

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 OF OPAL RESOURCES
OPERATING COMPANY, LLC AND
OPAL RESOURCES II, LLC FOR A
NONSTANDARD SPACING AND PRORATION
UNIT, A NONSTANDARD PROJECT AREA,
AND COMPULSORY POOLING, LEA COUNTY,
NEW MEXICO.

CASE NO. 15621

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

March 2, 2017

Santa Fe, New Mexico

BEFORE: MICHAEL McMILLAN, CHIEF EXAMINER
LEONARD LOWE, TECHNICAL EXAMINER
GABRIEL WADE, LEGAL EXAMINER

This matter came on for hearing before the
New Mexico Oil Conservation Division, Michael McMillan,
Chief Examiner, Leonard Lowe, Technical Examiner, and
Gabriel Wade, Legal Examiner, on Thursday, March 2,
2017, 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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APPEARANCES

FOR APPLICANT OPAL RESOURCES OPERATING COMPANY, LLC AND
OPAL RESOURCES II, LLC:

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1 (8:20 a.m.)

2 EXAMINER McMILLAN: Okay. I would like now
3 to call Case Number 15621, applications of Opal
4 Resources Operating Company, LLC and Opal Resources II,
5 LLC for a nonstandard spacing and proration unit, a
6 nonstandard project area, and compulsory pooling, Lea
7 County, New Mexico.

8 Call for appearances.

9 MS. RYAN: Elizabeth Ryan, with Carson Ryan
10 in Roswell, representing Opal Resources.

11 EXAMINER McMILLAN: Any other appearances?

12 MS. KESSLER: Jordan Kessler with the
13 Santa Fe office of Holland & Hart. I'm representing
14 ConocoPhillips Company. I would like to note for the
15 record that Conoco has reached an agreement with Opal,
16 and we have no objection to this application.

17 EXAMINER McMILLAN: Thank you.

18 MS. RYAN: Good morning.

19 EXAMINER McMILLAN: Good morning.

20 MS. RYAN: We'd like to call our first
21 witness.

22 EXAMINER McMILLAN: Okay. How many
23 witnesses do you have?

24 MS. RYAN: We have two.

25 EXAMINER McMILLAN: Would the witnesses

1 please stand up and be sworn in at this time?

2 (Mr. McCormick and Mr. Castagno sworn.)

3 LESTER C. McCORMICK,

4 after having been first duly sworn under oath, was
5 questioned and testified as follows:

6 DIRECT EXAMINATION

7 BY MS. RYAN:

8 Q. Good morning. Would you please state your name
9 for the record and tell the Examiners by whom you are
10 employed and in what capacity?

11 A. My name is Lester McCormick. I'm employed by
12 Opal Resources II, LLC. I'm the vice president of land
13 and business development.

14 Q. And how long have you been employed in that
15 position?

16 A. Ten years.

17 Q. Could you briefly describe your roles and
18 responsibilities in that position?

19 A. I'm in charge of the plan function for all of
20 Opal and lease brokerage, acquiring lease records and
21 also business development, any acquisitions in
22 development or divestitures that we've had.

23 Q. Does your responsibility include southeastern
24 New Mexico?

25 A. Yes, it does.

1 **Q. How many total years of experience do you have**
2 **in the oil and gas business?**

3 A. Hate to say it, but 37.

4 **Q. And could you give us a brief summary of your**
5 **education and experience?**

6 A. I graduated with an MBA from Western Michigan
7 University, and then my undergraduate was at the
8 University of Michigan.

9 I started in the oil and gas business as an
10 independent landman. Then I started my own company, LCM
11 Limited, ran that as a brokerage company until 2003.
12 Then I was a vice president with Associated Resources,
13 which is an outsourcing land company. Then I was a
14 president of Red River Energy, which was a contract
15 drilling company, and then I started with Opal.

16 **Q. Are you a member of any professional**
17 **organizations?**

18 A. Yes. I'm a member of the American Association
19 of Professional Landmen, the Houston Association, West
20 Houston.

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

23 A. No.

24 **Q. Are you familiar with the land matters involved**
25 **in this case?**

1 A. Yes, I am.

2 MS. RYAN: Mr. Examiner, I'd ask that
3 Mr. McCormick be admitted as an expert in petroleum land
4 matters.

5 EXAMINER McMILLAN: So qualified.

6 Q. (BY MS. RYAN) So, Mr. McCormick, I'd like to
7 turn your attention to Exhibit 1. Could you briefly
8 identify and describe Exhibit 1 for the Examiner?

9 A. Yes. It's a Midland Map of the area that we're
10 planning on drilling.

11 Q. And what is your proposed -- how many acres are
12 in your proposed spacing and proration unit or project
13 area?

14 A. 200 in Sections 29 and 32.

15 Q. And does that comprise the west half-west half
16 of 29 and the northwest-northwest of Section 32?

17 A. Yes, it does.

18 Q. And what well will this acreage be dedicated
19 to?

20 A. It's going to be the Jade 19S-39E-S29 #1H well.

21 Q. And today do you seek to pool the uncommitted
22 interest owners in the Nadine-Abo Formation for this
23 unit?

24 A. Yes, we do.

25 Q. All right. I'd like to bring your attention to

1 **Exhibit 2. Could you please identify the exhibit for**
2 **the Examiners?**

3 A. That's the C-102 for the Jade well.

4 **Q. And could you briefly describe the location of**
5 **the surface and the bottom-hole locations?**

6 A. The surface is going to be in what would be the
7 northwest-northwest of Section 29. The bottom hole will
8 be in the northwest-northwest of Section 32.

9 **Q. And will the producing interval for the well**
10 **meet the 330-foot standard offset requirements from the**
11 **outer boundaries of the project area?**

12 A. The producing zones will, yes.

13 **Q. Are these lands limited to any special pool**
14 **orders?**

15 A. No.

16 **Q. And is this project area nonstandard?**

17 A. Yes.

18 **Q. And why is that?**

19 A. Because the well crosses two sections and
20 goes -- the lateral goes within 330 feet of the bottom
21 hole.

22 **Q. So your perforations are within the 330-foot**
23 **setback even though your bottom-hole location is 200**
24 **feet?**

25 A. Correct.

1 **Q. Okay. And turning to the attachments to the**
2 **C-102 form, could you briefly describe the first**
3 **attachment?**

4 A. The first one just gives you the coordinates of
5 the proposed unit in Sections 29 and 32. The next one
6 is just a verification of -- it's a topo of a location
7 where the well will be spud, and it kind of blocks out
8 all of Section 29.

9 **Q. And does it reflect where your proposed lease**
10 **road is going to go?**

11 A. Yes. It's -- we're going to go up along the --
12 the western boundary of the section and then just kind
13 of go into the location.

14 **Q. And is the eastern boundary of the section the**
15 **state line?**

16 A. Yes.

17 The next one is an aerial photo of
18 basically the same thing as the location map showing the
19 road and basically an aerial view of the area around it.
20 And then the last map is a vicinity map that shows,
21 basically, that we're directly off the Nadine Road just
22 to the east of Hobbs.

23 **Q. And the very last attachment?**

24 A. Oh, yeah. There is one more. That's a site
25 location for the well.

1 Q. And how many acres does the site location map
2 reflect?

3 A. It's planned right now to be 2.4 acres.

4 Q. All right. I'd like to bring your attention to
5 Exhibit 3. Could you identify and summarize that
6 exhibit for the Examiner?

7 A. That's a breakout of the mineral interests of
8 the tracts.

9 Q. Does this reflect the ownership of the minerals
10 in these tracts?

11 A. Yes, it does.

12 Q. And does it also show the mineral owners who
13 are unleased?

14 A. Yes, it does.

15 Q. What interests are you seeking to pool in this
16 case?

17 A. We're interested in pooling all the unleased
18 acres, which is the David Bond Trust, Noble, Ollie
19 Jones, Carla Leet-Assaf, Carl Hatch, the Collinses, and
20 the Cavinesses.

21 Q. All right. And before we go into some of those
22 owners, I'd like you to identify -- moving to Exhibit 4,
23 would you identify Exhibit 4?

24 A. That's a proposal letter that we had our
25 brokers send out to everyone on the tracts that we

1 identified as mineral owners and then followed by the
2 original oil and gas lease that we originally sent out
3 to all of the owners.

4 Q. And when did you start sending out your offer
5 letters and lease proposals?

6 A. We started about April 2016.

7 Q. And did that continue throughout the year?

8 A. Throughout all of 2016 and even into this year.
9 We've had to try to pick up a few more leases.

10 Q. And you identified a moment ago the owners that
11 are currently unleased. Let's just go through them
12 right now and briefly summarize your communication with
13 them.

14 The first owner, the heirs or devisees of
15 Ollie S. Jones, deceased, what was your communication?

16 A. We were not able to locate them. The last
17 information that we had was substantially back in the
18 title chain.

19 Q. So was there notice of publication?

20 A. Yes, there was.

21 Q. Next, Noble Energy, Inc. When did you make
22 contact with Noble?

23 A. We originally contacted Noble back in October.
24 Then we basically had an agreement put together with
25 them. In early January, they did an acquisition of

1 Clayton Williams, and it pretty well tied them up. So
2 they haven't been able to get me the oil and gas lease,
3 so we're kind of waiting on them.

4 Q. Was notice of this hearing mailed to them by
5 certified mail, return receipt requested?

6 A. Yes, it was.

7 Q. And was it received?

8 A. Yes, it was.

9 Q. So your last contact was February 23rd of this
10 year?

11 A. Yes.

12 Q. And as you stated, we still do not have a
13 signed lease with Noble. Do you expect that you may
14 negotiate one before your well is drilled?

15 A. Yes. I believe we will get one from them.
16 It's just that the minerals management person over there
17 is too tied up. So --

18 Q. Sure.

19 A. They've got a small staff.

20 Q. Okay. The next owner, Carla Leet-Assaf, please
21 summarize your contact.

22 A. She accepted the mailed-out letter, but we have
23 never been able to get any response from her. We have
24 not been able to find a phone number.

25 Q. So she received notice by certified mail, but

1 we received no response from her?

2 A. Correct.

3 Q. Carl F. Hatch?

4 A. The same.

5 Q. So he received notice by certified mail, but
6 we've never had a response?

7 A. Yeah. Correct.

8 Q. And is that the same for Jeannie H. Collins?

9 A. Yes.

10 Q. For Cheedle Caviness and Elizabeth Caviness who
11 owned their interest as joint tenants with right of
12 survivorship, can you describe the notice to those
13 individuals?

14 A. It was returned undeliverable.

15 Q. So you provided notice by certified mail, and
16 then it was returned undeliverable?

17 A. Correct, off of the last address we had.

18 Q. Was notice accomplished by publication?

19 A. Yes, it was.

20 Q. Lastly, David M. Yager, Trustee of the David
21 Bond Kyte 1997 Trust, can you summarize your notice as
22 to that?

23 A. They -- they attempted to transfer the
24 ownership, but they haven't gotten that done yet. The
25 interest, if it was transferred, we have a lease from

1 the party that would have ended up with it, so we've got
2 some ownership problems that.

3 Q. Mr. McCormick, who currently owns the interest
4 of record -- mineral interest of record? Is that the
5 Trust?

6 A. No. The Trust -- well, yeah, of record, it's
7 the Trust.

8 Q. It's the Trust?

9 A. Yeah.

10 Q. And were you advised that it terminated?

11 A. The Trust has been terminated.

12 Q. Is any of that information of record?

13 A. None of that is of record.

14 Q. And were we able to locate any address to
15 notify the Trust?

16 A. Not the Trust.

17 Q. So was notice accomplished by publication?

18 A. Yes, it was.

19 Q. I'd like to bring your attention to Exhibit 5.
20 Would you identify that exhibit?

21 A. Okay. That's an Affidavit of Notice that you
22 sent out.

23 Q. And does it attach copies of the certified
24 return receipts?

25 A. Yes, it does. Well -- yes.

1 Q. And included in the exhibit, is there a summary
2 of receipt of service?

3 A. Yes.

4 Q. And since this hearing was continued from the
5 January 19th original hearing, was notice provided for
6 both hearings, including the March 2nd hearing today?

7 A. Yes, they were.

8 Q. I'd like to refer you to Exhibit 6. Could you
9 identify that for the Examiner?

10 A. That's an email from the State Land Office.

11 Q. And what does it say?

12 A. It basically says that they have no problems
13 with us pooling their minerals, along with a fee
14 ownership.

15 Q. So is it correct that we're not pooling their
16 interest, but they have no objection to our pooling
17 hearing?

18 A. Correct.

19 Q. And is it true that you've been working on a
20 proposed communitization agreement with the State Land
21 Office?

22 A. Yes, we have been.

23 Q. And will that be finalized after receiving a
24 pooling order from the Division in this matter?

25 A. Yes.

1 Q. And is a copy of that proposed agreement
2 included in this exhibit?

3 A. Yes, it is.

4 Q. And regarding the leases in our project area,
5 what type of leases are in the west half-west half of
6 Section 19?

7 A. They're all private mineral ownerships.

8 Q. And then what acreage does the state lease
9 cover?

10 A. It covers -- the lease covers the north half of
11 the northwest, but what we're asking for is the
12 northwest-northwest.

13 Q. And what is that state lease, for the record?

14 A. It is BO 9775-1.

15 Q. And who is the owner of that state lease?

16 A. Opal Resources II, LLC.

17 Q. And are they 100 percent -- they're the only
18 owner?

19 A. Yes.

20 Q. What formation does that agreement cover?

21 A. It covers the Wichita-Albany-Abo, but the Abo
22 is for New Mexico, so it's the Abo Formation.

23 Q. And have all other mineral interest owners
24 reached an agreement or are participating in the Jade
25 well?

1 A. Yes.

2 Q. I'd like to bring your attention to Exhibit
3 Number 7. Can you identify that for the Examiner?

4 A. That's the APD that was filed with the State.

5 Q. And when does Opal plan to spud the Jade well?

6 A. We're hoping to spud it by May 1st, 2017.

7 Q. And for the record, could you identify the
8 surface and bottom-hole location?

9 A. Surface location is 400 feet from the north
10 line and 400 feet from the west line. The bottom
11 location is 1,122 feet from the north line and 400 feet
12 from the west line.

13 Q. And do you plan to complete the well in the
14 Nadine-Abo Formation?

15 A. Yes, we do.

16 Q. What is the planned total vertical depth?

17 A. About 7,577 feet.

18 Q. And flipping towards the last page of that
19 exhibit, identify the 7-1. Can you identify that for
20 the Examiners?

21 A. Yes. That's our AFE that was sent to the
22 partners, working interest owners.

23 Q. And are the costs reflected on the AFE
24 consistent with operators in the area --

25 A. Yes.

1 Q. What are the estimated overhead and
2 administrative costs for the Jade well?

3 A. During the drilling, it's going to be 97 --
4 \$150.

5 EXAMINER McMILLAN: I'm sorry?

6 THE WITNESS: During the drilling period,
7 it's going to be 970 -- 970 -- \$9,750 --

8 Q. (BY MS. RYAN) Is that a month?

9 A. -- a month.

10 And then during the production, it's going
11 to be 975.

12 Q. And are these costs in line with other
13 operators for this type of well in the area?

14 A. Yes.

15 Q. And do you ask that they be adjusted in
16 accordance with the appropriate COPAS accounting
17 procedures?

18 A. Yes.

19 Q. And for any other uncommitted interest, do you
20 request that the Division assess a 200 percent risk
21 penalty?

22 A. Yes.

23 Q. Did Opal publish notice of this hearing?

24 A. Yes.

25 Q. Is the Affidavit of Publication Exhibit 8?

1 A. Yes.

2 Q. And does Exhibit 8 include both the January
3 19th notice and the March 2nd notice?

4 A. Yes.

5 Q. And, again, were the only parties that were
6 unlocatable the heirs or devisees of the Ollie S. Jones
7 and the David Bond Kyte Trust?

8 A. Correct.

9 Q. All right. Did you provide notice to the
10 offset working interest owners?

11 A. Yes, we did.

12 Q. And did you ever receive a response or any
13 objection --

14 A. No.

15 Q. -- from the offset owners?

16 Were Exhibits 1 through 8 prepared by you
17 or compiled by you or under your direction and
18 supervision?

19 A. Yes.

20 Q. And in your opinion, is the granting of this
21 application in the interest of conservation and the
22 prevention of waste?

23 A. Yes.

24 EXAMINER McMILLAN: Okay. Exhibits 1
25 through 8 may now be accepted as part of the record.

1 (Opal Resources Exhibit Numbers 1 through 8
2 are offered and admitted into evidence.)

3 CROSS-EXAMINATION

4 BY EXAMINER McMILLAN:

5 Q. Okay. So I may have misheard this, but you
6 said that everyone was noticed as of February the 2nd?

7 A. No, February the 23rd.

8 Q. So everyone was notified within ten working
9 days of this application?

10 MS. RYAN: Yes. Yes.

11 Q. (BY EXAMINER McMILLAN) And who is the next
12 individual? Is he an engineer?

13 A. Yes.

14 MS. RYAN: Yes.

15 Q. (BY EXAMINER McMILLAN) And you included an AFE
16 in your letter to the interests who you do not have a
17 voluntary agreement with or the packet, correct? The
18 AFE was included?

19 A. No, I don't believe so. You mean -- which ones
20 are you talking about?

21 Q. For the interests you're trying to -- who you
22 do not have a voluntary agreement with that you are
23 trying to locate, did you send an AFE?

24 A. I can't remember. I don't think we did.

25 Did we?

1 MS. RYAN: To the ones -- everybody --
2 everybody leased that could be located, and to the ones
3 that could not be, there was no AFE provided because
4 they could not be located.

5 Q. (BY EXAMINER McMILLAN) Okay. And let me ask
6 you a question. Why didn't you make this a two-mile
7 horizontal? And how do you plan to develop the
8 southwest quarter of the northwest quarter and the west
9 half of the southwest?

10 A. We don't have a lease on that. It's HBP by old
11 wells. You're talking about the -- in Section 32?

12 Q. Yes.

13 A. Yeah. We do not have a lease on that. Our
14 lease just covers the north half of the northwest.
15 Everything south of there is HBP by older wells. We're
16 hoping to get leases from them, but our understanding is
17 that those wells will be plugged sometime in the next
18 year. They're vertical wells.

19 Q. So it could safely be said at this time you
20 don't have a definitive plan to develop the acreage.
21 Have you made a good-faith effort to attempt to lease
22 the acreage?

23 A. Yes. But it's currently HBP. We've contacted
24 the oil company that owns it. Yes.

25

1 REDIRECT EXAMINATION

2 BY MS. RYAN:

3 Q. Does Opal Resources have any interest in other
4 acreage in that Section 32?

5 A. No. No.

6 CONTINUED CROSS-EXAMINATION

7 BY EXAMINER McMILLAN:

8 Q. Are there any depth severances within the pool?

9 A. No.

10 EXAMINER McMILLAN: Go ahead, Leonard.

11 CROSS-EXAMINATION

12 BY EXAMINER LOWE:

13 Q. What portion did you say HPP [sic] owned in 32?

14 A. Everything -- if you look at our -- I'll tell
15 you, the easiest one to look at is the map up front --

16 EXAMINER McMILLAN: I got it.

17 THE WITNESS: -- the Number 1 exhibit.
18 Everything south of there is Kaiser-Francis, and it's
19 all HBP.

20 Q. (BY EXAMINER LOWE) Also, you mentioned that the
21 pooling order that you had requested from the State Land
22 Office is based upon this hearing or the conclusion of
23 this hearing or the outcome of this hearing?

24 MS. RYAN: The State Land Office will not
25 finalize the policy -- they're not going to finalize

1 that until they have an order from the Division.

2 EXAMINER McMILLAN: Go ahead.

3 CROSS-EXAMINATION

4 BY EXAMINER WADE:

5 Q. If you can just go to Exhibit 8.

6 A. 8?

7 Q. Yeah, your Affidavit of Publication.

8 A. Okay.

9 Q. I'm noticing the January 5 notice just has more
10 people listed, and I'm guessing it's because --

11 A. We picked up some leases since then.

12 MS. RYAN: Their status changed. We had
13 more response prior to this hearing.

14 Q. (BY EXAMINER WADE) But everybody who needed
15 notice by publication got notice by publication?

16 A. Correct.

17 EXAMINER WADE: That's it.

18 EXAMINER McMILLAN: I'm satisfied. Thank
19 you very much.

20 RICHARD "RICK" CASTAGNO,
21 after having been previously sworn under oath, was
22 questioned and testified as follows:

23 DIRECT EXAMINATION

24 BY MS. RYAN:

25 Q. Good morning. Please state your name for the

1 **record and tell the Examiners who you're employed by and**
2 **in what capacity you're employed.**

3 A. Yes. Rick Castagno. I'm the vice president of
4 reservoir engineering for Opal Resources. I've been
5 with Opal Resources for six years.

6 **Q. And could you briefly described your roles and**
7 **responsibilities in that position?**

8 A. Yes. My main responsibilities are to do all
9 the reserve estimates for any wells Opal has an interest
10 in, also provide guidance on our year-end reserve
11 report, as well as I do the annual budget and cash-flow
12 reports for the company and value any of the potential
13 acquisitions that we make, either land or
14 producing-property acquisitions. I also advise on the
15 drilling locations of wells, as well as the completions,
16 and I'll get involved in producing well --

17 **Q. And does your area of responsibility include**
18 **southeastern New Mexico?**

19 A. Yes.

20 **Q. How many total years of experience do you have**
21 **in the oil and gas business?**

22 A. I have 36 -- just over 36 years of experience
23 in the oil and gas business.

24 **Q. And what are -- could you just give a brief**
25 **summary of some of the positions you've held?**

1 A. Sure. After graduating with a petroleum
2 engineering degree, I went to work for Conoco in 1980
3 for 20 years. When I left Conoco, I went to work for a
4 start-up company, Advantage Energy Services, where we
5 provided asset management services. So I was the
6 technical manager guiding geologists, reservoir
7 engineers, production engineers, completion engineers.

8 After that, I went to a company called
9 Texas Petroleum Investment Company where I was the
10 director of reservoir engineering for them. After that,
11 I went to a company called Goldking. That later turned
12 into Dune Energy, and there I was the vice president of
13 reservoir engineering and development geology until I
14 joined Opal in 2010.

15 **Q. And could you briefly summarize your education?**

16 A. Yes. I graduated from Texas Tech University in
17 1980 with a degree in petroleum engineering.

18 **Q. And are you a member of any professional**
19 **organizations?**

20 A. I am, the Society of Petroleum Engineers.

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

23 A. No, I have not.

24 **Q. And are you familiar with the engineering**
25 **matters involved in this case?**

1 A. I am, yes.

2 Q. Are you familiar with the application filed in
3 this case?

4 A. Yes, I am.

5 Q. And are you familiar with Opal's geologic and
6 technology study on the Nadine-Abo Formation in this
7 area?

8 A. I am, yes.

9 MS. RYAN: I'd ask that Mr. Castagno be
10 admitted as an expert petroleum engineer.

11 EXAMINER McMILLAN: So qualified.

12 Q. (BY MS. RYAN) I'd like to direct your attention
13 to Exhibit Number 9. Could you identify that and
14 explain that for the Examiner?

15 A. You bet. That is a cartoon-type diagram of the
16 entire Permian Basin. It's a location map showing the
17 area of Opal's interest highlighted in red, which is
18 along the Central Basin Platform, which is an uplifted
19 area between the Midland Basin and Delaware Basin. Our
20 acreage mainly is focused in that northern part of the
21 Central Basin Platform, and it's located in between
22 major fields. The major fields there are identified by
23 the green areas.

24 Q. Okay. I'd like to bring your attention to
25 Exhibit Number 10. Can you identify that for the

1 **Examiner?**

2 A. Yes. That is zooming in a bit more on the
3 Central Basin Platform. That is our structure map of
4 what we call the Wichita-Albany, which is the same as
5 the Nadine-Abo. It's called the Wichita-Albany in Texas
6 and the Abo in New Mexico.

7 The structure map just illustrates the red
8 outline is our area of mutual interest with other
9 partners. The black star highlights the location of our
10 well. That is what we're talking about today. You'll
11 notice the black outlines. That's the acreage that Opal
12 has in that area. And one thing to note, that we are in
13 the structurally lower position than most of the major
14 oil producing fields on the western side.

15 **Q. With respect to the structure in Sections 29**
16 **and 32, do you observe any geologic hazards?**

17 A. No, I do not.

18 **Q. I'd like to refer you to Exhibit Number 11.**
19 **Would you identify that for the Examiners?**

20 A. Sure. This is a base map, a zoom-in of the
21 area of interest, showing the well location that we're
22 talking about here, the Jade well. This time the Opal
23 acreage is highlighted in yellow. There are four wells
24 shown in blue that are part of a cross section that is
25 Exhibit 12.

1 Q. And do you believe that the wells used for your
2 cross-section exhibit are representative of the wells in
3 the Nadine-Abo Formation in this area?

4 A. Yes.

5 Q. I'd like to bring your attention to Exhibit
6 Number 12. Would you identify that for the Examiner?

7 A. Yes. This is the cross section. And let me
8 start by just describing the curves in the cross section
9 and what you're looking at. Each one of these wells --
10 the logs I have on these wells is a petrophysical
11 analysis -- a detailed petrophysical analysis that we
12 have had performed.

13 I'll go through the curve on the left-hand
14 side, and we'll start with Tract Number 1, which is the
15 gamma-ray curve. Moving next to that, in the depth
16 track, you'll notice the perforated interval. So these
17 are all old vertical wells that have produced from the
18 Wichita-Albany or the Abo, Nadine-Abo. And you can see,
19 if you go down to the bottom of the log, after the
20 perforations, it shows the completion date of that well.
21 Then it shows the amount of oil that well has cumed, the
22 amount of gas and the amount of water. So, for example,
23 the first well is produced from the -- Wichita-Albany
24 has made right at 59,000 barrels of oil, 124 mcf of gas
25 and 113 barrels of water.

1 Moving over to the next track where you see
2 the blue and red -- or sorry -- blue-and-black
3 highlights, that is the resistivity track. And more
4 importantly in there are some what we call pay markers.
5 Each one of those markers, whether it be blue or black,
6 are simply identifying rock that has porosity greater
7 than 6 percent and a clay content of less than 15
8 percent. The blue markings are showing -- with those
9 porosity cutoffs, are showing reservoir rock that is
10 greater than 60 percent water saturation, and the black
11 highlighted areas are showing reservoir rock that are
12 less than 60 percent water saturation.

13 The following curve to the right is the
14 porosity curve, mainly focused on the black line there,
15 which is showing density porosity. And that scaling is
16 from zero, on the right-hand side, to 20 percent on the
17 left-hand side.

18 The final track we have there is our
19 lithology track. And what that's showing is that the
20 light blue is limestone. The purple color is a
21 dolomite, and the pink is anhydrite.

22 What I'd like to talk about as well are the
23 markers along the left-hand side, which is labeled
24 "Wichita-Albany" and then "M-O-N," which stands for
25 Monument. The Monument 4 Wichita-Albany Marker 1 is

1 highlighted, and then we go down to an oil-water
2 transition zone and then what we believe to be an
3 oil-water contact at 4,200 feet.

4 The lateral well in question will be
5 drilled right in between the Monument 4 Wichita-Albany
6 Marker 1 and the oil-water transition zone. And the
7 lateral will be at a subsea depth of about 3,950 to
8 4,000 feet.

9 Oh, just as a final note, the yellow
10 shadings coming across was work we did prior to the
11 detail petrophysical work. What that's highlighting is
12 porosity zones from a Raster log, just a regular paper
13 log, that's greater than 10 percent, and we use those
14 markings to guide our leasing in the area before we had
15 the detail petrophysics done. I think that describes
16 it.

17 **Q. Thank you so much.**

18 **I'd like to refer you to Exhibit Number 13.**
19 **Can you identify that for the Examiners?**

20 **A.** Yes. Exhibit 13 is the well-construction
21 diagram on how we plan to drill the well. I'll just
22 start off at the top. We plan to drill conductor
23 pipe -- or set conductor pipe at about 100 feet, bring
24 the rig in and drill our surface casing, which will be
25 down to 1,750, where we'll set 13 to 5/8 -- 3/8-inch

1 [sic] casing. We'll then drill out from that and set
2 our -- and drill down to a depth of about 5,950 and set
3 our intermediate casing, which will be 9-5/8-inch. Both
4 will be cemented back to surface.

5 We'll then drill out from under the
6 intermediate casing, get down to about a point of 7,004
7 feet, at which we'll kick off and start -- start
8 deviating the well at about 10 to 12 degrees per 100
9 feet until we reach a lateral depth of 7,577, at which
10 we'll then continue to go laterally for 6,010 feet.

11 We'll then run a 5-1/2-inch -- what's
12 called a sleeve completion. We'll cement that all the
13 way back to surface. Each one of these sleeved areas
14 will have anywhere 50 to 60 sleeves in the well, and we
15 will frac each individual sleeve as a cluster. So we'll
16 do 50 to 60 frac jobs on this well.

17 **Q. And we mentioned previously, with reference**
18 **back to the C-102 plat, that your bottom-hole location**
19 **is closer to the -- is within the 330 setback, but your**
20 **perforations will comply with the 330 setback**
21 **requirement?**

22 **A. Yes.** We need to drill a little bit deeper for
23 cement float shoes and items of that, so we don't -- so
24 we can get our 330 feet from the lease line. We will run
25 surveys to make sure -- ensure that we are only 330 feet

1 from the lease line and no closer.

2 Q. In your opinion, will the granting of Opal's
3 application be in the best interest of conservation and
4 the prevention of waste and the protection of
5 correlative rights?

6 A. Yes.

7 Q. Were Exhibits 9 through 13 prepared by you or
8 compiled under your direction and supervision?

9 A. Yes, they were.

10 MS. RYAN: I'd move to admit Exhibits 9
11 through 13.

12 EXAMINER McMILLAN: Exhibits 9 through 13
13 may now be accepted as part of the record.

14 (Opal Resources Exhibit Numbers 9 through
15 13 are offered and admitted into evidence.)

16 CROSS-EXAMINATION

17 BY EXAMINER McMILLAN:

18 Q. Will all quarter-quarter sections -- do you
19 expect them equally to contribute to production?

20 A. Do all quarter-quarter sections -- at this time
21 we would believe they would, yes.

22 Q. Okay. I got a question for you. Your drilling
23 costs are 9,750, right, and 975?

24 A. The drilling costs?

25 MS. RYAN: The administrative fee

1 per month.

2 Q. (BY EXAMINER McMILLAN) Administrative are 9,750
3 and your drilling are 975.

4 A. Uh-huh.

5 Q. What is your justification for that, because
6 typically what we're seeing out of the Bone Spring and
7 the Wolfcamp is 7,500 and 750? And do you -- why is it
8 so high?

9 A. Well, it's just the contractors that we have
10 used. That's what they are charging at that point.

11 Q. So do you expect this to be more difficult
12 drilling than a Wolfcamp well?

13 A. Well, the difficulty in this -- that is in this
14 well versus a Wolfcamp well is the type of completion we
15 will have, which is included in the drilling costs as
16 well. Being a sleeved completion, they're not done all
17 the time, and it is a little bit more technically
18 challenging.

19 Q. So you're saying more technically challenging
20 than a Wolfcamp and Bone Spring completion in southern
21 Lea?

22 A. On this one well, yes.

23 Q. I want a written -- I believe these costs are
24 higher -- are considerably higher than anything I've
25 seen, and I want written justification of it.

1 A. Okay.

2 **Q. I expect to see that.**

3 MS. RYAN: So is that something we can
4 supplement as an exhibit?

5 EXAMINER McMILLAN: Yes. It will be
6 submitted as an exhibit, and the order will not be
7 processed until we receive that.

8 THE WITNESS: Okay.

9 EXAMINER McMILLAN: For the record, I will
10 not recommend that the director sign until OCD receives
11 that information.

12 THE WITNESS: Okay.

13 EXAMINER McMILLAN: Go ahead.

14 EXAMINER WADE: I don't have any questions.

15 EXAMINER McMILLAN: Go ahead, Leonard.

16 EXAMINER LOWE: I'm good.

17 EXAMINER McMILLAN: Case Number 15621 shall
18 be taken under advisement pending the explanation of the
19 drilling and administrative costs.

20 MS. RYAN: Yes. We will supplement that
21 for the record.

22 EXAMINER McMILLAN: Thank you.

23 MS. RYAN: Thank you.

24 EXAMINER McMILLAN: We're coming back at
25 ten after 9:00.

1 (Case Number 15621 concludes 9:01 a.m.)
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1 STATE OF NEW MEXICO
2 COUNTY OF BERNALILLO

3

4 CERTIFICATE OF COURT REPORTER

5 I, MARY C. HANKINS, Certified Court
6 Reporter, New Mexico Certified Court Reporter No. 20,
7 and Registered Professional Reporter, do hereby certify
8 that I reported the foregoing proceedings in
9 stenographic shorthand and that the foregoing pages are
10 a true and correct transcript of those proceedings that
11 were reduced to printed form by me to the best of my
12 ability.

13 I FURTHER CERTIFY that the Reporter's
14 Record of the proceedings truly and accurately reflects
15 the exhibits, if any, offered by the respective parties.

16 I FURTHER CERTIFY that I am neither
17 employed by nor related to any of the parties or
18 attorneys in this case and that I have no interest in
19 the final disposition of this case.

20

21

22 MARY C. HANKINS, CCR, RPR
23 Certified Court Reporter
24 New Mexico CCR No. 20
25 Date of CCR Expiration: 12/31/2017
Paul Baca Professional Court Reporters

25