

Before the Oil Conservation Division Examiner Hearing September 24th, 2020

Case No. 21392

Fiddle Fire 24 SB Fed Com 10H & Fiddle Fire 24 SB Fed Com 11H



**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE APPLICATION OF
MARATHON OIL PERMIAN LLC FOR
COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO.**

CASE NO. 21392

TABLE OF CONTENTS

Tab A: Compulsory Pooling Checklist

Tab B: Affidavit of Chase Rice, Landman

- Exhibit B-1: Application
- Exhibit B-2: C-102s
- Exhibit B-3: Lease Tract Map and Summary of Interests
- Exhibit B-4 Summary of Contacts
- B-5: Sample Proposal Letter
- B-6: AFEs
- B-7: Notice Affidavit

Tab C: Affidavit of Matt Baker, Geologist

- Exhibit C-8: Locator Map
- Exhibit C-9: Well Bore Schematic
- Exhibit C-10: Geology Study
- Exhibit C-11: Orientation Justification

COMPULSORY POOLING APPLICATION CHECKLIST

ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS

Case: 21392	APPLICANT'S RESPONSE
Date: 09/10/2020 (Hearing date)	
Applicant:	Marathon Oil Permian LLC
Designated Operator & OGRID (affiliation if applicable)	Marathon Oil Permian LLC (OGRID 372098)
Applicant's Counsel:	Modrall Sperling
Case Title:	Application of Marathon Oil Permian LLC for Compulsory Pooling, Eddy County, New Mexico
Entries of Appearance/Intervenors:	EOG Resources Inc.
Well Family	Fiddle Fire
Formation/Pool	
Formation Name(s) or Vertical Extent:	Bone Spring
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	N/A
Pool Name and Pool Code:	Malaga; Bone Spring Pool (42780)
Well Location Setback Rules:	State wide rules apply
Spacing Unit Size:	640 acres
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	640 acres
Building Blocks:	Quarter/Quarter Sections
Orientation:	E/W
Description: TRS/County	N/2 of Sections 23 and 24, Township 24 South, Range 28 East, NMPPM, Eddy County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe	Y
Other Situations	
Depth Severance: Y/N. If yes, description	N
Proximity Tracts: If yes, description	Yes: Fiddle Fire 24 SB Fed Com 10H is less than 330' from the adjoining tracts.
Proximity Defining Well: if yes, description	Fiddle Fire 24 SB Fed Com 10H
Applicant's Ownership in Each Tract	See Exhibit B-3, page 16
Well(s)	
Name & API (if assigned), surface and bottom hole location, footages, completion target, orientation, completion status (standard or non-standard)	Add wells as needed



Well #1: Fiddle Fire 24 SB Fed Com 10H	SHL: 1701' FNL 913' FWL (Unit E) Section 23, T-23-S R-28-E FTP: 1000'FNL 100'FWL Section 23, T-23-S R-28-E BHL: 1000' FNL 100' (Unit A) FEL Section 24, T-23-S R-28-E Orientation: East to West Completion Target: Second Bone Spring; Completion Status: Standard; TVD 8,178', MVD: 18,838'
Well #2	SHL: 1731' FNL 910' FWL (Unit E) Section 23, T-23-S R-28-E FTP: 2310'FNL 100'FWL Section 23, T-23-S R-28-E BHL: 2310' FNL 100' (UnitHA) FEL Section 24, T-23-S R-28-E Orientation: East to West Completion Target: Second Bone Spring; Completion Status: Standard TVD 8,178', MVD: 18,838'
Horizontal Well First and Last Take Points	See above; see also Exhibit B-2 (Page 13); 5 (Page 19)
Completion Target (Formation, TVD and MD)	See above; see also Exhibit B-2 (Page 14); 5 (Page 19)
AFE Capex and Operating Costs	
Drilling Supervision/Month \$	\$8,000.00
Production Supervision/Month \$	\$800.00
Justification for Supervision Costs	See Exhibit B, ¶ 23.
Requested Risk Charge	See Exhibit B, ¶ 24.
Notice of Hearing	
Proposed Notice of Hearing	See Exhibit B-7, pages 26-31.
Proof of Mailed Notice of Hearing (20 days before hearing)	See Exhibit B-7, pages 26-35
Proof of Published Notice of Hearing (10 days before hearing)	See Exhibit B-7, page 36.
Ownership Determination	
Land Ownership Schematic of the Spacing Unit	See Exhibit B-3, page 15.
Tract List (including lease numbers and owners)	See Exhibit B-3, pages 15-16.
Pooled Parties (including ownership type)	See Exhibit B-3, pages 15-16.
Unlocatable Parties to be Pooled	None
Ownership Depth Severance (including percentage above & below)	N/A
Joinder	
Sample Copy of Proposal Letter	See Exhibit B-5, pages 19-20.
List of Interest Owners (ie Exhibit A of JOA)	See Exhibit B-3, pages 16-17.
Chronology of Contact with Non-Joined Working Interests	See Exhibit B-4, page 18.
Overhead Rates In Proposal Letter	N/A

List of Interest Owners (ie Exhibit A of JOA)	See Exhibit B-3, pages 16-17.
Chronology of Contact with Non-Joined Working Interests	See Exhibit B-4, page 18.
Overhead Rates In Proposal Letter	N/A
Cost Estimate to Drill and Complete	See Exhibit B-6, pages 21-24.
Cost Estimate to Equip Well	See Exhibit B-6, pages 21-24.
Cost Estimate for Production Facilities	See Exhibit B-6, pages 21-24.
Geology	
Summary (including special considerations)	See Exhibit C, pages 37-40.
Spacing Unit Schematic	See Exhibit C-8, page 41; C-9, page 42; C-10-A, page 43.
Gunbarrel/Lateral Trajectory Schematic	See Exhibit C-9, page 42.
Well Orientation (with rationale)	See Exhibit C-11, page 47; Exhibit C, ¶ 14.
Target Formation	See Exhibit C-10-C, page 45.
HSU Cross Section	See Exhibit C-10-C, page 45.
Depth Severance Discussion	N/A
Forms, Figures and Tables	
C-102	See Exhibit B-2, pages 13-14.
Tracts	See Exhibit B-3, page 15.
Summary of Interests, Unit Recapitulation (Tracts)	See Exhibit B-3, pages 16-17.
General Location Map (including basin)	See Exhibit C-8, page 41.
Well Bore Location Map	See Exhibit C-10-A, page 43.
Structure Contour Map - Subsea Depth	See Exhibit C-10-A, page 43.
Cross Section Location Map (including wells)	See Exhibit C-10-B, page 44.
Cross Section (including Landing Zone)	See Exhibit C-10-C, page 45.
Additional Information	
Special Provisions/Stipulations	None
CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	Deana M. Bennett
Signed Name (Attorney or Party Representative):	
Date: 9/8/2020	

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**APPLICATION OF MARATHON OIL PERMIAN LLC
FOR COMPUSLORY POOLING,
EDDY COUNTY, NEW MEXICO.**

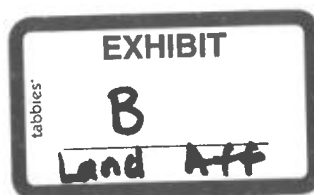
CASE NO. 21392

AFFIDAVIT

STATE OF TEXAS)
) ss.
COUNTY OF MIDLAND)

Clayton Rule, being duly sworn, deposes and states:

1. I am over the age of 18, I am a landman for Marathon Oil Permian LLC and have personal knowledge of the matters stated herein. I have previously testified before the Oil Conservation Division ("Division") and my credentials as an expert petroleum landman were accepted by the Division as a matter of record.
2. My area of responsibility at Marathon includes the area of Eddy County in New Mexico.
3. I am familiar with the application filed by Marathon in this case.
4. I am familiar with the status of the lands that are subject to the application.
5. I submit the following information pursuant to NMAC 19.15.4.12.A(1) in support of the above referenced compulsory pooling applications.
6. The purpose of these applications is to force pool working interest owners into the horizontal spacing unit described below, and in the wells to be drilled in the unit.



7. No opposition is expected because the interest owners being pooled have been contacted regarding the proposed wells, but have failed or refused to voluntarily commit their interests in the wells.

8. In this case, Marathon seeks an order from the Division pooling all uncommitted interests within a Bone Spring horizontal spacing unit underlying the N/2 of Sections 23 and 24, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico.

9. The spacing unit will be dedicated to the **Fiddle Fire 24 SB Fed Com 10H** and the **Fiddle Fire 24 SB Fed Com 11H** wells to be horizontally drilled. The Application is attached hereto as **Exhibit 1**.

10. Attached as **Exhibit 2** are proposed C-102s for the wells.

11. The C-102s identify the proposed surface hole locations, first take point, and bottom hole locations. The C-102s also identify the pool and pool code.

12. The wells will develop the Malaga; Bone Spring pool, pool code, 42780.

13. The Malaga; Bone Spring pool is an oil pool with 40-acre building blocks.

14. The producing interval for the wells will be orthodox and will comply with the Division's set back requirements.

15. A lease tract map outlining the unit being pooled is included behind Tab 3. The parties being pooled and the percent of their interests is also included as part of **Exhibit 3**.

16. There are no depth severances within the proposed spacing unit.

17. I have conducted a diligent search of the public records in the county where the wells are located, and conducted phone directory and computer searches to locate contact information for parties entitled to notification, and mailed well proposals to all parties entitled to well proposals, including an Authorization for Expenditure.

18. In my opinion, Marathon has made a good faith effort to obtain voluntary joinder of the working interest owners in the proposed wells.

19. **Exhibit 4** is a summary of my contacts with the working interest owners is included with Exhibit 4.

20. Marathon seeks to pool overriding royalty interest owners, and they were provided notice of this hearing.

21. **Exhibit 5** is the well proposal letter that I sent to all working-interest owners. The proposal letter identifies the proposed surface hole and bottom hole locations and approximate TVD.

22. **Exhibit 6** contains the Authorization for Expenditure for the proposed wells. The estimated cost of the wells set forth therein is fair and reasonable, and is comparable to the costs of other wells of similar depths and length drilled in this area of New Mexico.

23. Marathon requests overhead and administrative rates of \$8000.00/month for drilling a well and \$800.00/month for a producing well. These rates are fair, and comparable to the rates charged by other operators for wells of this type in this area of Southeastern, New Mexico. Marathon requests that these rates be adjusted periodically as provided in the COPAS Accounting Procedure.

24. Marathon requests the maximum cost plus 200% risk charge be assessed against non-consenting working interest owners.

25. Marathon requests that it be designated operator of the wells.

26. Marathon requests that it be allowed a period of one (1) year between when the wells are drilled and when the first well is completed under the order.

27. The parties Marathon is seeking to pool were notified of this hearing.

28. **Exhibit 7** is an affidavit of notice prepared by counsel for Marathon that shows the parties who were notified of this hearing, the status of whether they received notice, and an affidavit of publication from the Carlsbad Argus newspaper, showing that notice of this hearing was published on August 22, 2020.

29. WPX Energy Permian LLC was provided notice, as evidenced by the mailing information. RKI Exploration & Production LLC, which Marathon seeks to pool as an overriding royalty interest owner, was acquired by WPX Energy Permian LLC.

30. The attachments to this affidavit were prepared by me, or compiled from company business records, or were prepared at my direction.

31. I attest that the information provided herein is correct and complete to the best of my knowledge and belief.

32. The granting of this application is in the interests of conservation and the prevention of waste.

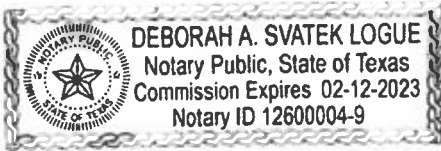
[Signature page follows]

Clayton Rule
Clayton Rule

SUBSCRIBED AND SWORN to before me this 1st day of September, 2020 by Clayton Rule on behalf of Marathon Oil Permian LLC.

Deborah A Svatek Logue
Notary Public

My commission expires: 2/12/2023



**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

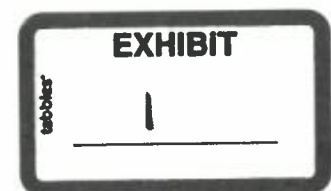
**APPLICATION OF MARATHON
OIL PERMIAN LLC FOR COMPULSORY
POOLING, EDDY COUNTY, NEW MEXICO.**

CASE NO. 21392

APPLICATION

Marathon Oil Permian LLC ("Marathon"), OGRID Number 372098, through its undersigned attorneys, hereby files this application with the Oil Conservation Division pursuant to the provisions of NMSA 1978, § 70-2-17, for an order pooling all uncommitted interests within a Bone Spring horizontal spacing unit underlying the N/2 of Sections 23 and 24, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. In support of this application, Marathon states as follows:

1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
2. Marathon seeks to dedicate the N/2 of Sections 23 and 24, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico to form a 640-acre, more or less, spacing unit.
3. Marathon plans to drill the **Fiddle Fire 24 SB Fed Com 10H** and the **Fiddle Fire 24 SB Fed Com 11H** wells to a depth sufficient to test the Bone Spring formation. These wells will be horizontally drilled and will comply with the Division's setback requirements.



4. The completed interval for the **Fiddle Fire 24 SB Fed Com 10H** well is less than 330 feet from the adjoining tracts and the Division's rules allow for the inclusion of proximity tracts within the proposed spacing unit for the wells.

5. Marathon sought, but has been unable to obtain, a voluntary agreement from all mineral interest owners in the Bone Spring formation underlying the proposed spacing unit to participate in the drilling of the wells or to otherwise commit their interests to the wells.

6. The pooling of all interests in the Bone Spring formation underlying the proposed unit will prevent the drilling of unnecessary wells, prevent waste and protect correlative rights.

7. Marathon further requests that it be allowed one (1) year between the time the wells are drilled and completion of the first well under the order issued by the Division.

WHEREFORE, Marathon requests this application be set for hearing before an Examiner of the Oil Conservation Division on September 10, 2020, and after notice and hearing as required by law, the Division enter its order:

A. Pooling all mineral interests in the Bone Spring formation underlying a horizontal spacing unit within the N/2 of Sections 23 and 24, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico;

B. Designating Marathon as operator of this unit and the wells to be drilled thereon;

C. Authorizing Marathon to recover its costs of drilling, equipping and completing these wells;

D. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure;

E. Setting a 200% charge for the risk involved in drilling and completing the wells in the event a working interest owner elects not to participate in the wells.

F. Allowing a time period of one (1) year between when the wells are drilled and when the first well is completed under the order.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS
& SISK, P.A.

By: Deana M. Bennett
Deana M. Bennett
Post Office Box 2168
500 Fourth Street NW, Suite 1000
Albuquerque, New Mexico 87103-2168
Telephone: 505.848.1800
Attorneys for Applicant

CASE NO. 21392: Application of Marathon Oil Permian LLC for compulsory pooling, Eddy County, New Mexico. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the N/2 of Sections 23 and 24, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the **Fiddle Fire 24 SB Fed Com 10H** and **Fiddle Fire 24 SB Fed Com 11H** wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the wells, and a 200% charge for risk involved in drilling said wells, and allowing a one year period between when the wells are drilled and when the first well is completed. Said area is located approximately 2 miles southeast of Malaga, New Mexico.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 42780	³ Pool Name MALAGA; BONE SPRING
⁴ Property Code	⁵ Property Name FIDDLE FIRE 24 SB FED COM	⁶ Well Number 10H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 2992'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	23	24S	28E		1701	NORTH	913	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	24	24S	28E		1000	NORTH	100	EAST	EDDY

¹² Dedicated Acres 640.0	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

Defining Well SECTION 10 SECTION 15	SURFACE HOLE LOCATION 1701' FNL 913' FWL, SECTION 23 NAD 83, SPCS NM EAST X: 624835.79' / Y: 438791.83' LAT: 32.20802891N / LON: 104.06401528W NAD 27, SPCS NM EAST X: 583452.16' / Y: 438733.27' LAT: 32.20590697N / LON: 104.06352394W	KICK OFF POINT/FIRST TAKE POINT 1000' FNL 100' FWL, SECTION 23 NAD 83, SPCS NM EAST X: 623806.99' / Y: 439504.31' LAT: 32.20799311N / LON: 104.06688921W NAD 27, SPCS NM EAST X: 582623.39' / Y: 439445.74' LAT: 32.20787123N / LON: 104.06619769W	SEC. 7 SEC. 18	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature _____ Date _____ Printed Name _____ E-mail Address _____
		18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey _____ Signature _____ Certificate Number _____		

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99977572 Convergence Angle: 00°08'09.701916"

EXHIBIT
2

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
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Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 42780	³ Pool Name MALAGA; BONE SPRING
⁴ Property Code	⁵ Property Name FIDDLE FIRE 24 SB FED COM	⁶ Well Number 11H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 2992'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	23	24S	28E		1731	NORTH	910	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	24	24S	28E		2310	NORTH	100	EAST	EDDY

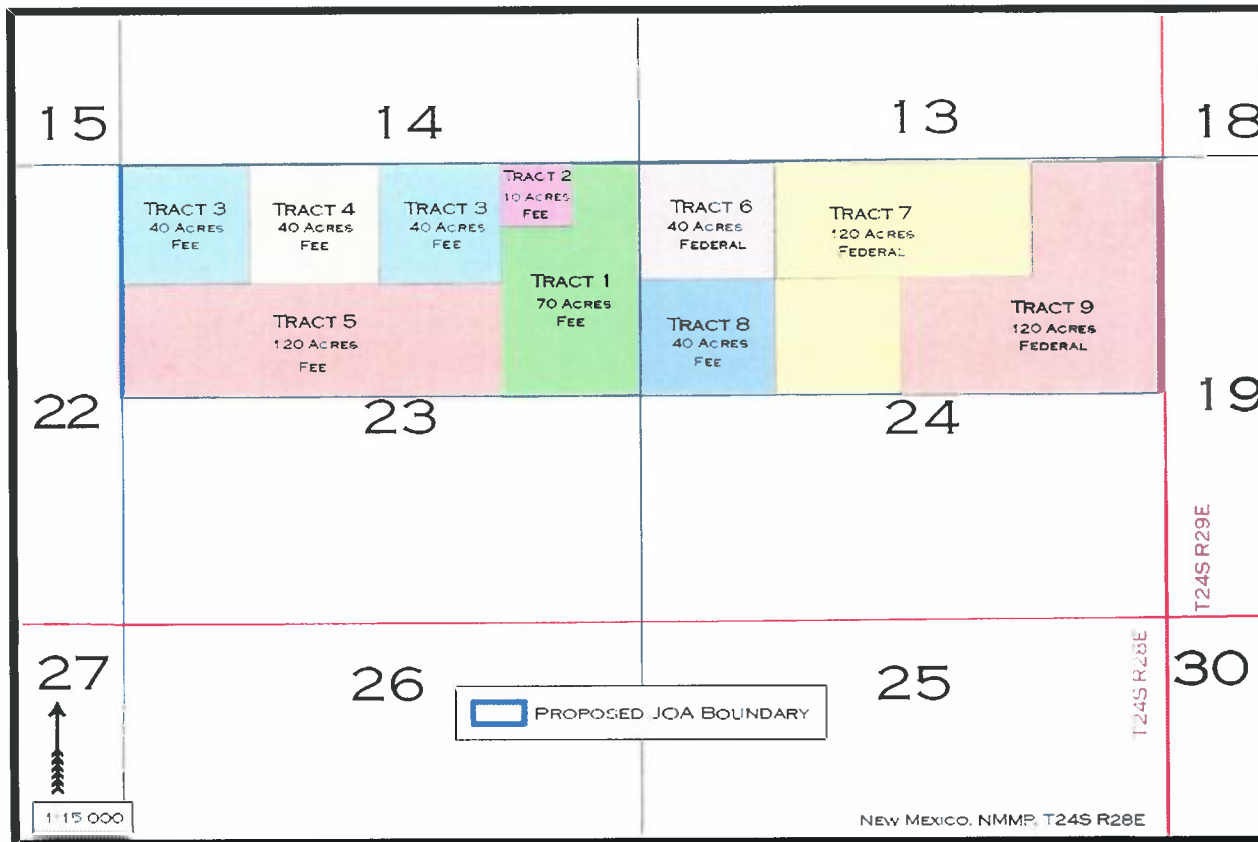
¹² Dedicated Acres 640.0	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

Infill Well SECTION 10 SECTION 15 SECTION 15 SECTION 22 SECTION 22 SECTION 27 SECTION 23 SECTION 26 SECTION 24 SECTION 25 SECTION 19 SECTION 30	SURFACE HOLE LOCATION 1731' FNL 910' FWL, SECTION 23 NAD 83, SPCS NM EAST X: 624833.34 / Y: 438761.84' LAT: 32.20584650N / LON: 104.06402347W NAD 27, SPCS NM EAST X: 583449.71' / Y: 438703.28' LAT: 32.20582455N / LON: 104.06353212W	KICK OFF POINT/FIRST TAKE POINT 2310' FNL 100' FWL, SECTION 23 NAD 83, SPCS NM EAST X: 623834.96' / Y: 438193.81' LAT: 32.20439051N / LON: 104.06660929W NAD 27, SPCS NM EAST X: 582651.33' / Y: 438135.27' LAT: 32.20426858N / LON: 104.06611788W	SECTION 7 SECTION 18
17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.			
Signature _____ Date _____ Printed Name _____ E-mail Address _____			
18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.			
Date of Survey _____ Signature and Seal of Professional Surveyor: _____ PRELIMINARY THIS DOCUMENT IS NOT TO BE USED FOR RECORDATION, BIDDING, RECORDATION, SALE OR THE BASIS FOR THE ISSUANCE OF A PERMIT			
Certificate Number _____			

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99977572 Convergence Angle: 00°08'09.701916"

Lease Tract Map
Fiddle Fire 24 28 N/2 23-24 Spacing Unit (640 acres)



- Total Federal Acres: 280
- Total Fee Acres: 360

Summary of Working Interests: *Bone Spring Formation* Fiddle Fire 24 28 N/2 23-24 Spacing Unit (640 acres)

Committed Working Interest:33.74%

Interest Owner	Tract 1 WI	Tract 2 WI	Tract 3 WI	Tract 4 WI	Tract 5 WI	Tract 6 WI	Tract 7 WI	Tract 8 WI	Tract 9 WI	Unit WI
Marathon Oil Permian LLC	1.00000000				1.00000000				0.21613837	0.33740094

Uncommitted Working Interest:66.26%

Interest Owner	Tract 1 WI	Tract 2 WI	Tract 3 WI	Tract 4 WI	Tract 5 WI	Tract 6 WI	Tract 7 WI	Tract 8 WI	Tract 9 WI	Unit WI
Kaiser-Francis Oil Company		0.35140000	0.50000000	0.50000000						0.09924063
MRC Permian Company		0.35140000	0.50000000	0.50000000						0.09924063
EOG Resources Inc		0.29720000				1.00000000	1.00000000			0.25464375
RSC Resources, LP								0.16793010		0.01049563
The H and S Drilling Company								0.06962158		0.00435135
Lean Dog Limited Partnership No. 1								0.03845961		0.00240373
Headington Royalty, Inc.								0.72398871		0.04524929
Murchison Oil and Gas, LLC									0.26298217	0.04930916
OXY USA, Inc.									0.23390740	0.04385764
COG Production LLC									0.18480932	0.03465175
Occidental Permian Limited Partnership									0.05560919	0.01042672
COG Acreage, LP									0.01573292	0.00294992
MEC Petroleum Corp.									0.01384149	0.00259528
CD Ray Exploration, LLC									0.00565848	0.00106096
David W. Cromwell									0.00111255	0.00020860
TBO Oil & Gas, LLC									0.00020811	0.00003902

Unleased Mineral Interest:0.0000%

**Summary of Overriding Royalty Interests: *Bone Spring Formation*
Fiddle Fire 24 28 N/2 23-24 Spacing Unit (640 acres)**

Overriding Royalty Interest:2.64%

ORI Owners	Tract 1 ORI	Tract 2 ORI	Tract 3 ORI	Tract 4 ORI	Tract 5 ORI	Tract 6 ORI	Tract 7 ORI	Tract 8 ORI	Tract 9 ORI	Unit ORI
Heading Royalty Inc	0.04524929									0.00494914
White Rock Royalty Partners No. 1	0.01495630							0.02099126		0.00294780
The H & S Drilling Company	0.00435135									0.00047593
Lean Dog Limited Partnership No. 1	0.00240373									0.00026291
RKI Exploration & Production LLC		0.03294375	0.00937500							0.00168662
The Estate of Felton W. Courtney				0.15000000						0.00937500
R. Fort Mineral Properties LLC					0.00937500					0.00175781
Robert Mitchell Raindl					0.00312500					0.00058594
Debra Kay Primera					0.00312500					0.00058594
Ricky Don Raindl					0.00312500					0.00058594
Debra Roland					0.00312500					0.00058594
Celey David Ward					0.00156250					0.00029297
Brandley Trent Ward Sr					0.00156250					0.00029297
Oak Valley Mineral and Land LP									0.00312500	0.00058594
CD Ray Exploration, LLC									0.00755998	0.00141750
TBO Oil & Gas, LLC									0.00022103	0.00004144

Summary of Attempted Contacts: Fiddle Fire

- Marathon sent well proposal letters to the working interest owners on or around April 28, 2020.
- According to Marathon's records, all of the proposal letters were received by the parties to whom they were sent.
- Marathon sent Joint Operating Agreements to working interest owners on July 7, 2020 to see if they would participate in the well and/or execute a joint operating agreement.
- Marathon continued to attempt to contact the parties who had not executed an agreement.
- To date, the following entities have:
 - Executed the JOA: None
 - Indicated they will participate in the JOA:
 - The H & S Drilling Company
 - Lean Dog Limited Partnership
 - MEC Petroleum Corporation
 - Murchison Oil & Gas LLC
 - David Cromwell
 - No communication: None
- Marathon filed an application to force pool parties who had not entered in to an agreement.
- Marathon sent notices of the force pooling application to the addresses of record at the time of the filing of the application.
- Marathon then also published notice in a newspaper of general circulation in the county where the wells will be located.



Clayton Rule, CPL
Land Supervisor



Marathon Oil Permian LLC
5555 San Felipe Street
Houston, Texas 77056
Telephone: 713-296-2186
cwrule@marathonoil.com

April 28, 2020

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

Canaan Resources Drilling Company
1101 N. Broadway
Oklahoma City, OK 73103

Re: Well Proposals
Sections 23 and 24, Township 24 South, Range 28 East
Eddy County, New Mexico

Dear Sir or Madam:

Marathon Oil Permian LLC ("Marathon") hereby proposes the drilling of the below-referenced Horizontal Wells located in Sections 23 & 24 T24S-T28E, Eddy County, New Mexico. Accordingly, enclosed are the AFEs for the following wells:

- Fiddle Fire 24 SB Fed Com 10H to be drilled to a depth sufficient to adequately test the Bone Spring Formation, with an approximate true vertical depth ("TVD") of 8,178' subsurface and a total measured depth of 18,838' from a legal surface location in Unit H of Section 22-T24S-R28E. The proposed First Take Point ("FTP") shall be located approximately 100' FWL x 1,000' FNL of Section 23-T24S-R28E and a proposed Last Take Point ("LTP") 100' FEL x 1,000' FNL of Section 24-T24S-R28E with a proration unit being the N/2 of Sections 23 and 24-T23S-R28E.
- Fiddle Fire 24 SB Fed Com 11H to be drilled to a depth sufficient to adequately test the Bone Spring Formation, with an approximate true vertical depth ("TVD") of 8,178' subsurface and a total measured depth of 18,838' from a legal surface location in Unit H of Section 22-T24S-R28E. The proposed First Take Point ("FTP") shall be located approximately 100' FWL x 2,310' FNL of Section 23-T24S-R28E and a proposed Last Take Point ("LTP") 100' FEL x 2,310' FNL of Section 24-T24S-R28E with a proration unit being the N/2 of Sections 23 and 24-T23S-R28E.

These proposed locations and target depths are subject to change depending on any surface or subsurface concerns encountered. The enclosed AFEs represent an estimate of the costs that will be incurred to drill and complete the wells, but those electing to participate in the wells are responsible for their proportionate share of the actual costs incurred.

If your election is to participate in the drilling and completion of the wells, please sign and return a copy of this letter along with an executed copy of the enclosed AFEs for each well within thirty (30) days of receipt of this proposal.

Marathon proposes that a 1989 AAPL Model Form Operating Agreement (JOA), with a contract area encompassing the N/2 of Sections 23 and 24, T24S-R28E from the top of the Bone Spring Formation to the base of the Bone Spring Formation be utilized. A copy of which will be subsequently provided for execution.

If you do not wish to participate in these wells, please contact the undersigned to discuss a potential acquisition of your interest via an assignment. If an agreement cannot be reached within 30 days of the date



of this letter, Marathon will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into the proration unit for the proposed wells.

Should you have any questions regarding this or other matters, please do not hesitate to contact me at the above listed phone number or email.

Sincerely,



Clayton Rule, CPL
Land Supervisor
Marathon Oil Permian LLC

_____ Canaan Resources Drilling Company elects to participate in the drilling, completing, and equipping of the Fiddle Fire 24 SB Fed Com 10H.

_____ Canaan Resources Drilling Company elects NOT to participate in the drilling, completing, and equipping of the Fiddle Fire 24 SB Fed Com 10H.

_____ Canaan Resources Drilling Company elects to participate in the drilling, completing, and equipping of Fiddle Fire 24 SB Fed Com 11H.

_____ Canaan Resources Drilling Company elects NOT to participate in the drilling, completing, and equipping of the Fiddle Fire 24 SB Fed Com 11H.

Canaan Resources Drilling Company

By: _____

Print Name: _____

Title: _____

Date: _____

MARATHON OIL PERMIAN LLC
AUTHORITY FOR EXPENDITURE
DETAIL OF ESTIMATED WELL COSTS

DATE 4/27/2020
DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD
COMPLETION PREPARED BY JOSH SHANNON
FACILITIES PREPARED BY RICK LINDSAY
ARTIFICIAL LIFT PREPARED BY RICK LINDSAY

Asset Team PERMIAN
Field Malaga; Bone Sprin FORMATION: 2ND BONE SPRINGS WILDCAT EXPLORATION
Lease/Facility Fiddle Fire 24 5B Fed Com 10H DEVELOPMENT RECOMPLETION
Location EDDY COUNTY X EXPLOITATION WORKOVER
Prospect MALAGA

Est Total Depth 18,838 Est Drilling Days Est Completion Days 11

LOCATION COST - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	67,000
7001250	Land Broker Fees and Services	45,000
TOTAL LOCATION COST - INTANGIBLE		112,000

DRILLING COST - TANGIBLE

7012050	Conductor Pipe	28,000
7012050	Surface Casing	18,000
7012050	Intermediate Casing 1	63,000
7012050	Intermediate Casing 2	201,000
7012050	Production Casing	130,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550	Drilling Wellhead Equipment	34,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
TOTAL DRILLING - TANGIBLE		558,000

DRILLING COST - INTANGIBLE

7019200	Drilling Rig Mob/Demob	43,333
7019220	Drilling Rig - day work/footage	405,000
7019040	Directional Drilling Services	155,000
7019020	Cement and Cementing Service	15,000
7019020	Cement and Cementing Service	25,000
7019020	Cement and Cementing Service	35,000
7019020	Cement and Cementing Service	60,000
7019140	Mud Fluids & Services	62,000
7012310	Solids Control equipment	32,400
7012020	Bits	72,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	56,467
7019140	Fuel (Mud)	30,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	-
7019150	Mud Logging/geosteering	14,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110	Casing inspection/cleaning	15,000
7019110	Drill pipe/collar inspection services	10,000
7016180	Freight - truck	25,000
7001460	Water hauling and disposal (includes soil farming)	60,000
7001160	Contract Services - Disposal/Non-Hazardous Waste	80,000
7001440	Vacuum Trucks	10,000
7000030	Contract Labor - general	30,000
7000030	Contract Labor - Operations	3,000
7001200	Contract Services - Facilities	10,000
7019300	Well Services - Well Control Services	19,167
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	73,333
7018150	Rig Equipment and Misc.	9,167
7001110	Telecommunications Services	5,000
7001120	Consulting Services	86,167
7001400	Safety and Environmental	29,333
7018120	Rental Buildings (trailers)	14,667
7019330	Coring (sidewalls & analysis)	-
7011010	7% Contingency & Taxes	155,262
TOTAL DRILLING - INTANGIBLE		\$1,815,296

TOTAL DRILLING COST \$2,373,296

COMPLETION - TANGIBLE

7012580	Tubing	-
7012040	Tubing Accessories (nipple, wireline entry)	-
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	-
TOTAL COMPLETION - TANGIBLE		\$15,000



Asset Team PERMIAN
Field Malaga; Bone Sprin FORMATION: 2ND BONE SPRINGS
Lease/Facility Fiddle Fire 24 SB Fed Com 10H

COMPLETION - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	10,000
7019220	Drilling Rig During Completion	-
7019140	Mud Fluids & Services	-
7019030	Coiled Tubing Services (3 runs)	380,000
7019240	Snubbing Services	-
7019270	Pulling/Swab Units	-
7016350	Fuel (from drig)	-
7019010	Casing Crew and Services	-
7019020	Cement and Cementing Services	-
7019080	Well Testing Services (flow hand & equip)	420,000
7019320	Fracturing Services	2,390,185
7019330	Perforating	300,000
7019360	Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids)	245,000
7016180	Freight - Truck (haul pipe; drig & compl)	20,000
7018150	BOP Rental & Testing	-
7018150	Rental Tools and Equipment (ind drig; lightplant,hydra-walk)	-
7018150	CT Downhole Rental Equipment (ie. Bt, BHA)	-
7000030	Contract Labor - general	60,000
7001110	Telecommunications Services	100,000
7001400	Safety and Environmental	-
7001120	Consulting Services	100,000
7018150	Zipper Manifold	220,000
7019300	Frack Stack Rentals	85,000
7016190	Freight (Transportation Services)	-
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	100,000
7018120	Rental Buildings (trailers)	35,000
7000030	Contract Labor - Pumping (pump-down pumps)	60,000
7011010	8% Contingency & Taxes	324,815
TOTAL COMPLETION - INTANGIBLE		\$4,865,000

TOTAL COMPLETION COST

\$4,880,000

SURFACE EQUIPMENT - TANGIBLE

7012350	Misc. Piping, Fittings & Valves	17,120
7006640	Company Labor & Burden	-
7000030	Contract Labor - General	62,878
7001110	Telecommunication equip (Telemetry)	-
7012410	Line Pipe & Accessories	-
7012270	Miscellaneous Materials (containment system)	35,847
7008060	SCADA	-
7016180	Freight - truck	-
7001190	Contract Engineering	7,264
7012290	Metering and Instrumentation	5,823
7012290	I&E Materials	105,326
7012200	Gas Treating	-
7012200	Dehydration	-
7012010	Compressor	-
7012350	Power	-
7012610	Vapor Recovery Unit	-
7012440	Separator & other pressure vessels	336,771
7012500	Tanks	235,346
7012100	Heater Treater	-
7012640	Flare & Accessories	23,293
7000010	Electrical Labor	10,482
7000010	Mechanical Labor	-
7012480	Rod Pumping unit & Pad	-
7012180	Pumping Unit Engine	-
7012350	Electrical Power (electrical cooperative construction costs)	-
TOTAL SURFACE EQUIPMENT - TANGIBLE		\$840,149

TOTAL SURFACE EQUIPMENT COST

\$ 840,149

ARTIFICIAL LIFT

7006640	Company Labor	45,000
7012180	Gas Lift Equipment	15,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	6,250
7012140	Elect Sub Pumps (ESP)	17,500
7019350	Well Services-Well/Wellhead Services	6,000
7012270	Materials & Supplies-Tangible	6,000
7012550	Surface Wellhead Equipment	5,000
7012390	Pig Launchers/Receivers & Rel Equip	6,250
7011010	8% Contingency & Taxes	3,000
TOTAL ARTIFICIAL LIFT		110,000

TOTAL ARTIFICIAL LIFT COST

\$ 110,000

SUMMARY OF ESTIMATED DRILLING WELL COSTS

TOTAL COST

TOTAL LOCATION COST	\$ 112,000
TOTAL DRILLING COST	\$ 2,373,296
TOTAL COMPLETIONS COST	\$ 4,880,000
TOTAL SURFACE EQUIPMENT COST	\$ 840,149
TOTAL ARTIFICIAL LIFT COST	\$ 110,000

GRAND TOTAL COST

\$8,315,445

Participant's Approval

Name of Company: _____

Signature: _____

Title: _____ Date: _____

MARATHON OIL PERMIAN LLC
 AUTHORITY FOR EXPENDITURE
 DETAIL OF ESTIMATED WELL COSTS

DATE 4/27/2020
 DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD
 COMPLETION PREPARED BY JOSH SHANNON
 FACILITIES PREPARED BY RICK LINDSAY
 ARTIFICIAL LIFT PREPARED BY RICK LINDSAY

Asset Team	PERMIAN			
Field	Malaga Bone Sprin	FORMATION: 2ND BONE SPRINGS	WILDCAT	EXPLORATION
Lease/Facility	Riddle Fire 24 58 Fed Com 11H		DEVELOPMENT	RECOMPLETION
Location	LODY COUNTY		X EXPLOITATION	WORKOVER
Prospect	MALAGA			
Est Total Depth	18,838	Est Drilling Days		Est Completion Days 11

LOCATION COST - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	67,000
7001250	Land Broker Fees and Services	45,000
TOTAL LOCATION COST - INTANGIBLE		112,000

DRILLING COST - TANGIBLE

7012050	Conductor Pipe	28,000
7012050	Surface Casing	18,000
7012050	Intermediate Casing 1	63,000
7012050	Intermediate Casing 2	201,000
7012050	Production Casing	130,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550	Drilling Wellhead Equipment	34,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
TOTAL DRILLING - TANGIBLE		558,000

DRILLING COST - INTANGIBLE

7019200	Drilling Rig Mob/Demob	43,333
7019220	Drilling Rig - day work/footage	495,000
7019040	Directional Drilling Services	155,000
7019020	Cement and Cementing Service Surface	15,000
7019020	Cement and Cementing Service Intermediate 1	15,000
7019020	Cement and Cementing Service Intermediate 2	15,000
7019020	Cement and Cementing Service Production	60,000
7019140	Mud Fluids & Services	62,000
7012310	Solids Control equipment	32,400
7012020	Bits	72,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	56,467
7019140	Fuel (Mud)	30,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	-
7019150	Mud Logging/geosteering	14,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110	Casing Inspection/cleaning	15,000
7019110	Drill pipe/collar inspection services	10,000
7016180	Freight - truck	25,000
7001460	Water hauling and disposal (includes soil farming)	60,000
7001160	Contract Services - Disposal/Non-Hazardous Waste	80,000
7001440	Vacuum Trucks	10,000
7000030	Contract Labor - general	30,000
7000030	Contract Labor - Operations	3,000
7001200	Contract Services - Facilities	10,000
7019300	Well Services - Well Control Services	19,167
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	73,333
7018150	Rig Equipment and Misc.	9,167
7001110	Telecommunications Services	5,000
7001120	Consulting Services	86,167
7001400	Safety and Environmental	29,333
7018120	Rental Buildings (trailers)	14,667
7019310	Coring (sidewalls & analysis)	-
7011010	7% Contingency & Taxes	155,262
TOTAL DRILLING - INTANGIBLE		\$1,815,296

TOTAL DRILLING COST

\$2,373,296

COMPLETION - TANGIBLE

7012580	Tubing	-
7012040	Tubing Accessories (nipple, wireline entry)	-
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	-
TOTAL COMPLETION - TANGIBLE		\$15,000

Asset Team PERMIAN
 Field Malaga; Bone Sprin FORMATION: 2ND BONE SPRINGS
 Lease/Facility Fiddle Fire 24 58 Fed Com 11H

COMPLETION - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	10,000
7019220	Drilling Rig During Completion	-
7019140	Mud Fluids & Services	-
7019030	Coiled Tubing Services (3 runs)	380,000
7019240	Snubbing Services	-
7019270	Pulling/Swab Units	-
7016350	Fuel (from drlg)	-
7019010	Casing Crew and Services	-
7019020	Cement and Cementing Services	-
7019080	Well Testing Services (flow hand & equip)	420,000
7019320	Fracturing Services	2,390,185
7019330	Perforating	300,000
7019360	Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids)	245,000
7016180	Freight - Truck (haul pipe; drlg & compl)	20,000
7018150	BOP Rental & Testing	-
7018150	Rental Tools and Equipment (incl drlg; lightplant, hydra-walk)	-
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	-
7000030	Contract Labor - general	60,000
7001110	Telecommunications Services	100,000
7001400	Safety and Environmental	-
7001120	Consulting Services	100,000
7018150	Zipper Manifold	220,000
7019300	Frack Stack Rentals	85,000
7016190	Freight (Transportation Services)	-
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	100,000
7018120	Rental Buildings (trailers)	35,000
7000030	Contract Labor - Pumping (pump-down pumps)	60,000
7011010	8% Contingency & Taxes	324,815
TOTAL COMPLETION - INTANGIBLE		\$4,865,000

TOTAL COMPLETION COST

\$4,880,000

SURFACE EQUIPMENT - TANGIBLE

7012350	Misc. Piping, Fittings & Valves	17,120
7006640	Company Labor & Burden	-
7000030	Contract Labor - General	62,878
7001110	Telecommunication equip (Telemetry)	-
7012410	Line Pipe & Accessories	-
7012270	Miscellaneous Materials (containment system)	35,847
7008060	SCADA	-
7016180	Freight - truck	-
7001190	Contract Engineering	7,264
7012290	Metering and Instrumentation	5,823
7012290	I&E Materials	105,326
7012200	Gas Treating	-
7012200	Dehydration	-
7012010	Compressor	-
7012350	Power	-
7012610	Vapor Recovery Unit	-
7012440	Separator & other pressure vessels	336,771
7012500	Tanks	235,346
7012100	Heater Treater	-
7012640	Flare & Accessories	23,293
7000010	Electrical Labor	10,482
7000010	Mechanical Labor	-
7012480	Rod Pumping unit & Pad	-
7012180	Pumping Unit Engine	-
7012350	Electrical Power (electrical cooperative construction costs)	-
TOTAL SURFACE EQUIPMENT - TANGIBLE		\$840,149

TOTAL SURFACE EQUIPMENT COST

\$ 840,149

ARTIFICIAL LIFT

7006640	Company Labor	45,000
7012180	Gas Lift Equipment	15,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	6,250
7012140	Elect Sub Pumps (ESP)	17,500
7019350	Well Services-Well/Wellhead Services	6,000
7012270	Materials & Supplies-Tangible	6,000
7012550	Surface Wellhead Equipment	5,000
7012390	Pig Launchers/Receivers & Rel Equip	6,250
7011010	8% Contingency & Taxes	3,000
TOTAL ARTIFICIAL LIFT		110,000

TOTAL ARTIFICIAL LIFT COST

\$ 110,000

SUMMARY OF ESTIMATED DRILLING WELL COSTS

	TOTAL COST
TOTAL LOCATION COST	\$ 112,000
TOTAL DRILLING COST	\$ 2,373,296
TOTAL COMPLETIONS COST	\$ 4,880,000
TOTAL SURFACE EQUIPMENT COST	\$ 840,149
TOTAL ARTIFICIAL LIFT COST	\$ 110,000
GRAND TOTAL COST	\$8,315,445

Participant's Approval

Name of Company: _____
 Signature: _____
 Title: _____ Date: _____

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**APPLICATION OF MARATHON OIL PERMIAN LLC FOR COMPUSLORY
POOLING, EDDY COUNTY, NEW MEXICO.**

**CASE NO. 21392
(Fiddle Fire)**

AFFIDAVIT

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

Deana M. Bennett, attorney in fact and authorized representative of Marathon Oil Permian LLC, the Applicant herein, being first duly sworn, upon oath, states that the above-referenced Application was sent under a notice letter, example included, and that proof of receipt and an affidavit of publication are attached hereto.



Deana M. Bennett

SUBSCRIBED AND SWORN to before me this 8th day of September, 2020 by Deana M. Bennett.





Notary Public





August 20, 2020

Deana M. Bennett
505.848.1834
Deana.Bennett@modrall.com

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

**Re: APPLICATION OF MARATHON OIL PERMIAN LLC FOR
COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO.**

CASE NO. 21392

TO: AFFECTED PARTIES

This letter is to advise you that Marathon Oil Permian LLC ("Marathon") has filed the above-listed application.

In Case No. 21392, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the N/2 of Sections 23 and 24, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the **Fiddle Fire 24 SB Fed Com 10H and Fiddle Fire 24 SB Fed Com 11H** wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the wells, and a 200% charge for risk involved in drilling said wells, and allowing a one year period between when the wells are drilled and when the first well is completed.

During the COVID-19 Public Health Emergency, state buildings are closed to the public and hearings will be conducted remotely. The hearing will be conducted on September 10, 2020 beginning at 8:15 a.m. To participate in the electronic hearing, see the instructions posted on the docket for the hearing date: <http://www.emnrd.state.nm.us/OCD/hearings.html>.

As a party who may be affected by this application, we are notifying you of your right to appear at the hearing and participate in the case, including the right to present evidence either in support of or in opposition to the application. Failure to appear at the hearing may preclude you from any involvement in the case at a later date.

Modrall Sperling
Roehl Harris & Sisk P.A.

500 Fourth Street NW
Suite 1000
Albuquerque,
New Mexico 87102

PO Box 2168
Albuquerque,
New Mexico 87103-2168

Tel: 505.848.1800
www.modrall.com

20

You are further notified that if you desire to appear in this case, then you are requested to file a Pre-Hearing Statement with the Division at least four business days in advance of a scheduled hearing before the Division or the Commission, but in no event later than 5:00 p.m. mountain time, on the Thursday preceding the scheduled hearing date, with a copy delivered to the undersigned.

Sincerely,



Deana M. Bennett
Attorney for Applicant

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**APPLICATION OF MARATHON
OIL PERMIAN LLC FOR COMPULSORY
POOLING, EDDY COUNTY, NEW MEXICO.**

CASE NO. 21392

APPLICATION

Marathon Oil Permian LLC ("Marathon"), OGRID Number 372098, through its undersigned attorneys, hereby files this application with the Oil Conservation Division pursuant to the provisions of NMSA 1978, § 70-2-17, for an order pooling all uncommitted interests within a Bone Spring horizontal spacing unit underlying the N/2 of Sections 23 and 24, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. In support of this application, Marathon states as follows:

1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
2. Marathon seeks to dedicate the N/2 of Sections 23 and 24, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico to form a 640-acre, more or less, spacing unit.
3. Marathon plans to drill the **Fiddle Fire 24 SB Fed Com 10H** and the **Fiddle Fire 24 SB Fed Com 11H** wells to a depth sufficient to test the Bone Spring formation. These wells will be horizontally drilled and will comply with the Division's setback requirements.

4. The completed interval for the **Fiddle Fire 24 SB Fed Com 10H** well is less than 330 feet from the adjoining tracts and the Division's rules allow for the inclusion of proximity tracts within the proposed spacing unit for the wells.

5. Marathon sought, but has been unable to obtain, a voluntary agreement from all mineral interest owners in the Bone Spring formation underlying the proposed spacing unit to participate in the drilling of the wells or to otherwise commit their interests to the wells.

6. The pooling of all interests in the Bone Spring formation underlying the proposed unit will prevent the drilling of unnecessary wells, prevent waste and protect correlative rights.

7. Marathon further requests that it be allowed one (1) year between the time the wells are drilled and completion of the first well under the order issued by the Division.

WHEREFORE, Marathon requests this application be set for hearing before an Examiner of the Oil Conservation Division on September 10, 2020, and after notice and hearing as required by law, the Division enter its order:

A. Pooling all mineral interests in the Bone Spring formation underlying a horizontal spacing unit within the N/2 of Sections 23 and 24, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico;

B. Designating Marathon as operator of this unit and the wells to be drilled thereon;

C. Authorizing Marathon to recover its costs of drilling, equipping and completing these wells;

D. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure;

E. Setting a 200% charge for the risk involved in drilling and completing the wells in the event a working interest owner elects not to participate in the wells.

F. Allowing a time period of one (1) year between when the wells are drilled and when the first well is completed under the order.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS
& SISK, P.A.

By: Deana M. Bennett
Deana M. Bennett
Post Office Box 2168
500 Fourth Street NW, Suite 1000
Albuquerque, New Mexico 87103-2168
Telephone: 505.848.1800
Attorneys for Applicant

CASE NO. 21392 : Application of Marathon Oil Permian LLC for compulsory pooling, Eddy County, New Mexico. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the N/2 of Sections 23 and 24, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the **Fiddle Fire 24 SB Fed Com 10H** and **Fiddle Fire 24 SB Fed Com 11H** wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the wells, and a 200% charge for risk involved in drilling said wells, and allowing a one year period between when the wells are drilled and when the first well is completed. Said area is located approximately 2 miles southeast of Malaga, New Mexico.

Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED MAIL
08/20/2020

Firm Mailing Book ID: 193999

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0074 2902 40	Oxy USA Inc. 5 Greenway Plaza, Suite 110 Houston TX 77046	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
2	9314 8699 0430 0074 2902 57	Occidental Permian Limited Partnership P.O. Box 50250 Midland TX 79710	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
3	9314 8699 0430 0074 2902 64	BRADLEY TRENT WARD 1739 OAK GLEN NEW BRAUNFELS TX 78132	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
4	9314 8699 0430 0074 2902 71	CELEY DAVID WARD 12 PLACID CT ODESSA TX 79762	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
5	9314 8699 0430 0074 2902 88	DEBRA KAY PRIMERA PO BOX 28504 AUSTIN TX 78755	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
6	9314 8699 0430 0074 2902 95	DEBRA ROLAND PO BOX 456 GARDENDALE TX 79758	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
7	9314 8699 0430 0074 2903 01	H AND S DRILLING COMPANY PO BOX 701620 TULSA OK 74170	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
8	9314 8699 0430 0074 2903 18	HEADINGTON ROYALTY INC 1700 N REDBUD BLVD, Suite 400 MCKINNEY TX 75069	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
9	9314 8699 0430 0074 2903 25	LEAN DOG LIMITED PARTNERSHIP NO 1 P O BOX 25203 DALLAS TX 75225	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
10	9314 8699 0430 0074 2903 32	MARATHON OIL PERMIAN LLC 5555 SAN FELIPE STREET HOUSTON TX 77056	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
11	9314 8699 0430 0074 2903 49	MARGI BRUNS 12711 COLORADO BLVD E 505 THORNTON CO 80241	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
12	9314 8699 0430 0074 2903 56	RFORT MINERAL PROPERTIES LLC 9716 ADMIRAL EMERSON AVE NE ALBUQUERQUE NM 87111	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
13	9314 8699 0430 0074 2903 63	RICKY D RAINDL PO BOX 142454 IRVING TX 75014	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
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15	9314 8699 0430 0074 2903 87	TOMMY LYNN FORT PO BOX 5356 MIDLAND TX 79704	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice

Karlene Schuman
 Modrall Sperling Roehl Harris & Sisk P.A.
 500 Fourth Street, Suite 1000
 Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED MAIL
 08/20/2020

Firm Mailing Book ID: 193999

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17	9314 8699 0430 0074 2904 00	WPX ENERGY PERMIAN LLC 25061 NETWORK PLACE CHICAGO IL 60673	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
18	9314 8699 0430 0074 2904 17	David W. Cromwell P.O. Box 50820 Midland TX 79710	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
19	9314 8699 0430 0074 2904 24	MEC Petroleum Corp. 414 W. Texas Ave #410 Midland TX 79701	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
20	9314 8699 0430 0074 2904 31	COG Production, LLC 600 W. Illinois Ave. Midland TX 79701	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
21	9314 8699 0430 0074 2904 48	COG Acreage, LP 600 W. Illinois Ave. Midland TX 79701	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
22	9314 8699 0430 0074 2904 55	Murchison Oil and Gas, LLC 7250 Dallas Parkway, Suite 1400 Plano TX 75024	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
23	9314 8699 0430 0074 2904 62	LHAH Properties, LLC 415 W. Wall St., Suite 1500 Midland TX 79701	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
24	9314 8699 0430 0074 2904 79	H6 Holdings, LLC P.O. Box 1212 Midland TX 79702	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
25	9314 8699 0430 0074 2904 86	Tap Rock Resources, LLC 602 Park Point Dr., Suite 200 Golden CO 80401	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
26	9314 8699 0430 0074 2904 93	Hanley Petroleum, LLC 415 W. Wall St., Suite 1500 Midland TX 79701	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
27	9314 8699 0430 0074 2905 09	White Rock Royalty Partners No. 1 427 South Boston Ave., Suite 711 Tulsa OK 74103	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
28	9314 8699 0430 0074 2905 16	Oak Valley Mineral and Land, LP PO BOX 50820 MIDLAND TX 79710	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
29	9314 8699 0430 0074 2905 23	Stillwater Investments PO BOX 8470 MIDLAND TX 79708	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
30	9314 8699 0430 0074 2905 30	EOG RESOURCES INC PO BOX 4362 HOUSTON TX 77210	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice

Karlene Schuman
 Modrall Sperling Rochl Harris & Sisk P.A.
 500 Fourth Street, Suite 1000
 Albuquerque NM 87102

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 08/20/2020

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Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest. Del. Fee	Reference Contents
31	9314 8699 0430 0074 2905 47	KAISER FRANCIS OIL CO P O BOX 21468 TULSA OK 74121	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
32	9314 8699 0430 0074 2905 54	MARATHON OIL PERMIAN LLC 5555 SAN FELIPE STREET HOUSTON TX 77056	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
33	9314 8699 0430 0074 2905 61	MRC PERMIAN COMPANY 5400 LBJ FREEWAY SUITE 1500 ONE LINCOLN CENTRE DALLAS TX 75240	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
34	9314 8699 0430 0074 2905 78	RSC Resources, LP P.O. Box 8329 Horseshoe Bay TX 78657	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
35	9314 8699 0430 0074 2905 85	Headington Royalty, Inc. 1700 N. Redbud Blvd., Suite 400 McKinney TX 75069	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
36	9314 8699 0430 0074 2905 92	The H and S Drilling Company P.O. Box 701620 Tulsa OK 74170	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
37	9314 8699 0430 0074 2906 08	Lean Dog Limited Partnership No. 1 P.O. Box 25203 Dallas TX 75225	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
38	9314 8699 0430 0074 2906 15	TBO Oil & Gas, LLC P.O. Box 10502 Midland TX 79702	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
39	9314 8699 0430 0074 2906 22	CD Ray Exploration, LLC 4 Churchill Way Midland TX 79705	\$1.20	\$3.55	\$1.70	\$0.00	81363-0124 FF Notice
Totals:			\$46.80	\$138.45	\$66.30	\$0.00	
			Grand Total:		\$251.55		

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Listed by Sender

Total Number of Pieces
Received at Post Office

Postmaster:
Name of receiving employee

39

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Transaction Report Details - CertifiedPro.net
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Carlsbad Current Argus.

PART OF THE USA TODAY NETWORK

Affidavit of Publication

Ad # 0004341682

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POBOX 2168

ALBUQUERQUE, NM 87103

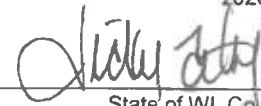
I, a legal clerk of the **Carlsbad Current Argus**, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

08/22/2020



Legal Clerk

Subscribed and sworn before me this August 22,
2020:



State of WI, County of Brown
NOTARY PUBLIC
9-19-21

My commission expires

CASE NO. 21392: Notice to all affected parties, as well as the heirs and devisees of: Oxy USA Inc.; Occidental Permian Limited Partnership; Bradley Trent Ward; Celey David Ward; Debra Kay Primera; Debra Roland; H and S Drilling Company; Headington Royalty Inc.; Lean Dog Limited Partnership No. 1; Margi Bruns; Rfort Mineral Properties LLC; Ricky D. Raindl; Robert Mitchell Raindl; Tommy Lynn Fort; White Rock Royalty Partners No. 1; WPX Energy Permian LLC; David W. Cromwell; MEC Petroleum Corp.; COG Production, LLC; COG Acreage, LP; Murchison Oil and Gas LLC; LHAH Properties, LLC; H6 Holdings, LLC; Tap Rock Resources, LLC; Hanley Petroleum, LLC; White Rock Royalty Partners No. 1; Oak Valley Mineral and Land, LP; Stillwater Investments; EOG Resources Inc.; Kaiser Francis Oil Co.; MRC Permian Company; RSC Resources, LP; Headington Royalty, Inc.; The H and S Drilling Company; Lean Dog Limited Partnership No. 1; TBO Oil & Gas, LLC; CD Ray Exploration, LLC of Marathon Oil Permian LLC's application for compulsory pooling, Eddy County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on September 10, 2020, to consider this application. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the N/2 of Sections 23 and 24, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Fiddle Fire 24 SB Fed Com 10H and Fiddle Fire 24 SB Fed Com 11H wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the wells, and a 200% charge for risk involved in drilling said wells, and allowing a one year period between when the wells are drilled and when the first well is completed. Said area is located approximately 2 miles southeast of Malaga, New Mexico.

August 22, 2020

Ad # 0004341682

PO #: 21392

of Affidavits 1

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**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**APPLICATION OF MARATHON OIL PERMIAN LLC
FOR COMPUSLORY POOLING,
EDDY COUNTY, NEW MEXICO.**

CASE NO. 21392

AFFIDAVIT

STATE OF TEXAS)
) ss.
COUNTY OF MIDLAND)

Matt Baker, being duly sworn, deposes and states:

1. I am over the age of 18, I am a geologist for Marathon Oil Permian LLC, and have personal knowledge of the matters stated herein. I have previously testified before the Oil Conservation Division ("Division") and my credentials as an expert petroleum geologist were accepted by the Division as a matter of record.

2. My area of responsibility at Marathon includes the area of Eddy County in New Mexico.

3. I am familiar with the application filed by Marathon in this case.

4. **Exhibit 8** is a locator map showing the approximate location of the proposed wells in relation to the Capitan Reef.

5. **Exhibit 9** is a wellbore schematic showing the Fiddle Fire development plan. The original Fiddle Fee Wolfcamp development were 1-mile laterals. The proposed Second Bone Spring wells will be 2-mile laterals.

6. The exhibits behind **Tab 10** are the geology study I prepared for this case.



7. **Exhibit 10-A** is structure map of the base of the Second Bone Spring. The proposed project area is identified by a black-dashed box, and the proposed wells are identified by red lines. The horizontal wells shown in black represent existing Second Bone Spring laterals. The contour interval used this exhibit is 25 feet. This exhibit shows that the structure dips to the east.

8. **Exhibit 10-B** identifies three wells in the vicinity of the proposed Second Bone Spring wells, shown by a line of cross-section running from A to A'.

9. **Exhibit 10-C** is a stratigraphic cross section hung on the base of the Second Bone Spring Sand. The well logs on the cross-section give a representative sample of the Second Bone Spring Sand formation in the area. The target zone is identified by the words "Producing Zone" and the shaded area across the cross section, along with a red arrow.

10. Based on these well logs, the Second Bone Spring Sand interval will increase in thickness moving from West to East across the unit.

11. **Exhibit 10-D** is a Gross Interval Isochore of the Second Bone Spring Sand. The Second Bone Spring Sand will increase in thickness moving from West to East across the unit.

12. I conclude from the maps that:

- a. The horizontal spacing unit is justified from a geologic standpoint.
- b. There are no structural impediments or faulting that will interfere with horizontal development.
- c. Each quarter quarter section in the proposed unit will contribute more or less equally to production.

13. **Exhibit 11** provides an overview of the stress orientation in the area based on the 2018 Snee-Zoback paper.

14. The preferred well orientation in this area is either north/south or east/west. This is because the S_{Hmax} is at approximately 45 degrees in mid-Eddy County. Marathon is proposing east/west orientation to maximize the lateral length given Marathon's acreage.

15. Exhibits 8-11 were prepared by my or under my supervision or compiled from company business records.

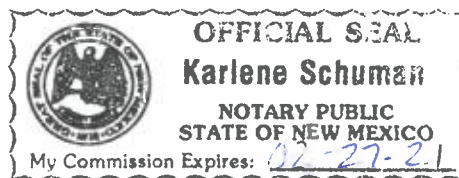
16. In my opinion, the granting of Marathon's application is in the interests of conservation and the prevention of waste.

Matt P. Baker
Matt Baker

SUBSCRIBED AND SWORN to before me this 8th day of September 2020 by Matt Baker, on behalf of Marathon Oil Permian LLC.

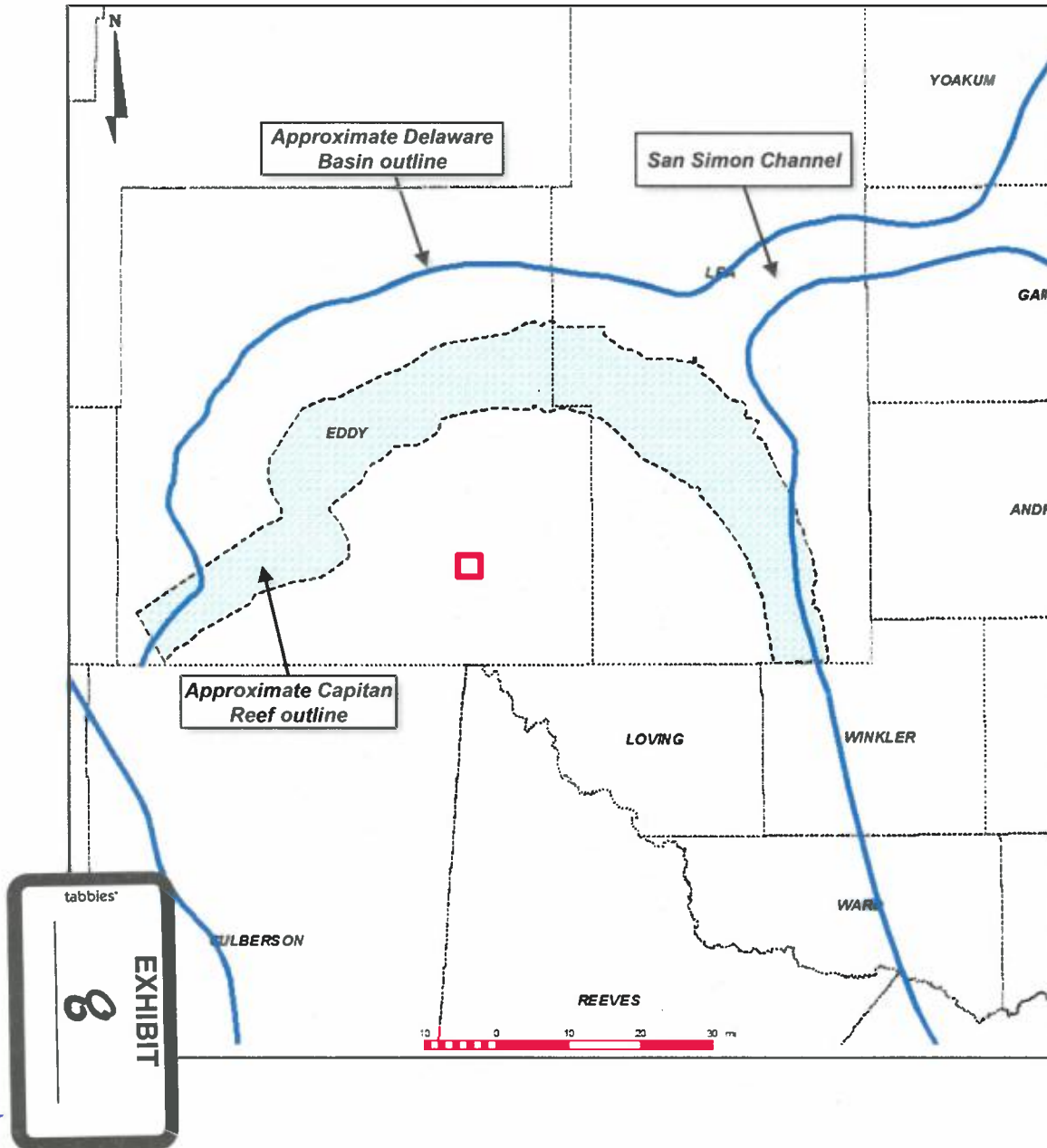
Karlene Schuman
Notary Public

My commission expires: 02-27-21



Fiddle Fire 24 Federal Com Unit

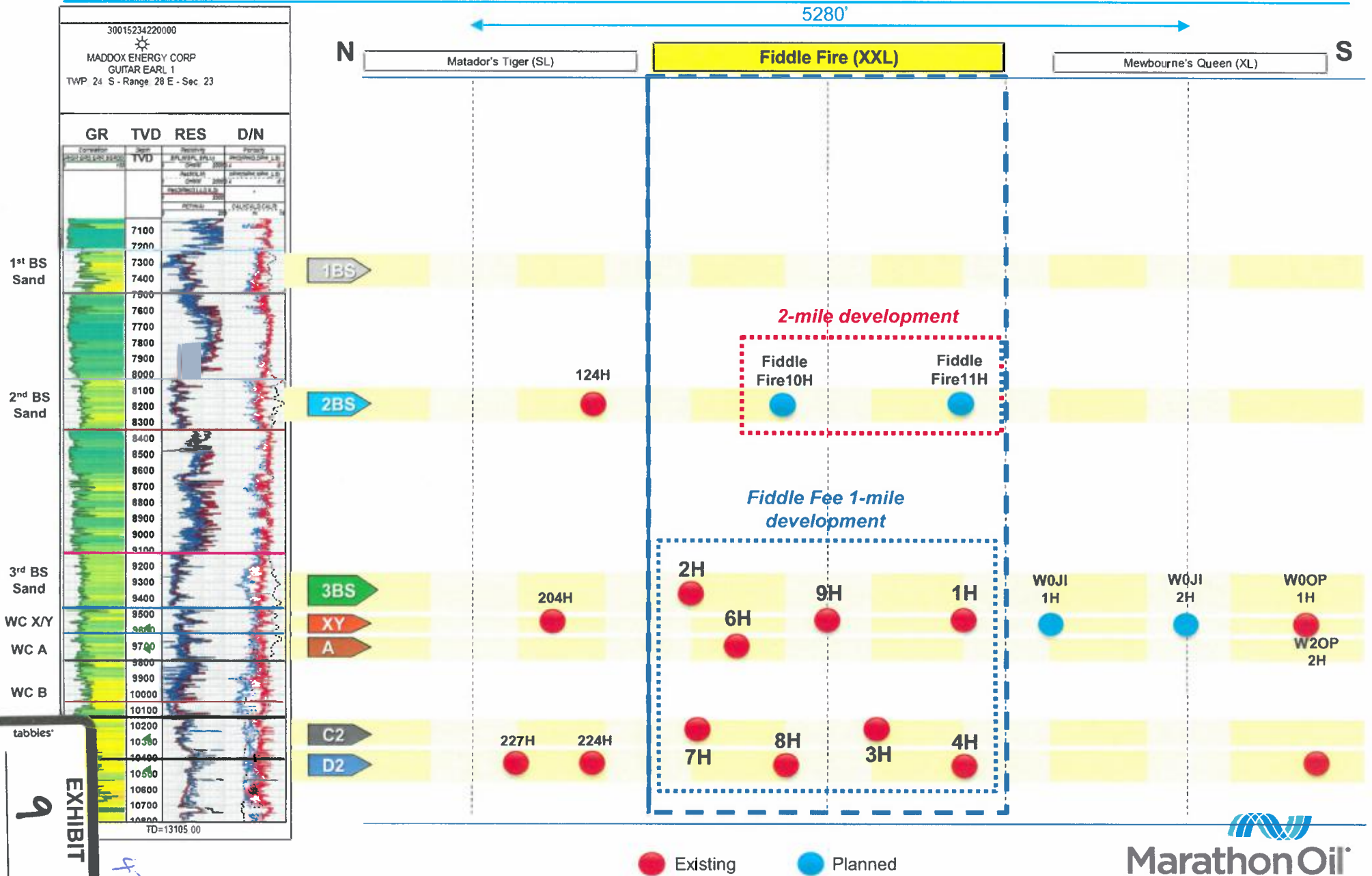
Locator Map



- Approximate location of proposed Fiddle Fire 24 Federal Com well locations shown with red box
- Located outside of the Capitan Reef
- Mid-eastern Eddy County

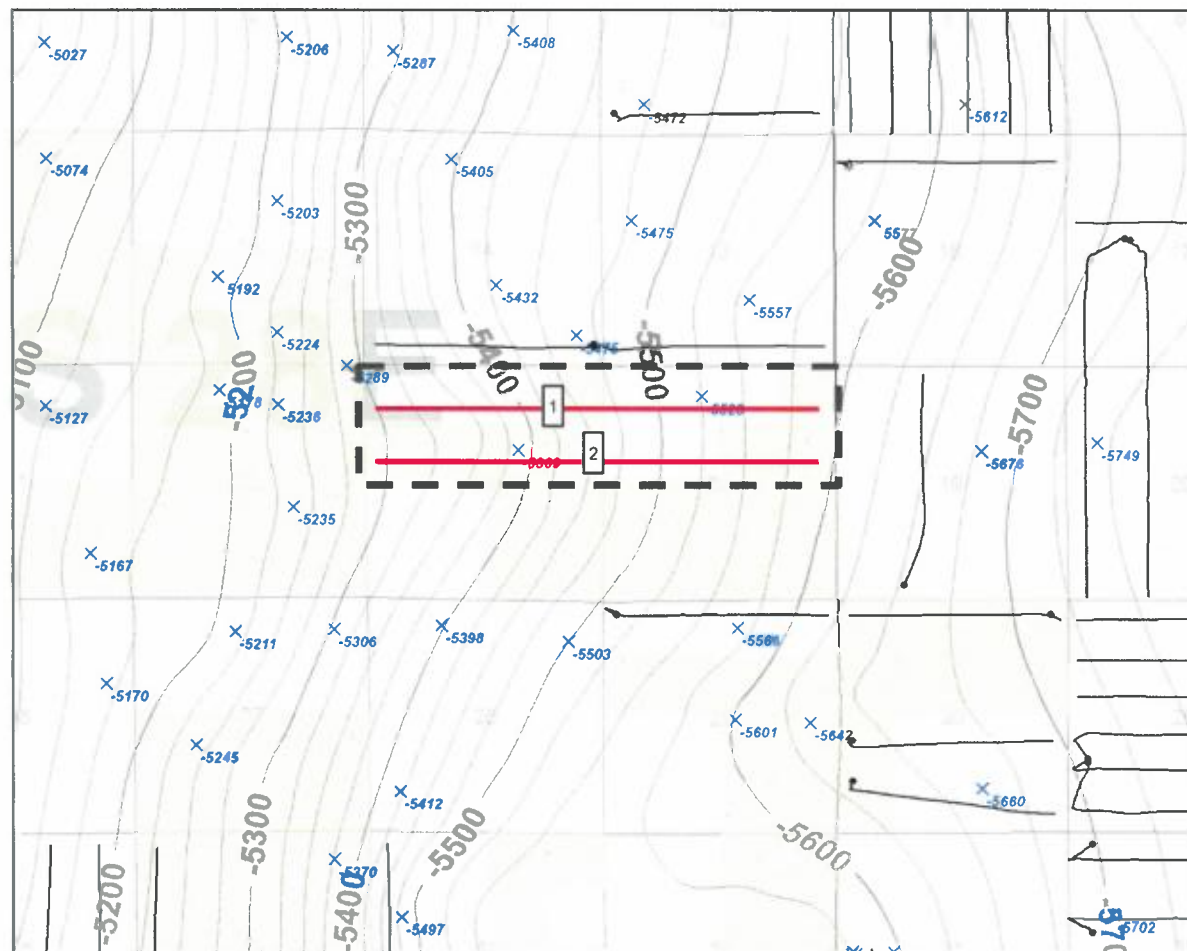
Fiddle Fire 24 Federal Com Unit

Wellbore Schematic



Fiddle Fire 24 Federal Com Unit

Structure Map – Base of Second Bone Spring Sand/Top of Third Bone Spring Carbonate (TVDSS)



- 1 Fiddle Fire 24 SB Fed Com 10H
- 2 Fiddle Fire 24 SB Fed Com 11H

Map Legend*

- Proposed Wells
- Existing SBSG wells



MRO Acreage

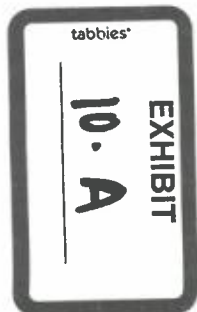


Project Area

The base of the Second Bone Spring dips towards the east.

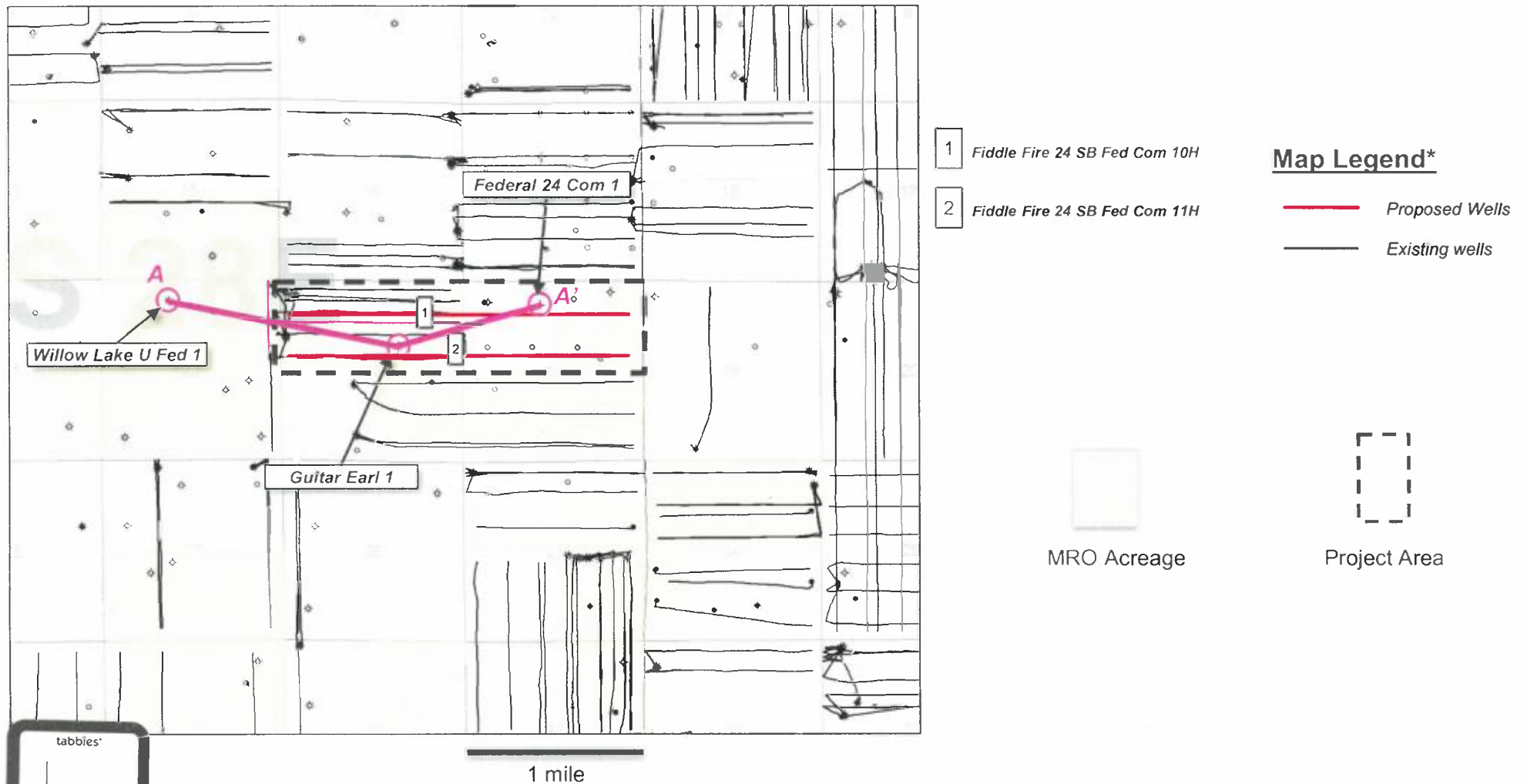
1 mile

C.I. = 25'



Fiddle Fire 24 Federal Com Unit

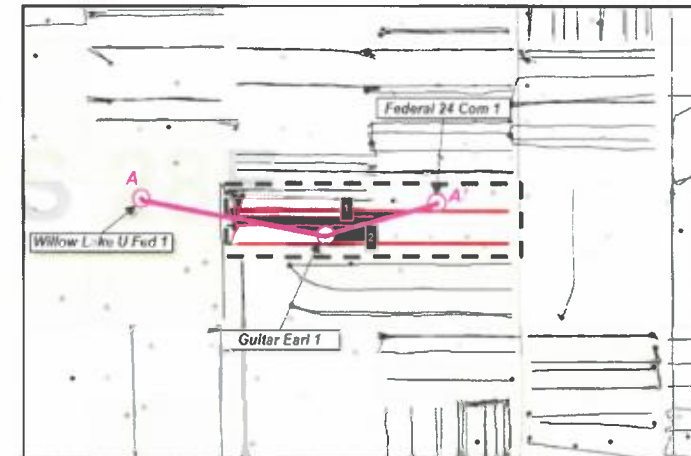
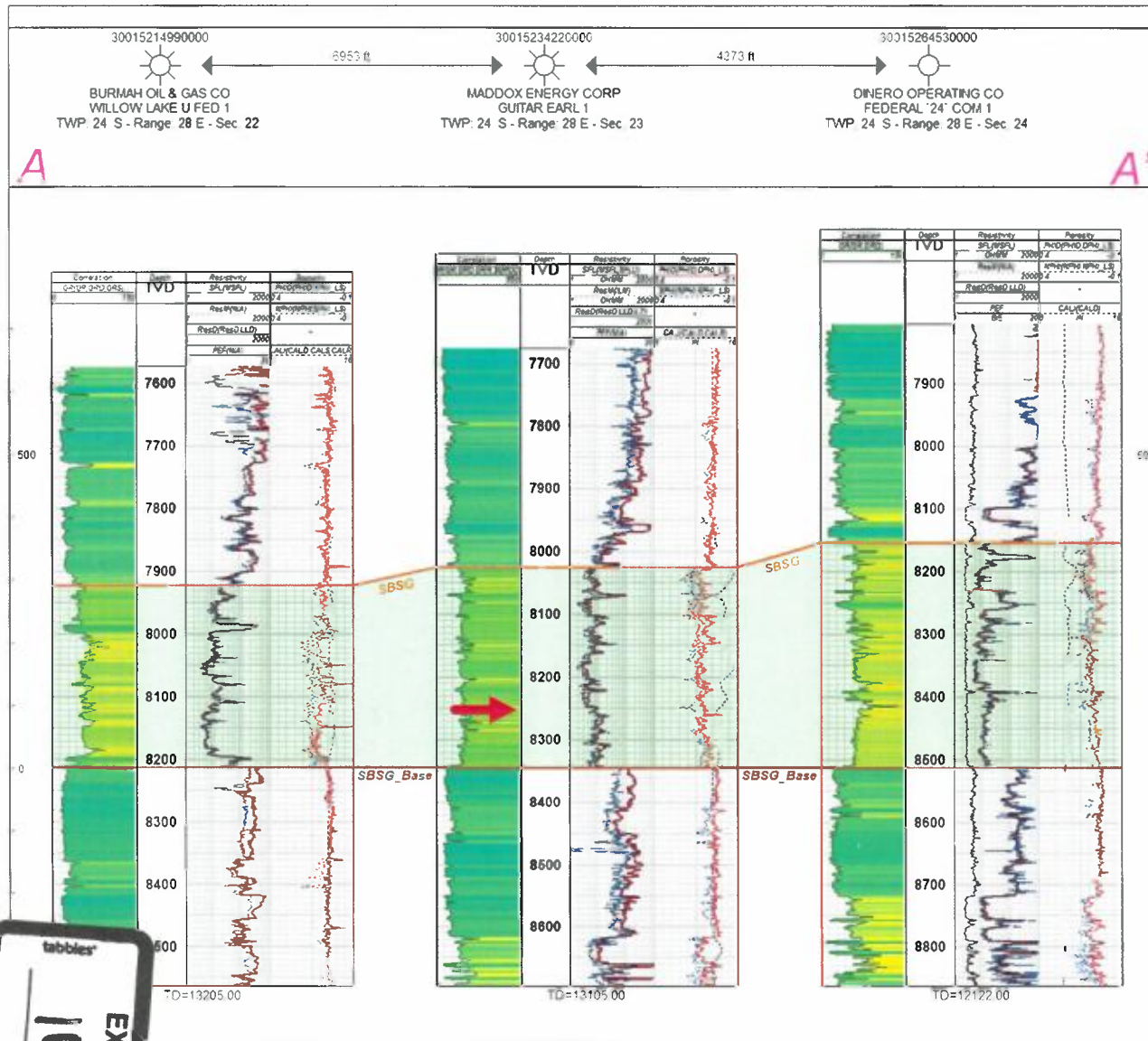
Reference Map for Cross Section



tabbies®
EXHIBIT
10.13

Fiddle Fire 24 Federal Com Unit

Stratigraphic Cross Section (Base Second Bone Spring Datum)

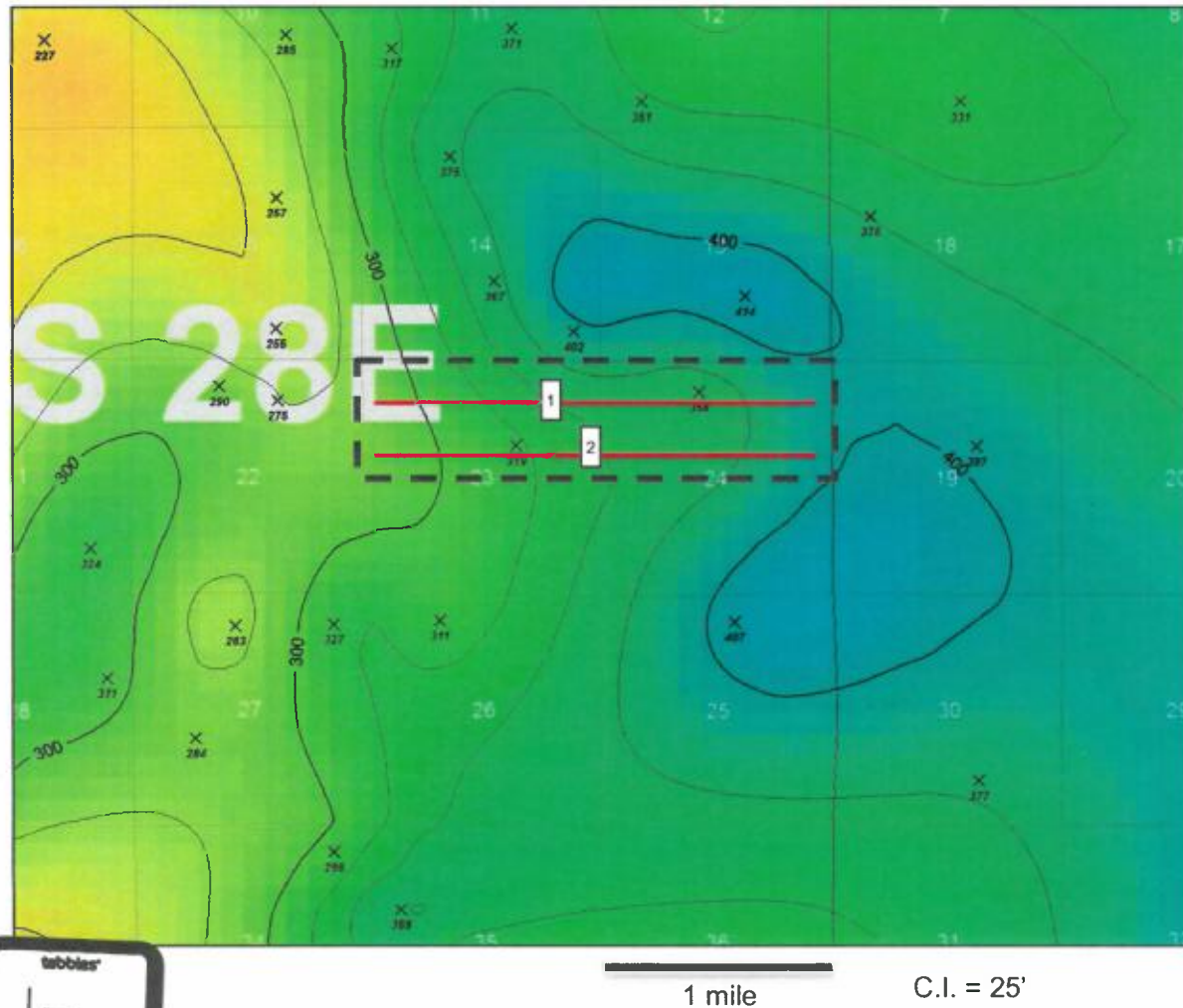


**Producing Zone –
Second Bone Spring Sand**

*Second Bone Spring sand thickens
from West to East across the unit.*

Fiddle Fire 24 Federal Com Unit

Gross Interval Isochore – Second Bone Spring Sand



- 1 Fiddle Fire 24 SB Fed Com 10H
- 2 Fiddle Fire 24 SB Fed Com 11H

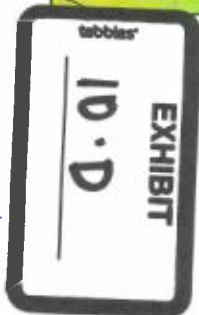
Map Legend*

- Proposed Wells
- Existing SBSG wells

MRO Acreage

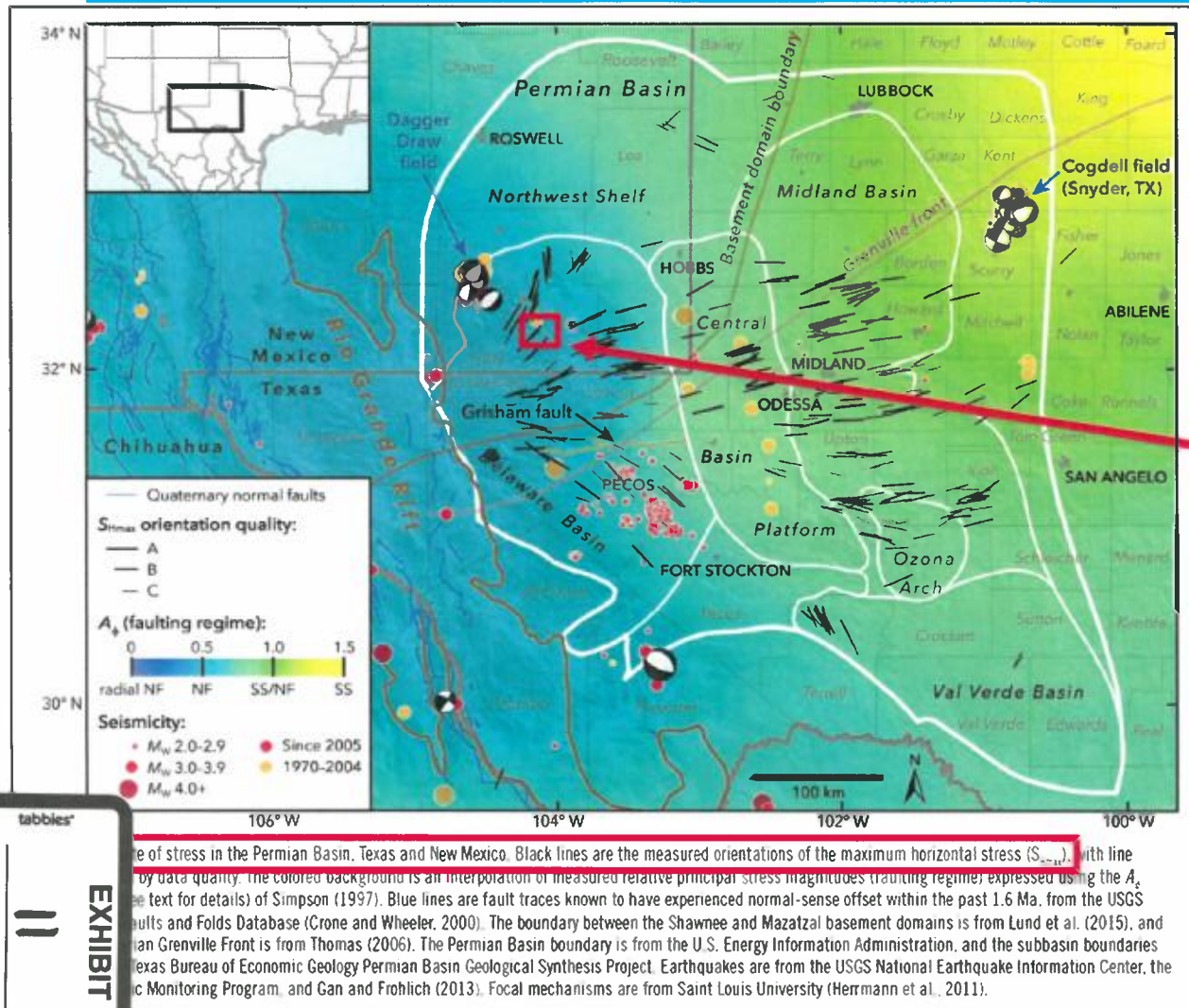
Project Area

The Second Bone Spring sand thickens moving West to East across the unit



Fiddle Fire 24 Federal Com Unit

Preferred Well Orientation - SHmax



Preferred well orientation is either N/S or E/W

As outlined in Snee & Zoback (2018), SHmax is at approximately 45° in this part of Eddy County. As a result, hydraulic fractures will prefer to propagate outwards at 45° regardless if wells are oriented N/S or E/W.

EXHIBIT

Source:

Snee, J.L. & M.D. Zoback, 2018, State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity: *The Leading Edge*, 810-819, <https://doi.org/10.1190/tle37020810.1>.