,000 feet.
23 That's only the Bell Lake-South. The Bell Lake-North
24 Block covers all depths.

25 Q. And Kaiser-Francis is the largest working

1 interest owner in these blocks, right?

2 A. We are in the north -- I mean in the south by
3 far. In the north, we have anywhere from 44.4 percent
4 to 60 percent.

5 Q. But when a PA is formed, then everybody shares
6 equally throughout the unit?

7 A. In the separate blocks, yes.

8 Q. In the separate blocks.

9 And then let's move up to the top. This
10 would be page -- page 5, I believe, in the red.

11 A. Yes.

12 Q. This is where the first mention is -- again,
13 Mr. Raines will go more into this. But Kaiser-Francis
14 requested 440-acre, mile-and-a-half-long spacing
15 units --

16 A. Correct.

17 Q. -- in both the Bone Spring and the Wolfcamp?

18 A. Yes.

19 Q. With the intention of drilling more or less
20 three wells across each well unit in any particular Bone
21 Spring or Wolfcamp zone?

22 A. Correct.

23 Q. Now, the order issued in this case said: Well,
24 you only get 480 acres if the first well is drilled more
25 or less in the center of a well unit?

1 A. Yes.

2 Q. And Kaiser-Francis does not believe that's
3 necessary?

4 A. That is correct. And Mr. Raines will explain
5 that technically.

6 Q. And, again, once a PA is created, these are
7 essentially nine-section well units. You may look at it
8 that way?

9 A. Yes, correct.

10 Q. When the first hearing was done, did
11 Kaiser-Francis notify every interest owner in each block
12 of these applications?

13 A. Yes, we did.

14 Q. Working interests, royalty interests, override,
15 everybody, unleased mineral interests?

16 A. Correct.

17 Q. And nobody objected?

18 A. No.

19 MR. BRUCE: And because of that,
20 Mr. Examiner, I did not send out any notice of this
21 hearing because we weren't asking for any more than we
22 did the first go-around. And if you'll recall, you
23 know, I had to hire somebody to help carry in the notice
24 materials here.

25 EXAMINER JONES: You did. It took me

1 forever to scan it in. I had to Wite-Out all those bar
2 codes.

3 (Laughter.)

4 EXAMINER BROOKS: I was not present at the
5 previous hearing. Did anybody appear, or was it --

6 MR. BRUCE: The only person that appeared
7 was Energen, and they appeared in favor of the
8 applications.

9 EXAMINER BROOKS: Okay. Go ahead.

10 MR. BRUCE: Mr. Examiner, this may not be
11 necessary, but we're submitting as Exhibit 3 the 70-2-17
12 to reference a section of that statute that I've never
13 referenced in my 36 years here, which is Subsection E.
14 And before I get into that --

15 **Q. (BY MR. BRUCE) Ms. Courtney, the pool rules**
16 **that are proposed only apply within the Bell Lake Unit?**

17 **A. Yes.**

18 **Q. They do not apply to what the Division has**
19 **referred to as frozen. They're not going to apply**
20 **outside the unit?**

21 **A. That's correct.**

22 MR. BRUCE: But under E, Mr. Examiner, you
23 know, it says, "Whenever...the owners in any pool have
24 agreed upon a plan for the spacing of wells," et cetera,
25 which in the judgment of the Division has the effect of

1 preventing waste, and, of course, the Division always
2 oversees this. But I would submit that in this case,
3 the owners have submitted a plan, which, based on what
4 Mr. Raines will testify about shortly, does equitably
5 fix production and won't impinge upon the correlative
6 rights of anyone. And I think Subsection E is
7 applicable in this case. I mean, of course, the
8 Division has the right to modify, but I'll get into that
9 with the next witness.

10 Q. (BY MR. BRUCE) Ms. Courtney, were Exhibits 1
11 through 3 -- 1 and 2 prepared by you?

12 A. Yes.

13 Q. And Exhibit 3 is simply the statute?

14 A. Correct.

15 Q. In your opinion, is the granting of these
16 applications, with the changes noted in Exhibit 2, in
17 the interest of conservation and the prevention of
18 waste?

19 A. Yes.

20 MR. BRUCE: Mr. Examiner, I'd move the
21 admission of Exhibits 1 through 3.

22 EXAMINER DAWSON: Exhibits 1 through 3 will
23 be admitted to the record at this time.

24 (Kaiser-Francis Oil Company Exhibit Numbers
25 1 through 3 are offered and admitted into

1 evidence.)

2 MR. BRUCE: And I have no further questions
3 of the witness.

4 EXAMINER DAWSON: David?

5 EXAMINER BROOKS: Nothing.

6 EXAMINER DAWSON: Will?

7 CROSS-EXAMINATION

8 BY EXAMINER JONES:

9 Q. These names, is that -- these units are state
10 and federal units, correct?

11 A. It's a federal exploratory unit.

12 Q. Federal. They're on the federal form. So
13 they've got some state acreage in them?

14 A. Yes, they do. They have some state and some
15 federal, and in the south, there is a little bit of fee.
16 But it's -- because it's federal, they have, I guess,
17 jurisdiction for all of them.

18 Q. Okay. Okay. So they would be deciding about
19 the PA issues?

20 A. Yes.

21 Q. Even if they didn't do the whole -- each block
22 as one PA, if they did it according to spacing units
23 that are created and as those spacing units are
24 developed with wells, that would still gradually create
25 a PA over the whole block; is that correct?

1 A. That's correct. We would form an initial one
2 if they wouldn't let us do what we hope to do, and then
3 we would enlarge it as we go along. Every time we
4 drill, we will enlarge it. So eventually I think it
5 would still be nine sections.

6 Q. Okay. And I guess you're going to talk about
7 this later, but you haven't changed any of your plans
8 for this extensive development out here --

9 A. No.

10 Q. -- as far as that goes?

11 A. No. He will have an exhibit that shows you
12 that.

13 Q. So you probably will end up drilling the well
14 in the center of the -- I can talk, I guess -- okay.

15 And is it your opinion that a spacing unit
16 is not synonymous with a proration unit?

17 A. Well, I think in this case, it's a
18 participating area that --

19 MR. BRUCE: Objection (laughter).

20 THE WITNESS: I think what we'll have is
21 we'll have a participating area, which is defined by the
22 BLM.

23 Q. (BY EXAMINER JONES) Yeah. Yeah. It's a land
24 answer to a legal question, which is really good
25 (laughter).

1 Okay. Now, this business about 9,000 foot,
2 I remember testimony as to that in one of the blocks, I
3 guess the south block, but -- so that kind of excluded
4 portions of the Avalon, I think.

5 A. You're right.

6 Q. But then there was testimony that the Avalon in
7 that area would not be prospective. So I guess that's a
8 question for the next witness.

9 MR. BRUCE: Yeah. I think it was also that
10 the working interest above and below that cutout --

11 THE WITNESS: It's just the working
12 interests that would be affected by that. The royalty
13 owners would be the same. So I think that's --

14 Q. (BY EXAMINER JONES) Okay. Okay. But the Upper
15 Avalon is not part of the agreement area?

16 A. Well, it's a 9,000-foot hard depth. It's
17 not --

18 Q. Yeah. And that depth is in the unit?

19 A. It's in the operating agreement. When they
20 split out the nine -- the two nine-section blocks, it's
21 in the operating agreement that covers the south block.

22 Q. Okay. Now, these nine-section blocks, are they
23 still covered by -- each one of them covered by separate
24 Devonian PAs?

25 A. There is one Devonian PA, but because it's a

1 federal unit, it's one -- it's still two Devonian PAs,
2 is what I should say.

3 Q. Okay. So they've still got it designated as
4 two -- as a Devonian PA.

5 A. Two Devonian participating areas.
6 Participating Area A and Participating Area B is what
7 the Feds call it.

8 Q. Okay. I always forget to ask all the questions
9 I need to ask.

10 But they're definitely calling it Bell Lake
11 Unit-North Block and Bell Unit-South Block?

12 A. Actually, yes. It's Bell Lake Participating
13 Area A and Participating Area B. And A is actually the
14 South Block, and B is actually the North Block.

15 Q. Okay. And there was no controversy about the
16 pool names involved here that you were going to use?

17 MR. BRUCE: No. They were approved by a
18 certain engineer in Hobbs.

19 EXAMINER JONES: Paul (laughter).

20 Q. (BY EXAMINER JONES) Okay. And you're still
21 planning on the 100 feet. The other -- the other
22 requested professional rules are still the same, the 100
23 feet from the sideline?

24 A. Yes.

25 Q. But no closer than 330 feet for the toe and the

1 heel?

2 A. From the outside boundaries of the unit.

3 Q. Outside boundaries of the unit. Okay.

4 Okay. And there was no problem with
5 splitting out the allowables down to the quarter-quarter
6 level?

7 MR. BRUCE: No.

8 One thing I would say, Mr. Examiner, you
9 asked if this was on the federal form. I mean, this
10 unit was formed in --

11 THE WITNESS: 1953.

12 MR. BRUCE: -- '52 or '53. So it was
13 probably -- I don't know. There wasn't any standard
14 form at that time.

15 THE WITNESS: It's a form, but I haven't
16 seen the new ones.

17 EXAMINER BROOKS: There were some forms in
18 use that were used a lot, at least up in the northwest,
19 with respect to some title examination.

20 MR. BRUCE: Yeah. They were more or less
21 involved by the -- the operators and accepted by the
22 BLM. So --

23 EXAMINER BROOKS: Yeah.

24 Q. (BY EXAMINER JONES) As far as surface land
25 issues go, you're going to still have this corridor in

1 the middle -- lay-down corridor in the middle of each
2 lot, and those corridors are still available to use
3 facilities and --

4 A. Yes. We're already working on that.

5 Q. Okay. Okay. Have you received any other -- of
6 all these people that got notice, have you received any
7 correspondence since the last hearing?

8 A. No. I've had a couple people call and ask how
9 it went, and I said, As far as we know, it went fine; we
10 expect to get our order. Nobody objected. Most people
11 are just curious when we will start drilling. Those
12 were overriding mineral owners who were curious.

13 Q. Okay.

14 EXAMINER JONES: Anybody with questions?

15 EXAMINER BROOKS: I have no questions.

16 CROSS-EXAMINATION

17 BY EXAMINER DAWSON:

18 Q. I'm going to call this earn-as-you-go. You
19 drill the well, and that's the participating area of the
20 well. So you're earning as you go, as you drill the
21 wells, right? Is that what the BLM wants?

22 MR. BRUCE: Let's get the next witness up.

23 THE WITNESS: I was going to say, I think
24 he can answer that better.

25 MR. BRUCE: In most units, it's like that.

1 You might have one 320-acre PA and then grow it as you
2 drill more wells. This should not be that way.

3 EXAMINER DAWSON: Okay. Great. I'll ask
4 the next witness then.

5 EXAMINER JONES: Thank you very much.

6 MICHAEL RAINES,
7 after having been previously sworn under oath, was
8 questioned and testified as follows:

9 DIRECT EXAMINATION

10 BY MR. BRUCE:

11 Q. Will you please state your name for the record?

12 A. Michael Raines.

13 Q. Where do you reside?

14 A. Tulsa, Oklahoma.

15 Q. Who do you work for and in what capacity?

16 A. Kaiser-Francis Oil Company as an engineer.

17 Q. Have you previously testified before the
18 Division as an engineer?

19 A. Yes.

20 Q. And were your credentials as an expert accepted
21 as a matter of record?

22 A. Yes, they were.

23 Q. And are you familiar with the engineering
24 matters related to these applications?

25 A. Yes, I am.

1 MR. BRUCE: Mr. Examiner, I tender
2 Mr. Raines as an expert petroleum engineer.

3 EXAMINER DAWSON: Mr. Raines will be
4 accepted as an expert petroleum engineer at this time.

5 Q. (BY MR. BRUCE) Mr. Raines, you prepared one
6 exhibit with several pages on it. Could you identify
7 that exhibit? And I think there may be a couple of
8 follow-up questions, but I'll let you run through the
9 highlights.

10 A. Okay. I'll hit some highlights. The first
11 four pages we showed at the last hearing. We're asking
12 for the -- we asked for the 480-acre spacing units for
13 both the Bone Spring and the Wolfcamp with increased
14 allowables, 9,700 barrels a day for the 480 for the Bone
15 Spring, and 6,000 barrels a day for the 480 for the
16 Wolfcamp, both with 5,000 standard cubic feet per barrel
17 GORs.

18 The increased allowable is needed to
19 develop the multiple very thick stack pay zones that we
20 have here and to develop these thick sections with the
21 required well density that we envision.

22 I'll turn the page to page 2. This shows
23 both the North Bell Lake block and the South Bell Lake
24 block, each nine-section three-mile-by-three-mile-
25 square areas. As you can see on the map with the black

1 dots and the directional paths, there are a great number
2 of wells that have been drilled offset to Bell Lake,
3 which will enable us, with a very small number of wells
4 drilled inside of block, to establish these large PAs,
5 which I would like to talk about in just a minute.

6 **Q. And in the South Block, Kaiser-Francis has**
7 **drilled two wells already?**

8 A. Correct. We've drilled the two wells shown in
9 the solid lines. And in the North Block, we've drilled
10 the one well with the solid line, and the dashed line is
11 the well we're moving on next month. And those should
12 complete the four wells that we need to establish our
13 large PAs.

14 **Q. Page 3?**

15 A. Page 3 shows the overall development scheme for
16 a block. A question was asked about the corridor. This
17 displays our corridor still running down the middle with
18 pads on both sides of the centerline. Inside the
19 corridor, we will put roads, pipelines, power lines.
20 And those, along with the pads, will create a very
21 efficient development, which will minimize capital costs
22 and surface impact.

23 From these pads, we'll drill two wells from
24 each pad, so we'll get the six wells in across the
25 one-mile section, and the 480-acre spacing units will

1 work hand in hand with those well pads.

2 **Q. Page 4?**

3 A. Page 4 is the graphic which sets out the
4 prospective zones within each of these pools, four zones
5 in the Bone Spring Pool, the Upper and Lower Avalon, the
6 2nd and 3rd Bone Spring and the two in the Wolfcamp
7 Pool, which is the Wolfcamp A and the Wolfcamp B.

8 Our technical work to date suggests that
9 six wells across the one-mile width is the well count
10 which we believe will optimally develop the reserves.
11 So it will be three wells across the 480, and that's
12 what's depicted on this graphic.

13 **Q. And in looking at this, the huge numbers of**
14 **target zones available, that's one reason why it's**
15 **inevitable that a central well will be drilled in each**
16 **well unit?**

17 A. That's correct.

18 **Q. Whether 2nd or 3rd Bone Spring or Wolfcamp A or**
19 **a B?**

20 A. That's correct.

21 **Q. Let's move on to Exhibit 5 [sic].**

22 A. Exhibit 4, pages 5 and 6, both address our
23 plans for performing large PAs. We have met with the
24 BLM on multiple occasions. They're in favor of a large
25 PA for the North Block and a large PA for the South

1 Block. We are also in favor of it.

2 The two key requirements for forming these
3 large PAs, number one, is to show that your geology is
4 consistent across the block, and that's what I'm showing
5 here on page 5, where you can see the thickness of each
6 of those zones is consistent all the way across the
7 block. This is a representation of the North Bell Lake.
8 The South Bell Lake representation is similar. So we
9 meet the first criteria easily, consistent geology
10 across the block.

11 If I could to the next page --

12 **Q. Page 6.**

13 A. -- page 6, this addresses the second key
14 requirement for forming large PAs and that is that you
15 have to establish economic production across the block.
16 You will notice with the well dots, the green shades are
17 the Bone Spring intervals. The red shades are Wolfcamp
18 intervals with a very large number of wells immediately
19 offsetting Bell Lake, about 95 percent of which are
20 clearly economic.

21 The BLM would like us to use those wells
22 combined with a minimum number of wells that are
23 economic in our unit, which will easily satisfy this
24 economic requirement. And so our plan is, after the
25 second well in each of the blocks, to apply for the

1 large PAs, and we expect that we'll get them just like
2 the Devon Thistle Unit, which is immediately offset to
3 the west. They got very large PAs with a low well
4 count.

5 **Q. And then let's move back to the**
6 **development sequence, and explain maybe the problems**
7 **of -- the technical and economic problems of drilling**
8 **the first well in the center of a well unit.**

9 A. Good. Okay. I'm happy to.

10 Page 7, this depicts our overall
11 development layout. And with our six-wells-per-section
12 plan, the center wells will get developed anyway. We
13 utilize our pad development scheme. As you can see, in
14 each pad, there are two well pads. Every other pad has
15 a well path with a well running through the center of
16 the 480. The other pads have well paths don't run
17 through the center.

18 I'd like to illustrate one of the
19 complications that is created for us with the
20 requirement to place the center well first in each 480.
21 I would like to run through an example. On starting pad
22 one on the west side, this -- pad one, we can drill the
23 first two wells with -- on the first pad. The third
24 well in that 480 would be drilled from pad three. So we
25 move the rig from pad one over to pad three, and we

1 drill the last well in that first spacing unit.

2 Then if we are to drill the first well in
3 the next spacing unit in the center, we would then have
4 to move the rig from pad three to pad five, drill that
5 well. While the rig's there, we'll go ahead and drill
6 the second well from that pad. Then we'll have to move
7 the rig back to pad three to drill the final well in
8 that sequence.

9 And the first problem is -- the challenge
10 is the estimated cost. It's about \$250,000 for each rig
11 move. The second disadvantage is we'll be moving back
12 onto a pad where we have just established initial
13 production, and that creates a simultaneous-operation
14 situation where you're drilling and producing on the
15 same pad. It's a risk that most operators try hard to
16 avoid. Many times it's inevitable, we can't avoid it,
17 but we sure try because it is a risky operation.

18 **Q. And with that type of cost, it would**
19 **substantially increase the overall drilling costs within**
20 **the unit?**

21 **A. It would.**

22 There is one other item I'd like to review
23 before we get off this page. There is the high
24 potential for lost reserves when we skip a well in a
25 pattern as we're drilling across. When you skip a well,

1 it creates what the industry now terms "a parent-child
2 relationship." The child well, the new well, is drilled
3 next to a parent well, a well which has been there for
4 some period of time. And even two or three months is a
5 long enough period of time to cause enough depletion in
6 that parent well to create with your child well two key
7 issues.

8 One is that when you go to frac that child
9 well, you're fracking into some potential areas of
10 depletion. Those fractures, as they initiate, will seek
11 the lowest stress portion of the reservoir. And so any
12 frac wings that are extended from the parent well will
13 be sought by that fracture extension. You will not get
14 the complexity in the fracture network that you're
15 looking for. And, in some cases, you can frac into the
16 parent well bringing proppant into that wellbore, which
17 can place the well off production. You can get it back
18 on with an expensive intervention. But the parent-child
19 relationship is very well recognized in the industry and
20 one in which you will end up with significantly poor
21 reservation in the combination of that parent-child well
22 than you otherwise would if you could drill that next
23 well very soon after you drill your parent well.

24 So not only is there increased risk and
25 cost with having to drill the center well first, there

1 is a significant chance for -- a significant reduction
2 in reserve potential.

3 Q. And is page 8 simply a summary of the major
4 points you have already discussed?

5 A. It is.

6 Q. Was Exhibit 4 prepared by you?

7 A. It was.

8 Q. And in your opinion, is the granting of this
9 application -- these applications, especially with the
10 requested center-well issue, the change, in the interest
11 of conservation and the prevention of waste?

12 A. Yes.

13 MR. BRUCE: Mr. Examiner, I move the
14 admission of Exhibit 4.

15 EXAMINER DAWSON: Exhibit 4 will be
16 admitted to the record at this time.

17 (Kaiser-Francis Oil Company Exhibit Number
18 4 is offered and admitted into evidence.)

19 MR. BRUCE: That's all the questions I have
20 of the witness.

21 EXAMINER DAWSON: Mr. Brooks?

22 CROSS-EXAMINATION

23 BY EXAMINER BROOKS:

24 Q. Okay. These are beginning -- throughout, these
25 are units, right? This whole area is unitized?

1 A. The whole area is a federal unit.

2 Q. Yeah. So regardless of whether -- if, in
3 fact -- it's all considered as one participating area.
4 Now, if it grows as a traditional participating area,
5 then you might have some other considerations involved,
6 and I can't seem to think through them all very fast.

7 A. If I could point out, the very first well that
8 we drill, we applied for a PA for that first well.

9 Q. Right.

10 A. And we'll get an area which is equal to the
11 spacing area. So it'll be a 480-acre PA. The next well
12 drilled, we will, at a minimum, apply for an extension
13 of that PA that covers the distance between the first
14 well and the second well.

15 I illustrated on the map where you can see
16 our first two wells are quite a distance apart, about
17 2/3 of the way across the block. So our expectation is,
18 worse case, the BLM would expand the PA to cover both of
19 those 480s that would be created from the two first two
20 wells and utilizing the well control around us. In a
21 large number of economic wells around us, that's how we
22 are able to -- why we think that we'll get a PA that
23 covers the full nine-section block.

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REDIRECT EXAMINATION

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BY MR. BRUCE:

Q. And, again, you've discussed this extensively with the BLM?

A. We have.

CONTINUED CROSS-EXAMINATION

BY EXAMINER BROOKS:

Q. Okay. My concern is -- the way I'm looking at -- the angle from which I'm coming at this is -- I don't know what went on in this case previously, but we have had a lot of discussions around here about the fact that if you make larger-than-normal spacing units and bring in additional acreage that's a long way from the well, then you may be diluting the interest of the people who own what would be the normal spacing unit around the well. And that is the reason that in some orders -- I think was the primary reason, that in some orders, we required if you want to drill three wells in a project area, that we want you to drill the first one -- the center one first. But it doesn't seem to me that that applies in a unit if it's all going to be -- if the interest in all the wells are all going to be the same, however many you drill. And that's what I understand you have here. Now, is that a correct understanding of where we're going on this?

1 A. Once we get the PAs established, then the
2 ownership -- the royalty ownership will be consistent
3 across the PA.

4 Q. That's my understanding.

5 And you believe that the PAs are going to
6 be established such that they'll be the same -- this
7 whole nine sections will be one PA?

8 A. That's correct.

9 Q. And so all the wells -- regardless of what
10 order you drill them, all the wells will be -- they all
11 have the same ownership?

12 A. That's correct.

13 Q. And the same proportions?

14 A. That's correct.

15 Q. That's what I was thinking, and I thank you for
16 clarifying it. That's all I have.

17 CROSS-EXAMINATION

18 BY EXAMINER JONES:

19 Q. The multiple targets is a good argument that
20 there will be a well drilled in the center. You're
21 reasonably certain you will drill the well in the center
22 of the 480 at one point; are you not?

23 A. Yes, in sequence.

24 Q. Yeah. Yeah. Okay.

25 And you've got working interest owners out

1 here that will maybe demand you keep drilling anyway.

2 So you said the development scheme will
3 cost more to drill because you're moving the rig, but
4 you also talked about a risk. And I was spacing out
5 what you were saying there. Would you repeat?

6 A. Okay. I'll be happy to go over it again. Yes.

7 Q. Yeah. I got the part about moving the rig will
8 cost more and about the reserve reduction due to the
9 parent-child, but the risk thing is --

10 A. So if I can go back to my illustration. That
11 may be the easiest way, on page 7 of the exhibit. We
12 will drill pad one first, then we will move over to pad
13 three and drill the 221H first in pad three. That will
14 complete the first three wells in that first 480.

15 Then we will mobilize the rig to pad five
16 in order to comply with requirements to drill the first
17 well in this next 480 in the center.

18 Meanwhile, while we're on pad five drilling
19 that well and then the next well, which is the 224, we
20 will be fracking and putting on production the 221 so
21 that by the time we finish drilling on pad four and move
22 the rig back to pad three in order to drill the well we
23 had to skip, which was the 222H, when the rig moves back
24 to pad three, the 221 will already be on production.

25 And these drilling pads are small enough

1 where you've got -- you've got a wellhead which is live.
2 It has a high pressure. It has oil, gas and water
3 flowing through it. You have a facility, a tank battery
4 that's built there, separators and treaters and tanks,
5 and your drilling rig is right there in and amongst all
6 that equipment. And in the drilling operation, you have
7 several -- it's an industrial operation. You have
8 several, heavy, overhead lifts that you're making with
9 equipment, with casing, with drill pipe. And you also
10 have a very high level of vehicular traffic there and
11 many, many other machines, from forklifts to cranes, all
12 moving around that location. And you really don't
13 prefer to have a live well producing, especially early
14 on with these very high rates, where you have an
15 industrial activity which is very heavy in the activity
16 with several overhead lifts.

17 And so you have to take extraordinary
18 precautions to fence off your well location, to fence
19 off the facilities, to put a cage over the well, to put
20 a cage over all the equipment, all the pipelines that
21 are exposed. Accidents can easily happen where a piece
22 of equipment gets loose from an overhead lift. It falls
23 on the wellhead, it falls on a flow line and it breaks
24 it. Once you have a release of hydrocarbons in the air,
25 with all of the pumps and engines that are running to

1 support that drilling operation, you set up an immediate
2 explosion risk.

3 Q. Okay. That's very clear. Thank you for that.

4 So, basically, while you're at pad one,
5 will you drill the two wells, 219 and 220, but you'll
6 also drill wells to the south also?

7 A. No, sir, because the wells to the south have to
8 be drilled from another pad, which I took off of this
9 graphic, but it is displayed on page 3. You can see the
10 full complement of pads on page 3.

11 Q. Okay.

12 A. So your wells that you drill to the north have
13 to be drilled from pads which are south of the
14 centerline because of the turn that you have to make.

15 Q. Because of the 500-foot turn or whatever it is?

16 A. Yes, sir.

17 And our plan is to start -- we could start
18 on the north or the south, either one, but you pick one
19 and work your way all the way across in order to
20 minimize the depletion that would occur if you have a
21 gap between adding the next well in the series.

22 Our plan would be to drill all the way
23 across, from east to west, and then come back over here
24 and drill the south part of the block.

25 Q. Okay. And you're still not looking at that

1 Upper Avalon in the South Block as being prospective, is
2 that right, because it's not part of the unit -- or the
3 agreements area?

4 A. There is only -- because of the structure dips.
5 We're up here on the top of a structure, and it dips.
6 And as the Avalon goes deeper -- most of the Avalon
7 falls below that 9,000-foot interval. So it's only a
8 small portion of the block where we have a small portion
9 of the Avalon which is above the 9,000-foot line.

10 Q. Okay. Okay. That works.

11 I know our system is not set up to drill
12 vertical wells and complete -- in the same pool, if it
13 goes below or above a unit, you can't do that with our
14 system. It's just not set up for that. But this is not
15 vertical wells anyway. These are horizontals.

16 MR. BRUCE: Yeah. As the original
17 testimony, I mean, that 9,000-foot cutoff -- and
18 Ms. Courtney can correct me if I'm wrong -- is only in
19 the JOA for that South Block. The unit covers all
20 depths.

21 EXAMINER DAWSON: Okay.

22 EXAMINER JONES: Okay. Okay. That could
23 be corrected if it had to be.

24 Q. (BY EXAMINER JONES) We can't control the oil
25 prices or anything, but are you the one that has to sell

1 **this to your management --**

2 A. Yes, sir.

3 Q. -- for the CAPEX it's going to take to do all
4 **this?**

5 A. Yes, sir.

6 Q. And you're confident you can get that done? I
7 **mean to keep drilling it. What are your plans for**
8 **development of --**

9 A. If oil prices change?

10 Q. No, if they stay the same or get better. Can
11 **you get it done in the next few years, or are you**
12 **planning on a five-year schedule of getting all this**
13 **done?**

14 A. It will take several years to get the field
15 completely drilled out. We put one rig under contract
16 here a few months ago, the Cactus 171. We pick up the
17 second rig at the beginning of 2019. Our plan is to
18 employ both of those rigs in the development of this
19 asset until we get all the wells drilled. It will take
20 a number of years to do that. And depending on the
21 success that we have and depending on the oil price
22 cooperation, we could easily see ourselves picking up
23 more rigs.

24 Q. Okay. I don't know if I've forgotten anything.
25 **They certainly haven't.**

CROSS-EXAMINATION

BY EXAMINER DAWSON:

Q. I have a question for you. On your last slide, the summary of major points on the last exhibit, the third item down, "The BLM will approve a participation area in each nine-section block after two or three wells will be drilled, thus creating two large project areas such as was done in the Devon Thistle Unit," did you talk to the SLO, the land office, about approving a participating area after wells are drilled? Did you talk to them about this?

A. Yes. We have talked to them.

Q. They were agreeable to it?

A. Yes, sir.

Q. Are there any contraction clauses within either of these units?

MS. COURTNEY: They're all contracted to the point they are now.

THE WITNESS: There was one contraction period that occurred after the primary term, and that was in 1968, I believe. It was 15 years after the 1953 unit was formed, one contraction period or event. Once that contraction occurs, the unit size will not contract again.

Q. (BY EXAMINER DAWSON) And do you have an idea --

1 I mean, I could count, but you probably know off the top
2 of your head about how many wells you will have in these
3 two units after you fully develop them?

4 A. I have a well count that I can put my hand on,
5 which is approximately 200, which would be a full
6 development of three of the zones. And as you can see,
7 there is even more target zones than that. So it will
8 be hundreds of wells.

9 Q. So this will keep you busy for the rest of your
10 lifetime (laughter)?

11 A. Yes, sir.

12 MS. COURTNEY: For the rest of our careers.

13 EXAMINER JONES: What you're basically
14 wanting is these 480s because of your -- the science
15 tells you the well spacing should be three wells per
16 half section.

17 THE WITNESS: That's correct.

18 EXAMINER JONES: Okay. Thank you very
19 much.

20 EXAMINER DAWSON: That's all the questions
21 I have. Thank you.

22 MR. BRUCE: Ask that these matters be taken
23 under advisement.

24 EXAMINER DAWSON: Okay. So Case Number
25 15821, Case Number 15822, Case Number 15823 and Case

1 Number 15824 will be taken under advisement.

2 And that concludes today's hearing. Thank
3 very much. Have a great day.

4 Good luck with your drilling.

5 (Case Numbers 15821, 15822, 15823 and 15824
6 conclude, 12:44 p.m.)

7 (The proceedings conclude, 12:44 p.m.)

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I do hereby certify that the foregoing is
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as heard by me on _____
at _____

Paul Baca Reporter
Oil Conservation Division

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2 COUNTY OF BERNALILLO

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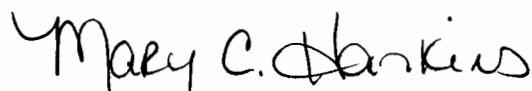
the final disposition of this case.

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DATED THIS 9th day of March 2018.

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MARY C. HANKINS, CCR, RPR
Certified Court Reporter
New Mexico CCR No. 20

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Date of CCR Expiration: 12/31/2018

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