

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 TAP ROCK RESOURCES, LLC CASE NO. 16432
FOR COMPULSORY POOLING, EDDY COUNTY,
NEW MEXICO.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

October 4, 2018

Santa Fe, New Mexico

BEFORE: MICHAEL McMILLAN, CHIEF EXAMINER
 PHILLIP GOETZE, TECHNICAL EXAMINER
 DAVID K. BROOKS, LEGAL EXAMINER

This matter came on for hearing before the New Mexico Oil Conservation Division, Michael McMillan, Chief Examiner, Phillip Goetze, Technical Examiner, and David K. Brooks, Legal Examiner, on Thursday, October 4, 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.

REPORTED BY: Mary C. Hankins, CCR, RPR
 New Mexico CCR #20
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1 APPEARANCES

2 FOR APPLICANT TAP ROCK RESOURCES, LLC:

3 DANA ARNOLD, ESQ.
 4 TAP ROCK OPERATING, LLC
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1 (9:46 a.m.; Examiner Goetze not present.)

2 EXAMINER McMILLAN: I'd like to call this
3 hearing back to order.

4 I'm here, and obviously the geologist is
5 here also.

6 (Laughter.)

7 EXAMINER McMILLAN: I'd like to call Case
8 16432, application of Tap Rock Resources, LLC for
9 compulsory pooling, Eddy County, New Mexico.

10 And will this be combined with 16433?

11 MS. ARNOLD: No, because the interests are
12 different and the formation is different, so I thought
13 it would be better to separate them.

14 EXAMINER McMILLAN: Call for appearances.

15 MS. ARNOLD: Dana Arnold for Tap Rock
16 Resources. And Jim Bruce will be here.

17 EXAMINER McMILLAN: Any other appearances?
18 Please proceed.

19 If the witnesses at this time would please
20 stand up and be sworn in.

21 (Ms. Hixson and Mr. Smith sworn.)

22 MS. ARNOLD: I'd like to start with Erica
23 Hixson.

24 EXAMINER McMILLAN: Please proceed.

25

1 ERICA HIXSON,
2 after having been first duly sworn under oath, was
3 questioned and testified as follows:

4 DIRECT EXAMINATION

5 BY MS. ARNOLD:

6 Q. Please state your full name and place of
7 residence.

8 A. Erica Hixson, and I live in Arvada, Colorado.

9 Q. Please state for whom you are employed and in
10 what capacity.

11 A. Tap Rock Resources as a landman.

12 Q. Have you previously testified before the
13 Division and had your credentials accepted as a matter
14 of record?

15 A. Yes.

16 Q. Are you familiar with the application filed in
17 this case?

18 A. Yes.

19 Q. Are you familiar with the subject area?

20 A. I am.

21 MS. ARNOLD: I tender Erica Hixson as an
22 expert land witness.

23 (Examiner Goetze enters the room, 9:48
24 a.m.)

25 EXAMINER McMILLAN: So qualified.

1 Q. (BY MS. ARNOLD) Turning to Exhibit 1, could you
2 briefly state what Tap Rock seeks in this application?

3 A. Tap Rock seeks to compulsory pool the west half
4 of Sections 27 and 34 of 26 South, 29 East in order to
5 form a Wolfcamp Unit with two initial wells, the Welcome
6 to Golden 26S29E2734 Fed Com #201 and #211H.

7 Q. And is Exhibit 1 the C-102 for the 201H on the
8 first page and the 211H on the second page?

9 A. It is.

10 Q. Are the first and last take points for the
11 wells shown on the exhibit?

12 A. Yes.

13 Q. What pools govern the development for the
14 Wolfcamp in this area?

15 A. Purple Sage; Wolfcamp.

16 Q. Is this particular pool unaffected by the new
17 horizontal drilling rules?

18 A. Yes.

19 Q. So what are the setbacks?

20 A. 330 feet.

21 Q. And are the setbacks for both the 201H and 211H
22 within these rules?

23 A. Yes.

24 Q. Is Exhibit 2 a tract map showing Tap Rock's
25 horizontal spacing unit?

1 A. It is.

2 **Q. And please describe the composition of the**
3 **acreage.**

4 A. The unit is comprised of one fee lease, and the
5 rest of the unit is federal leases.

6 **Q. And is Exhibit 3 an ownership breakdown that**
7 **you've put together for the unit?**

8 A. It is.

9 **Q. Please briefly walk us through it.**

10 A. Yes. Tap Rock Resources owns approximately 54
11 percent working interest. The uncommitted working
12 interest parties are WPX Energy Permian at approximately
13 9 percent and COG Operating at approximately 38 percent.

14 **Q. And what else is on this unit breakdown?**

15 A. There are some overriding royalty interest
16 parties in this unit. Tap Rock Minerals, LP owns an
17 override. JSM Oil & Gas, Inc.; Mekusukey Oil Company,
18 LLC; COG Operating; and Red Bluff Water Power Control
19 District all have overriding royalty interests.

20 **Q. And you provided notice to all of these parties**
21 **out of an abundance of caution?**

22 A. We did.

23 **Q. Did you send a well-proposal letter to the**
24 **parties you seek to pool?**

25 A. Yes.

1 Q. Is that found on Exhibit 4?

2 A. It is.

3 Q. And did you include a JOA with your proposal?

4 A. We did.

5 Q. Are you asking the Division to pool the
6 uncommitted working interest owners?

7 A. Yes.

8 Q. And do also seek the imposition of a 200
9 percent risk charge against those unjoined working
10 interests?

11 A. Yes.

12 Q. And does Tap Rock seek to be designated
13 operator for the well?

14 A. Yes.

15 Q. In your opinion, has Tap Rock made a good-faith
16 effort to locate and communicate with all of the working
17 interest parties in order to get their voluntary
18 participation?

19 A. Yes.

20 Q. Can you briefly describe where you sit with the
21 working interest parties?

22 A. Currently we are negotiating a JOA.

23 Q. And if you reach a JOA, will you let the
24 Division know?

25 A. Yes, we will.

1 Q. Are the AFEs for the wells found at the last
2 few pages of Exhibit 4?

3 A. They are.

4 Q. And what is the total completed AFE for first
5 the 201H and then the 211H?

6 A. The 201H is approximately \$8,900,000.

7 Q. And what about the 211?

8 A. The 211 is approximately \$8,900,000 as well.

9 Q. Are these costs in line with what's being
10 charged by other operators in the area for similar
11 wells?

12 A. They are.

13 Q. And have you made an estimate of overhead and
14 administrative costs for drilling and producing the
15 wells?

16 A. Yes. 7,000 per month for drilling overhead and
17 700 a month for producing overhead.

18 Q. And are these costs in line with what's being
19 charged by other operators?

20 A. Yes.

21 Q. And do you recommend that these drilling and
22 producing rates be incorporated into the order resulting
23 from the hearing?

24 A. Yes.

25 Q. And also do you recommend that they be adjusted

1 **annually pursuant to COPAS?**

2 A. Yes.

3 **Q. In your opinion, would the granting of Tap**
4 **Rock's application be in the best interest of**
5 **conservation, the prevention of waste and the protection**
6 **of correlative rights?**

7 A. Yes.

8 MS. ARNOLD: And on Exhibit 5, you'll see
9 the affidavit prepared by Jim Bruce showing notice is
10 complete for this application.

11 Move to enter Exhibits 1 through 5 into the
12 record, and I pass the witness.

13 EXAMINER McMILLAN: Exhibits 1 through 5
14 may now be accepted as part of the record.

15 (Tap Rock Resources, LLC Exhibit Numbers 1
16 through 5 are offered and admitted into
17 evidence.)

18 CROSS-EXAMINATION

19 BY EXAMINER McMILLAN:

20 **Q. Were there any unlocatable interests?**

21 A. No.

22 **Q. Any depth severances?**

23 A. Not that I -- not pertaining to this case, no.

24 **Q. Okay. What were the building blocks? Were**
25 **they quarter-section equivalents?**

1 A. So our unit is the west half of Section 27 and
2 the west half of Section 34, and it's as the entire --
3 entire unit.

4 **Q. You didn't answer the question. Are you using**
5 **the entire 320, or are you using quarter-section**
6 **equivalents?**

7 MS. ARNOLD: Quarter-section equivalents.

8 EXAMINER McMILLAN: That's very important.

9 MS. ARNOLD: Yes.

10 EXAMINER McMILLAN: Because that way you
11 don't have to have a nonstandard horizontal spacing unit
12 for the Texas state line tracts.

13 MS. ARNOLD: Yes. So it should be --
14 you'll see it -- I think the easiest place to see it is
15 on Exhibit 2.

16 EXAMINER McMILLAN: Yeah. But it needs to
17 be stated as part of the record.

18 **Q. (BY EXAMINER McMILLAN) There is no API numbers,**
19 **right?**

20 A. No.

21 EXAMINER McMILLAN: Go ahead, David.

22 CROSS-EXAMINATION

23 BY EXAMINER BROOKS:

24 **Q. I was not listening as carefully as I should**
25 **have been. I didn't hear whether you notified all the**

1 overrides.

2 A. We did.

3 Q. Okay. Then I don't have to ask any more
4 questions. Because you said you had no unlocatable
5 interests, I assume everybody got their --

6 A. That's correct, yes.

7 Q. -- got their notices.

8 A. Yes.

9 Q. All right. Thank you.

10 MS. ARNOLD: I'd like to call my next
11 witness.

12 EXAMINER McMILLAN: Please proceed. Thank
13 you.

14 ADAM SMITH,
15 after having been previously sworn under oath, was
16 questioned and testified as follows:

17 DIRECT EXAMINATION

18 BY MS. ARNOLD:

19 Q. Please state your full name for the record.

20 A. Adam Smith.

21 Q. Where do you reside?

22 A. Littleton, Colorado.

23 Q. By whom are you employed and in what capacity?

24 A. Tap Rock Resources as a senior exploration
25 geologist.

1 Q. Have you previously testified before the
2 Division and had your credentials as an expert in
3 petroleum geology accepted and made a matter of record?

4 A. Yes.

5 Q. Are you familiar with the application filed in
6 this case?

7 A. Yes.

8 MS. ARNOLD: I tender Mr. Smith as an
9 expert petroleum geologist.

10 EXAMINER McMILLAN: So qualified.

11 Q. (BY MS. ARNOLD) Did you conduct a geologic
12 evaluation of this area?

13 A. Yes.

14 Q. And have you determined whether the proposed
15 horizontal spacing unit for the Golden wells for each of
16 the tracts are prospective for production?

17 A. Yes.

18 Q. And will each tract contribute approximately
19 the same amount of reserves?

20 A. Yes.

21 Q. Turning to Exhibit 6, please describe an
22 overview of the geologic development in this area of the
23 Permian Basin.

24 A. Yes. So the Welcome to Golden drilling spacing
25 unit sits on the New Mexico-Texas state line in southern

1 Eddy County in Township 26 South, Range 29 East. This
2 is more of a central part of the basin. During the
3 Wolfcamp time, it would have been pretty distal to the
4 sediment input from the north and from the west and the
5 east, so you've got some much finer sediment being put
6 in with laminated sand shales and limestones, real thin
7 beds there. Whereas, the top of the Wolfcamp, we do
8 recognize the Y Sand and the X Sand being present.

9 **Q. Turning to Exhibit 7, can you please show us**
10 **what's shown?**

11 A. Exhibit 7 is a subsea structure map on the top
12 of the Wolfcamp A. So on here, I have the location of
13 the Welcome to Golden 201H in orange showing surface and
14 bottom hole, and I have the 320 unit -- DSU unit project
15 area on here. I've also colored coded the different
16 producers that are in this horizon as horizontal wells
17 surrounding the area.

18 On this structure map, it's a TVD subsea
19 structure map. The contour interval is 25 feet. I have
20 posted on other wells in small, light gray where the
21 data points come from in the area, and what we see is a
22 monoclinial dip from the west down towards the east. And
23 also on here, I have the cross-section locator map from
24 A to A prime for the three wells in the upcoming
25 exhibit.

1 **Q. You said 320-acre, but you really meant**
2 **approximately 460 acres?**

3 A. Oh, I'm sorry. Yes.

4 **Q. And it's actually a horizontal spacing unit?**

5 A. Correct.

6 EXAMINER BROOKS: 480 acres?

7 MS. ARNOLD: It's approximately 460 acres.

8 EXAMINER BROOKS: 460 acres. Okay. Yeah.

9 So it's --

10 MS. ARNOLD: It's slightly larger than a
11 standard 320.

12 EXAMINER BROOKS: And slightly -- well,
13 it's not a 320, though.

14 THE WITNESS: Right.

15 EXAMINER BROOKS: It's eight
16 quarter-quarter -- eight quarter sections --
17 quarter-quarter sections or equivalent.

18 EXAMINER McMILLAN: Three quarter
19 equivalents.

20 MS. ARNOLD: That sounds right. Yes.

21 EXAMINER BROOKS: Six quarter-quarter --
22 no -- oh, three quarter-quarter -- yeah. This is gas,
23 so it's three quarter-section equivalents. You're
24 right. You've got it straighter than I do.

25 **Q. (BY MS. ARNOLD) Did you use these three wells**

1 **shown on the structure map to make your cross section on**
2 **Exhibit 8?**

3 A. Yes.

4 **Q. Can you briefly walk us through this exhibit?**

5 A. Yes. This is a stratigraphic cross section
6 hung on the top of the Wolfcamp A. Each of these wells
7 has a triple-combo log. Starting in the first track is
8 our gamma ray from zero to 200, and it's color coded
9 by an interpreted lithology fill and then a caliper log
10 from 6 to 16 inches. The depth track is in the middle,
11 and then track number two is a deep resistivity track
12 from .2 to 2,000 ohm meters. And the blue shading is
13 anything less than 50 ohm meters on that. And then the
14 third track is a density neutron from 30 to minus 10
15 percent, with some green shading of anything over 10
16 percent on the density log. On this I also have the
17 lateral interval outlined to show the Upper Wolfcamp A
18 and the target zone in the 201H well to be the Y Sand.

19 **Q. And can you please turn to Exhibit 9, what's**
20 **been marked as the isopach map --**

21 A. Yes.

22 **Q. -- and explain that?**

23 A. Yes. This is a gross isopach map from the top
24 of the Wolfcamp A to the top of the Wolfcamp B, so
25 showing a pretty consistent thickness of 450 feet

1 through our project area. I also still have the same
2 highlighted wells by zone within the Wolfcamp A and the
3 cross section locator from A to A prime.

4 Q. And does the interval that you're seeking here
5 seem to be continuous throughout the unit?

6 A. Yes.

7 Q. Any major faults or discontinuities?

8 A. No.

9 Q. Do you observe any porosity difference
10 throughout the areal extent of the unit?

11 A. No.

12 Q. Any major thickening or thinning?

13 A. No.

14 Q. And is Exhibit 10 a simplified wellbore
15 diagram?

16 A. Yes.

17 Q. And does it show where the first and last take
18 points will be for this well?

19 A. Yes.

20 Q. And will these setbacks be on 330 foot for the
21 Purple Sage; Wolfcamp pool rules?

22 A. Yes.

23 Q. What is the prevailing development pattern for
24 the Wolfcamp in this area?

25 A. It's a stand-up, north-south orientation.

1 **Q. And that's what you've proposed here?**

2 A. Correct.

3 **Q. All right. That was the set of exhibits for**
4 **the 201H.**

5 **Now turning to Exhibit 11, can you walk us**
6 **through, starting with the structure map, the exhibits**
7 **for the 211H?**

8 A. Yeah. So this has the location of the Welcome
9 to Golden 211H in the same horizontal DSU that we have
10 proposed and showing that project locator in the red box
11 and the well surface and bottom hole in green on here.
12 It's the same structure map on the top of the Wolfcamp A
13 as previously discussed, with the same cross section
14 locator from A to A prime.

15 **Q. And turning to Exhibit 12, have you created a**
16 **cross section for this well, the 211H?**

17 A. Yes. This is the same cross section as
18 previously described, so using the same logs and same
19 wells and showing the lateral interval in the lower part
20 of the Wolfcamp A, what we would call the Wolfcamp A
21 fat. That is much more thin-bedded, laminated sand
22 shales and limestones.

23 **Q. And is Exhibit 13 an isopach map for this well?**

24 A. Yes. This is also a gross isopach from the top
25 of the Wolfcamp A to the top of the Wolfcamp B showing

1 the same 450-foot thickness, the location of the well,
2 the project area and the cross section of A to A prime.

3 Q. And is Exhibit 14 a simplified wellbore diagram
4 for this well that also shows the 330-foot setbacks?

5 A. Yes.

6 Q. And in your opinion, is the granting of this
7 application in the best interest of protecting
8 correlative rights and the prevention of waste?

9 A. Yes.

10 MS. ARNOLD: I would like to introduce
11 Exhibits 6 through 14 into the record.

12 EXAMINER McMILLAN: Exhibits 6 through 14
13 may now be accepted as part of the record.

14 (Tap Rock Resources, LLC Exhibit Numbers 6
15 through 14 are offered and admitted into
16 evidence.)

17 MS. ARNOLD: And I have no further
18 questions.

19 CROSS-EXAMINATION

20 BY EXAMINER McMILLAN:

21 Q. Do you expect each quarter section to
22 contribute more or less equally to production?

23 A. Yes, sir.

24 EXAMINER McMILLAN: I don't have any more
25 questions.

1 EXAMINER BROOKS: Neither do I.

2 EXAMINER GOETZE: No questions.

3 MS. ARNOLD: I would like to ask that Case
4 Number 16432 be taken under advisement.

5 EXAMINER McMILLAN: 16432 will be taken
6 under advisement.

7 (Case Number 16432 concludes, 10:03 a.m.)

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1 STATE OF NEW MEXICO
2 COUNTY OF BERNALILLO
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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 DATED THIS 25th day of October 2018.
21

22
23 MARY C. HANKINS, CCR, RPR
24 Certified Court Reporter
25 New Mexico CCR No. 20
Date of CCR Expiration: 12/31/2018
Paul Baca Professional Court Reporters