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 MARATHON OIL PERMIAN, CASE NOs. 20693, LLC FOR COMPULSORY POOLING LEA COUNTY, 20699, 20705, NEW MEXICO. 20708

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

September 19, 2019

Santa Fe, New Mexico

BEFORE: KATHLEEN MURPHY, CHIEF EXAMINER
PHILLIP GOETZE, TECHNICAL EXAMINER
DANA Z. DAVID, LEGAL EXAMINER

This matter came on for hearing before the New Mexico Oil Conservation Division, Kathleen Murphy, Chief Examiner; Phillip Goetze, Technical Examiner; and Dana Z. David, Legal Examiner, on Thursday, September 19, 2019, 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
Paul Baca Professional Court Reporters
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| 2 | FOR APPLICANT MARATHON OIL PERMIAN, LLC: | |
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- 1 (4:36 p.m.)
- 2 EXAMINER MURPHY: Next we will hear Case
- 3 Numbers 20693, 20699, 20705 and 20708, and these are
- 4 applications of Marathon Oil Permian, LLC for compulsory
- 5 pooling, Lea County, New Mexico.
- 6 Call for appearances.
- 7 MS. BENNETT: Good afternoon.
- 8 Deana Bennett on behalf of Marathon Oil
- 9 Permian, LLC.
- 10 EXAMINER MURPHY: Are there any other
- 11 appearances?
- 12 MS. BENNETT: None that I'm aware of.
- 13 EXAMINER MURPHY: And this will be by
- 14 affidavit?
- MS. BENNETT: Yes.
- 16 EXAMINER MURPHY: So there are no
- 17 witnesses.
- 18 MS. BENNETT: There are no witnesses.
- 19 And as you mentioned -- or as you
- 20 acknowledged, I intend to present these cases
- 21 consolidated for hearing.
- 22 EXAMINER MURPHY: Okay. Please proceed.
- MS. BENNETT: Thank you.
- 24 As a bit of an overview, in these cases
- 25 Marathon is requesting four separate units, and that is

1 based on two Bone Spring wells and two Wolfbone wells.

- 2 And Marathon is proposing this unit in the east half of
- 3 Section 32. These will be one-mile laterals.
- 4 So turning first to Tab A, Tab A is the
- 5 affidavit of Mr. Ryan Gyllenband. Ryan Gyllenband has
- 6 testified before the Division on a number of occasions
- 7 live and throughout affidavits. He is a land supervisor
- 8 for Marathon Oil Permian, LLC. He has personal
- 9 knowledge of the matters stated herein, and his
- 10 credentials as an expert petroleum landman have been
- 11 previously accepted by the Division as a matter of
- 12 record.
- 13 EXAMINER MURPHY: So qualified.
- MS. BENNETT: Thank you.
- 15 Turning first to Exhibits 1, 2, 3, 4, those
- 16 are -- those are the applications that Marathon filed in
- 17 these four cases, and those are in there for your
- 18 convenience. And as I mentioned, there are four
- 19 applications seeking four units. Two Wolfbone wells and
- 20 two Bone Spring wells are proposed, one well per unit.
- 21 The first two applications -- the applications in Case
- 22 Number 20693 and 20699 are what I'm calling the Wolfbone
- 23 applications.
- 24 In 20693, Marathon seeks to pool -- or
- 25 seeks to create a horizontal spacing unit comprised of

- 1 the west half-east half of Section 32. And in Case
- 2 Number 20699, Marathon seeks an order creating a spacing
- 3 unit comprised of the east half-east half. So between
- 4 the two units, it will cover the east half Wolfbone.
- 5 And the reason why this is a Wolfbone pool is spelled
- 6 out more in the geology affidavit, but I can say -- and
- 7 it's in Mr. Gyllenband's affidavit -- that the decision
- 8 to call this a Wolfbone pool was based on discussions
- 9 with Paul Kautz.
- 10 And Mr. Kautz suggested using the following
- 11 terminology to describe the Wolfbone pool, and I quote,
- 12 "From the top of the 3rd Bone Spring Carbonate to a
- 13 point 500 feet below the top of the Wolfcamp." And so
- 14 Marathon requests that the order reflect this
- 15 terminology for those two wells, the 7H and the 8H well.
- 16 And you'll see that terminology on the lease tract maps
- 17 when we get to those.
- The next two cases are simple, just 2nd
- 19 Bone Spring. Mr. Gyllenband testifies -- sorry. Let me
- 20 back up.
- 21 All four of these cases are governed by the
- 22 general statewide horizontal well rule, and all four of
- these proposed wells comply with the setback
- 24 requirements in the horizontal well rule. And there are
- 25 no depth severances in either of the Bone Spring or the

- 1 Wolfcamp Formation. And as its name suggests, the
- 2 Wolfbone is a combination of the Upper Wolfcamp and the
- 3 Lower Bone Spring.
- 4 Mr. Gyllenband also testifies that
- 5 ownership is consistent throughout the Bone Spring and
- 6 the Upper Wolfcamp that we're seeking to pool here as
- 7 the Wolfbone. So there is no difference in ownership
- 8 either.
- 9 In addition, the good news is there is only
- 10 one uncommitted working interest owner, and there are no
- 11 overrides. So the only uncommitted working interest
- owner is ConocoPhillips. You'll see that name on the
- 13 summary of interests. Marathon has been diligently
- 14 discussing voluntary joinder with ConocoPhillips and
- 15 will continue to do so. Marathon will alert the
- 16 Division if Marathon and ConocoPhillips reach a
- 17 voluntary agreement.
- 18 So I skipped ahead a little bit. If you
- 19 look at Exhibit 5, that's the C-102s for the four wells.
- 20 And these are proposed C-102s for the four wells, which
- 21 is usual.
- 22 Exhibit 6 has the lease tract maps. So
- 23 page 27 is the tract map for 20693, which is one of the
- 24 Wolfbone cases, and so you'll see I've copied the
- 25 preferred terminology from Mr. Kautz on that slide. And

1 the east half is two tracts, one of which is -- well,

- 2 they're both state. And Marathon is the 100 percent
- 3 owner -- or interest owner, and in the second one,
- 4 ConocoPhillips is the 100 percent interest owner. So
- 5 the next slides are basically identical with the
- 6 exception of switching east to west in the east half.
- 7 Page 31 shows the summary of interests,
- 8 with Marathon owning 50 percent and Conoco owning 50
- 9 percent. In Mr. Gyllenband's opinion, Marathon has made
- 10 a good-faith effort to obtain voluntary joinder of
- 11 ConocoPhillips.
- 12 Exhibit 7 is the well-proposal letter that
- was sent to ConocoPhillips. Like all Marathon's
- 14 proposal letters, it has a place for separate election,
- 15 the estimated TVD and the surface-hole and bottom-hole
- 16 locations.
- 17 Exhibit 8 is the AFEs for these four wells.
- 18 And Mr. Gyllenband testifies that the estimated cost of
- 19 the wells set forth in the AFEs is fair and reasonable
- 20 and comparable to the cost of other wells of similar
- 21 depths and lengths in this area of New Mexico.
- 22 Marathon is requesting overhead and
- 23 administrative rates of 7,000 a month for drilling and
- 24 700 a month for producing. In Mr. Gyllenband's opinion,
- 25 these rates are fair and comparable to the rates charged

1 by other operators for wells of this type in this area

- 2 of southeastern New Mexico. Marathon requests that
- 3 these rates be adjusted periodically as provided by the
- 4 COPAS accounting procedure. Marathon requests the
- 5 maximum cost plus 200 percent risk charge be assessed
- 6 against nonconsenting working interest owners. Marathon
- 7 requests it be designated operator of the wells and that
- 8 it be allowed a period of one year between when the
- 9 wells are drilled and when the first well is completed
- 10 under the order.
- 11 Exhibit 9 is the Affidavit of Notice.
- 12 Again, I did not include the notice letter here, but I'm
- 13 happy to supplement the record with the notice letter,
- 14 if that's desired. But the next few pages show the
- 15 names of the parties to whom notice was sent. And I
- 16 should say this has more names than just ConocoPhillips
- on it because originally Marathon had proposed eight
- 18 wells altogether, and so this mailing was for all eight
- 19 wells, but we've dismissed four of the cases. So the
- 20 only relevant party on this mailing list is
- 21 ConocoPhillips, and ConocoPhillips did receive notice of
- 22 the mailing. On page 46, it shows that our letter was
- 23 delivered on July 24th, 2019.
- 24 EXAMINER MURPHY: Please just send that
- 25 along as a supplement.

- 1 MS. BENNETT: I will.
- 2 EXAMINER MURPHY: Thank you.
- MS. BENNETT: And for belt and suspenders,
- 4 we always publish, so I included the publication
- 5 information as well, although it was not necessary here.
- 6 Mr. Gyllenband testifies that the exhibits
- 7 were prepared by him or compiled under his direction or
- 8 compiled from company business records and that the
- 9 information provided herein is correct and complete to
- 10 the best of his knowledge. He also testifies that in
- 11 his opinion the granting of this application -- or these
- 12 applications is in the interest of conservation and the
- 13 prevention of waste.
- 14 At this point, before turning to the
- 15 geology exhibits, I'm happy to answer any questions I
- 16 may about the land exhibits.
- 17 EXAMINER GOETZE: No questions.
- 18 EXAMINER MURPHY: No questions.
- 19 EXAMINER DAVID: No questions.
- MS. BENNETT: Thank you.
- 21 If you look behind Tab B then, Tab B is the
- 22 affidavit of Thomas Lockwood. Again, Thomas Lockwood is
- 23 a geologist for Marathon and has personal knowledge of
- 24 the matters herein. He's been qualified by the Oil
- 25 Conservation Division as an expert petroleum geologist

1 and was the same geologist that prepared the affidavit

- 2 for Crossbow. And he's prepared a geologic study for
- 3 these wells as well.
- 4 EXAMINER MURPHY: Qualified.
- 5 MS. BENNETT: Exhibit 10 is a locator map
- 6 showing the proposed unit vis-à-vis the Capitan Reef.
- 7 Exhibit 11 is a wellbore schematic giving
- 8 gun-barrel view of where these wells will be located in
- 9 space.
- 10 Exhibit 12 is a structure map on the top of
- 11 the Wolfcamp. And here it's a little hard to tell the
- 12 difference between the wells because they're stacked on
- 13 top of each other, but you can kind of see red and
- 14 purple inside the dashed box. But in any event, he's
- 15 labeled them 1, 2, 3 and 4. So he used a 25-foot
- 16 contour interval for this map, and he testifies that the
- 17 structure dips towards the south-southeast.
- 18 Exhibit 13 is the reference map for the
- 19 cross-section wells that he used. And this is for the
- 20 Wolfbone well, so the Lower Bone Spring, Upper Wolfcamp.
- 21 And this shows the line of cross section running from A
- 22 to A prime.
- Then if you turn to page 14, this is a
- 24 stratigraphic cross section hung on the top of the
- 25 Wolfcamp. And, again, there is a larger 14 Excel on

- 1 page 59.
- In Mr. Lockwood's opinion, the well logs on
- 3 the cross section give a representative sample of the
- 4 3rd Bone Spring Sand in the Wolfcamp A and Y Formations
- 5 in the area. And, again, the Wolfbone pool is
- 6 combining given the thinness of the area. In this area
- 7 the Wolfbone pool combines those two. That's why he's
- 8 called out the relative thickness of the 3rd Bone Spring
- 9 Sand and the Wolfcamp A and Y.
- 10 He's identified the target zone by the
- 11 words "Producing Zone" and the shaded area across the
- 12 cross section with the red arrow. He testifies that the
- 13 3rd Bone Spring Sand and the Wolfcamp Y Sand thin
- 14 significantly from west to east. The Wolfcamp A also
- 15 thins from west to east but not as significantly. He
- 16 testifies that the wellbores in the Upper Wolfcamp are
- 17 expected to drain the 3rd Bone Spring. And the Upper
- 18 Wolfcamp thins equally in this area, which is why we're
- 19 calling this a Wolfbone pool.
- 20 In his opinion these wells are justified
- 21 from a geologic perspective. This reservoir has been
- 22 delineated by the Eagleclaw Fed Com 1H and the Eagleclaw
- 23 Fed 2H wells in the section to the south, which targeted
- 24 the same depth. And he did use the Eagleclaw Fed 1H as
- 25 one of his reference wells.

- 1 He testifies that he discussed this
- 2 particular reservoir with Paul Kautz in regards to using
- 3 the Wolfbone pool designation for these wells, which he
- 4 did not oppose, and he suggested the terminology that
- 5 we've already discussed.
- 6 Exhibit 15 is the gross interval isochore
- 7 for the 3rd Bone Spring Sand to the Wolfcamp A. This
- 8 zone represents the reservoir that would be drained by
- 9 the Wolfbone pool. From east to -- I'm sorry. From
- 10 west to east, the 3rd Bone Spring Sand and the Upper
- 11 Wolfcamp sands thin significantly from 300 feet thick
- 12 two miles to the west to less than 50 feet thick two
- 13 mile to the east. This reservoir is approximately 100
- 14 feet to 125 feet thick at the proposed Mead unit.
- 15 Exhibit 16 is a structure map on the base
- of the 2nd Bone Spring, top of the 3rd Bone Spring
- 17 Carbonate. So now we're moving to the 2nd Bone Spring
- 18 wells. The contour interval used for Section 16 is 25
- 19 feet. Again, Exhibit 16 shows that the structure dips
- 20 to the south-southwest.
- 21 Exhibit 17 identifies the cross-reference
- 22 wells with a line running from A to A prime.
- 23 Exhibit 18 is the stratigraphic cross
- 24 section hung on the base of the 2nd Bone Spring. And,
- 25 again, Exhibit 18 Excel is the stratigraphic cross

1 section blown up for your convenience. The well logs on

- 2 the cross section, according to Mr. Lockwood, give a
- 3 representative sample of the 2nd Bone Spring Sand in the
- 4 area. The target zone is identified by the words
- 5 "Producing Zone" and the shaded cross section along with
- 6 the red arrow. In his opinion, the 2nd Bone Spring Sand
- 7 has consistent thickness across the proposed unit.
- 8 Exhibit 19 is a gross interval isochore for
- 9 the 2nd Bone Spring Sand. In his opinion, the formation
- 10 is relatively uniform across the proposed unit. He
- 11 concludes from the maps that the horizontal spacing unit
- 12 is justified from a geologic standpoint. There are no
- 13 structural impediments or faulting that will interfere
- 14 with horizontal development of these units and that each
- 15 quarter-quarter section in the units will contribute
- 16 more or less equally to production.
- 17 Exhibit 20 provides an overview of the
- 18 stress orientation in the area based on the 2018 Snee
- 19 and Zoback paper. Mr. Lockwood testifies that the
- 20 preferred well orientation in this area is north-south
- 21 and that is because the SHmax is from 70 to 80 degrees
- 22 in mid-Lea County.
- 23 Mr. Lockwood testifies that Exhibits 10
- 24 through 20 were prepared by him or under his supervision
- 25 or compiled from company business records. And he also

- 1 testifies that in his opinion, the granting of
- 2 Marathon's application is in the interest of
- 3 conservation and the prevention of waste.
- 4 At this time I'd like to ask that Exhibits
- 5 A and B and their attachments be admitted into the
- 6 record in Case Numbers 20693, 20699, 20705 and 20708.
- 7 EXAMINER MURPHY: Exhibits A and B and
- 8 their attachments are admitted.
- 9 (Matador Production Company Exhibits A and
- B and Attachments 1 through 20 are offered
- and admitted into evidence.)
- MS. BENNETT: I'm happy to answer any
- 13 further questions.
- 14 EXAMINER GOETZE: Just one. Did Paul give
- 15 you any kind of pool number or imaginary thing that he
- 16 assigned to this, or is it still something that we'll
- 17 have to track down?
- MS. BENNETT: No, no pool number. He did
- 19 say that this is like the Blueberry Hill cases. And I
- 20 looked back at the Blueberry Hill case, and there is a
- 21 generic Wolfbone pool code. I just wasn't sure if that
- 22 was the appropriate pool code to use for this.
- 23 EXAMINER GOETZE: No, no. We will pursue
- 24 Mr. Kautz. I was wondering if between this and now that
- 25 he provided you something that appeared in the C-102s.

1 So we will find Mr. Kautz and pull a number out of it

- 2 somehow.
- 3 MS. BENNETT: Yes. And as we discussed
- 4 with the Blueberry -- when I was here two weeks ago for
- 5 Blueberry Hill, Mr. Kautz suggested, as did Mr. Jones,
- 6 two weeks ago that the pool should probably be brought
- 7 to hearing or the designation of the pool should be
- 8 brought to hearing.
- 9 EXAMINER GOETZE: That's neither here nor
- 10 there since this is mostly an exploratory effort, since
- 11 you are on the very northeast portion of the -- out of
- 12 the basin on the shelf. So this is a new horizon.
- MS. BENNETT: Okay.
- 14 EXAMINER GOETZE: So Wolfbone, the
- 15 combining of the 3rd and the 1st to the top of the
- 16 Wolfcamp is still one of these things that will be done
- in the base -- what we're seeing is that the geology is
- 18 making an input. So this is not going to be uncommon,
- 19 but what our intentions are is okay, I want to make sure
- 20 Paul has looked at this. And so we'll go track down a
- 21 number for it, but at the same time, down the road,
- 22 we're going to have to draw a line somewhere in the
- 23 geology that says we have enough Wolfcamp, Wolfcamp and
- 24 Bone Spring. But that's not here.
- MS. BENNETT: Okay.

1 EXAMINER GOETZE: This will answer some of

- 2 the questions when it's completed.
- MS. BENNETT: Okay.
- 4 EXAMINER GOETZE: All right? I just
- 5 thought he whipped out a number for you. He does that.
- 6 MS. BENNETT: No. The only thing that was
- 7 talked about was the fact to deep it consistent with
- 8 Blueberry Hill, use the 500 -- use the terminology that
- 9 I put on the slides.
- 10 EXAMINER GOETZE: Well, we'll talk with our
- 11 district geologist and see what he wants to go with.
- 12 Okay?
- MS. BENNETT: Okay. Thank you.
- 14 EXAMINER MURPHY: No questions from me.
- 15 Mr. David?
- 16 EXAMINER DAVID: No questions.
- 17 MS. BENNETT: In that case I would ask that
- 18 Case Numbers 20693, 20699, 20705 and 20708 be taken
- 19 under advisement.
- 20 EXAMINER MURPHY: Taken under advisement.
- MS. BENNETT: Thank you.
- 22 (Case Numbers 20693, 20699, 20705 and 20708
- 23 conclude, 4:55 p.m.)

24

25

- 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.
- 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 9th day of October 2019.

21

22

MARY C. HANKINS, CCR, RPR Certified Court Reporter

New Mexico CCR No. 20
24
Date of CCR Expiration:

Date of CCR Expiration: 12/31/2019
Paul Baca Professional Court Reporters

25