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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 NO. 16214 LLC FOR A NONSTANDARD SPACING AND PRORATION UNIT AND COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO.

## REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

June 28, 2018

Santa Fe, New Mexico

# BEFORE: PHILLIP GOETZE, CHIEF EXAMINER DAVID K. BROOKS, LEGAL EXAMINER

This matter came on for hearing before the New Mexico Oil Conservation Division, Phillip Goetze, Chief Examiner, and David K. Brooks, Legal Examiner, on Thursday, June 28, 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 Paul Baca Professional Court Reporters 500 4th Street, Northwest, Suite 105 Albuquerque, New Mexico 87102 (505) 843-9241

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Page 4 (11:02 a.m.) 1 2 EXAMINER GOETZE: Let's go back on the record and continue on to Case Number 16214, application 3 of Marathon Oil Permian, LLC for a nonstandard spacing 4 5 and proration unit and compulsory pooling, Eddy County, б New Mexico. 7 Call for appearances. 8 MS. BRADFUTE: Mr. Examiner, Jennifer Bradfute on behalf of the Applicant, and I have two 9 witnesses with me today. 10 11 MS. RYAN: COG Operating, Beth Ryan. 12 EXAMINER GOETZE: Thank you. 13 Would the witnesses please stand, identify themselves to the court reporter and be sworn in? 14 DR. ZEIGLER: Kate Zeigler. 15 16 MR. TATE: Matt Tate. 17 (Dr. Zeigler and Mr. Tate sworn.) 18 OPENING STATEMENT 19 MS. BRADFUTE: Mr. Examiner, before I begin 20 questioning my first witness, I wanted to make a brief opening statement because Marathon is going to be 21 22 requesting some amendments to the application, which I 23 discussed briefly yesterday. 24 Marathon previously obtained approval for a 25 480-acre Wolfcamp spacing unit underlying the same

acreage at issue in this application today, and that 1 2 spacing unit was approved in Order Number R-14348-A. Marathon also proposed a JOA covering the 480-acre unit, 3 and it has -- because of that JOA being in place, it 4 5 provided notice to all of the interest owners within the б 480-acre spacing and proration unit. Marathon filed 7 this application before the new horizontal well rule was 8 in effect.

9 And in the original application, it sought 10 creation of a 240-acre spacing and proration unit, but 11 now under the new horizontal well rule, Marathon seeks 12 to create a consistent voluntary unit that matches the 13 spacing for its Wolfcamp unit, which is 480 acres.

And so we are going to request that 14 Marathon is able to amend its application to change the 15 16 spacing unit to 480 acres, and then we'll send notice of that request, because 240 acres was specifically 17 18 requested in the application. At the end of this 19 hearing, I'll ask that this matter be continued to the 20 July 26th docket in order to make that change. EXAMINER BROOKS: Seems like a reasonable 21 22 request to me.

23 EXAMINER GOETZE: Okay. Sounds like my24 attorney is good with that. Please continue.

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1	MATT TATE,	
2	after having been previously sworn under oath, was	
3	questioned and testified as follows:	
4	DIRECT EXAMINATION	
5	BY MS. BRADFUTE:	
6	Q. Would you please state your name for the	
7	record?	
8	A. Matt Tate.	
9	Q. And, Mr. Tate, who do you work for?	
10	A. Marathon Oil Company.	
11	Q. And what is your position at Marathon?	
12	A. Landman.	
13	Q. And what are your responsibilities as a	
14	landman?	
15	A. I'm responsible for certain assets and oil and	
16	gas properties in Eddy County, New Mexico.	
17	Q. And have you previously testified before the	
18	Division?	
19	A. Yes.	
20	Q. And were your credentials accepted and made	
21	part of the record?	
22	A. Yes.	
23	Q. Does your area of responsibility at Marathon	
24	include the area of Eddy County in southeast New Mexico?	
25	A. Yes.	

Page 7 1 And are you familiar with the application 0. 2 that's been filed by Marathon in this case? 3 Α. Yes, I am. 4 Are you familiar with the status of the lands Q. 5 that are the subject matter of that application? 6 Α. Yes. 7 MS. BRADFUTE: I'd like to tender this 8 witness as an expert in petroleum land matters. 9 EXAMINER GOETZE: Ms. Ryan? 10 MS. RYAN: No objection. 11 EXAMINER GOETZE: So qualified. 12 0. (BY MS. BRADFUTE) Mr. Tate, could you please 13 turn to Tab 1 in the exhibit packet in front of you? Is 14 this document a copy of the original application that's 15 been filed by Marathon in this case? 16 Α. It is, yes. 17 And as I previously stated during my opening Q. 18 statement, is Marathon seeking to amend this 19 application? 20 Α. Yes. 21 Could you please turn to Tab 2 in the exhibit Q. 22 packet in front of you? And this exhibit has two 23 different documents in it. I want to first focus on the 24 first page. 25 Okay. Α.

Page 8 1 Could you please identify what this document 0. 2 is? These are the amendments that we are 3 Α. Yes. requesting to make to this application. 4 5 Okay. And let's go through this. There are Q. 6 five bullet points included on this page. 7 Α. Okay. 8 Under the first bullet point on this document Q. 9 is a description of the amendments that Marathon is seeking provided to the Division? 10 11 It is. We're seeking an order creating a Α. 12 480-acre spacing unit in the Bone Spring Formation comprised of the southeast quarter of Section 25 and the 13 east half of Section 36, Township 24 South, Range 28 14 East, Eddy County, New Mexico, and compulsory pooling of 15 16 all uncommitted working interests in the Bone Spring underlying the proposed spacing unit. 17 18 Q. And that's the southeast quarter of Section 25, 19 correct? 20 It's the southeast guarter of Section 25. Α. Yes. 21 And I believe there is a typo on this page. Q. It 22 says "southeast quarter of Section 35." It should read 23 "25"? 24 Α. Yes. 25 And the second bullet point, does it **Q**.

describe -- the second through the fifth bullet points, do those describe why Marathon is seeking this amendment?

So Marathon previously obtained approval 4 Α. Yes. 5 for the 480-acre Wolfcamp spacing unit underlying this same acreage in Order Number R-14348-A. Marathon 6 7 proposed a JOA of this acreage that covers 480 acres. 8 Marathon plans on completing the Southern Comfort Bone 9 Spring 6H well, along with additional Wolfcamp wells located within the 480-acre Wolfcamp spacing unit. And 10 Marathon's already provided notice of this application 11 12 to all affected parties within the 480 acres being 13 proposed.

Q. And could you please turn to the next page of this exhibit? Is this document a diagram of the spacing unit that Marathon plans to propose in its amended application?

18 A. Yes, it is.

Q. And could you please explain this document to
 the hearing examiner?

A. Yes. This is the well plat for the amended 480-acre spacing unit. This well will be located in the Willow Lake; Bone Spring Pool, Pool Code 64450. This will have a first take point located at 100 feet from the north line and 1,056 feet from the east line, with

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Page 10 the last take point located 100 feet from the south line 1 and 1,000 feet from the east line of Section 36. 2 3 Q. And it notes that the lateral portion of the 4 wellbore is going to be located 325 feet from the 5 western [sic] down the centerline within that spacing б unit? 7 Α. Yes, that's correct. 8 Q. Okay. So it's going to be within 330 feet to 9 the proximate tract adjoining the lateral? 10 Α. Yes. 11 0. And so Marathon is requesting, under the 12 proximity tract provisions under the new horizontal 13 well, to create a 480-acre spacing unit, correct? Α. 14 Correct. 15 And has Marathon previously filed a C-102 with ο. 16 the district office for this well? 17 Α. Yes, we did. 18 And is Marathon intending to submit a revised Q. 19 C-102 for the well? 20 Α. Yes. 21 Could you please turn to what's been marked as Q. 22 Exhibit Number 3 in this exhibit packet and identify 23 what this document is? 24 Α. Okay. So this is the lease tract plat 25 identifying the 480-acre proposed spacing unit. It's

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Page 11 comprised of three separate state leases, each being 160 1 2 acres. 3 Q. Okay. And if you could please turn to the 4 second page of this exhibit and explain what this 5 document shows? Okay. So this is the summary of interest 6 Α. 7 identifying the committed and uncommitted working 8 interest ownership within the proposed spacing unit. 9 And what type of interest is Marathon seeking 0. to pool in its application? 10 11 We're seeking to pool all uncommitted working Α. 12 interests within the proposed unit. 13 Okay. And I want to look a little bit more 0. 14 closely at the uncommitted working interest that's 15 listed on the second page of Exhibit 3. You have 16 certain interests that are shown in bold font. It looks 17 like OXY, Occidental Permian Limited Partnership, 18 Richardson Mineral & Royalty? 19 Α. Yes. 20 Why are those entities shown in bold? Q. 21 Α. Those parties have already elected to 22 participate, and OXY has indicated that they prefer to 23 be pooled under a pooling order. So by "elected to participate," do you mean 24 0. 25 that they have elected under the AFE but not yet

Page 12 executed a joint operating agreement? 1 2 Α. Yes. 3 Q. What efforts did Marathon engage in to obtain 4 voluntary joinder in this well proposal? 5 We provided well proposal and AFE to all Α. uncommitted working interest owners. 6 7 And in your opinion, did Marathon make a ο. 8 good-faith effort to obtain voluntary joinder in the 9 well? 10 We did, yes. Α. 11 If you could please turn to what's been marked 0. 12 as Exhibit Number 4, is this a copy of the well-proposal 13 letter that was sent to the working interest owners that 14 you're seeking to pool? 15 Α. Yes, it is. 16 And did Marathon also send an AFE along with Q. 17 this well-proposal letter? 18 We did, yes. Α. 19 And is that AFE included in Tab 5 of the Q. 20 exhibit packet? 21 Α. Yes. 22 Q. And does this AFE identify estimated costs for 23 drilling, completing and equipping the well? It does, yes. 24 Α. 25 And could you please identify what those costs Q.

Page 13 are to the hearing examiner? 1 2 Α. Yes. That total cost is \$8,451,671. 3 Q. And is that estimated cost in line with costs 4 for drilling and completing wells which are drilled to 5 these lengths and these depths in this area of New 6 Mexico? 7 Α. Yes. 8 Q. And in your opinion, who should be appointed as 9 operator of the well? 10 Marathon Oil Company. Α. 11 Do you have a recommendation for the amounts 0. 12 which Marathon should be paid for supervision and 13 administrative expenses? We request \$7,000 per month for a drilling well 14 Α. and \$700 a day for a producing well -- I'm sorry -- \$700 15 16 per month for a producing well. 17 Are these amounts similar to those normally Q. 18 charged by Marathon and other operators within this area 19 for horizontal wells drilled to these lengths and these 20 depths? 21 Α. Yes. 22 Q. Do you request that these rates be adjusted 23 periodically as provided for under the COPAS accounting 24 procedure? 25 Α. Yes.

Page 14 And does Marathon request the maximum cost plus 1 0. 2 200 percent risk charge for any pooled working interest 3 owner who fails to pay its share of the cost for 4 drilling, completing and equipping the wells? 5 Α. Yes. 6 Were the parties who you are seeking to pool Q. 7 notified of this hearing? 8 Α. Yes, they were. If you can please turn to Tab 6 in the exhibit 9 Q. packet in front of you, within the first page of Exhibit 10 11 6, is there an affidavit that's been prepared by 12 Marathon's counsel confirming that notification was 13 provided to affected parties? 14 Α. Yes. 15 And if you could please turn to Tab A of this ο. 16 exhibit, there's a list that's about two pages long, 17 correct? 18 Α. Correct. 19 And this list provides a list of interest Q. 20 owners and interest type; is that correct? Let me show 21 you. It would look like this (indicating). 22 I'm sorry. Yes, that is correct. Α. 23 And under "Interest Type," it says "OR." Are 0. 24 those the overriding royalty interest owners that own 25 overriding royalty interest within the 480-acre

Page 15 proration unit? 1 2 Α. Yes. 3 Q. Did Marathon provide notice to these overriding 4 royalty interest owners of this hearing? 5 Yes, we did. Α. 6 Is Marathon also requesting to pool these Q. 7 overriding royalty interests in its application? 8 Α. Yes. There were some mailings that were returned and 9 0. some parties that could not be located; is that correct? 10 11 Α. Correct. 12 Q. If you turn to Tab B and I actually want you to 13 look at the last three pages in this Tab B. 14 Α. Okay. 15 Is this a copy of an Affidavit of Publication ο. 16 confirming that notice of this hearing was also published in the "Carlsbad Current-Argus" newspaper? 17 18 Yes, it is. Α. 19 And all affected parties notified are named Q. 20 within this application? 21 Α. Yes, ma'am. 22 And I want to flip back to Tab B. Does Tab B 0. 23 in general confirm that notice was provided to offset 24 interest owners of this application? 25 Α. Yes.

Page 16 Under the new horizontal well rule, 1 0. 2 notification to offset owners is no longer required; is 3 that correct? 4 Α. Yes. 5 In your opinion, is the granting of this Q. 6 application within the interest of conservation and the 7 prevention of waste? 8 Α. Yes. And were Exhibits 1 through 6 prepared by you 9 Q. or compiled under your supervision and direction or from 10 11 company business records? 12 Α. Yes, they were. 13 MS. BRADFUTE: I'd like to move Exhibits 1 through 6 into the record. 14 15 EXAMINER GOETZE: Ms. Ryan? 16 MS. RYAN: No. 17 (Laughter.) 18 EXAMINER GOETZE: You have no objections to 19 the --MS. RYAN: No objections to the exhibits. 20 21 EXAMINER GOETZE: Thank you. 22 Exhibits 1 through 6 are so entered. 23 (Marathon Oil Permian, LLC Exhibit Numbers 24 1 through 6 are offered and admitted into 25 evidence.)

Page 17 MS. BRADFUTE: And that concludes my 1 2 questions to the witness. EXAMINER GOETZE: Mr. Brooks? 3 4 EXAMINER BROOKS: No questions. 5 CROSS-EXAMINATION BY EXAMINER GOETZE: 6 7 So the AFE is reflective of your changes and 0. 8 design in what you're going to be doing? 9 It's my understanding, yes. Α. 10 So current with the newest approach of what 0. 11 you're going to be taking of this well --12 MS. BRADFUTE: Yes. EXAMINER GOETZE: -- reflects the most 13 14 current understanding of what's going to happen? MS. BRADFUTE: Yes. 15 EXAMINER GOETZE: If they amend it, do we 16 17 have to re-advertise it or --EXAMINER BROOKS: Well, you're going to 18 19 delay it with sufficient time to give notice, right? 20 MS. BRADFUTE: That is correct. 21 EXAMINER BROOKS: So that's going to be 22 what date? 23 MS. BRADFUTE: I think July 26th. We'll 24 get notice out tomorrow. 25 EXAMINER GOETZE: That'll be sufficient.

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Page 18 EXAMINER BROOKS: Yes. We would give 1 2 notice again in our -- the notice that we give. We have time to do that, and we would do that. 3 EXAMINER GOETZE: And for the sake of 4 5 curiosity, why so many -- why is this a thick package? Is this a private --6 7 MS. BRADFUTE: It is every green card, 8 mailing receipt and tracking. But there were a lot of 9 offset owners and a long list of overriding royalty interest owners. 10 11 EXAMINER BROOKS: A lot of owners. I 12 noticed that on the exhibit. 13 EXAMINER GOETZE: It was for you, but she did a better job. 14 15 THE WITNESS: Yes. Yes. 16 EXAMINER GOETZE: Thank you. 17 MS. BRADFUTE: I'd like to call my next 18 witness. 19 KATE ZEIGLER, Ph.D., 20 after having been previously sworn under oath, was questioned and testified as follows: 21 22 DIRECT EXAMINATION BY MS. BRADFUTE: 23 24 Could you please state your name for the Q. 25 record?

Page 19 1 Α. Kate Zeigler. 2 And, Ms. Zeigler, who do you work for? 0. Zeigler Geologic Consulting on behalf of 3 Α. Marathon Oil. 4 5 Ms. Zeigler, are you a geologist? Q. 6 Α. Yes. 7 And what type of functions do you typically Q. 8 perform as a geologist? 9 I spend a lot of time working with stratigraphy Α. throughout New Mexico both with oil and gas and water. 10 11 0. And have you previously testified before the 12 Division? 13 Α. I have. 14 Q. Were your credentials accepted and made part of 15 the record? 16 Α. Yes. 17 Q. Are you familiar with the application that's 18 been filed by Marathon? 19 Α. Yes. 20 And are you familiar with the status of the Q. 21 lands that are the subject matter of this application? 22 Α. I am. 23 Are you familiar with the drilling plan for the 0. 24 6H well? 25 Α. Yes.

Page 20 1 And have you conducted a geologic study of the 0. 2 area embracing the proposed spacing unit for the well? 3 Α. Yes. MS. BRADFUTE: I'd like to tender 4 5 Ms. Zeigler as an expert witness in geology matters. 6 EXAMINER GOETZE: Ms. Ryan? 7 MS. RYAN: No objection. 8 EXAMINER GOETZE: She is so qualified. (BY MS. BRADFUTE) Ms. Zeigler, what is the 9 0. targeted interval for the 6H well? 10 11 The 3rd Bone Spring Sand. Α. 12 Q. And could you please turn to Tab 7 in the 13 exhibit packet in front of you? Is this document a 14 structure map that has been prepared to analyze the top 15 of the 3rd Bone Spring Sand? 16 Α. Yes. 17 Q. And could you please explain this document to 18 the hearing examiner? 19 Α. So this shows Marathon's acreage throughout the area in question, and the project area here, the 20 Southern Comfort State 242825 TB 6H, is within the 21 black-dashed box in the middle of the figure, with the 22 23 well's location near to the centerline of the project 24 area. And there are three wells that we'll look at in 25 just a moment for the cross section that run north to

Page 21 south to southeast, the Craft 25 Com, the Queen Lake 36 1 State and the Rustler Bluff. 2 3 And this is a structure contour map developed on the top of the 3rd Bone Spring Sand. 4 And 5 what we see here is a gentle dip off to the east. So from west to east, the top of the Bone Spring is 6 7 dipping. We will be drilling along strike. And the 8 contour intervals are very regular, so this is just a 9 nice, smooth dip, with no faulting or lateral pinch-outs that might affect this well. 10 11 Has a cross section of logs been prepared 0. 12 creating this structure map? 13 Α. Yes. 14 0. Could you please turn to Tab 8? Is this the 15 cross section that has been prepared? 16 Α. Yes. 17 Q. Could you just walk through this exhibit with 18 the Examiners? 19 So these are the three wells that were Α. 20 identified on the previous map. And so from left to right, we're going north to south to southeast across 21 22 the project area. These are hung on the base of the 3rd 23 Bone Spring Sand so the top of the Wolfcamp. And 24 looking at this, we have for each of the logs a gamma 25 ray, your depth, your resistivity. And for the two

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southern and southern [sic] southeastern wells, we have 1 a porosity log as well. We do not have a porosity log 2 for the northern well. And it's simply showing that for 3 this area, the 3rd Bone Spring Sand is very contiguous 4 in its thickness and in its lithology. 5 And the producing zone that we'll be targeting is in the lower 6 7 half of the interval, so just showing consistent 8 thickness and no faulting or lateral pinch-outs that might impede the well. 9

Q. Are the wells that have been selected within this cross section representative of the 3rd Bone Spring Sand Formation in the area?

13 A. Yes.

Q. And what does this cross section show you about
the acreage that's proposed to be dedicated to the well?
A. We are very -- we should expect very consistent
behavior throughout the project area from the 3rd Bone
Spring Sand.

19 Could you please turn to Tab 9 in the exhibit Q. packet in front of you, and could you please identify 20 21 what that document is to the hearing examiner? 22 So similar to the map we looked at earlier, the Α. 23 yellow areas are Marathon's acreage in the overall area. 24 The black-dashed line is the project area for the 25 Southern Comfort well, with the well located near to the

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corner line, and, again, the three wells that we just
 looked at the cross section for the north to south to
 southeast.

And this is an isopach map of the 3rd Bone 4 5 Spring Sand and, as was reflected in the cross section, showing that there is a contiguous thickness throughout 6 7 this area. So the contour interval here is 30 feet. 8 And it's a little hard to read, but sort of northwest of 9 the project area, there is a little area of 350-foot thickness. So as you go south, trend down to 10 11 330-thickness area. But overall, the tiny, little pinpoints with the tiny, little numbers are (laughter) 12 individual thickness measurements that were used to 13 develop this contour map. And so in the project area, 14 we're looking at 360- to 380-foot thickness on the 3rd 15 16 Bone Spring. So, again, this -- just very continuous thickness throughout the project area. 17

Q. And what conclusions have you drawn from your
 geologic study of this area?

A. Well, the 3rd Bone Spring should contribute equally along the length of this well, that there are no faults or pinch-outs that might impact development in the project area.

Q. And did you notice any impediments to
 horizontal development throughout the proposed spacing

Page 24 1 unit? 2 Α. No. 3 Q. And will each quarter-quarter section be 4 productive within the Bone Spring Formation? 5 Α. Yes. 6 Were Exhibits 7 through 9 prepared by you or Q. 7 compiled under your direction and supervision? 8 Α. Yes. 9 MS. BRADFUTE: I'd like to move these exhibits into the record. 10 11 MS. RYAN: No objections. 12 EXAMINER GOETZE: Thank you for piping up. 13 (Laughter.) MS. RYAN: I moved over here because I have 14 questions. 15 16 EXAMINER GOETZE: Very good. 17 Exhibits 7 through 9 are so entered. (Marathon Oil Permian, LLC Exhibit Numbers 18 19 7 through 9 are offered and admitted into 20 evidence.) 21 EXAMINER GOETZE: Your witness. 22 CROSS-EXAMINATION BY MS. RYAN: 23 24 I just have a couple of questions regarding 0. 25 your Exhibits 7 through 9. I just noticed your proposed

Page 25 well has a north-to-south orientation, and that seems 1 2 like, in this area at least, to the east and to the 3 northeast and north, the wells have -- you know, it 4 looks like an east-west orientation. I was just 5 wondering what your comment was on moving from the 6 lay-downs to the stand-up in this section is. 7 So in this area, the stress field is Α. 8 northeast-southwest at about 45 degrees, so it actually doesn't impede whether you drill north to south or east 9 to west. And so based on production in other wells that 10 Marathon has worked in the area, they have not seen a 11 12 difference in terms of which format they use for that. So there is no stress field force on which direction you 13 choose to drill the wells right there. 14 15 Okay. And is it your testimony that changing ο. 16 to the 480-acre spacing, that the well will be 17 developing all 40s within that spacing? 18 Yes, ma'am. Α. 19 Q. Thank you. 20 No more questions. MS. RYAN: 21 EXAMINER GOETZE: Thank you. 22 Mr. Brooks? 23 CROSS-EXAMINATION 24 BY EXAMINER BROOKS: 25 The section lines aren't very distinct on this Q.

Page 26 Number 7, so I'm trying to figure out how big an area 1 2 we're looking at here. Can you clarify for me? Yes. So I'm going to scribble on mine. 3 Α. So it's a mile-and-a-half-long lateral. 4 5 Q. Okay. So you have -- I don't know if you can see it, 6 Α. 7 but you have the -- there is the 25 to 36 crossover 8 (indicating). 9 Let's see. This is in what sections? It's 0. Section -- the east half of 36 and the east half of 10 11 southeast quarter of 25. 12 Α. Yes. 13 0. Yeah. 14 I can't see the line between 25 and 36, but 15 it looks like it's --16 Α. Do you see where the 6H is in the label, 17 "Southern Comfort 242825 TB 6H"? It's within the box line. 18 19 Q. Okay. 20 If you go just a tiny bit above that is where Α. the section line would cross. 21 22 Q. Is it where the yellow --23 Α. Yeah. 24 Q. As the panhandle of yellow tract to the east 25 ends?

Page 27 1 Α. Yes. 2 0. Okay. 3 Α. It's at the panhandle end. 4 Thank you. Q. And we will endeavor to have the section lines 5 Α. more clearly marked in the future. 6 7 ο. All right. It was clear there was one along 8 the bottom part of the spacing unit, but the others, I 9 couldn't locate. 10 Α. Yeah. 11 Q. Thank you. 12 Α. Yes, sir. 13 EXAMINER BROOKS: I have nothing further. 14 CROSS-EXAMINATION BY EXAMINER GOETZE: 15 16 All right. Since we're bringing up everything, Q. the east-west well to the north of your proposed well, 17 what is that? 18 19 Α. They did not give me information on that well. 20 MS. BRADFUTE: It didn't specifically come up in the conversation. We can find that, Phil. I know 21 22 that several wells -- 2nd Bone Spring as well. 23 (BY EXAMINER GOETZE) So you're still looking at 0. 24 Bone Spring production. 25 Α. Yes.

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Page 28 1 And do I see another well that's going 0. 2 north-south that parallels your proposed well in the 3 same area, or is that squiggly line something else? 4 You've really got to get a bigger map. 5 Α. Yeah. So there are also -- are these the two 6 7 Wolfcamp wells that are within --8 Q. So what we're saying is we don't have any 9 separation. We have Permian wells. We don't know if 10 they are Wolfcamp or Bone Spring production? 11 Yes. So all of the Bone Spring producer wells Α. 12 that are marked on this map are -- can be 2nd or 3rd Bone Spring, but the vast majority are 1st and 2nd Bone 13 Spring wells. Yeah. 14 15 Any concept of what the average porosity will ο. 16 be? 17 Based on the well logs that were used for the Α. cross section, we're looking at an average of about 8 to 18 19 10 percent porosity. 20 Very good. I have no further questions. Q. 21 MS. RYAN: I have one follow-up, 22 Mr. Examiner. 23 Because of the amendments to the 24 application, will the witnesses be available for further 25 questions on July 26th when this is continued? I'm not

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Page 29 sure we're going to have any objections or not, but will 1 2 your witnesses be available? 3 THE WITNESS: Yes. MS. BRADFUTE: Yes. I don't foresee an 4 5 issue of having witnesses available that day. EXAMINER GOETZE: So you will be presenting 6 7 an affidavit of some sort? 8 MS. BRADFUTE: Yes. 9 EXAMINER GOETZE: With that, if you were interested in requesting witnesses be here --10 11 MS. BRADFUTE: Yes. I agree with that. 12 We'd ask this application be continued to 13 the July 26th docket. 14 EXAMINER GOETZE: Case 16214 is continued to July 26. 15 16 Thank you. 17 MS. BRADFUTE: Thank you. 18 (Case Number 16214 concludes, 11:26 a.m.) 19 (Examiner Brooks exits the room, 11:26 20 a.m.) 21 22 23 24 25

Page 30 1 STATE OF NEW MEXICO 2 COUNTY OF BERNALILLO 3 CERTIFICATE OF COURT REPORTER 4 5 I, MARY C. HANKINS, Certified Court Reporter, New Mexico Certified Court Reporter No. 20, 6 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 a true and correct transcript of those proceedings that 10 were reduced to printed form by me to the best of my 11 12 ability. 13 I FURTHER CERTIFY that the Reporter's Record of the proceedings truly and accurately reflects 14 the exhibits, if any, offered by the respective parties. 15 16 I FURTHER CERTIFY that I am neither employed by nor related to any of the parties or 17 18 attorneys in this case and that I have no interest in 19 the final disposition of this case. 20 DATED THIS 26th day of July 2018. 21 22 MARY C. HANKINS, CCR, RPR 23 Certified Court Reporter New Mexico CCR No. 20 Date of CCR Expiration: 12/31/2018 24 Paul Baca Professional Court Reporters 25