

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. 15594  
LLC TO RE-OPEN CASE NO. 15594 FOR A                   (Re-opened)  
NONSTANDARD OIL SPACING AND PRORATION  
UNIT AND COMPULSORY POOLING, EDDY  
COUNTY, NEW MEXICO.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

November 30, 2017

Santa Fe, New Mexico

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

This matter came on for hearing before the  
New Mexico Oil Conservation Division, William V. Jones,  
Chief Examiner, and David K. Brooks, Legal Examiner, on  
Thursday, November 30, 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.

REPORTED BY:   Mary C. Hankins, CCR, RPR  
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APPEARANCES

FOR APPLICANT MARATHON OIL PERMIAN, LLC:

JENNIFER L. BRADFUTE, ESQ.  
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1 (10:37 a.m.)

2 EXAMINER JONES: Call Case 15594,  
3 re-opened, application of Marathon Oil Permian, LLC to  
4 re-open Case No. 15594 for a nonstandard oil spacing and  
5 proration unit and compulsory pooling in Eddy County,  
6 New Mexico.

7 Call for appearances.

8 MS. BRADFUTE: Mr. Examiner, Jennifer  
9 Bradfute, with the Modrall Law Firm, on behalf of  
10 Marathon.

11 EXAMINER JONES: Any other appearances?

12 There used to be -- there were appearances,  
13 but they've dropped their --

14 MS. BRADFUTE: That's right. The Allar  
15 Company entered an appearance in the case, A-L-L-A-R,  
16 and the dispute between the parties was resolved.

17 EXAMINER JONES: And they were represented  
18 by Bardinian -- Rob Bardinian [phonetic]?

19 MS. BRADFUTE: Yes. That is correct,  
20 Thompson & Knight, LLP of Fort Worth. And he had sent  
21 an email in to the Division previously letting you know  
22 the dispute had been resolved.

23 EXAMINER JONES: Will the witnesses please  
24 stand and the court reporter swear the witnesses?

25 (Mr. Tate and Mr. Keren sworn.)

1 MS. BRADFUTE: Mr. Examiner, I'll call my  
2 first witness.

3 And before I begin questioning, I'd like to  
4 state why we're re-opening this case.

5 EXAMINER BROOKS: I was going to suggest  
6 you do that.

7 MS. BRADFUTE: Thank you, Mr. Brooks.

8 Marathon has asked to re-open this case for  
9 a few different reasons. This matter involves a  
10 480-acre spacing unit within the Purple Sage; Wolfcamp  
11 Gas Pool, and we found some notification defects in the  
12 original order, parties who were left out of one of the  
13 320 -- well, would have been one of the 320-acre spacing  
14 units that weren't notified. And so Marathon provided  
15 notice to all of the mineral interest owners in that  
16 portion of the spacing unit.

17 In addition, we found some additional  
18 interest owners who had not executed JOAs who needed to  
19 be notified and pooled. And then there is a  
20 wellbore-specific JOA that was at issue in the original  
21 pooling case for the 2H well. There are certain parties  
22 to a subsequent well that's going to be drilled in the  
23 spacing unit, the 1H well, who have not signed a JOA for  
24 that 1H well, so their interests need to be pooled as  
25 well.

1                   At this time I'd like to begin questioning  
2 of our first witness.

3                                   MATT S. TATE,  
4 after having been previously sworn under oath, was  
5 questioned and testified as follows:

6                                   DIRECT EXAMINATION

7 BY MS. BRADFUTE:

8           **Q. Please state your name for the record.**

9           A. Yes, ma'am. Matt Tate.

10          **Q. And, Mr. Tate, who do you work for?**

11          A. I work for Marathon Oil Company as a landman.

12          **Q. And what are your responsibilities as a  
13 landman?**

14          A. My responsibilities include determining mineral  
15 and working interest ownership under certain lands  
16 located in Eddy County, New Mexico.

17          **Q. And, Mr. Tate, have you previously testified  
18 before the Division?**

19          A. No, I have not.

20          **Q. Could you please explain your educational  
21 background to the Hearing Examiners?**

22          A. Yes. I attended Texas Tech University and  
23 received a degree in petroleum land management.

24          **Q. And could you please explain your professional  
25 background?**

1           A.    Yes.  I worked for Southwestern Energy for  
2 seven years as a landman, and I've been with Marathon  
3 for six years working as a landman.

4           **Q.    And do you hold any professional**  
5 **certifications?**

6           A.    I'm a CPL from the AAPL.

7           **Q.    And does your area of responsibility at**  
8 **Marathon include the area of Eddy County in New Mexico?**

9           A.    Yes, it does.

10          **Q.    And are you familiar with the application**  
11 **that's been filed by Marathon in this case?**

12          A.    Yes, ma'am.

13          **Q.    And are you familiar with the status of the**  
14 **lands which are the subject matter of this application?**

15          A.    Yes.

16                   MS. BRADFUTE:  At this point in time, I'd  
17 like to tender Mr. Tate as an expert in land matters.

18                   EXAMINER JONES:  Do you work with Randy  
19 Wilson?

20                   THE WITNESS:  Yes, sir.  I sure do.  Great  
21 guy.

22                   EXAMINER JONES:  So qualified.

23                   (Laughter.)

24          **Q.    (BY MS. BRADFUTE) Mr. Tate, could you please**  
25 **turn to what's been marked as Exhibit 1 in the notebook**

1 in front of you and briefly explain what this document  
2 is to the Hearing Examiner?

3 A. Yes, ma'am. Marathon seeks an order from the  
4 Division creating a 480-acre nonstandard spacing unit  
5 covering the southeast quarter of Section 25 in the east  
6 half of Section 36, Township 24 South, Range 28 East,  
7 Eddy County, New Mexico, and compulsory pooling of  
8 certain uncommitted working interests within the spacing  
9 unit.

10 Q. And did Marathon recently acquire this acreage  
11 from BC Operating?

12 A. Yes, we did.

13 Q. And had BC Operating previously applied for a  
14 nonstandard proration unit and compulsory pooling?

15 A. Yes. It was originally heard at hearing on  
16 February 2nd, 2017 and an order was issued on May 15th,  
17 2017.

18 Q. Okay. So why is Marathon seeking to re-open  
19 this matter?

20 A. There were certain working interest owners  
21 within the spacing unit that did not receive notice of  
22 the application prior to the hearing. There were also  
23 interest owners in the offsetting quarter sections  
24 located in the northeast quarter of Section 25 and the  
25 southwest quarter of Section 25 that also did not

1 receive notice of the application prior to hearing.

2 And then after the order was issued in May,  
3 BC provided a wellbore-specific JOA as to the Southern  
4 Comfort 2H only, which was signed by certain working  
5 interest owners within the spacing unit.

6 **Q. Could you please turn to what's been marked as**  
7 **Exhibit Number 2 in your notebook and explain -- this is**  
8 **a two-page document. Could you please explain what the**  
9 **first page is?**

10 A. Yes, ma'am. This is the C-102 for the Southern  
11 Comfort 25-36 State X 2 well with a surface-hole  
12 location in the northeast quarter of the southeast  
13 quarter of Section 25 and a bottom-hole location in the  
14 southeast quarter of the southeast quarter of Section 26  
15 for development of the 480-acre spacing unit.

16 **Q. And would you please turn to the second page of**  
17 **this exhibit and explain what this document is?**

18 A. Yes. This is the C-102 for the  
19 Southern-Comfort 25-36 State X 1H well with a  
20 surface-hole location in the northwest quarter of the  
21 southeast quarter of Section 25 and a bottom-hole  
22 location in the southwest quarter of the southeast  
23 quarter of Section 36, Township 24 South, Range 28 East,  
24 Eddy County, New Mexico.

25 **Q. And have these wells already been drilled by**

1 **Marathon?**

2 A. Yes, ma'am. They have.

3 **Q. And has the Division identified a pool and the**  
4 **pool code for the wells?**

5 A. Yes. It's the Purple Sage; Wolfcamp Gas.

6 **Q. And is that pool governed by special pool rules**  
7 **that have been issued by the Division?**

8 A. Yes, ma'am.

9 **Q. And do those pool rules provide for 330-foot**  
10 **setbacks?**

11 A. Yes, they do.

12 **Q. And will each of these wells comply with that**  
13 **setback requirements?**

14 A. Yes, they will.

15 **Q. Can you please turn to what's been marked as**  
16 **Exhibit Number 3 in the notebook in front of you and**  
17 **explain what that document is to the Hearing Examiners?**

18 A. Yes. This is a lease tract map covering the  
19 480-acre nonstandard spacing unit. It's comprised of  
20 three separate state leases each covering 160 net acres.  
21 There are approximately 11 percent uncommitted working  
22 interests under Tract 1, approximately 1 percent under  
23 Tract 2, and approximately 13 percent under Tract 3.

24 **Q. What kind of interests do you seek to pool in**  
25 **this case?**

1           A.    We are seeking to pool uncommitted working  
2 interests.

3           **Q.    Okay.  Can you please turn to Exhibit Number 4**  
4 **and walk the Hearing Examiners through this exhibit?**

5           A.    Yes.  This is the summary of interests  
6 identifying the committed working interests at this  
7 time, as well as the uncommitted working interests  
8 within the spacing unit, and there are no unleased  
9 mineral interests within the spacing unit.

10          **Q.    And there is a section on this document called**  
11 **"Uncommitted" -- "Uncommitted Working Interest"; is that**  
12 **correct?**

13          A.    Yes, ma'am.

14          **Q.    Some of the parties are shown in red font?**

15          A.    Yes.

16          **Q.    Why is the red font being used?**

17          A.    This is identifying the parties that were  
18 provided a wellbore-specific JOA for the Southern  
19 Comfort 2H, and those parties did sign and return that  
20 JOA.

21          **Q.    But just for that particular well, correct?**

22          A.    Yes, ma'am.

23          **Q.    And so their interests need to be pooled for**  
24 **the development of the 1H well?**

25          A.    Yes.  They sure do.

1           **Q. Did Marathon identify affected parties in the**  
2 **offset acreage involved?**

3           A. Yes, we did.

4           **Q. And was notice provided of this application to**  
5 **those parties?**

6           A. Yes, ma'am. Notice was provided to all working  
7 interests, unleased interests, mineral interest owners  
8 and overriding royalty owners.

9           **Q. And did Marathon identify mineral interest**  
10 **owners to be excluded from any proration units created**  
11 **through the 480-acre spacing unit?**

12          A. Yes, we did.

13          **Q. And was notice provided to those mineral**  
14 **interest owners?**

15          A. Yes, ma'am.

16          **Q. Could you please summarize to the Hearing**  
17 **Examiners what efforts you made to obtain voluntary**  
18 **pooling of the interests?**

19          A. Yes. We have provided a well-proposal letter  
20 and AFE, along with the JOA covering our 480-acre  
21 spacing unit to all uncommitted working interest owners.  
22 In addition, we've made offers to acquire the interest  
23 of certain uncommitted working interest owners listed on  
24 Exhibit 4.

25          **Q. And in your opinion, has Marathon made a**

1    **good-faith effort to obtain voluntary joinder in the**  
2    **unit?**

3           A.    Yes, ma'am.

4           **Q.    Could you please turn to what's been marked as**  
5    **Exhibit Number 5?  And this exhibit has several pages.**  
6    **Could you please explain what the first page -- first**  
7    **and second page is to the Hearing Examiners?**

8           A.    The first page is the well-proposal letter that  
9    was provided for the Southern Comfort 2H.

10          **Q.    If you look at the third page and fourth page,**  
11    **could you identify what these documents are?**

12          A.    Yes.  This is the AFE provided to those owners  
13    for the Southern Comfort 2H.

14          **Q.    And if you look at the fifth and sixth pages,**  
15    **could you identify what these documents are?**

16          A.    Yes.  This is a copy of the well-proposal  
17    letter provided to the uncommitted and committed working  
18    interest owners for the Southern Comfort 1H.

19          **Q.    And if you look at the last two pages of this**  
20    **exhibit, can you identify what those documents are?**

21          A.    This is the AFE provided to those owners for  
22    the Southern Comfort 1H.

23          **Q.    Could you please tell the Hearing Examiners**  
24    **what the costs for drilling and completing each well**  
25    **are?**

1           A.    Yes.  The total costs on the AFE for the  
2   Southern Comfort 2H is \$8,699,628.  Actual cost to drill  
3   and complete that well is 8.77 million.  The total cost  
4   to drill and complete the Southern Comfort 1H reflected  
5   on the AFE is \$8,665,068.  The actual cost to drill and  
6   complete that well was 8.7 million.

7           **Q.    And those wells were only recently completed,**  
8   **correct?**

9           A.    Yes, ma'am.

10          **Q.    And are those costs in line with the costs for**  
11   **other horizontal wells that are drilled to this length**  
12   **and this depth within this area of New Mexico?**

13          A.    Yes.

14          **Q.    And who should be appointed operator of both of**  
15   **these wells?**

16          A.    Marathon Oil Permian, LLC.

17          **Q.    And do you have a recommendation for the amount**  
18   **which Marathon should be paid for supervision and**  
19   **administrative expenses?**

20          A.    \$7,000 for a drilling well per month and \$700  
21   per month for a producing well.

22          **Q.    And are these amounts equivalent to those**  
23   **normally charged by Marathon and other operators within**  
24   **this area for horizontal wells drilled to this length**  
25   **and this depth?**

1           A.     Yes.

2           Q.     Do you request that these rates be adjusted  
3           periodically provided for under the COPAS accounting  
4           procedure?

5           A.     Yes.

6           Q.     And does Marathon request a maximum cost plus  
7           200 percent risk charge if any pooled working interest  
8           owner fails to pay its share of costs for drilling,  
9           completing and equipping the wells?

10          A.     Yes, we do.

11          Q.     Were the parties that you're seeking to pool  
12          notified of this hearing?

13          A.     Yes, ma'am.

14          Q.     Could you please turn to what's been marked as  
15          Exhibit Number 6? Is this exhibit an affidavit that was  
16          completed by your counsel confirming that notification  
17          was given to affected parties?

18          A.     Yes, it is.

19          Q.     And if you look at the very last page of this  
20          exhibit, is this an Affidavit of Publication showing  
21          that notice was also published in a newspaper of general  
22          circulation?

23          A.     Yes, ma'am.

24          Q.     Were Exhibits 1 through 6 prepared by you or  
25          under your supervision or compiled from company business

1 **records?**

2 A. Yes.

3 MS. BRADFUTE: I'd like to admit Exhibits 1  
4 through 6 into the record.

5 EXAMINER JONES: Exhibits 1 through 6 are  
6 admitted.

7 (Marathon Oil Permian, LLC Exhibit Numbers  
8 1 through 6 are offered and admitted into  
9 evidence.)

10 Q. (BY MS. BRADFUTE) Mr. Tate, is the granting of  
11 this application in the interest of conservation and the  
12 prevention of waste?

13 A. Yes.

14 Q. Thank you.

15 EXAMINER JONES: Okay. Mr. Brooks?

16 CROSS-EXAMINATION

17 BY EXAMINER BROOKS:

18 Q. Are there some parties that you sent notices  
19 to -- certified-mail notices to from whom you did not  
20 receive receipts -- return receipts?

21 A. Yes, sir. We did receive -- some were  
22 returned. For those that were returned, we exhausted  
23 all efforts to locate those either through Internet  
24 searches, as well as LexisNexis search to try to locate  
25 any kind of address for those owners.

1 Q. And were those owners that you were not able  
2 obtain a better address, they were included in the  
3 publication notice?

4 A. Yes, sir.

5 Q. Okay. I think that covers all the bases on  
6 notice. Thank you.

7 A. Yes, sir.

8 CROSS-EXAMINATION

9 BY EXAMINER JONES:

10 Q. As far as noticing for the nonstandard  
11 proration -- actually -- you're actually forming -- for  
12 the left-out people in the southeast of 25 and the  
13 northeast of -- southwest of 25, northeast of 25, where  
14 are those lists of people? You have a list of them,  
15 don't you?

16 A. They would be -- yes, sir.

17 Q. Number 9; is that correct? There is a whole  
18 big list. I assume that's it.

19 MS. BRADFUTE: Yes. There is a section,  
20 Will, that starts with "Offsets" that's listed in that  
21 chart, and there is a long list of offsets that's going  
22 to include those mineral interest owners left out of the  
23 proration unit.

24 Q. (BY EXAMINER JONES) Okay. And the red on  
25 Exhibit 4, one more time -- I'm sorry. You covered it.

1     **This is probably the third time, but tell me one more**  
2     **time.**

3           A.     The parties identified in red received a  
4     wellbore-specific JOA and signed and returned that.

5           **Q.     But not -- so they've already --**

6                   MS. BRADFUTE:   There are two wells.  There  
7     is the 2H, which was drilled before the 1H.  And the 2H,  
8     people signed a wellbore-specific JOA, but they didn't  
9     sign any JOA which covers the 1H.

10          **Q.     (BY EXAMINER JONES) Oh.  So wellbore-specific**  
11     **JOA, they did sign these people in red?**

12          A.     Yes, sir.  They originally compulsory pooled  
13     and executed the wellbore-specific JOA, which would  
14     cause their interest to fall out of the original pooling  
15     order.

16          **Q.     Oh, okay.**

17                   **So the second well that is going to be**  
18     **drilled is the 1H then, correct?**

19                   MS. BRADFUTE:   The 1H, yeah.  And so those  
20     interests in red need to be pooled for the 1H.

21                   EXAMINER JONES:  For the 1H.  Okay.  Still  
22     poolable.

23                   Okay.  We've got it in the record several  
24     times here, so I guess that's all I have.

25



1 want to notify for whom you did not have an address at  
2 all?

3 MS. BRADFUTE: No, there wasn't.

4 EXAMINER BROOKS: Very good. I think I've  
5 covered everything. Thank you.

6 THE WITNESS: Yes, sir. Thank you.

7 MS. BRADFUTE: I would like to call my  
8 second witness.

9 TUCKER KEREN,

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

12 DIRECT EXAMINATION

13 BY MS. BRADFUTE:

14 Q. Could you please state your name for the  
15 record?

16 A. Tucker Keren.

17 Q. Mr. Keren, who do you work for?

18 A. I work for Marathon Oil.

19 Q. And, Mr. Keren, what are your responsibilities  
20 at Marathon?

21 A. I'm geologist responsible for several  
22 properties in Eddy County, New Mexico.

23 Q. And have you previously testified before the  
24 Division?

25 A. I have not.

1           **Q.    Could you please explain your educational**  
2 **background to the Hearing Examiners?**

3           A.    I have a bachelor's degree from Hamilton  
4 College and a Master of Science in geoscience from  
5 Colorado State University.

6           **Q.    And can you please explain your work history?**

7           A.    I've been employed by Marathon as a geologist  
8 for two-and-a-half years.

9           **Q.    And are you a member of any professional**  
10 **organizations?**

11          A.    Yes.  I'm a member of the American Association  
12 of Petroleum Geologists.

13          **Q.    Are you familiar with the application that's**  
14 **been filed in this matter?**

15          A.    I am.

16          **Q.    And are you familiar with the status of the**  
17 **lands which are the subject matter of the application?**

18          A.    I am.

19          **Q.    Are you familiar with the drilling plan for the**  
20 **wells at issue?**

21          A.    Yes.

22          **Q.    And have you conducted a geologic study of the**  
23 **area for the proposed spacing for the wells?**

24          A.    Yes.

25                           MS. BRADFUTE:  Mr. Examiner, I'd like to

1 tender Mr. Keren as an expert witness in geology  
2 matters.

3 EXAMINER JONES: He is so qualified.  
4 We spell his name K-E-R-E-N, correct?

5 MS. BRADFUTE: Yes.

6 THE WITNESS: (Indicating.)

7 Q. (BY MS. BRADFUTE) Mr. Keren, what is the  
8 targeted interval for the wells?

9 A. The targeted interval is the Wolfcamp Formation  
10 and more specifically the Upper Wolfcamp X and Y sands.

11 Q. Could you please turn to what's been marked as  
12 Exhibit Number 7 in the notebook in front of you and  
13 explain what this document is to the Hearing Examiners?

14 A. This document is a structure map on the top of  
15 the Wolfcamp. It's in subsea depth, and it is showing  
16 where the project area and Marathon's acreage sit with  
17 respect to the Wolfcamp structure in this area.

18 As you can see, the project area outlined  
19 in the dashed black line sits approximately oriented  
20 along strike of the Wolfcamp Formation here, and the dip  
21 direction is down to the east, noted by the warmer  
22 colors increasing towards the east.

23 This map is also showing the location of  
24 adjacent producing wells from the same formation, that  
25 Upper Wolfcamp X-Y sand zone, as well as the locations

1 of the Southern Comfort 1H and 2H wells of today's  
2 hearing.

3 Q. And when you were compiling this structure map,  
4 did you notice anything structurally that would  
5 interfere with the contribution of the acreage for these  
6 proposed wells?

7 A. I did not.

8 Q. Did you also prepare a cross section on the  
9 logs to determine the relative thickness and porosity of  
10 the Wolfcamp Formation in the area?

11 A. Yes. And that cross section is noted on this  
12 structure map. It's from A to A prime going from the  
13 southeast to the northwest and labeled with the three  
14 wells that I've selected to include in that cross  
15 section.

16 Q. Could you please turn to what's been marked as  
17 Exhibit Number 8 and explain what this document is to  
18 the Hearing Examiners and then walk them through that?

19 A. This is a stratigraphic cross section showing  
20 the Upper Wolfcamp zone that we are producing from, and  
21 it is hung on the datum of the top of the Wolfcamp  
22 Formation labeled with the alias WFMP. And what this is  
23 showing is the relative consistency in sand body  
24 thickness and style in the log character across these  
25 three wells which bound the project area.

1           You're looking at, on the left, the gamma  
2     ray, and then as you move right, your total vertical  
3     depth, then your resistivity logs and then your porosity  
4     logs on the far right there.

5           I've also highlighted the producing zone  
6     where this -- both Southern Comfort wells were landed.

7           **Q.     And are the wells that you selected to include**  
8     **within this cross section representative of the Wolfcamp**  
9     **Formation within the area?**

10          A.     Yes, they are.

11          **Q.     And what does your cross section show you about**  
12     **the acreage that's proposed to be dedicated to these**  
13     **wells?**

14          A.     This shows that there is lateral consistency in  
15     the character of this Wolfcamp Y Sand as the producing  
16     zone.

17          **Q.     Could you please turn to what's been marked as**  
18     **Exhibit Number 9 and explain what this exhibit is to the**  
19     **Hearing Examiners?**

20          A.     This exhibit is a map of the -- isopach map of  
21     the thickness of that Wolfcamp Y Sand-producing zone,  
22     and I've labeled 10-foot contours on this map, as well  
23     as, once again, the adjacent producing wells producing  
24     from that same zone. What you can see is that in the  
25     project area for the Southern Comfort wells, we sit

1 favorably in a -- in a relatively thick section of  
2 this -- of this sand body, as well as it is consistent  
3 across the length of these laterals. We would -- we  
4 would equate this to something similar to a net pay map,  
5 as we believe the entire sand is considered pay.

6 **Q. What conclusions have you drawn from your**  
7 **geologic study of the area?**

8 A. That this Southern Comfort project area and  
9 these two horizontal wells are sitting favorably in a  
10 very prospective area for the Wolfcamp Y Sand.

11 **Q. And did you notice any impediments to**  
12 **horizontal development?**

13 A. I did not, no.

14 **Q. And will each quarter-quarter section be**  
15 **productive in the Wolfcamp Formation?**

16 A. Yes.

17 **Q. And will each quarter tract or quarter-quarter**  
18 **section contribute approximately equally to the**  
19 **production from each well?**

20 A. Yes.

21 **Q. Could you please turn to what's been marked as**  
22 **Exhibit Number 10? And this is a two-page document, and**  
23 **just walk the Hearing Examiners through what each page**  
24 **is.**

25 A. Sure. These are the as-drilled wellbore

1 diagrams for the Southern Comfort 1H and 2H laterals,  
2 and these were prepared by the directional survey  
3 companies that were contacted by Marathon on these jobs.  
4 And there is a lot of information on these figures.  
5 What I'm really trying to show here is that for the 1H  
6 well, the well was drilled vertically to a target depth  
7 of approximately 9,702 TVD and then laterally along  
8 strike for a mile and a half.

9                   On the 2H, we drilled vertically down to a  
10 target TVD of approximately 9,755 feet total vertical  
11 depth and then, once again, laterally along strike for a  
12 mile and a half.

13           **Q. And in your opinion, will the granting of**  
14 **Marathon's application be in the best interest of**  
15 **conservation, the prevention of waste and the protection**  
16 **of correlative rights?**

17           A. Yes.

18           **Q. Were Exhibits 7 through 10 prepared by you or**  
19 **compiled under your direction and supervision?**

20           A. Yes.

21                   MS. BRADFUTE: I'd like to move to admit  
22 Exhibits 7 through 10 into the record.

23                   EXAMINER JONES: Exhibits 7 through 10 are  
24 admitted.

25                   (Marathon Oil Permian, LLC Exhibit Numbers

1                   7 through 10 are offered and admitted into  
2                   evidence.)

3                   MS. BRADFUTE: Thank you.

4                   EXAMINER JONES: Mr. Brooks?

5                   EXAMINER BROOKS: No questions.

6                   EXAMINER JONES: I probably don't either.

7                   CROSS-EXAMINATION

8 BY EXAMINER JONES:

9           **Q. You said X-Y sand, but then I see the target is**  
10 **the Y.**

11           A. That's the landing zone, in the Y.

12           **Q. And the X is above that?**

13           A. Correct.

14           **Q. So is that nomenclature that is commonly used**  
15 **out here, or is it --**

16           A. In Eddy County, yes. Some operators choose to  
17 call X and Y, you know, different than we do. Some will  
18 call it Y, then X. But it is typically known as the X-Y  
19 sands.

20           **Q. Okay. So a lot of -- I've heard geologists say**  
21 **there are a lot of things that happened during the**  
22 **Wolfcamp time out here. So was there some kind of --**  
23 **can you go over it real quickly, just the sequence of**  
24 **the stratigraphy here?**

25           A. Yeah. I mean, this would be late in the -- in

1 the Wolfcampian and late in the Wolfcamp Formation  
2 deposition. But these X and Y sands are -- are record  
3 of turbidite deposits. That's the common model, that  
4 they're deposited in channels that are forming off of  
5 the -- coming off of the Northwest Shelf.

6 Q. Okay. Okay. I don't really have any more  
7 questions.

8 You just want to drill it from the north to  
9 the south, and the drilling direction is favorable  
10 rather than drilling an east-west well?

11 A. In this area, based on the stress orientations,  
12 we believe that east-west and north-south are equally  
13 favorable for -- or for completion.

14 Q. Oh. So you could have drilled them east-west?

15 A. Other operators have drilled east-west in this  
16 area.

17 Q. Okay. So did you pick this zone to drill in?

18 A. Yes.

19 Q. Okay. And why a mile and a half and not a  
20 mile-long well?

21 A. We've seen better production from  
22 mile-and-a-half-long laterals and more efficient  
23 development of the area that way.

24 Q. Have you heard any talk about increased risk of  
25 failure getting out that far?

1           A.    I have not, no.

2           **Q.    So everybody's pretty confident that they can**  
3 **drill and complete 17,000 feet in a well?**

4           A.    Yes.

5           **Q.    Thanks very much.**

6                       MS. BRADFUTE:  Mr. Examiner, that concludes  
7 the witnesses that I have today.  I ask this case be  
8 taken under advisement.

9                       EXAMINER JONES:  Okay.  Case Number 15594  
10 is taken under advisement.

11                      (Case Number 15594 concludes, 11:05 a.m.)

12                      EXAMINER JONES:  And let's take a  
13 ten-minute break.

14                      (Recess, 11:05 a.m. to 11:20 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  
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14 Record of the proceedings truly and accurately reflects  
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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.

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MARY C. HANKINS, CCR, RPR  
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