

**Before the Oil Conservation Division
Examiner Hearing December 12, 2019**

Case No. 20945
Ares 7 SB Fee 7H



Marathon Ares Cases: Nos. 20945

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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. 20945
(ARES 7 SB FEE 7H)**

AFFIDAVIT

STATE OF TEXAS)
) ss.
COUNTY OF MIDLAND)

Jeff Broussard, 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 been qualified by the Oil Conservation Division ("Division") as an expert petroleum landman.

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 this application.

5. I submit the following information pursuant to NMAC 19.15.4.12.A(1) in support of the above referenced compulsory pooling application.

6. The purpose of this application is to force pool working interest owners into the horizontal spacing unit described below, and in the well to be drilled in the unit.



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

8. In this case, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 W/2 of Section 7, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the **Ares 7 SB Fee 7H** well, to be horizontally drilled. The Application is attached hereto as **Exhibit 1**.

9. Attached as **Exhibit 2** is the proposed C-102 for the well. The well will develop the Culebra Bluff; Bone Spring, South, Pool Code, 15011, which is an oil pool.

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

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

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

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

14. Marathon is continuing to negotiate with unleased mineral interest owners and working interest owners and will notify the Division if it reaches an agreement with any unleased mineral interest owners and/or working interest owners.

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

16. **Exhibit 4** contains examples of the well proposal letter that I sent to all working-interest owners and unleased mineral interest owners. The proposal letter identifies the proposed first take point, last take point, and approximate TVD. It also contains separate elections for each well.

17. **Exhibit 5** contains the Authorization for Expenditure for the proposed well. The estimated cost of the well 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.

18. Marathon requests overhead and administrative rates of \$7500.00/month for drilling a well and \$750.00/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.

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

20. Marathon requests that it be designated operator of the well.

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

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

23. Marathon requests that overriding royalty interest owners be pooled.

24. **Exhibit 6** 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 Current-Argus newspaper, showing that notice of this hearing was published on November 26, 2019.

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

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

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

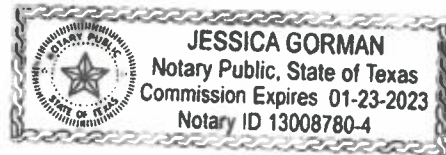
[Signature page follows]

Jeff Broussard
Jeff Broussard

SUBSCRIBED AND SWORN to before me this 9th day of December, 2019 by Jeff Broussard on behalf of Marathon Oil Permian LLC.

Jessica Gorman
Notary Public

My commission expires: 1/23/2023



**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. 20945

APPLICATION

Marathon Oil Permian LLC ("Marathon"), OGRID Number 372098, through its undersigned attorneys, hereby makes an application to the Oil Conservation Division pursuant to the provisions of NMSA (1978), Section 70-2-17, for an order pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying E/2 W/2 of Section 7, Township 23 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 E/2 W/2 of Section 7, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico to form a 160-acre, more or less, spacing unit.
3. Marathon plans to drill the Ares 7 SB Fee 7H well to a depth sufficient to test the Bone Spring formation. This well will be horizontally drilled and will be drilled at orthodox locations under the Division's rules.



66

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

5. 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.

6. Marathon further requests that it be allowed one (1) year between the time the well is drilled and completion of the 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 December 12, 2019, 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 E/2 W/2 of Section 7, Township 23 South, Range 28 East, NMPPM, Eddy County, New Mexico;

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

C. Authorizing Marathon to recover its costs of drilling, equipping and completing the well;

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 well in the event a working interest owner elects not to participate in the well.

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

Respectfully submitted,

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

By: Deana M. Bennett

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

CASE NO. _____: 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 E/2 W/2 of Section 7, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the **Ares 7 SB Fee 7H** well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 2.5 miles Northwest of Loving, 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 Hrazos 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 11, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 15011	³ Pool Name Culebra Bluff; Bone Spring, South
⁴ Property Code	⁵ Property Name ARES 7 SB FEE	⁶ Well Number 7H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 3061'

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
M	7	23S	28E		645	SOUTH	1010	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
C	7	23S	28E		100	NORTH	1980	WEST	EDDY

¹² Dedicated Acres 160.0	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.

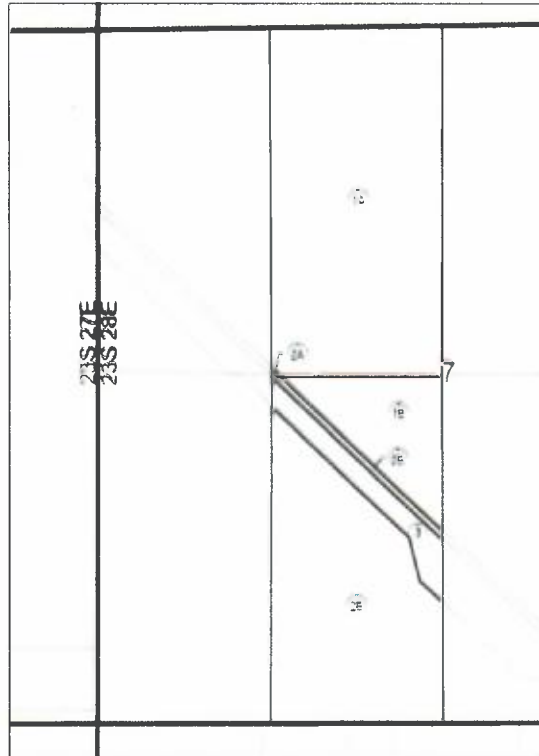
	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or released mineral interest in the land including the proposed bottom hole location or has 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.</p> <p>Signature _____ Date _____</p> <p>Printed Name _____</p> <p>E-mail Address _____</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Date of Survey _____</p> <p>Signature _____</p>
	<p>CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 605206.57' / Y: 482843.69' B - X: 605148.50' / Y: 477508.83' C - X: 603854.62' / Y: 477508.88' D - X: 603890.99' / Y: 482828.58'</p> <p>CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 564024.29' / Y: 482784.37' B - X: 563966.09' / Y: 477449.65' C - X: 562672.24' / Y: 477449.71' D - X: 562708.73' / Y: 482769.28'</p>
	<p>LAST TAKE POINT/BOTTOM HOLE LOCATION 100' FSL 1980' FWL, SECTION 7 NAD 83, SPCS NM EAST X: 604584.36' / Y: 482736.53' LAT: 32.32694869N / LON: 104.12857361W NAD 27, SPCS NM EAST X: 563402.08' / Y: 482677.23' LAT: 32.32682882N / LON: 104.12807577W</p> <p>KICK OFF / FIRST TAKE POINT 100' FSL 1980' FWL, SECTION 7 NAD 83, SPCS NM EAST X: 604586.87' / Y: 477608.85' LAT: 32.31285357N / LON: 104.12866161W NAD 27, SPCS NM EAST X: 563384.58' / Y: 477549.67' LAT: 32.31273360N / LON: 104.12816422W</p> <p>SURFACE HOLE LOCATION 645' FSL 1010' FWL, SECTION 7 NAD 83, SPCS NM EAST X: 603598.82' / Y: 478153.89' LAT: 32.31435684N / LON: 104.13178217W NAD 27, SPCS NM EAST X: 562416.45' / Y: 478094.71' LAT: 32.31423693N / LON: 104.13129462W</p>

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99977173 Convergence: 00°06'56.86466"

EXHIBIT

2

Exhibit "B" Lease Tract Map
Ares 7 SB Fee 7H
E/2 W/2 of Section 7, T23S-R28E– 158.05 acres



- Tract 1A: Fee Acreage
- Tract 1B: Fee Acreage
- Tract 2A: Fee Acreage
- Tract 2B: Fee Acreage
- Tract 3: Fee Acreage



Exhibit "B" Lease Tract Map
Ares 7 SB Fee 7H
E/2 W/2 of Section 7, T23S-R28E– 158.05 acres

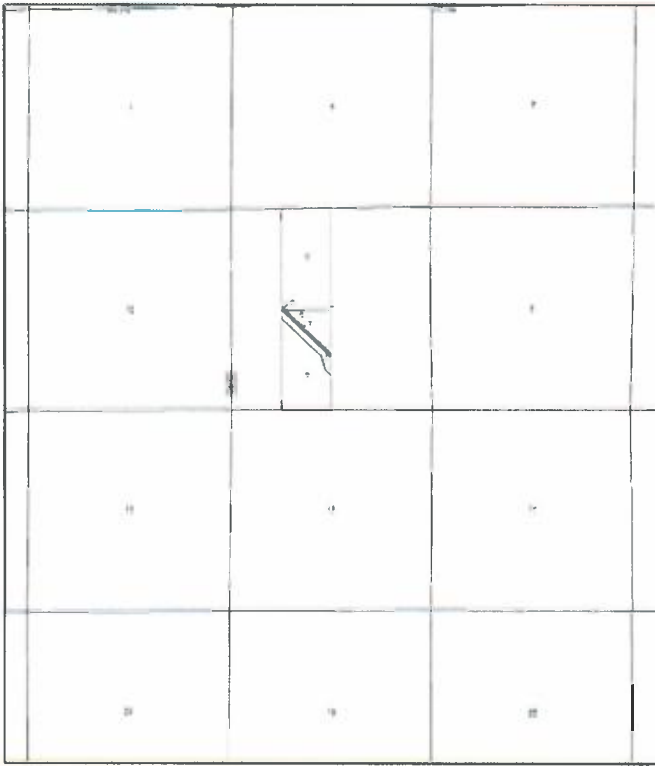


Exhibit “C” Summary of Interests
Ares 7 SB Fee 7H
E/2 W/2 of Section 7, T23S-R28E– 158.05 acres

<u>Committed Working Interest:</u>	52.720155%
Marathon Oil Permian LLC	52.711267%
Fasken Land & Minerals, Ltd.	0.008889%
 <u>Uncommitted Working Interest:</u>	 39.771721%
Tumbler Operating Partners, LLC	39.498131%
Accelerate Resources Operating, LLC	0.273590%
 <u>Unleased Mineral Interest:</u>	 7.508124%
State of New Mexico, Dept. of Transportation	1.236065%
Estate of Esther Montoya Aguilar	1.094361%
Estate of Elias “Lee” Montoya c/o Ramona V. Montoya	1.094361%
Estate of Wanda (Jimenez) Barron	1.094361%
Esther Gomez Hernandez	0.547181%
Maria P. Barron	0.547181%
Ranchito AD4, LP	0.547181%
Hope Morningstar	0.273590%
Mary Lou Hernandez	0.273590%
Margaret Carrasco	0.273590%
Diane Montoya Carrasco	0.218872%
Connie Hernandez	0.218872%
MCM Permian, LLC	0.088917%
 <u>Overriding Royalty Owners:</u>	
Mineral Warehouse #1 LLC	
Stryker Energy, LLC	
Excess Investments, LLC	



Jeffrey Broussard
Landman



Marathon Oil Permian LLC
5555 San Felipe Street
Houston, Texas 77056
Telephone: 713-296-3159
jbroussard1@marathonoil.com

September 5, 2019

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED
7019 0700 0000 8791 1961

Tumbler Energy Partners, LLC
1701 River Run, Suite 306
Fort Worth, TX 76107

Re: Ares 7 Fee 7H Well Proposal
W/2 of Section 28, Township 23 South, Range 28 East
Eddy County, New Mexico

Dear Tumbler Energy Partners, LLC:

The records of Marathon Oil Permian LLC ("Marathon") indicates that you own an unleased mineral interest in the W/2 Section 7, 23S-28E. As an unleased mineral owner, Marathon would like to offer you the opportunity to lease your minerals to Marathon at the below lease terms:

This offer to lease terminates October 7, 2019 and is subject to due diligence and title verification satisfactory to Marathon. Should you be agreeable to this offer to lease, please sign the lease form in the presence of a notary and complete the IRS Form W-9 included in this proposal and return them in the enclosed self-addressed, stamped envelope.

Marathon proposes the drilling of the following well located in Section 7, 23S-28E, Eddy County, New Mexico. Should you not elect to lease, Marathon would also like to offer you the opportunity to participate in the drilling of the well as a working interest owner.

Well Name	SHL	BHL	Proration Unit	Target TVD	Est. MD
Ares 7 SB Fee 7H	1010' FWL & 645' FNL	1980' FWL & 100' FNL	E/2 W/2 of Sec. 7	7852'	13313'

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

Marathon proposes drilling the well under the terms of the 1989 AAPL JOA, and if you are interested in participating, please execute and return the enclosed JOA. The JOA has these general provisions:

- 100%/300%/300% non-consent penalty
- \$7,500/\$750 drilling and producing rates



- Contract area of W/2 of Section 7, 23S-28E, covering the depths from the top of the Bone Spring formation to the base of the Wolfcamp formation

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

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,



Jeffrey Broussard
Marathon Oil Permian LLC

_____ Tumbler Energy Partners, LLC elects to participate in the drilling, completing, and equipping of the Ares 7 SB Fee 7H.

_____ Tumbler Energy Partners, LLC elects NOT to participate in the drilling, completing, and equipping of the Ares 7 SB Fee 7H.

Tumbler Energy Partners, LLC

By: _____

Print Name: _____

Title: _____

Date: _____

Jeffrey Broussard
Landman



Marathon Oil Permian LLC
5555 San Felipe Street
Houston, Texas 77056
Telephone: 713-296-3159
jbroussard1@marathonoil.com

September 5, 2019

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED
7019 0700 0000 8791 1923

Tumbler Operating Partners, LLC
1701 River Run, Suite 306
Fort Worth, TX 76107

Re: Ares 7 Fee 7H Well Proposal
W/2 of Section 7, Township 23 South, Range 28 East
Eddy County, New Mexico

Dear Tumbler Operating Partners, LLC:

Marathon Oil Permian LLC ("Marathon") proposes the drilling of the following well located in Section 7, 23S-28E, Eddy, New Mexico.

Well Name	SHL	BHL	Proration Unit	Target TVD	Est. MD
Ares 7 SB Fee 7H	1010' FWL & 645' FNL	1980' FWL & 100' FNL	E/2 W/2 of Sec. 7	7852'	13313'

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

Marathon proposes drilling the well under the terms of the 1989 AAPL JOA. Enclosed is a draft of the JOA covering the contract area. The JOA has the following general provisions:

- 100%/300%/300% non-consent penalty
- \$7,500/\$750 drilling and producing rates
- Contract area of W/2 of Section 7, 23S-28E, covering from the top of the Bone Spring Formation to the base of the Wolfcamp formation

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

If you do not wish to participate, Marathon proposes to acquire your interest via term assignment at the following terms:

•

This term assignment offer terminates on October 7, 2019 and is subject to due diligence and title verification satisfactory to Marathon.

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,



Jeffrey Broussard
Marathon Oil Permian LLC

_____ Tumbler Operating Partners, LLC elects to participate in the drilling, completing, and equipping of the Ares 7 SB Fee 7H.

_____ Tumbler Operating Partners, LLC elects NOT to participate in the drilling, completing, and equipping of the Ares 7 SB Fee 7H.

Tumbler Operating Partners, LLC

By: _____

Print Name: _____

Title: _____

Date: _____

Jeffrey Broussard
Landman



Marathon Oil Permian LLC
5555 San Felipe Street
Houston, Texas 77056
Telephone: 713-296-3159
jbroussard1@marathonoil.com

September 5, 2019

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED
7019 0700 0000 8791 2098

Genevieve Andrews
2001 Peppertree Court
Carlsbad, NM 88220

Re: Ares 7 Fee 7H Well Proposal
W/2 of Section 28, Township 23 South, Range 28 East
Eddy County, New Mexico

Dear Genevieve Andrews:

The records of Marathon Oil Permian LLC ("Marathon") indicates that you own an unleased mineral interest in the W/2 Section 7, 23S-28E. As an unleased mineral owner, Marathon would like to offer you the opportunity to lease your minerals to Marathon at the below lease terms:

This offer to lease terminates October 7, 2019 and is subject to due diligence and title verification satisfactory to Marathon. Should you be agreeable to this offer to lease, please sign the lease form in the presence of a notary and complete the IRS Form W-9 included in this proposal and return them in the enclosed self-addressed, stamped envelope.

Marathon proposes the drilling of the following well located in Section 7, 23S-28E, Eddy County, New Mexico. Should you not elect to lease, Marathon would also like to offer you the opportunity to participate in the drilling of the well as a working interest owner.

Well Name	SHL	BHL	Proration Unit	Target TVD	Est. MD
Ares 7 SB Fee 7H	1010' FWL & 645' FNL	1980' FWL & 100' FNL	E/2 W/2 of Sec. 7	7852'	13313'

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

Marathon proposes drilling the well under the terms of the 1989 AAPL JOA, and if you are interested in participating, please execute and return the enclosed JOA. The JOA has these general provisions:

- 100%/300%/300% non-consent penalty
- \$7,500/\$750 drilling and producing rates

- Contract area of W/2 of Section 7, 23S-28E, covering the depths from the top of the Bone Spring formation to the base of the Wolfcamp formation

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

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,



Jeffrey Broussard
Marathon Oil Permian LLC

_____ Genevieve Andrews elects to participate in the drilling, completing, and equipping of the Ares 7 SB Fee 7H.

_____ Genevieve Andrews elects NOT to participate in the drilling, completing, and equipping of the Ares 7 SB Fee 7H.

Genevieve Andrews

By: _____

Print Name: _____

Title: _____

Date: _____

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

DATE 8/15/2019
 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 Culebra Bluff; Bone FORMATION: 2ND BONE SPRINGS WILDCAT EXPLORATION
 Lease/Facility Ares 7 SB Fee 7H DEVELOPMENT RECOMPLETION
 Location EDDY COUNTY X EXPLOITATION WORKOVER
 Prospect MALAGA

Est Total Depth 13,333 Est Drilling Days Est Completion Days 5.5

LOCATION COST - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	100,500
7001250	Land Broker Fees and Services	67,500
TOTAL LOCATION COST - INTANGIBLE		168,000

DRILLING COST - TANGIBLE

7012050	Conductor Pipe	28,000
7012050	Surface Casing	38,000
7012050	Intermediate Casing 1	66,000
7012050	Intermediate Casing 2	-
7012050	Production Casing	213,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	10,000
7012550	Drilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
TOTAL DRILLING - TANGIBLE		434,000

DRILLING COST - INTANGIBLE

7019200	Drilling Rig Mob/Demob	65,000
7019220	Drilling Rig - day work/footage	371,250
7019040	Directional Drilling Services	105,000
7019020	Cement and Cementing Service Surface	15,000
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	-
7019020	Cement and Cementing Service Production	110,000
7019140	Mud Fluids & Services	57,000
7012310	Solids Control equipment	23,000
7012020	BHs	72,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	42,000
7019140	Fuel (Mud)	18,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	-
7019150	Mud Logging+geosteering	9,000
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	16,875
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	55,000
7018150	Rig Equipment and Misc.	6,875
7001110	Telecommunications Services	5,000
7001120	Consulting Services	64,625
7001400	Safety and Environmental	22,000
7018120	Rental Buildings (trailers)	11,000
7019310	Coring (sidewalls & analysis)	-
7011010	7% Contingency & Taxes	129,894
TOTAL DRILLING - INTANGIBLE		\$1,551,519

TOTAL DRILLING COST \$1,985,519

COMPLETION - TANGIBLE

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

EXHIBIT

5

tabbies

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

DATE 8/15/2019

Asset Team PERMIAN
Field Culebra Bluff; Bone FORMATION: 2ND BONE SPRINGS
Lease/Facility Ares 7 SB Fee 7H

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)	210,000
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)	425,000
7019320	Fracturing Services	1,784,200
7019330	Perforating	175,000
7019360	Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids)	218,000
7016180	Freight - Truck (haul pipe; drlg & compl)	15,000
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	35,000
7001110	Telecommunications Services	70,000
7001400	Safety and Environmental	-
7001120	Consulting Services	60,000
7018150	Zipper Manifold	120,000
7019300	Frack Stack Rentals	45,000
7016190	Freight (Transportation Services)	-
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	75,000
7018120	Rental Buildings (trailers)	15,000
7000030	Contract Labor - Pumping (pump-down pumps)	30,000
7011010	8% Contingency & Taxes	220,700
TOTAL COMPLETION - INTANGIBLE		\$3,522,900

TOTAL COMPLETION COST

\$3,537,900

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	IBE 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	\$ 168,000
TOTAL DRILLING COST	\$ 1,985,519
TOTAL COMPLETIONS COST	\$ 3,537,900
TOTAL SURFACE EQUIPMENT COST	\$ 840,149
TOTAL ARTIFICIAL LIFT COST	\$ 110,000
GRAND TOTAL COST	\$6,641,568

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. 20945

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, provided herewith, and that proof of receipt is attached hereto.



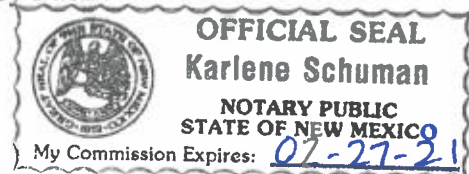
Deana M. Bennett

SUBSCRIBED AND SWORN to before me this 5th day of December, 2019 by Deana M. Bennett.



Notary Public

My commission expires: 02-27-21





MODRALL SPERLING

L A W Y E R S

November 20, 2019

Deana M. Bennett
505.848.1834
dmb@modrall.com

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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

CASE NO. 20945

TO: AFFECTED PARTIES

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

In Case No. 20945, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 W/2 of Section 7, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the **Ares 7 SB Fee 7H** well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed.

This case has been set for hearing before a Division Examiner on December 12, 2019, starting at 8:15 a.m. The hearing will be held in Porter Hall in the Oil Conservation Division's Santa Fe Office located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505. 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.

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

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

Page 2

Thursday preceding the scheduled hearing date, with a copy delivered to the undersigned.

Sincerely,

A handwritten signature in cursive script that reads "Deana M. Bennett".

Deana M. Bennett

Attorney for Applicant

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
11/20/2019



Firm Mailing Book ID: 179496

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0065 9607 49	DSD Energy Resources, LLC PO Box 229 Fort Worth TX 76101	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
2	9314 8699 0430 0065 9607 63	Fasken Land & Minerals, LTD 303 W. Wall St., Suite 1800 Midland TX 79701	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
3	9314 8699 0430 0065 9607 70	Llano Natural Resources, LLC 4920 S. Loop 289, Suite 206 Lubbock TX 79414	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
4	9314 8699 0430 0065 9607 87	OXY USA WTP Limited Partnership 5 Greenway Plaza, Suite 110 Houston TX 77046	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
5	9314 8699 0430 0065 9607 94	Tumbler Operating Partners LLC 1701 River Run, Suite 306 Fort Worth TX 76107	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
6	9314 8699 0430 0065 9608 00	1836 Royalty Partners, LLC 306 W. Wall St., Suite 620 Midland TX 79701	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
7	9314 8699 0430 0065 9608 17	Connie Hernandez 3528 Grandi Rd. Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
8	9314 8699 0430 0065 9608 24	Diane Montoya Carrasco 3414 Grandi Rd. Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
9	9314 8699 0430 0065 9608 31	Esther Gomez Hernandez 1509 W. Greene Street Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
10	9314 8699 0430 0065 9608 48	Esther Montoya Aguilar 1414 Ortega Street Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
11	9314 8699 0430 0065 9608 55	Hope Morningstar 7821 Seward Ave. Cincinnati OH 45231	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
12	9314 8699 0430 0065 9608 62	Maria P. Barron 1612 W. Bronson St. Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
13	9314 8699 0430 0065 9608 79	MCM Exploration Company, LLC PO Box 1540 Midland TX 79702	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
14	9314 8699 0430 0065 9608 86	PBEX Resources LLC PO Box 10250 Midland TX 79702	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
15	9314 8699 0430 0065 9608 93	Ranchito AD4, LP 2100 Ross Ave., suite 1870 Dallas TX 75201	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice

6102 02 NOV

25

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
11/20/2019



Firm Mailing Book ID: 179496

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
16	9314 8699 0430 0065 9609 09	State of New Mexico Department of Transportation PO Box 1148 Santa Fe NM 87501	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
17	9314 8699 0430 0065 9609 16	The Estate of Elias Montoya aka Lee Montoya c/o Ramona v. Montoya 2301 Sage Street Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
18	9314 8699 0430 0065 9609 23	Tumbler Energy Partners LLC 1701 River Run, Suite 306 Fort Worth TX 76107	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
19	9314 8699 0430 0065 9609 30	Wanda (Jimenez) Barron PO Box 2204 Carlsbad NM 88221	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
20	9314 8699 0430 0065 9609 47	Dick Jackson 411 N. Maple Ave. Mountain Grove MO 65711	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
21	9314 8699 0430 0065 9609 54	Stryker Energy, LLC PO Box 53448 Houston TX 77052	\$1.15	\$3.50	\$1.60	\$0.00	81363-0190 Ares Notice
Totals:			\$24.15	\$73.50	\$33.60	\$0.00	
			Grand Total:		\$131.25		

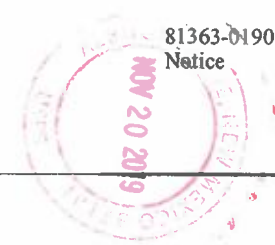
List Number of Pieces
Listed by Sender

Total Number of Pieces
Received at Post Office

Postmaster:
Name of receiving employee

Dated:

21



24

Transaction Report Details - CertifiedPro.net
 Firm Mail Book ID= 179496
 Generated: 12/5/2019 10:50:49 AM

USPS Article Number	Reference Number	Name 1	Name 2	City	State	Zip	Mailing Status	Service Options	Mail Delivery Date
9314869904300065960954	81363-0190 Ares	Stryker Energy, LLC		Houston	TX	77052	Delivered	Return Receipt - Electronic, Certified Mail	11-26-2019
9314869904300065960947	81363-0190 Ares	Dick Jackson		Mountain Grove	MO	65711	Forwarded	Return Receipt - Electronic, Certified Mail	
9314869904300065960930	81363-0190 Ares	Wanda (Jimenez) Barron		Carlsbad	NM	88221	To be Returned	Return Receipt - Electronic, Certified Mail	
9314869904300065960923	81363-0190 Ares	Tumbler Energy Partners LLC		Fort Worth	TX	76107	Delivered	Return Receipt - Electronic, Certified Mail	11-25-2019
9314869904300065960916	81363-0190 Ares	The Estate of Elias Montoya aka Lee Montoya	c/o Ramona v. Montoya	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	11-23-2019
9314869904300065960909	81363-0190 Ares	State of New Mexico Department of Transportation		Santa Fe	NM	87501	Delivered	Return Receipt - Electronic, Certified Mail	11-22-2019
9314869904300065960893	81363-0190 Ares	Ranchito AD4, LP		Dallas	TX	75201	Mailed	Return Receipt - Electronic, Certified Mail	
9314869904300065960886	81363-0190 Ares	PBEX Resources LLC		Midland	TX	79702	Mailed	Return Receipt - Electronic, Certified Mail	
9314869904300065960879	81363-0190 Ares	MCM Exploration Company, LLC		Midland	TX	79702	Delivered	Return Receipt - Electronic, Certified Mail	12-02-2019
9314869904300065960862	81363-0190 Ares	Maria P. Barron		Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	11-30-2019
9314869904300065960855	81363-0190 Ares	Hope Morningstar		Cincinnati	OH	45231	Delivered	Return Receipt - Electronic, Certified Mail	11-25-2019
9314869904300065960848	81363-0190 Ares	Esther Montoya Aguilar		Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	11-25-2019
9314869904300065960831	81363-0190 Ares	Esther Gomez Hernandez		Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	12-02-2019
9314869904300065960824	81363-0190 Ares	Diane Montoya Carrasco		Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	11-23-2019
9314869904300065960817	81363-0190 Ares	Connie Hernandez		Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	11-23-2019
9314869904300065960800	81363-0190 Ares	1836 Royalty Partners, LLC		Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	11-26-2019
9314869904300065960794	81363-0190 Ares	Tumbler Operating Partners LLC		Fort Worth	TX	76107	Mailed	Return Receipt - Electronic, Certified Mail	
9314869904300065960787	81363-0190 Ares	OXY USA WTP Limited Partnership		Houston	TX	77046	Delivered	Return Receipt - Electronic, Certified Mail	11-25-2019
9314869904300065960770	81363-0190 Ares	Llano Natural Resources, LLC		Lubbock	TX	79414	Delivered	Return Receipt - Electronic, Certified Mail	11-25-2019
9314869904300065960763	81363-0190 Ares	Fasken Land & Minerals, LTD		Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	11-25-2019
9314869904300065960749	81363-0190 Ares	DSD Energy Resources, LLC		Fort Worth	TX	76101	Delivered	Return Receipt - Electronic, Certified Mail	12-02-2019

Carlsbad Current Argus.

PART OF THE USA TODAY NETWORK

Affidavit of Publication

Ad # 0003918831

This is not an invoice

MODRALL SPERLING

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:

November 26, 2019


Legal Clerk

Subscribed and sworn before me this November 26, 2019:


State of WI, County of Brown
NOTARY PUBLIC
8-25-23
My commission expires

CASE NO. 20945: Notice to all affected parties, as well as the heirs and devisees of DSD Energy Resources LLC, Fasken Land & Minerals LTD., Llano Natural Resources LLC, OXY USA WTP Limited Partnership, Tumbler Operating Partners LLC, 1836 Royalty Partners LLC, Connie Hernandez, Diane Montoya, Esther Gomez Hernandez, Esther Montoya Aguilar, Hope Morningstar, Maria P. Barron, MCM Exploration Company LLC, PBEX Resources LLC, Ranchito AD4 LP, State of New Mexico Dept. of Transportation, Estate of Elias Montoya aka Lee Montoya, Tumbler Energy Partners, Wanda Jimenez Barron, Dick Jackson, Stryker Energy 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 December 12, 2019, 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 E/2 W/2 of Section 7, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the **Ares 7 SB Fee 7H** well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 2.5 miles Northwest of Loving, New Mexico.

November 26, 2019

SHELLY HORA
Notary Public
State of Wisconsin

Ad # 0003918831

PO #: CASE NO. 20945

of Affidavits : 1

This is not an invoice

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. 20945
(ARES 7 SB FEE 7H)

AFFIDAVIT

STATE OF TEXAS)
) ss.
COUNTY OF HARRIS)

Rebecca Horne, 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 been qualified by the Oil Conservation Division ("Division") as an expert petroleum geologist.

2. **Exhibit 7** is a locator map showing the approximate location of the proposed unit in relation to the Capitan Reef.

3. **Exhibit 8** is a wellbore schematic showing the proposed well within the unit, along with Marathon's permitted Ares Wolfcamp wells.

4. The slides behind **Tab 9** are the geology study I prepared for the well.

5. **Exhibit 9-A** is structure map of the base of the Second Bone Spring Sand. The proposed project area is identified by a black-dashed box, and the proposed well is identified by turquoise line and the Number 1.

6. The contour interval used for Exhibit 9-A is 25 feet.

7. Exhibit 9-A shows that the structure dips to the east.



8. **Exhibit 9-B** identifies four wells in the vicinity of the proposed Second Bone Spring Sand well, shown by a line of cross-section running from A to A'.

9. **Exhibit 9-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 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. In my opinion, the Second Bone Spring sand is continuous across the proposed unit.

11. **Exhibit 9-D** is a Gross Interval Isochore Second Bone Spring Sand. The formation is relatively consistent thickness across the proposed 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 units will contribute more or less equally to production.

13. **Exhibit 10** 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 North/South laterals to maximize lateral length with respect to Marathon's acreage.

15. Exhibits 7-10 were prepared by my or under my supervision or compiled from company business records.

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

[Signature page follows]

Rebecca Horne
Rebecca Horne

SUBSCRIBED AND SWORN to before me this 11 day of December, 2019 by Rebecca Horne, on behalf of Marathon Oil Permian LLC.

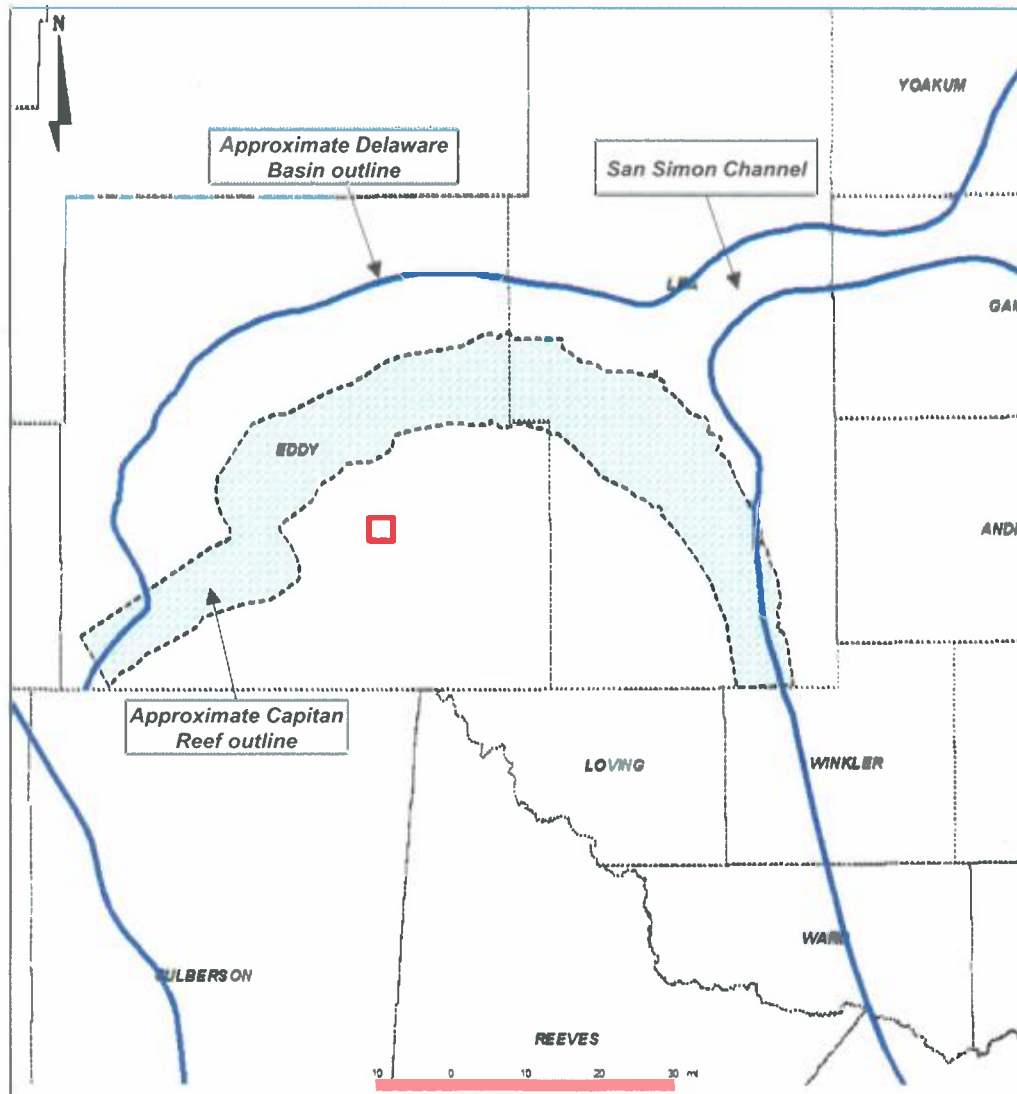
Cindy Daniels
Notary Public

My commission expires: 4-26-22



Ares 7 SB Fee Unit

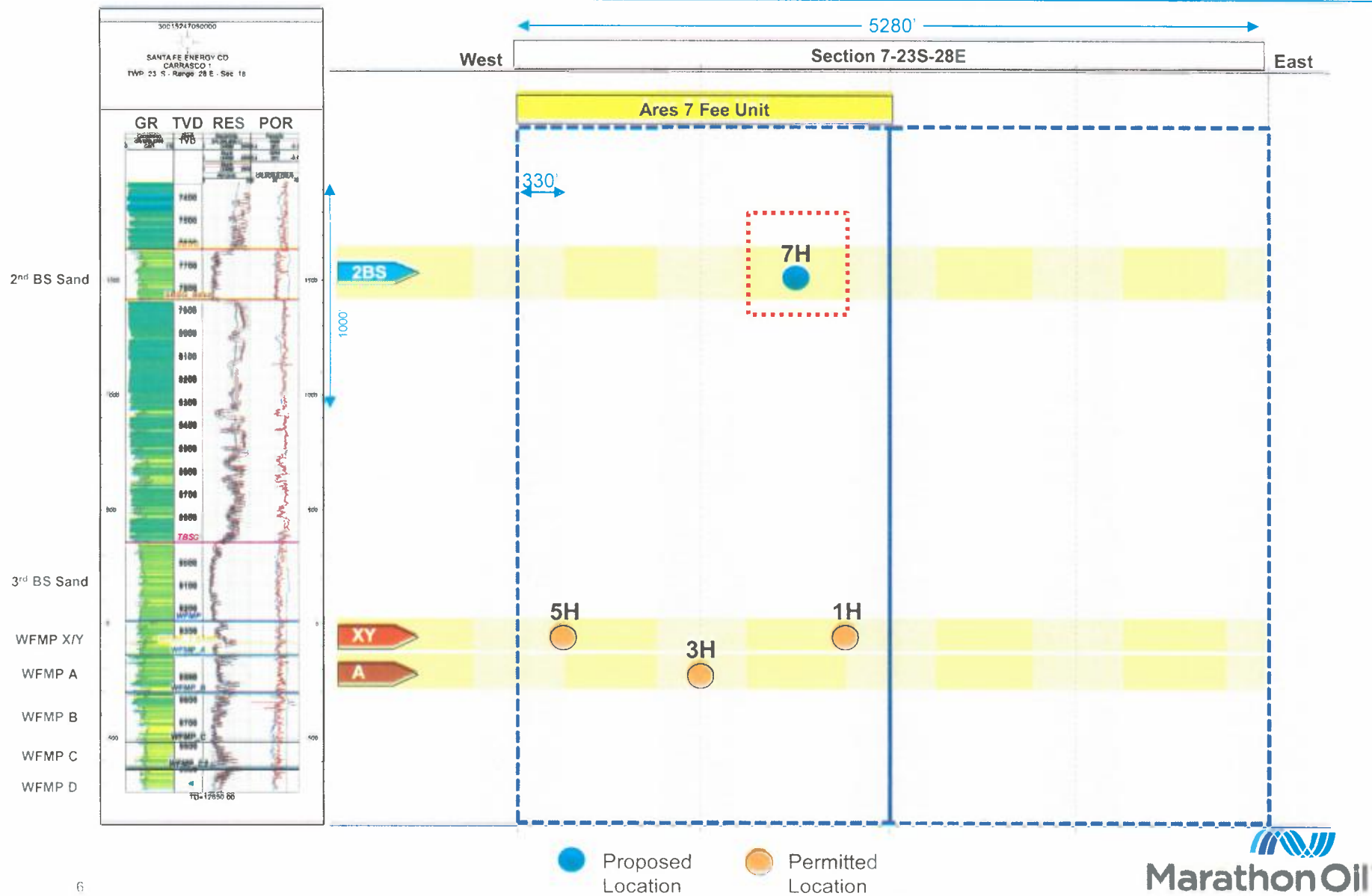
Locator Map



- Approximate location of proposed Ares 7 SB Fee 7H well shown with red box
- Located basinward of the Capitan Reef
- Mid Eddy county

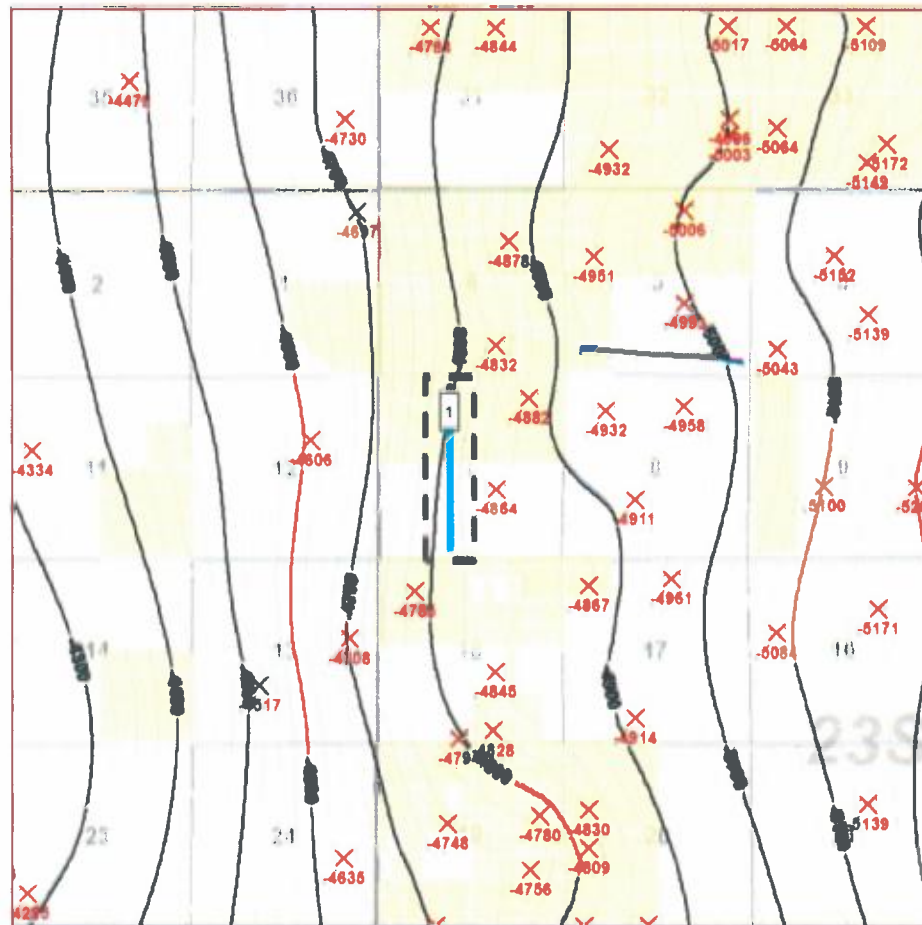
Ares 7 SB Fee Unit

Wellbore Schematic



Ares 7 SB Fee Unit

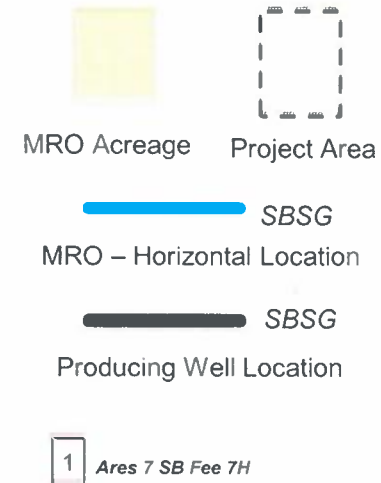
Structure Map for Bone Spring Wells – Base of Second Bone Spring Sand (TVDSS)



C.I. = 25'

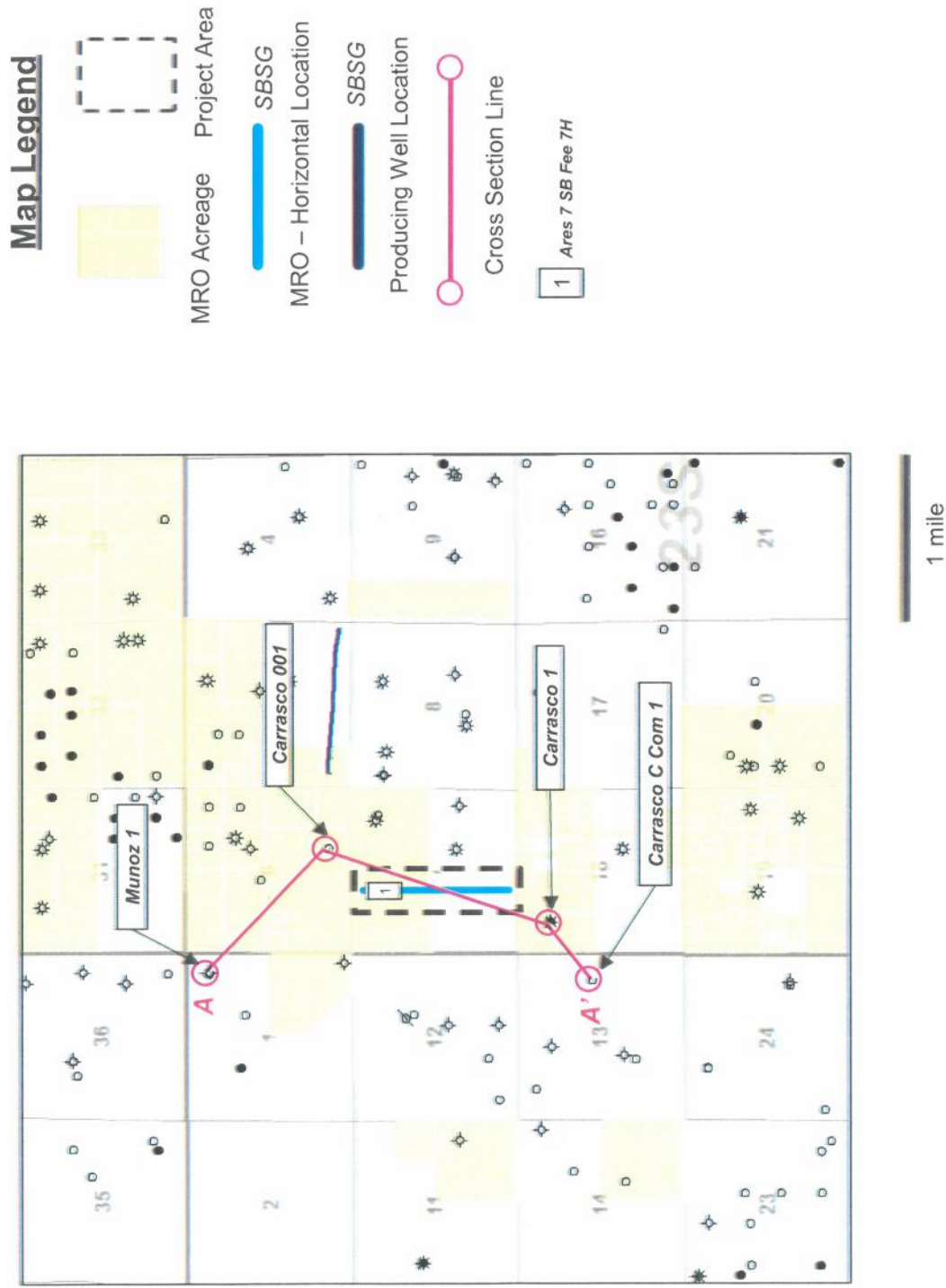
1 mile

Map Legend



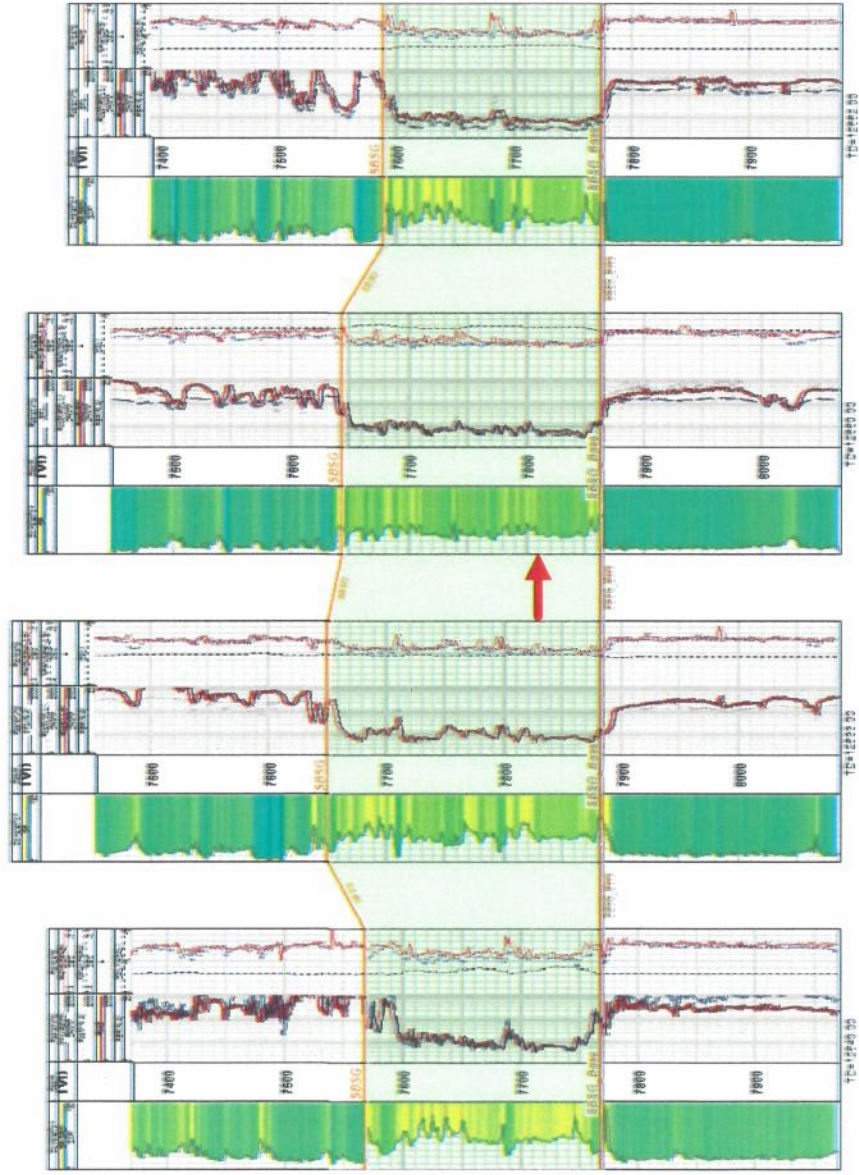
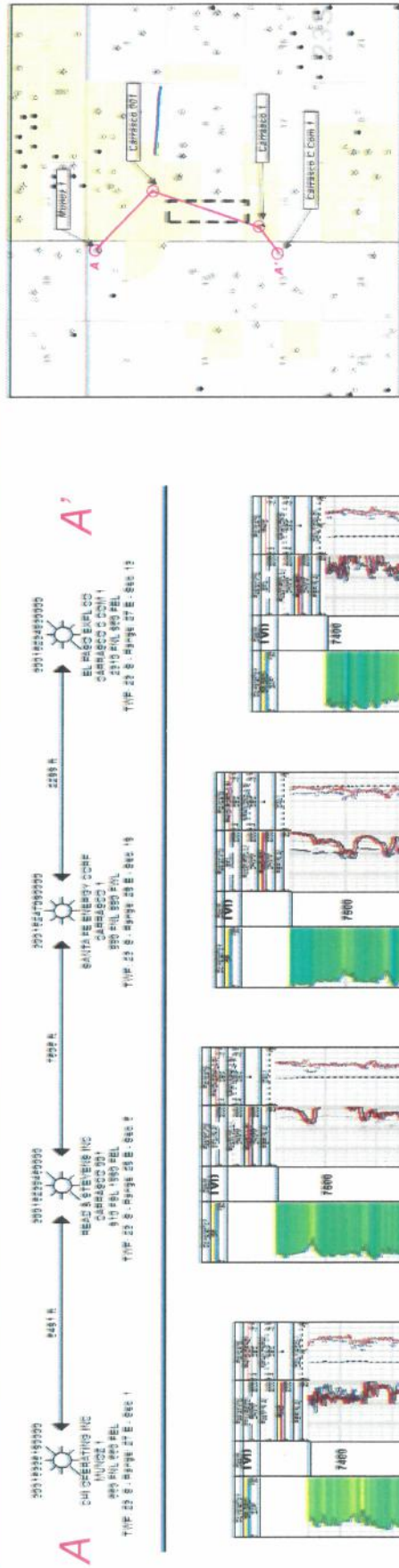
Ares 7 SB Fee Unit

Reference Map for Cross Section – Bone Spring Wells



Ares 7 SB Fee Unit

Stratigraphic Cross Section (Base Second Bone Spring Sand Datum)

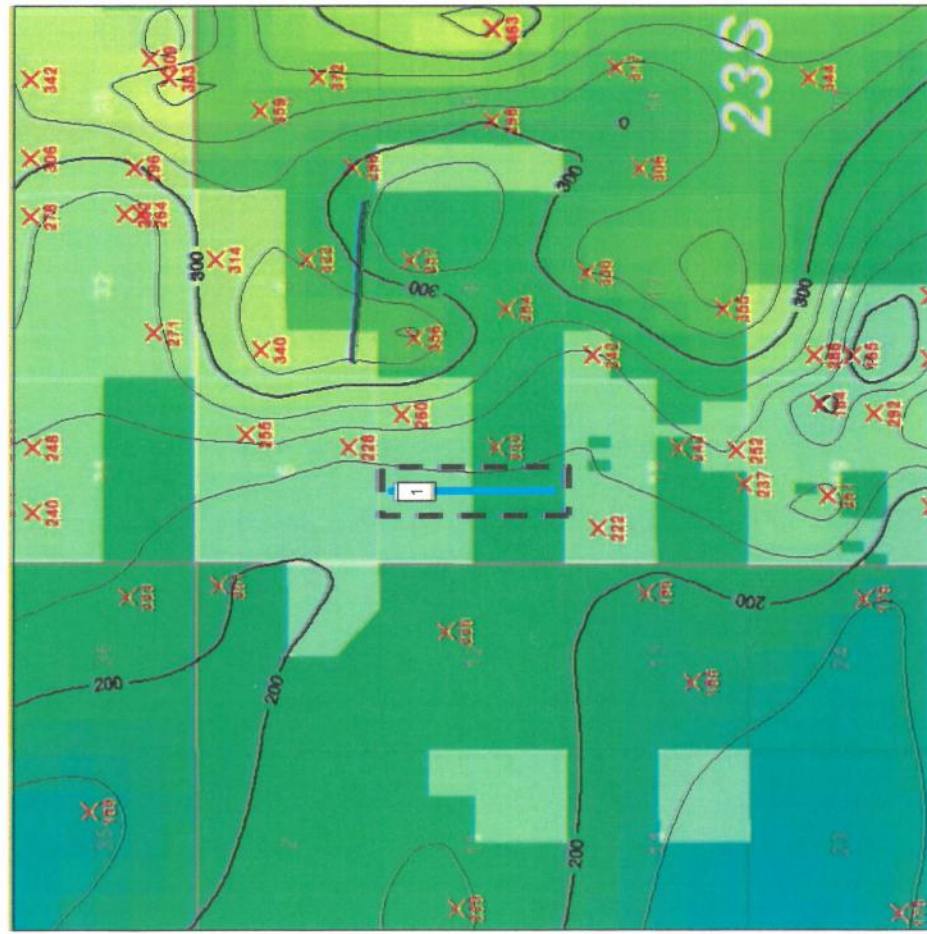


Producing zone is continuous across unit with relatively consistent thickness.

Producing Zone - Second Bone Spring Sand

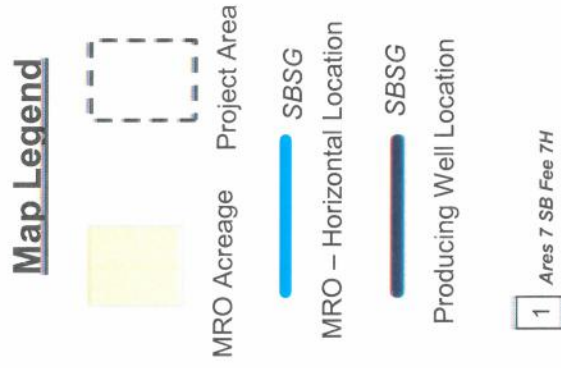
Ares 7 SB Fee Unit

Gross Interval Isochore – Second Bone Spring Sand



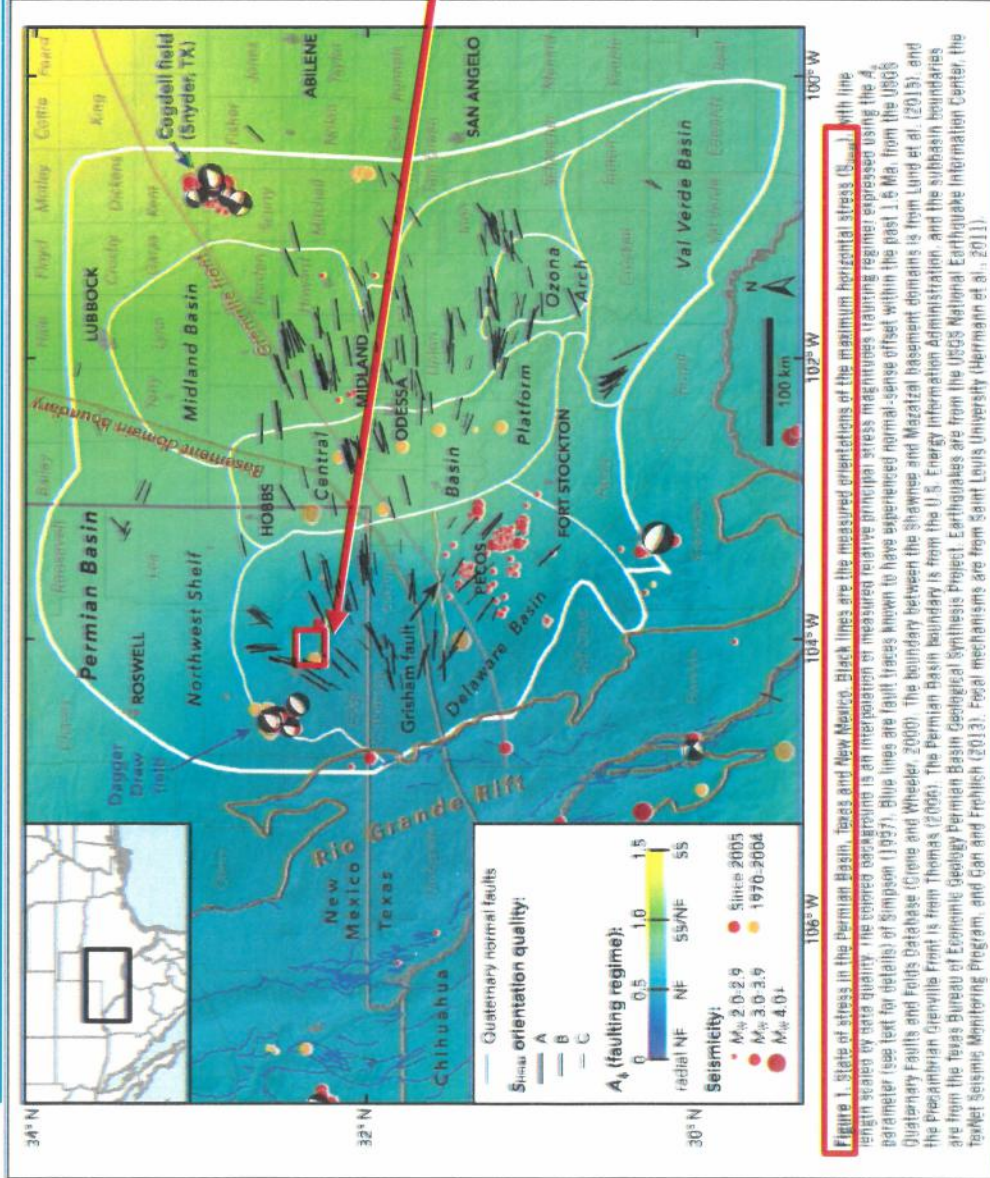
C.I. = 25'

1 mile



Ares 7 SB Fee Unit

Preferred Well Orientation - SHmax



Preferred well orientation N/S to maximize lateral length with respect to Marathon's acreage.

As outlined in Snee & Zoback (2018), SHmax is at approximately 45 degrees in mid Eddy county. Therefore, hydraulic fractures will propagate out at ~45 degrees. Production is expected to be the same for wells oriented either N/S or EW.

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>.