

**Before the Oil Conservation Division
Examiner Hearing September 20, 2018**

Case No. 16421

Elizabeth Reed Fed 22-33-26 SB 4H

And

Case No. 16423

Elizabeth Reed Fed 22-33-26 TB 7H and Elizabeth Reed Fed 22-33-26 SB 8H



MarathonOil®

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

**AMENDED APPLICATION OF MARATHON
OIL PERMIAN LLC FOR APPROVAL
OF A NON-STANDARD SPACING AND
PRORATION UNIT AND COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO.**

CASE NO. 16421

AMENDED 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: (1) to the extent necessary, approving the creation of a non-standard Bone Spring spacing and proration unit; and, (2) pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the W/2 W/2 of Section 26, Township 22 South, Range 33 East, NMPM, Lea 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 W/2 W/2 of Section 26, Township 22 South, Range 33 East, NMPM, Lea County, New Mexico to form a 160-acre, more or less, spacing unit.
3. Marathon plans to drill the **Elizabeth Reed Federal 22-33-26 SB 4H** well to a depth sufficient to test the Bone Spring formation. This well will be horizontally drilled.
4. This well will comply with the Division’s setback requirements.

5. 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.

6. The creation of a non-standard spacing and proration unit and 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 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 September 20, 2018, and after notice and hearing as required by law, the Division enter its order:

A. To the extent necessary, approving the creation of a non-standard spacing and proration unit;

B. Pooling all mineral interests in the Bone Spring formation underlying a horizontal spacing unit underlying the W/2 W/2 of Section 26, Township 22 South, Range 33 East, NMPM, Lea County, New Mexico;

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

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

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

F. 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.

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

Respectfully submitted,

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

By: Deana M. Bennett

Jennifer Bradfute
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. 16421: Amended Application of Marathon Oil Permian LLC for a non-standard spacing and proration unit and compulsory pooling, Lea County, New Mexico.

Applicant seeks an order from the Division: (1) to the extent necessary, approving the creation of a non-standard Bone Spring spacing and proration unit; and (2) pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the W/2 W/2 of Section 26, Township 22 South, Range 33 East, NMPM, Lea County, New Mexico. This proposed spacing unit will be dedicated to the **Elizabeth Reed Federal 22-33-26 SB 4H** well, to be horizontally drilled. The producing area for the 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 23 miles west south west of Eunice, New Mexico.

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

**AMENDED APPLICATION OF MARATHON
OIL PERMIAN LLC FOR APPROVAL
OF A NON-STANDARD SPACING AND
PRORATION UNIT AND COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO.**

CASE NO. 16423

AMENDED 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: (1) to the extent necessary, approving the creation of a non-standard Bone Spring spacing and proration unit; and (2) pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 W/2 of Section 26, Township 22 South, Range 33 East, NMPM, Lea 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 W/2 of Section 26, Township 22 South, Range 33 East, NMPM, Lea County, New Mexico to form a 160-acre, more or less, spacing unit.
3. Marathon plans to drill the **Elizabeth Reed Federal 22-33-26 TB 7H and Elizabeth Reed Federal 22-33-26 SB 8H** wells to a depth sufficient to test the Bone Spring formation. These wells will be horizontally drilled.
4. These wells will comply with the Division’s setback requirements.

5. 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 wells or to otherwise commit their interests to the wells.

6. The creation of a non-standard spacing and proration unit and 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 wells 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 20, 2018, and after notice and hearing as required by law, the Division enter its order:

A. To the extent necessary, approving the creation of a non-standard spacing and proration unit;

B. Pooling all mineral interests in the Bone Spring formation underlying a horizontal spacing unit underlying the E/2 W/2 of Section 26, Township 22 South, Range 33 East, NMPM, Lea County, New Mexico;

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

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

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

F. 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.

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

Respectfully submitted,

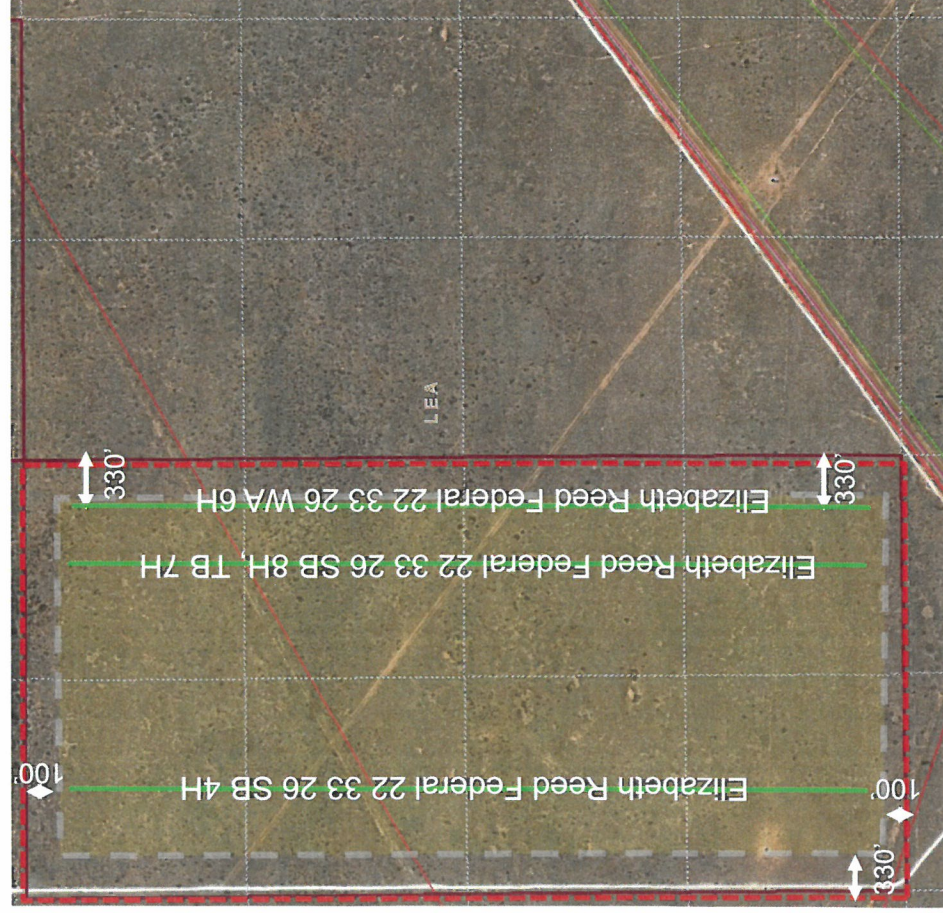
MODRALL, SPERLING, ROEHL, HARRIS
& SISK, P.A.

By: Deana M. Bennett

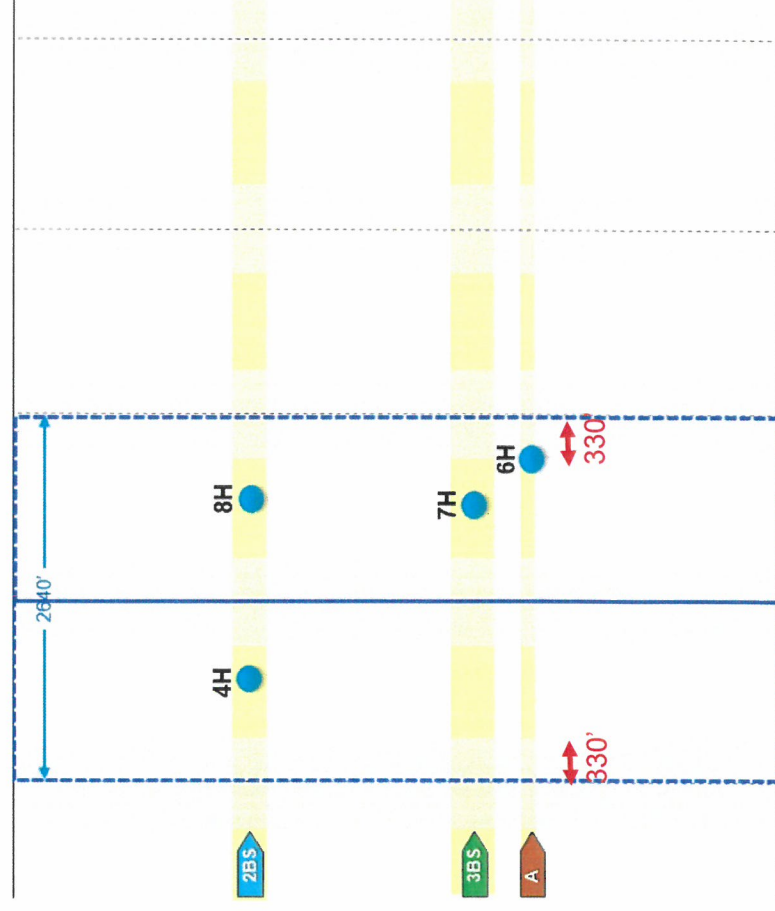
Jennifer Bradfute
Deana M. Bennett
Post Office Box 2168
500 Fourth Street NW, Suite 1000
Albuquerque, New Mexico 87103-2168
Telephone: 505.848.1800
Attorneys for Applicant

CASE NO. 16423: Amended Application of Marathon Oil Permian LLC for a non-standard spacing and proration unit and compulsory pooling, Lea County, New Mexico. Applicant seeks an order from the Division: (1) to the extent necessary, approving the creation of a non-standard Bone Spring spacing and proration unit; and (2) pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 W/2 of Section 26, Township 22 South, Range 33 East, NMPM, Lea County, New Mexico. This proposed spacing unit will be dedicated to the **Elizabeth Reed Federal 22-33-26 TB 7H and Elizabeth Reed Federal 22-33-26 SB 8H** 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 wells are completed. Said area is located approximately 23 miles west south west of Eunice, New Mexico.

Elizabeth Reed Federal 22 33 26 Unit Development



1320'



4. 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.

5. Case No. 16421:

a. Marathon seeks an order pooling of all mineral interests in the Bone Spring formation underlying the W/2 W/2 of Section 26, Township 22 South, Range 33 East, NMPM, Lea County, New Mexico. This proposed spacing unit will be dedicated to the **Elizabeth Reed Federal 22-33-26 SB 4H** well, to be horizontally drilled.

b. A plat outlining the unit being pooled in Case No. 16421 is attached hereto as **Exhibit A**, which shows the proposed well's location within the unit. The parties being pooled, the nature and percent of their interests, and their last known addresses are also included as part of **Exhibit A**. Exhibit A includes information for the working interest owners, the overriding interest owners, and offsets.

c. There are no depth severances within the Bone Spring formation.

d. 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 and a form of Operating Agreement.

e. Marathon has made a good faith effort to obtain voluntary joinder of the working interest owners in the proposed well.

f. Attached as **Exhibit B** is the proposed C-102s for the well. The well will develop the WC-025 G-06 S223322J; Bone Spring pool, pool code 97846, which is an oil pool.

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

h. **Exhibits C and D** are a sample proposal letter and 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.

6. Case No. 16423:

a. Marathon seeks an order pooling of all mineral interests in the Bone Spring formation underlying the 2 W/2 of Section 26, Township 22 South, Range 33 East, NMPM, Lea County, New Mexico. This proposed spacing unit will be dedicated to the **Elizabeth Reed Federal 22-33-26 TB 7H and Elizabeth Reed Federal 22-33-26 SB 8H** wells, to be horizontally drilled.

b. A plat outlining the unit being pooled in Case No. 16423 is attached hereto as **Exhibit A**, which shows the proposed wells' locations within the unit. The parties being pooled, the nature and percent of their interests, and their last known addresses are also included as part of **Exhibit A**. Exhibit A includes information for the working interest owners, the overriding interest owners, and offsets.

c. There are no depth severances within the Bone Spring formation.

d. 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 and a form of Operating Agreement.

e. Marathon has made a good faith effort to obtain voluntary joinder of the working interest owners in the proposed well.

f. Attached as **Exhibit B** are the proposed C-102s for the wells. The wells will develop the WC-025 G-06 S223322J, Bone Spring, pool code 97846, which is an oil pool.

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

h. **Exhibits C and D** are a sample proposal letter and 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.

6. Marathon requests overhead and administrative rates of \$7000.00/month for drilling a well and \$700.00/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.

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

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

9. The attachments to this affidavit were prepared by me, or compiled from company business records.

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

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

Ryan Gyllenband
Ryan Gyllenband

SUBSCRIBED AND SWORN to before me this 19th day of September, 2018 by Ryan Gyllenband on behalf of Marathon Oil Permian LLC.

Jessica Gorman
Notary Public

My commission expires: 1/23/2019



Case No. 16421

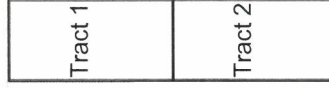
Elizabeth Reed Federal 22-33-26 SB 4H

Lease Tract Map
Elizabeth Reed Fed 22-33-26 SB 4H
W/2 W/2 of Section 26, 22S-33E – 160 acres

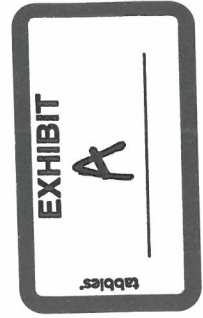
- Tract 1: Federal Acreage
- Tract 2: Federal Acreage

22 23 24

27 26 25



34 35 36



Summary of Interests

Elizabeth Reed Fed 22-33-26 SB 4H, Elizabeth Reed Fed 22-33-26 WA 6H, Elizabeth Reed Fed 22-33-26 TB 7H and Elizabeth Reed Fed 22-33-26 SB 8H

<u>Committed Working Interest:</u> Marathon Oil Permian LLC	50.00%	50.00%
<u>Uncommitted Working Interest:</u> Devon Energy Production Company, L.P.	50.00%	50.00%
<u>Unleased Mineral Interest:</u>		0.00%

Force Pooled Owners				
Owner Name	Address 1	City	State	Zip
Devon Energy Production Company, L.P.	333 West Sheridan Avenue	Oklahoma City	OK	73102 WI

ORRIS

Owner Name	Address 1	City	State	Zip	Type
State Royalty Limited Partnership	P.O. Box 911	Breckenridge	TX	76424	ORRI
Alan Jochimsen	4209 Cardinal Lane	Midland	TX	79707	ORRI
Monty McLane	P.O. Box 9451	Midland	TX	79708	ORRI
Chilmark Properties, LLC	110 W. Louisiana, Suite 404	Midland	TX	79701	ORRI
Fred L. Engle	P.O. Box 26245	Milwaukee	WI	53226	ORRI
Scott W. Tanberg	P.O. Box 7662	Midland	TX	79708	ORRI
The Rebecca L. Engle Children's Irrevocable Trust of 2003	P.O. Box 1184	Sioux Falls	SD	57101	ORRI
David B. Engle	38315 Sunset Drive	Oconomowoc	WI	53066	ORRI

Offsets

Owner Name	Address 1	City	State	Zip	Type
EOG Y Resources, Inc., EOG M Resources, Inc., EOG A Resources, Inc., EOG Resources Assets LLC	105 S 4th Street	Artesia	NM	88210	Offset
EOG Y Resources, Inc., EOG M Resources, Inc., EOG A Resources, Inc., EOG Resources Assets LLC	5509 Champtions Drive	Midland	TX	79706	Offset
OXY Y-1 Company	P.O. Box 27570	Houston	TX	77227	Offset
Sharbro Oil LTD Co.	P.O. Box 840	Artesia	NM	88210	Offset
United States, Department of the Interior - BLM	301 Dinosaur Trail	Santa Fe	NM	87502	UNLEASED MINERAL OWNER

Summary of Attempted Contacts

- Marathon sent well proposal letters.
- Marathon then contacted parties to see if they would participate in the well and/or execute a joint operating agreement.
- Marathon conducted updated record searches and internet searches for contact information for parties it seeks to pool.
- Marathon continued to attempt to contact the parties who had not executed an agreement.
- 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.
- Marathon then also published notice in a newspaper of general circulation in the county where the wells will be located.

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 97846		³ Pool Name WC-025 G-06S2233221 BONE SPRING					
⁴ Property Code		⁵ Property Name ELIZ REED 22 33 26 SB FED						⁶ Well Number 4H	
⁷ OGRID No. 372098		⁸ Operator Name MARATHON OIL PERMIAN LLC						⁹ Elevation 3515'	
¹⁰ Surface Location									
UL or lot no. M	Section 26	Township 22S	Range 33E	Lot Idn	Feet from the 309	North/South line SOUTH	Feet from the 1283	East/West line WEST	County LEA
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. D	Section 26	Township 22S	Range 33E	Lot Idn	Feet from the 100	North/South line NORTH	Feet from the 660	East/West line WEST	County LEA
¹² Dedicated Acres 160.0		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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.

	CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 782645.33' / Y: 499217.59' B - X: 783966.43' / Y: 499224.31' C - X: 784005.10' / Y: 493944.89' D - X: 782685.59' / Y: 493937.77'	CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 741462.52' / Y: 499157.25' B - X: 742783.62' / Y: 499163.97' C - X: 742822.17' / Y: 493884.71' D - X: 741502.66' / Y: 493877.59'	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 _____	
	LAST TAKE POINT/BOTTOM HOLE LOCATION 100' FSL 660' FWL, SECTION 26 NAD 83, SPCS NM EAST X: 783306.10' / Y: 499120.95' LAT: 32.36971759N / LON: -103.54960872W NAD 27, SPCS NM EAST X: 742123.29' / Y: 499060.61' LAT: 32.36959401N / LON: -103.54912567W			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: _____ Certificate Number _____
	FIRST TAKE POINT 100' FSL 660' FWL, SECTION 26 NAD 83, SPCS NM EAST X: 783344.81' / Y: 494041.33' LAT: 32.35575502N / LON: -103.54960381W NAD 27, SPCS NM EAST X: 742161.88' / Y: 493981.14' LAT: 32.35563142N / LON: -103.54912121W			
	KICK OFF POINT 50' FSL 660' FWL, SECTION 26 NAD 83, SPCS NM EAST X: 783345.20' / Y: 493991.33' LAT: 32.35561759N / LON: -103.54960375W NAD 27, SPCS NM EAST X: 742162.27' / Y: 493931.14' LAT: 32.35549399N / LON: -103.54912115W			
SURFACE HOLE LOCATION 309' FSL 1283' FWL, SECTION 26 NAD 83, SPCS NM EAST X: 783965.91' / Y: 494253.74' LAT: 32.35632635N / LON: -103.54758750W NAD 27, SPCS NM EAST X: 742782.99' / Y: 494193.55' LAT: 32.35620274N / LON: -103.54710495W				

SHEET 1 OF 3
JOB No. R3834_001
REV 1 BM 09/17/2018

EXHIBIT

B

Ryan Gyllenband
Land Professional



Marathon Oil Permian LLC
5555 San Felipe Street
Houston, TX 77056
Telephone: 713.296.2453 Mobile: 281.684.7389
Fax: 713.513.4006
mrgyllenband@marathonoil.com

November 29, 2017

VIA CERTIFIED RETURN RECEIPT MAIL

Advance Energy Partners
Attn: David A. Scott
11490 Westheimer Road, Suite 950
Houston, TX 77077

Re: Elizabeth Reed Federal 4H, 6H, 7H, 8H Well Proposals
Section 26, T22S-R33E
Lea County, New Mexico

Dear Advance Energy Partners:

Marathon Oil Permian LLC ("MRO") proposes the drilling of the following wells located in Section 26, 22S-33E, Lea County, New Mexico.

- Elizabeth Reed Federal 22 33 26 SB 4H with a proposed first take point located 660' FWL and 330' FNL of Section 26, 22S-33E, and a proposed last take point located 660' FWL and 330' FSL of Section 26, 22S-33E. The well will have a targeted interval located in the Bone Spring Formation (~11,045' TVD) with a productive lateral length of approximately 4,633'. The total estimated drilling and completion cost is \$7,031,630 as shown in the attached AFE.
- Elizabeth Reed Federal 22 33 26 WA 6H with a proposed first take point located 2,310' FWL and 330' FNL of Section 26, 22S-33E, and a proposed last take point located 2,310' FWL and 330' FSL of Section 26, 22S-33E. The well will have a targeted interval located in the Wolfcamp Formation (~12,299' TVD) with a productive lateral length of approximately 4,629'. The total estimated drilling and completion cost is \$7,402,070 as shown in the attached AFE.
- Elizabeth Reed Federal 22 33 26 TB 7H with a proposed first take point located 2,310' FWL and 330' FNL of Section 26, 22S-33E, and a proposed last take point located 2,310' FWL and 330' FSL of Section 26, 22S-33E. The well will have a targeted interval located in the Bone Spring Formation (~12,109' TVD) with a productive lateral length of approximately 4,629'. The total estimated drilling and completion cost is \$7,139,900 as shown in the attached AFE.
- Elizabeth Reed Federal 22 33 26 SB 8H with a proposed first take point located 1,980' FWL and 330' FNL of Section 26, 22S-33E, and a proposed last take point located 1,980' FWL and 330' FSL of Section 26, 22S-33E. The well will have a targeted interval located in the Bone Spring Formation (~11,045' TVD) with a productive lateral length of approximately 4,583'. The total estimated drilling and completion cost is \$7,031,630 as shown in the attached AFE.

These proposed locations and target depths are subject to change depending on any surface or subsurface concerns encountered. The 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.

MRO proposes drilling the well under the terms of the 1989 AAPL JOA and a form of this JOA will be sent to you following this proposal. The JOA will have these general provisions:

- 100%/300%/300% non-consent penalty



- \$7,000/\$700 drilling and producing rates
- Contract area covering the W/2 Section 26, 22S-33E, covering all depths

Our title records show that you own 50% WI in the proposed unit.

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 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:

- 3 year term
- \$2000 bonus consideration per net mineral acre
- Delivering a 75% NRI, proportionately reduced

This term assignment offer terminates January 15, 2018 and is subject to due diligence and title verification satisfactory to Marathon.

Should you have any questions regarding this or other matters, please don't hesitate to contact me at the above listed numbers.

Sincerely,

Ryan Gyllenband

_____ Advance Energy Partners elects to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 SB 4H well.

_____ Advance Energy Partners elects NOT to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 SB 4H well.

_____ Advance Energy Partners elects to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 WA 6H well.

_____ Advance Energy Partners elects NOT to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 WA 6H well.

_____ Advance Energy Partners elects to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 TB 7H well.

_____ Advance Energy Partners elects NOT to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 TB 7H well.

_____ Advance Energy Partners elects to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 SB 8H well.

_____ Advance Energy Partners elects NOT to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 SB 8H well.

Advance Energy Partners

By: _____

Print Name: _____

Title: _____

Date: _____

Permian Asset Team		Location 22, 33, 26	Rig NR5
Field	BRINNINSTOOL	State NEW MEXICO	
Lease / Facility	ELIZABETH REED FEDERAL 22 33 26 SB 4H	County/Parish LEA	
Operator	MARATHON OIL PERMIAN LLC	Estimated Start Date 22-Sep-2018	
		Estimated Completion Date 20-Oct-2018	
Estimated Gross Cost This AFE: \$7,031,630			

Project Description & Reason for Expenditure: Drill, Complete, & Equip a Horizontal Well

This well is planned to be drilled and completed with multistage fracturing using plug and perf. The estimated cost of drilling, testing, completing, and equipping the well is \$7,031,630 as detailed in the provided authority for expenditure document. This will include installation of transitional and long term artificial lift systems. The well will be drilled to a total vertical depth of 11,045' and a total measured depth of 15,947', with an estimated treatable lateral length of 4,633' and will be completed with an estimated 30 stages and approximately 2,500 lbs/ft of proppant.

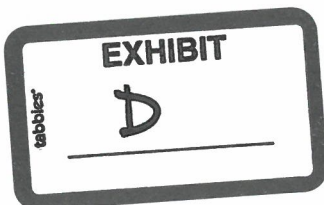
Prepared By: MATT RUGAARD, JOSH SHANNON, MATTT HENSCHEN, BILLY MOORE

Final Approval

 Date: 11/15/2017
Title: Regional Vice President Permian Asset Team

Participant's Approval

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



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

DATE 11/15/2017
 DRILLING & LOCATION PREPARED BY MATT RUGAARD
 COMPLETION PREPARED BY JOSH SHANNON
 FACILITIES PREPARED BY MATTT HENSCHEN
 ARTIFICIAL LIFT PREPARED BY BILLY MOORE

Asset Team	PERMIAN			
Field	BRINNINSTOOL	FORMATION: 2ND BONE SPRINGS	WILDCAT	EXPLORATION
Lease/Facility	ELIZABETH REED FEDERAL 22 33 26 58 4H		DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY		X EXPLOITATION	WORKOVER
Prospect	RANGER			

Est Total Depth	15,947	Est Drilling Days	#VALUE!	Est Completion Days	5.5
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LOCATION COST - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	67,500
7001250	Land Broker Fees and Services	36,000
TOTAL LOCATION COST - INTANGIBLE		103,500

DRILLING COST - TANGIBLE

7012050	Conductor Pipe	28,000
7012050	Surface Casing	58,000
7012050	Intermediate Casing 1	138,000
7012050	Intermediate Casing 2	-
7012050	Production Casing	240,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	-
7012550	Drilling Wellhead Equipment	70,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	-
TOTAL DRILLING - TANGIBLE		558,000

DRILLING COST - INTANGIBLE

7019200	Drilling Rig Mob/Demob	75,000
7019220	Drilling Rig - day work/footage	415,000
7019040	Directional Drilling Services	157,500
7019020	Cement and Cementing Service Surface	35,000
7019020	Cement and Cementing Service Intermediate 1	40,000
7019020	Cement and Cementing Service Intermediate 2	-
7019020	Cement and Cementing Service Production	100,000
7019140	Mud Fluids & Services	53,000
7012310	Solids Control equipment	34,000
7012020	Bits	65,000
7019010	Casing Crew and Services	35,000
7016350	Fuel (Rig)	64,000
7019140	Fuel (Mud)	-
7001460	Water (non potable)	25,000
7019000	Well Logging Services	-
7019150	Mud Logging+geosteering	15,000
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)	135,000
7001440	Vacuum Trucks	20,000
7000030	Contract Labor - general	30,000
7018150	Rental Tools and Equipment (surface rentals)	83,000
7018150	Rig Equipment and Misc.	6,225
7001110	Telecommunications Services	10,000
7001120	Consulting Services	97,525
7001400	Safety and Environmental	10,000
7018120	Rental Buildings (trailers)	-
7019310	Coring (sidewalls & analysis)	-
7011010	8% Contingency & Taxes	170,260
TOTAL DRILLING - INTANGIBLE		\$1,740,510

TOTAL DRILLING COST	\$2,298,510
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COMPLETION - TANGIBLE

7012580	Tubing	75,000
7012040	Tubing Accessories (nipple, wireline entry)	15,000
7012550	Wellhead Equip	20,000
7012560	Peckers - Completion Equipment	38,850
TOTAL COMPLETION - TANGIBLE		\$148,850

Asset Team PERMIAN
 Field BRINNINSTOOL FORMATION: 2ND BONE SPRINGS
 Lease/Facility ELIZABETH REED FEDERAL 22 33 26 58 4H

COMPLETION - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	20,000
7019220	Drilling Rig During Completion	20,000
7019140	Mud Fluids & Services	-
7019030	Coiled Tubing Services (3 runs)	140,000
7019240	Snubbing Services	25,000
7019270	Pulling/Swab Units	10,000
7016350	Fuel (from drlg)	-
7019010	Casing Crew and Services	-
7019020	Cement and Cementing Services	-
7019080	Well Testing Services (flow hand & equip)	71,000
7019320	Fracturing Services	1,860,000
7019330	Perforating	124,000
7019360	Wireline Services	-
7001460	Water Hauling & Disposal (frac fluids)	550,000
7016180	Freight - Truck (haul pipe; drlg & compl)	40,000
7018150	BOP Rental & Testing	-
7018150	Rental Tools and Equipment (incl drlg; lightplant,hydra-walk)	-
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	45,000
7000030	Contract Labor - general	75,000
7001110	Telecommunications Services	25,000
7001400	Safety and Environmental	-
7001120	Consulting Services	30,000
7018150	Zipper Manifold	57,600
7019900	Frack Stack Rentals	39,000
7016190	Freight (Transportation Services)	-
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	100,000
7018120	Rental Buildings (trailers)	55,000
7000030	Contract Labor - Pumping (pump-down pumps)	42,000
7011010	8% Contingency & Taxes	264,928
TOTAL COMPLETION - INTANGIBLE		\$3,593,528

TOTAL COMPLETION COST

\$3,742,378

SURFACE EQUIPMENT - TANGIBLE

7012350	Misc. Piping, Fittings & Valves	86,765
7006640	Company Labor & Burden	-
7000030	Contract Labor - General	69,528
7001110	Telecommunication equip (Telemetry)	-
7012410	Line Pipe & Accessories	31,445
7012270	Miscellaneous Materials (containment system)	43,047
7008060	SCADA	-
7016180	Freight - truck	-
7001190	Contract Engineering	29,116
7012290	Metering and Instrumentation	216,839
7012290	I&E Materials	-
7012200	Gas Treating	-
7012200	Dehydration	-
7012010	Compressor	-
7012350	Power	-
7012610	Vapor Recovery Unit	-
7012440	Separator & other pressure vessels	105,954
7012500	Tanks	142,674
7012100	Heater Treater	12,997
7012640	Flare & Accessories	17,469
7000010	Electrical Labor	29,116
7000010	Mechanical Labor	-
7012480	Rod Pumping unit & Pad	-
7012180	Pumping Unit Engine	-
7012350	Electrical Power (electrical cooperative construction costs)	23,293
TOTAL SURFACE EQUIPMENT - TANGIBLE		\$808,242

TOTAL SURFACE EQUIPMENT COST

\$ 808,242

ARTIFICIAL LIFT

7006640	Company Labor	3,000
7012180	Gas Lift Equipment	23,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	-
7012140	Elect Sub Pumps (ESP)	-
7019350	Well Services-Well/Wellhead Services	22,500
7012270	Materials & Supplies-Tangible	25,000
7012550	Surface Wellhead Equipment	3,000
7012390	Pig Launchers/Receivers & Rel Equip	-
7011010	8% Contingency & Taxes	2,500
TOTAL ARTIFICIAL LIFT		79,000

TOTAL ARTIFICIAL LIFT COST

\$ 79,000

SUMMARY OF ESTIMATED DRILLING WELL COSTS

TOTAL COST

TOTAL LOCATION COST	\$ 103,500
TOTAL DRILLING COST	\$ 2,298,510
TOTAL COMPLETIONS COST	\$ 3,742,378
TOTAL SURFACE EQUIPMENT COST	\$ 808,242
TOTAL ARTIFICIAL LIFT COST	\$ 79,000
GRAND TOTAL COST	\$7,031,630

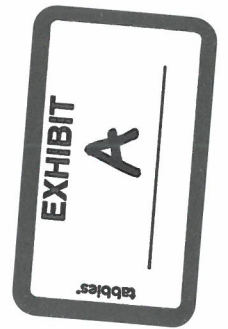
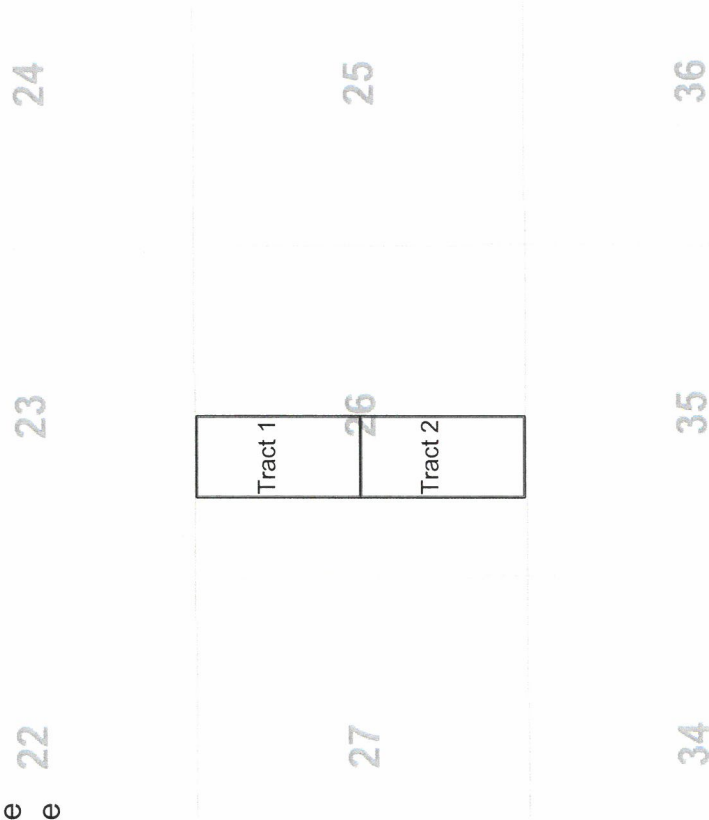
Case No. 16423

Elizabeth Reed Federal 22-33-26 TB 7H

Elizabeth Reed Federal 22-33-26 SB 8H

Lease Tract Map
 Elizabeth Reed Fed 22-33-26 TB 7H and Elizabeth Reed Fed 22-33-26 SB 8H
 E/2 W/2 of Section 26, 22S-33E – 160 acres

- Tract 1: Federal Acreage
- Tract 2: Federal Acreage



Summary of Interests

Elizabeth Reed Fed 22-33-26 SB 4H, Elizabeth Reed Fed 22-33-26 WA 6H, Elizabeth Reed Fed 22-33-26 TB 7H and Elizabeth Reed Fed 22-33-26 SB 8H

<u>Committed Working Interest:</u> Marathon Oil Permian LLC	50.00%	50.00%
<u>Uncommitted Working Interest:</u> Devon Energy Production Company, L.P.	50.00%	50.00%
<u>Unleased Mineral Interest:</u>		0.00%

Force Pooled Owners

Owner Name	Address 1	City	State	Zip	Type
Devon Energy Production Company, L.P.	333 West Sheridan Avenue	Oklahoma City	OK	73102	WI

ORRIs

Owner Name	Address 1	City	State	Zip	Type
State Royalty Limited Partnership	P.O. Box 911	Breckenridge	TX	76424	ORRI
Alan Jochimsen	4209 Cardinal Lane	Midland	TX	79707	ORRI
Monty McLane	P.O. Box 9451	Midland	TX	79708	ORRI
Chilmark Properties, LLC	110 W. Louisiana, Suite 404	Midland	TX	79701	ORRI
Fred L. Engle	P.O. Box 26245	Milwaukee	WI	53226	ORRI
Scott W. Tanberg	P.O. Box 7662	Midland	TX	79708	ORRI
The Rebecca L. Engle Children's Irrevocable Trust of 2003	P.O. Box 1184	Sioux Falls	SD	57101	ORRI
David B. Engle	38315 Sunset Drive	Oconomowoc	WI	53066	ORRI

Offsets

Owner Name	Address 1	City	State	Zip	Type
EOG Y Resources, Inc., EOG M Resources, Inc., EOG A Resources, Inc., EOG Resources Assets LLC	105 S 4th Street	Artesia	NM	88210	Offset
EOG Y Resources, Inc., EOG M Resources, Inc., EOG A Resources, Inc., EOG Resources Assets LLC	5509 Champignons Drive	Midland	TX	79706	Offset
OXY Y-1 Company	P.O. Box 27570	Houston	TX	77227	Offset
Sharbro Oil LTD Co.	P.O. Box 840	Artesia	NM	88210	Offset
United States, Department of the Interior - BLM	301 Dinosaur Trail	Santa Fe	NM	87502	UNLEASED MINERAL OWNER

Summary of Attempted Contacts

- Marathon sent well proposal letters.
- Marathon then contacted parties to see if they would participate in the well and/or execute a joint operating agreement.
- Marathon conducted updated record searches and internet searches for contact information for parties it seeks to pool.
- Marathon continued to attempt to contact the parties who had not executed an agreement.
- 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.
- Marathon then also published notice in a newspaper of general circulation in the county where the wells will be located.

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, Artesia, 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 97846	³ Pool Name WC-025 G-06 S223322J; BONE SPRING
⁴ Property Code	⁵ Property Name ELIZ REED 22 33 26 SB FED	⁶ Well Number 8H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 3515'

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	26	22S	33E		309	SOUTH	1313	WEST	LEA

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	26	22S	33E		100	NORTH	1982	WEST	LEA

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>SHEET 1 OF 3 JOB No. R3834_002 REV 1 BM 09/17/2018</p>	<p>CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 783986.43' / Y: 499224.31' B - X: 765267.54' / Y: 499231.02' C - X: 785324.61' / Y: 493952.00' D - X: 784005.10' / Y: 493944.89'</p>	<p>CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 742783.62' / Y: 499163.97' B - X: 744104.72' / Y: 499170.66' C - X: 744141.67' / Y: 493891.82' D - X: 742822.17' / Y: 493884.71'</p>	<p>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 interest 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>LAST TAKE POINT/BOTTOM HOLE LOCATION 100' FNL 1982' FWL, SECTION 26 NAD 83, SPCS NM EAST X: 784628.39' / Y: 499127.67' LAT: 32.36970938N / LON: -103.54532607W NAD 27, SPCS NM EAST X: 743445.57' / Y: 499067.33' LAT: 32.36958578N / LON: -103.54484315W</p>			<p>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.</p> <p>Date of Survey _____</p> <p>Signature and Seal of Professional Surveyor: _____</p> <p>Certificate Number _____</p>
	<p>FIRST TAKE POINT 100' FSL 1979' FWL, SECTION 26 NAD 83, SPCS NM EAST X: 784663.92' / Y: 494046.44' LAT: 32.35574795N / LON: -103.54533212W NAD 27, SPCS NM EAST X: 743480.99' / Y: 493988.25' LAT: 32.35562433N / LON: -103.54484963W</p>			
	<p>KICK OFF POINT 50' FSL 1979' FWL, SECTION 26 NAD 83, SPCS NM EAST X: 784664.27' / Y: 493998.44' LAT: 32.35561052N / LON: -103.54533218W NAD 27, SPCS NM EAST X: 743481.34' / Y: 493938.25' LAT: 32.35548690N / LON: -103.54484969W</p>			
<p>SURFACE HOLE LOCATION 309' FSL 1313' FWL, SECTION 26 NAD 83, SPCS NM EAST X: 783995.91' / Y: 494253.74' LAT: 32.35632574N / LON: -103.54749040W NAD 27, SPCS NM EAST X: 742812.99' / Y: 494193.55' LAT: 32.35620213N / LON: -103.54700781W</p>				

Ryan Gyllenband
Land Professional



Marathon Oil Permian LLC
5555 San Felipe Street
Houston, TX 77056
Telephone: 713.296.2453 Mobile: 281.684.7389
Fax: 713.513.4006
mrgyllenband@marathonoil.com

November 29, 2017

VIA CERTIFIED RETURN RECEIPT MAIL

Advance Energy Partners
Attn: David A. Scott
11490 Westheimer Road, Suite 950
Houston, TX 77077

Re: Elizabeth Reed Federal 4H, 6H, 7H, 8H Well Proposals
Section 26, T22S-R33E
Lea County, New Mexico

Dear Advance Energy Partners:

Marathon Oil Permian LLC ("MRO") proposes the drilling of the following wells located in Section 26, 22S-33E, Lea County, New Mexico.

- Elizabeth Reed Federal 22 33 26 SB 4H with a proposed first take point located 660' FWL and 330' FNL of Section 26, 22S-33E, and a proposed last take point located 660' FWL and 330' FSL of Section 26, 22S-33E. The well will have a targeted interval located in the Bone Spring Formation (~11,045' TVD) with a productive lateral length of approximately 4,633'. The total estimated drilling and completion cost is \$7,031,630 as shown in the attached AFE.
- Elizabeth Reed Federal 22 33 26 WA 6H with a proposed first take point located 2,310' FWL and 330' FNL of Section 26, 22S-33E, and a proposed last take point located 2,310' FWL and 330' FSL of Section 26, 22S-33E. The well will have a targeted interval located in the Wolfcamp Formation (~12,299' TVD) with a productive lateral length of approximately 4,629'. The total estimated drilling and completion cost is \$7,402,070 as shown in the attached AFE.
- Elizabeth Reed Federal 22 33 26 TB 7H with a proposed first take point located 2,310' FWL and 330' FNL of Section 26, 22S-33E, and a proposed last take point located 2,310' FWL and 330' FSL of Section 26, 22S-33E. The well will have a targeted interval located in the Bone Spring Formation (~12,109' TVD) with a productive lateral length of approximately 4,629'. The total estimated drilling and completion cost is \$7,139,900 as shown in the attached AFE.
- Elizabeth Reed Federal 22 33 26 SB 8H with a proposed first take point located 1,980' FWL and 330' FNL of Section 26, 22S-33E, and a proposed last take point located 1,980' FWL and 330' FSL of Section 26, 22S-33E. The well will have a targeted interval located in the Bone Spring Formation (~11,045' TVD) with a productive lateral length of approximately 4,583'. The total estimated drilling and completion cost is \$7,031,630 as shown in the attached AFE.

These proposed locations and target depths are subject to change depending on any surface or subsurface concerns encountered. The 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.

MRO proposes drilling the well under the terms of the 1989 AAPL JOA and a form of this JOA will be sent to you following this proposal. The JOA will have these general provisions:

- 100%/300%/300% non-consent penalty



- \$7,000/\$700 drilling and producing rates
- Contract area covering the W/2 Section 26, 22S-33E, covering all depths

Our title records show that you own 50% WI in the proposed unit.

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 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:

- 3 year term
- \$2000 bonus consideration per net mineral acre
- Delivering a 75% NRI, proportionately reduced

This term assignment offer terminates January 15, 2018 and is subject to due diligence and title verification satisfactory to Marathon.

Should you have any questions regarding this or other matters, please don't hesitate to contact me at the above listed numbers.

Sincerely,

Ryan Gyllenband

_____ Advance Energy Partners elects to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 SB 4H well.

_____ Advance Energy Partners elects NOT to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 SB 4H well.

_____ Advance Energy Partners elects to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 WA 6H well.

_____ Advance Energy Partners elects NOT to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 WA 6H well.

_____ Advance Energy Partners elects to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 TB 7H well.

_____ Advance Energy Partners elects NOT to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 TB 7H well.

_____ Advance Energy Partners elects to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 SB 8H well.

_____ Advance Energy Partners elects NOT to participate in the drilling, completing, and equipping of the Elizabeth Reed Federal 22 33 26 SB 8H well.

Advance Energy Partners

By: _____

Print Name: _____

Title: _____

Date: _____

Permian Asset Team		
Field	BRINNINSTOOL	Location 22, 33, 26 Rig NR5
Lease / Facility	ELIZABETH REED FEDERAL 22 33 26 TB 7H	State NEW MEXICO
Operator	MARATHON OIL PERMIAN LLC	County/Parish LEA
		Estimated Start Date 27-Nov-2018
		Estimated Completion Date 26-Dec-2018

Estimated Gross Cost This AFE: **\$7,139,900**

Project Description & Reason for Expenditure: Drill, Complete, & Equip a Horizontal Well

This well is planned to be drilled and completed with multistage fracturing using plug and perf. The estimated cost of drilling, testing, completing, and equipping the well is \$7,139,900 as detailed in the provided authority for expenditure document. This will include installation of transitional and long term artificial lift systems. The well will be drilled to a total vertical depth of 12,109' and a total measured depth of 17,025', with an estimated treatable lateral length of 4,629' and will be completed with an estimated 30 stages and approximately 2,500 lbs/ft of proppant.

Prepared By: MATT RUGAARD, JOSH SHANNON, MATTT HENSCHEN, BILLY MOORE,

Final Approval

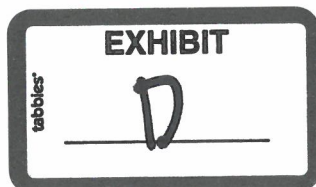
[Signature] Date: 11/15/2017
 Title: Regional Vice President Permian Asset Team

Participant's Approval

Name of
 Company: _____

Signature: _____

Title: _____ Date: _____



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

DATE 11/15/2017
 DRILLING & LOCATION PREPARED BY MATT RUGAARD
 COMPLETION PREPARED BY JOSH SHANNON
 FACILITIES PREPARED BY MATT HENSCHEN
 ARTIFICIAL LIFT PREPARED BY BILLY MOORE

Asset Team	PERMIAN			
Field	BRINNINSTOOL	FORMATION: 3RD BONE SPRINGS	WILDCAT	EXPLORATION
Lease/Facility	ELIZABETH REED FEDERAL 22 33 26 TB 7H		DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY		X EXPLOITATION	WORKOVER
Prospect	RANGER			

Est Total Depth 17,025 Est Drilling Days #VALUE! Est Completion Days 5.5

LOCATION COST - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	67,500
7001250	Land Broker Fees and Services	36,000
TOTAL LOCATION COST - INTANGIBLE		103,500

DRILLING COST - TANGIBLE

7012050	Conductor Pipe	28,000
7012050	Surface Casing	58,000
7012050	Intermediate Casing 1	138,000
7012050	Intermediate Casing 2	-
7012050	Production Casing	256,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	-
7012550	Drilling Wellhead Equipment	70,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	-
TOTAL DRILLING - TANGIBLE		574,000

DRILLING COST - INTANGIBLE

7019200	Drilling Rig Mob/Demob	75,000
7019220	Drilling Rig - day work/footage	445,000
7019040	Directional Drilling Services	171,750
7019020	Cement and Cementing Service Surface	35,000
7019020	Cement and Cementing Service Intermediate 1	40,000
7019020	Cement and Cementing Service Intermediate 2	-
7019020	Cement and Cementing Service Production	110,000
7019140	Mud Fluids & Services	59,500
7012310	Solids Control equipment	37,000
7012020	Bits	65,000
7019010	Casing Crew and Services	35,000
7016350	Fuel (Rig)	69,000
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7019000	Well Logging Services	-
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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)	135,000
7001440	Vacuum Trucks	20,000
7000030	Contract Labor - general	30,000
7018150	Rental Tools and Equipment (surface rentals)	89,000
7018150	Rig Equipment and Misc.	6,675
7001110	Telecommunications Services	10,000
7001120	Consulting Services	104,575
7001400	Safety and Environmental	10,000
7018120	Rental Buildings (trailers)	-
7019310	Coring (sidewalls & analysis)	-
7011010	8% Contingency & Taxes	178,280
TOTAL DRILLING - INTANGIBLE		\$1,832,780

TOTAL DRILLING COST \$2,406,780

COMPLETION - TANGIBLE

7012580	Tubing	75,000
7012040	Tubing Accessories (nipple, wireline entry)	15,000
7012550	Wellhead Equip	20,000
7012560	Packers - Completion Equipment	38,850
TOTAL COMPLETION - TANGIBLE		\$148,850

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

DATE 11/15/2017

Asset Team PERMIAN
 Field BRINNINSTOOL FORMATION: 3RD BONE SPRINGS
 Lease/Facility ELIZABETH REED FEDERAL 22 33 26 TB 7H

COMPLETION - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	20,000
7019220	Drilling Rig During Completion	20,000
7019140	Mud Fluids & Services	-
7019030	Coiled Tubing Services (3 runs)	140,000
7019240	Snubbing Services	25,000
7019270	Pulling/Swab Units	10,000
7016350	Fuel (from drig)	-
7019010	Casing Crew and Services	-
7019020	Cement and Cementing Services	-
7019080	Well Testing Services (flow hand & equip)	71,000
7019320	Fracturing Services	1,860,000
7019330	Perforating	124,000
7019360	Wireline Services	-
7001460	Water Hauling & Disposal (frac fluids)	550,000
7016180	Freight - Truck (haul pipe; drig & compl)	40,000
7018150	BOP Rental & Testing	-
7018150	Rental Tools and Equipment (incl drig; lightplant,hydra-walk)	-
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	45,000
7000030	Contract Labor - general	75,000
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7001120	Consulting Services	30,000
7018150	Zipper Manifold	57,600
7019300	Frack Stack Rentals	39,000
7016190	Freight (Transportation Services)	-
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	100,000
7018120	Rental Buildings (trailers)	55,000
7000030	Contract Labor - Pumping (pump-down pumps)	42,000
7011010	8% Contingency & Taxes	264,928
TOTAL COMPLETION - INTANGIBLE		\$3,593,528
TOTAL COMPLETION COST		\$3,742,378

SURFACE EQUIPMENT - TANGIBLE

7012350	Misc. Piping, Fittings & Valves	86,765
7006640	Company Labor & Burden	-
7000030	Contract Labor - General	69,528
7001110	Telecommunication equip (Telemetry)	-
7012410	Line Pipe & Accessories	31,445
7012270	Miscellaneous Materials (containment system)	43,047
7008060	SCADA	-
7016180	Freight - truck	-
7001190	Contract Engineering	29,116
7012290	Metering and Instrumentation	216,839
7012290	I&E Materials	-
7012200	Gas Treating	-
7012200	Dehydration	-
7012010	Compressor	-
7012350	Power	-
7012610	Vapor Recovery Unit	-
7012440	Separator & other pressure vessels	105,954
7012500	Tanks	142,674
7012100	Heater Treater	12,997
7012640	Flare & Accessories	17,469
7000010	Electrical Labor	29,116
7000010	Mechanical Labor	-
7012480	Rod Pumping unit & Pad	-
7012180	Pumping Unit Engine	-
7012350	Electrical Power (electrical cooperative construction costs)	23,293
TOTAL SURFACE EQUIPMENT - TANGIBLE		\$808,242
TOTAL SURFACE EQUIPMENT COST		\$ 808,242

ARTIFICIAL LIFT

7006640	Company Labor	3,000
7012180	Gas Lift Equipment	23,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	-
7012140	Elect Sub Pumps (ESP)	-
7019350	Well Services-Well/Wellhead Services	22,500
7012270	Materials & Supplies-Tangible	25,000
7012550	Surface Wellhead Equipment	3,000
7012390	Pig Launchers/Receivers & Rel Equip	-
7011010	8% Contingency & Taxes	2,500
TOTAL ARTIFICIAL LIFT		79,000
TOTAL ARTIFICIAL LIFT COST		\$ 79,000

SUMMARY OF ESTIMATED DRILLING WELL COSTS

TOTAL LOCATION COST	\$ 103,500
TOTAL DRILLING COST	\$ 2,406,780
TOTAL COMPLETIONS COST	\$ 3,742,378
TOTAL SURFACE EQUIPMENT COST	\$ 808,242
TOTAL ARTIFICIAL LIFT COST	\$ 79,000
GRAND TOTAL COST	\$7,139,900



AUTHORITY FOR EXPENDITURE
EXPLORATION & PRODUCTION

Drilling Project #
Pad Project #
DATE: 11/15/2017

Permian Asset Team

Field BRINNINSTOOL
Lease / Facility ELIZABETH REED FEDERAL 22 33 26 SB 8H
Operator MARATHON OIL PERMIAN LLC

Location 22, 33, 26 Rig NR5
State NEW MEXICO
County/Parish LEA
Estimated Start Date 4-Nov-2018
Estimated Completion Date 2-Dec-2018


Estimated Gross Cost This AFE: \$7,031,630

Project Description & Reason for Expenditure: Drill, Complete, & Equip a Horizontal Well

This well is planned to be drilled and completed with multistage fracturing using plug and perf. The estimated cost of drilling, testing, completing, and equipping the well is \$7,031,630 as detailed in the provided authority for expenditure document. This will include installation of transitional and long term artificial lift systems. The well will be drilled to a total vertical depth of 11,045' and a total measured depth of 15,941', with an estimated treatable lateral length of 4,628' and will be completed with an estimated 30 stages and approximately 2,500 lbs/ft of proppant.

Prepared By: MATT RUGAARD, JOSH SHANNON, MATTT HENSCHEN, BILLY MOORE,

Final Approval


Title: Regional Vice President Permian Asset Team

Date: 11/15/2017

Participant's Approval

Name of
Company: _____

Signature: _____

Title: _____ Date: _____

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

DATE 11/15/2017
DRILLING & LOCATION PREPARED BY MATT RUGAARD
COMPLETION PREPARED BY JOSH SHANNON
FACILITIES PREPARED BY MATTT HENSCHEN
ARTIFICIAL LIFT PREPARED BY BILLY MOORE

Asset Team	PERMIAN			
Field	BRINNINSTOOL	FORMATION: 2ND BONE SPRINGS	WILDCAT	EXPLORATION
Lease/Facility	ELIZABETH REED FEDERAL 22 33 26 58 8H		DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY		X EXPLOITATION	WORKOVER
Prospect	RANGER			

Est Total Depth	15,941	Est Drilling Days	#VALUE!	Est Completion Days	5.5
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LOCATION COST - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	67,500
7001250	Land Broker Fees and Services	36,000
TOTAL LOCATION COST - INTANGIBLE		103,500

DRILLING COST - TANGIBLE

7012050	Conductor Pipe	28,000
7012050	Surface Casing	58,000
7012050	Intermediate Casing 1	138,000
7012050	Intermediate Casing 2	-
7012050	Production Casing	240,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	-
7012550	Drilling Wellhead Equipment	70,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	-
TOTAL DRILLING - TANGIBLE		558,000

DRILLING COST - INTANGIBLE

7019200	Drilling Rig Mob/Demob	75,000
7019220	Drilling Rig - day work/footage	415,000
7019040	Directional Drilling Services	157,500
7019020	Cement and Cementing Service	35,000
7019020	Cement and Cementing Service	40,000
7019020	Cement and Cementing Service	-
7019020	Cement and Cementing Service	100,000
7019140	Mud Fluids & Services	58,000
7012310	Solids Control equipment	34,000
7012020	Bits	65,000
7019010	Casing Crew and Services	35,000
7016350	Fuel (Rig)	64,000
7019140	Fuel (Mud)	-
7001460	Water (non potable)	25,000
7019000	Well Logging Services	-
7019150	Mud Logging/geosteering	15,000
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)	135,000
7001440	Vacuum Trucks	20,000
7000030	Contract Labor - general	30,000
7018150	Rental Tools and Equipment (surface rentals)	83,000
7018150	Rig Equipment and Misc.	6,225
7001110	Telecommunications Services	10,000
7001120	Consulting Services	97,525
7001400	Safety and Environmental	10,000
7018120	Rental Buildings (trailers)	-
7019310	Coring (sidewalls & analysis)	-
7011010	8% Contingency & Taxes	170,260
TOTAL DRILLING - INTANGIBLE		\$1,740,510

TOTAL DRILLING COST

\$2,298,510

COMPLETION - TANGIBLE

7012580	Tubing	75,000
7012040	Tubing Accessories (nipple, wireline entry)	15,000
7012550	Wellhead Equip	20,000
7012560	Packers - Completion Equipment	38,850
TOTAL COMPLETION - TANGIBLE		\$148,850

Asset Team PERMIAN
 Field BRINNINSTOOL FORMATION: 2ND BONE SPRINGS
 Lease/Facility ELIZABETH REED FEDERAL 22 33 26 58 8H

COMPLETION - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	20,000
7019220	Drilling Rig During Completion	20,000
7019140	Mud Fluids & Services	-
7019030	Coiled Tubing Services (3 runs)	140,000
7019240	Snubbing Services	25,000
7019270	Pulling/Swab Units	10,000
7016350	Fuel (from drlg)	-
7019010	Casing Crew and Services	-
7019020	Cement and Cementing Services	-
7019080	Well Testing Services (flow hand & equip)	71,000
7019320	Fracturing Services	1,860,000
7019330	Perforating	124,000
7019360	Wireline Services	-
7001460	Water Hauling & Disposal (frac fluids)	550,000
7016180	Freight - Truck (haul pipe; drlg & compl)	40,000
7018150	BOP Rental & Testing	-
7018150	Rental Tools and Equipment (incl drlg; lightplant,hydra-walk)	-
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	45,000
7000030	Contract Labor - general	75,000
7001110	Telecommunications Services	25,000
7001400	Safety and Environmental	-
7001120	Consulting Services	30,000
7018150	Zipper Manifold	57,600
7019300	Frack Stack Rentals	39,000
7016190	Freight (Transportation Services)	-
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	100,000
7018120	Rental Buildings (trailers)	55,000
7000030	Contract Labor - Pumping (pump-down pumps)	42,000
7011010	8% Contingency & Taxes	264,928
TOTAL COMPLETION - INTANGIBLE		\$3,593,528

TOTAL COMPLETION COST

\$3,742,378

SURFACE EQUIPMENT - TANGIBLE

7012350	Misc. Piping, Fittings & Valves	86,765
7006640	Company Labor & Burden	-
7000030	Contract Labor - General	69,528
7001110	Telecommunication equip (Telemetry)	-
7012410	Line Pipe & Accessories	31,445
7012270	Miscellaneous Materials (containment system)	43,047
7008060	SCADA	-
7016180	Freight - truck	-
7001190	Contract Engineering	29,116
7012290	Metering and Instrumentation	216,639
7012290	I&E Materials	-
7012200	Gas Treating	-
7012200	Dehydration	-
7012010	Compressor	-
7012350	Power	-
7012610	Vapor Recovery Unit	-
7012440	Separator & other pressure vessels	105,954
7012500	Tanks	142,674
7012100	Heater Treater	12,997
7012640	Flare & Accessories	17,469
7000010	Electrical Labor	29,116
7000010	Mechanical Labor	-
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7012350	Electrical Power (electrical cooperative construction costs)	23,293
TOTAL SURFACE EQUIPMENT - TANGIBLE		\$808,242

TOTAL SURFACE EQUIPMENT COST

\$ 808,242

ARTIFICIAL LIFT

7006640	Company Labor	3,000
7012180	Gas Lift Equipment	23,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	-
7012140	Elect Sub Pumps (ESP)	-
7019350	Well Services-Well/Wellhead Services	22,500
7012270	Materials & Supplies-Tangible	25,000
7012550	Surface Wellhead Equipment	3,000
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TOTAL ARTIFICIAL LIFT		79,000

TOTAL ARTIFICIAL LIFT COST

\$ 79,000

SUMMARY OF ESTIMATED DRILLING WELL COSTS

TOTAL COST

TOTAL LOCATION COST	\$ 103,500
TOTAL DRILLING COST	\$ 2,298,510
TOTAL COMPLETIONS COST	\$ 3,742,378
TOTAL SURFACE EQUIPMENT COST	\$ 808,242
TOTAL ARTIFICIAL LIFT COST	\$ 79,000
GRAND TOTAL COST	\$7,031,630

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

**AMENDED APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL
OF A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO.**

CASE NO. 16421

**AMENDED APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL
OF A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO.**

CASE NO. 16423

AFFIDAVIT

STATE OF Texas)
) ss.
COUNTY OF Harris)

Ethan Perry, 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 A** is a structure map of the top of the Bone Spring. The proposed project area is identified by black-dashed boxes. The proposed horizontal locations are identified by a blue line, and the proposed Bone Spring wells are numbered 1, 2, and 3.

3. Exhibit A identifies Bone Spring wells in the vicinity of the proposed wells, with a line of cross-section running from A to A'.

4. Exhibit A shows that the structure dips down to the south.
5. **Exhibit B** is a Second Bone Spring cross section. It 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 for the SB 4H and SB 8H wells is the Second Bone Spring Sand, as identified by the words "Producing Zone" and the shaded area across the cross section. That zone is continuous across the well unit.
6. **Exhibit C** is a Gross Sand Isochore of the Second Bone Spring. The Second Bone Spring is uniform across the proposed well unit.
7. **Exhibit D** is a Wolfcamp cross section. It is a stratigraphic cross-section hung on the top of the Wolfcamp. The well logs on the cross-section give a representative sample of the Third Bone Spring Sand formation in the area. The target zone for the TB 7H well is the Third Bone Spring Sand, as identified by the words "Producing Zone" and the shaded area across the cross section. That zone is continuous across the well unit.
8. **Exhibit E** is a Gross Sand Isochore of the Third Bone Spring. The Third Bone Spring is uniform across the proposed well unit.
9. I conclude from the maps that:
 - a. The horizontal spacing and proration 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 unit will contribute more or less equally to production.

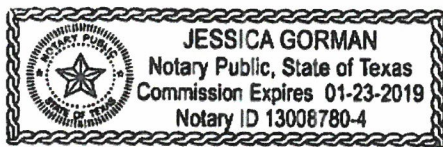
10. The preferred well orientation in this area is north-south. This is because the maximum horizontal stress orientation is roughly east-west.

Ethan Perry
Ethan Perry

SUBSCRIBED AND SWORN to before me this 18th day of September, 2018 by Ethan Perry, on behalf of Marathon Oil Permian LLC.

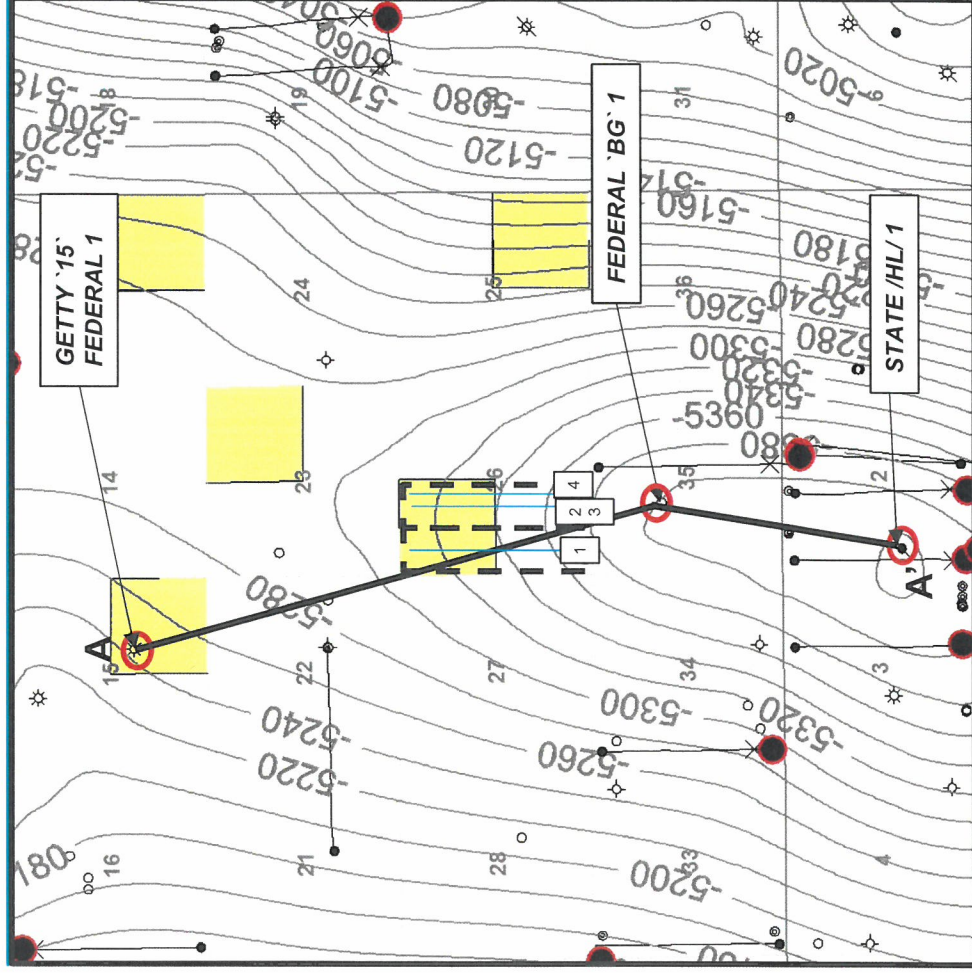
Jessica Gorman
Notary Public

My commission expires: 1/23/2019



Elizabeth Reed Federal 22 33 26 SB 4H, SB 8H, TB 7H and WA 6H

Structure Map – Top of Bone Spring (SSTVD)

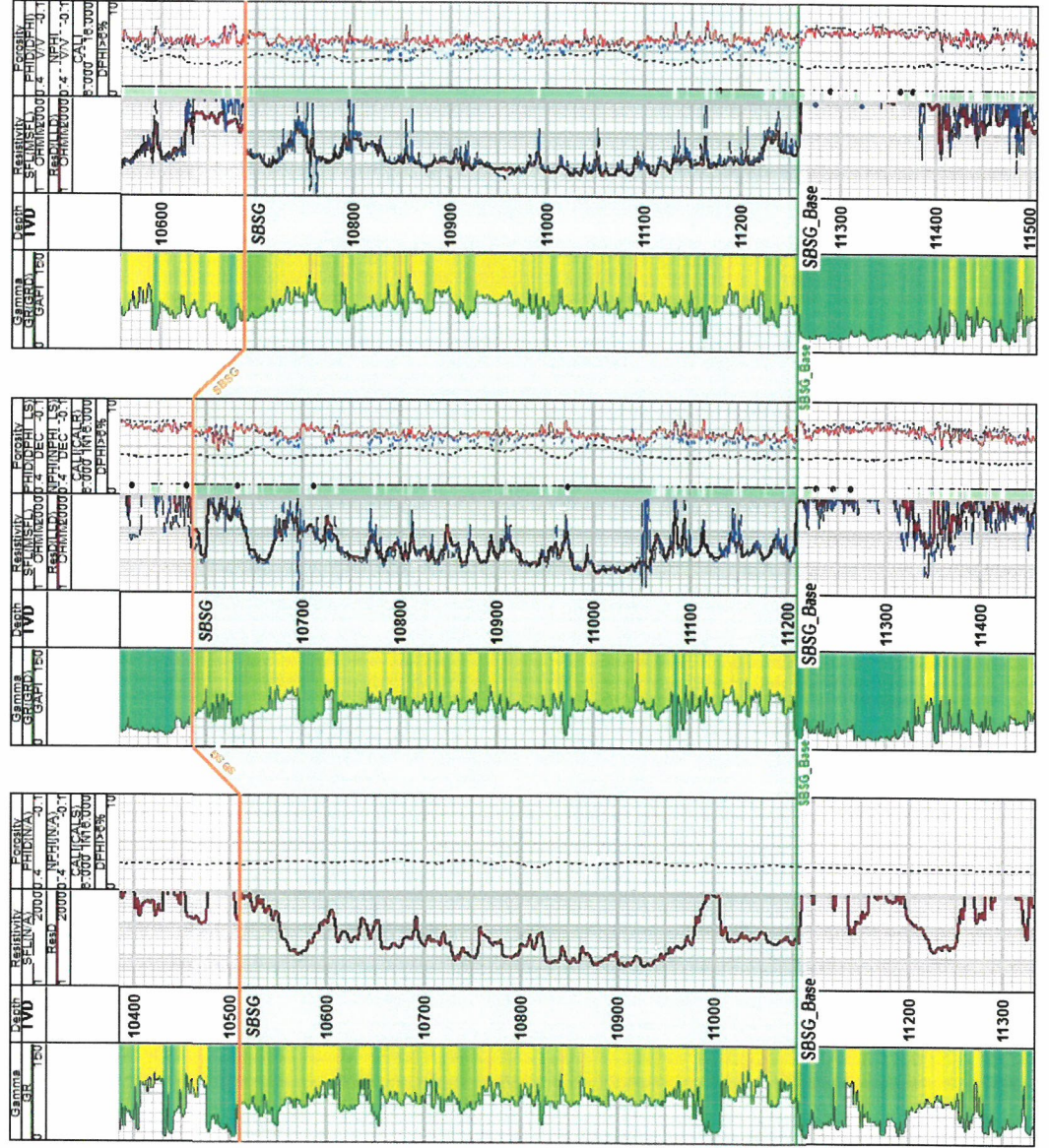
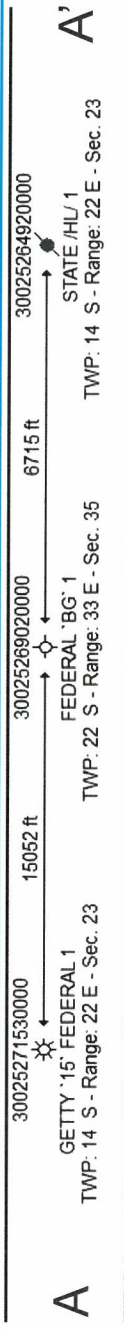


EXHIBIT

A

Elizabeth Reed Federal 22 33 26 SB 4H, SB 8H, TB 7H and WA 6H

Stratigraphic Cross Section (Top Second Bone Spring Base Datum)

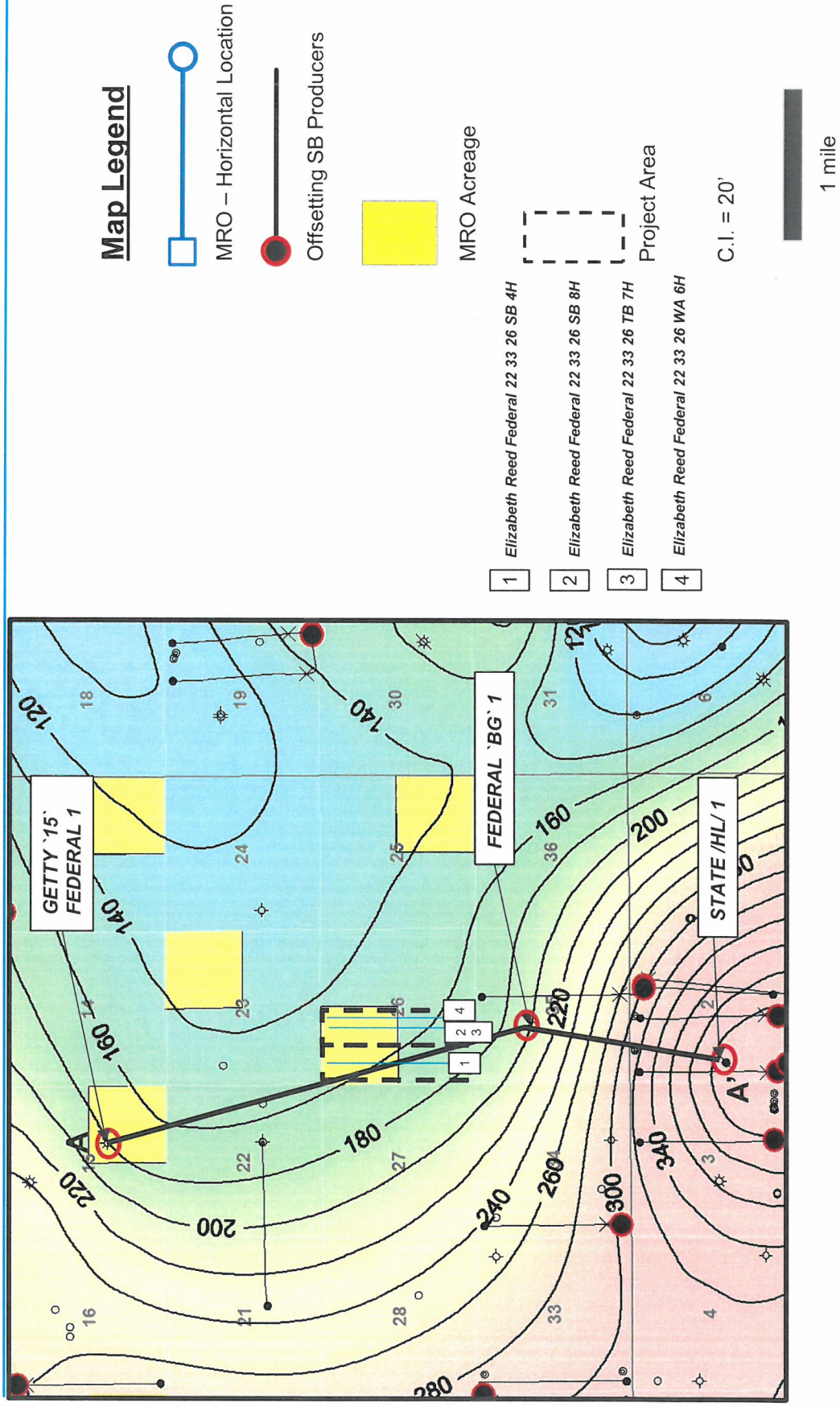


Producing
Zone



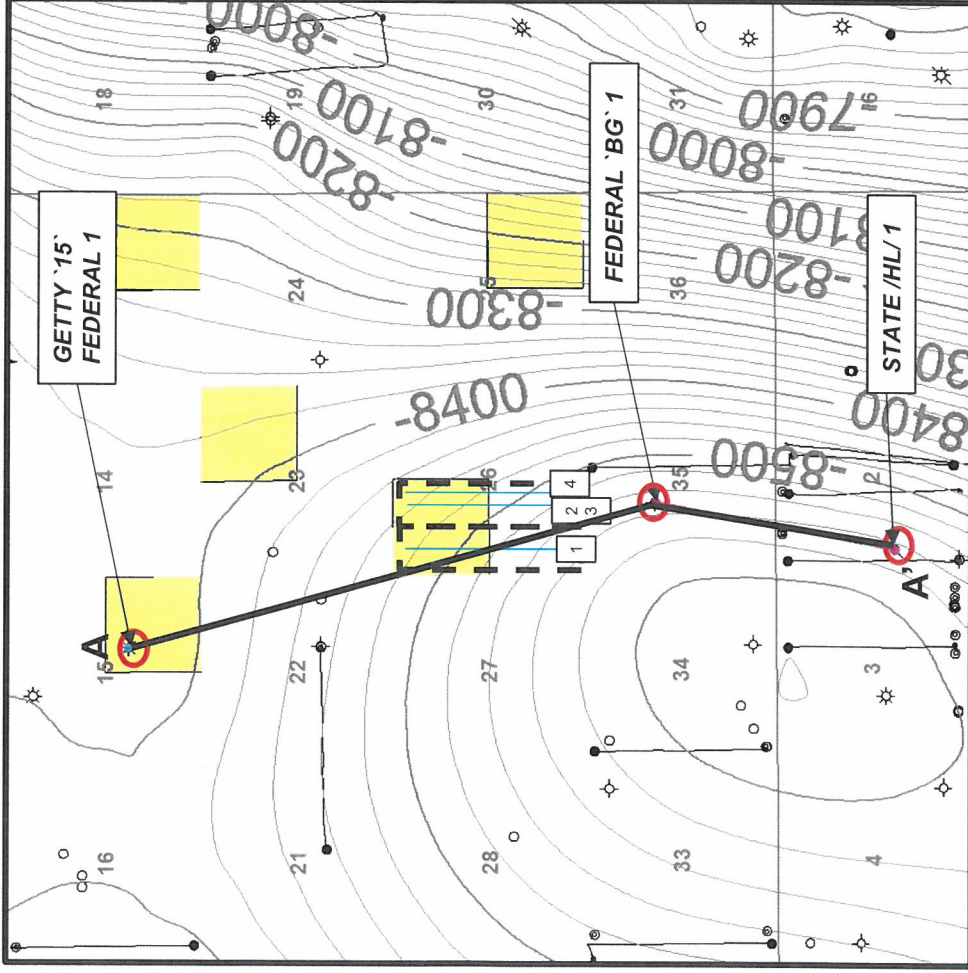
Elizabeth Reed Federal 22 33 26 SB 4H, SB 8H, TB 7H and WA 6H

Gross Sand Isochore – Second Bone Spring



Elizabeth Reed Federal 22 33 26 SB 4H, SB 8H, TB 7H and WA 6H

Structure Map – Top of Wolfcamp (SSTVD)



Map Legend



MRO – Horizontal Location



No Offsetting TB Producers



MRO Acreage



Project Area

C.I. = 20'



1 mile

- | | |
|---|---------------------------------------|
| 1 | Elizabeth Reed Federal 22 33 26 SB 4H |
| 2 | Elizabeth Reed Federal 22 33 26 SB 8H |
| 3 | Elizabeth Reed Federal 22 33 26 TB 7H |
| 4 | Elizabeth Reed Federal 22 33 26 WA 6H |

EXHIBIT

P-1

tables

Elizabeth Reed Federal 22 33 26 SB 4H, SB 8H, TB 7H and WA 6H

Stratigraphic Cross Section (Top Wolfcamp Datum)

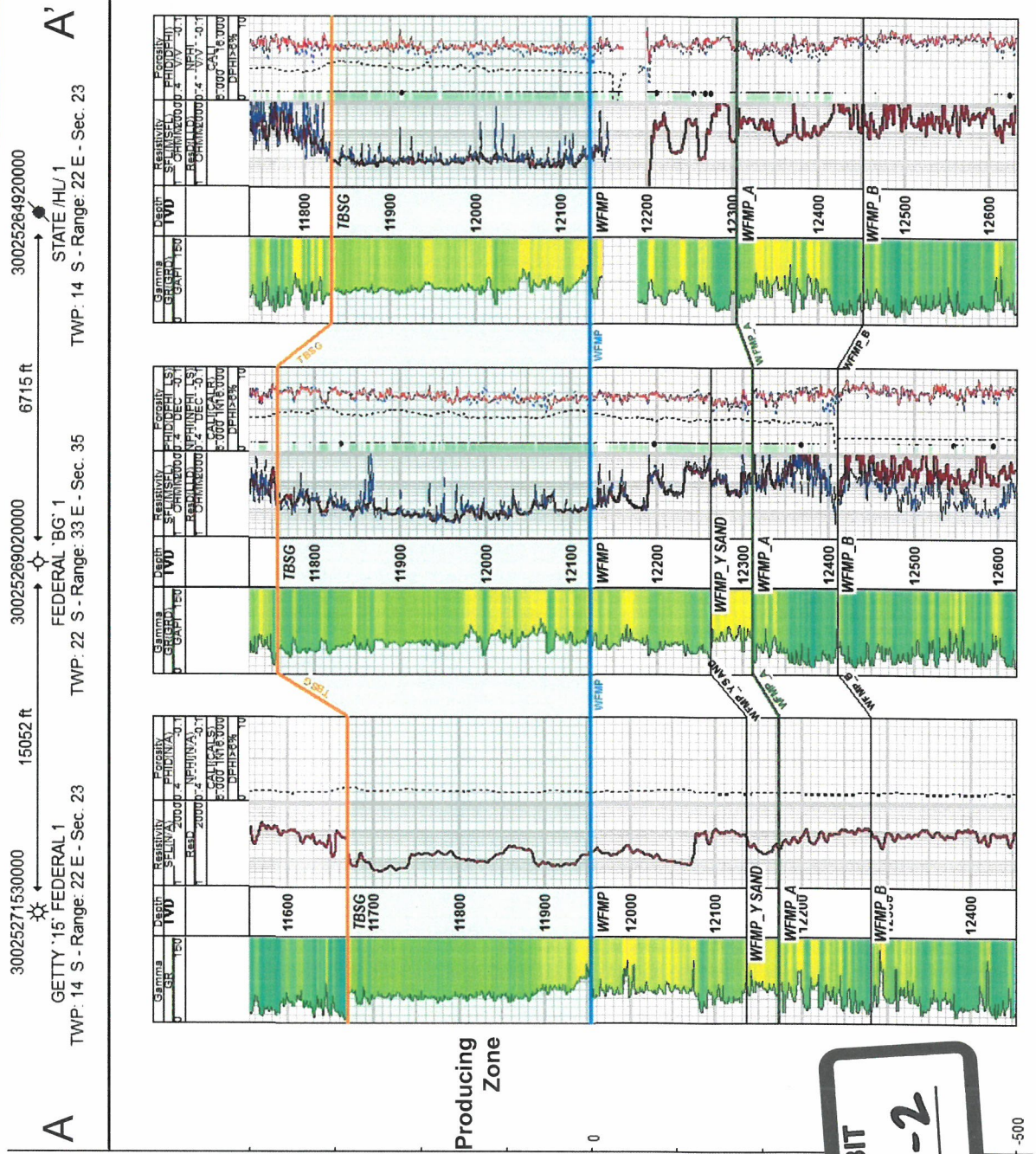
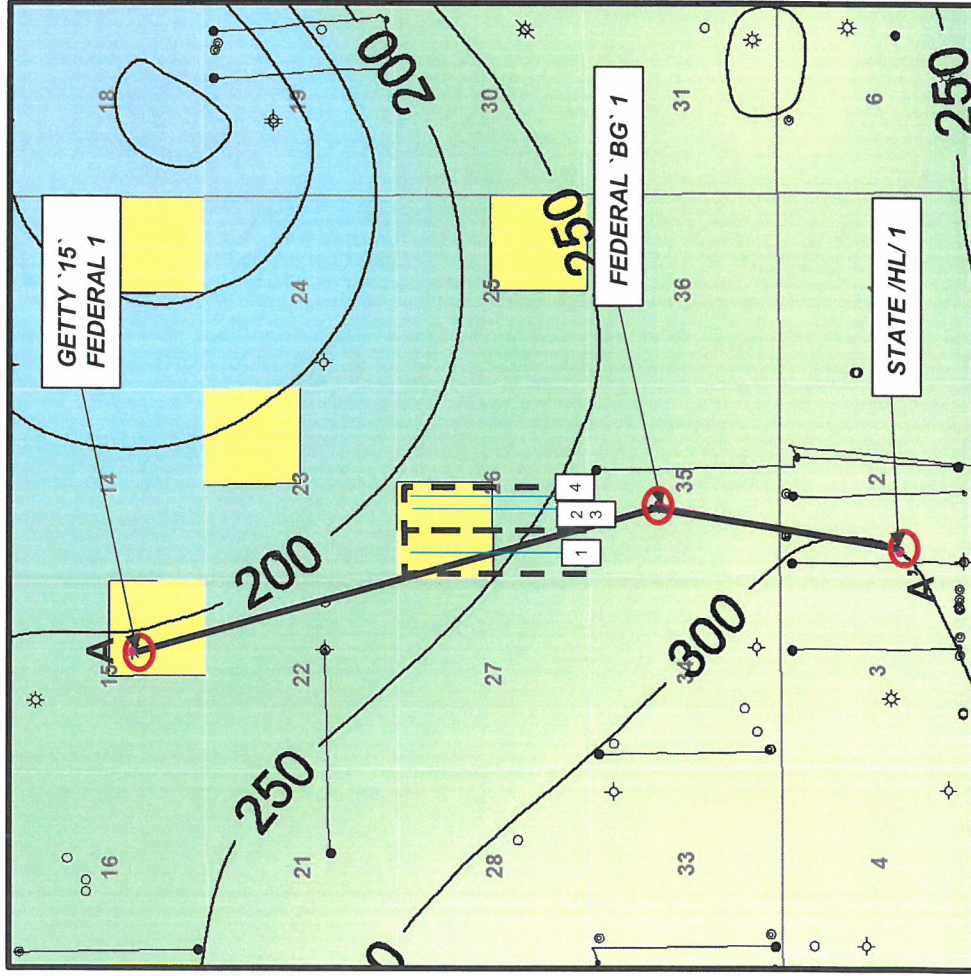


EXHIBIT
D-2

Elizabeth Reed Federal 22 33 26 SB 4H, SB 8H, TB 7H and WA 6H

Gross Sand Isochore – Third Bone Spring



Map Legend



MRO – Horizontal Location



No Offsetting TB Producers



MRO Acreage



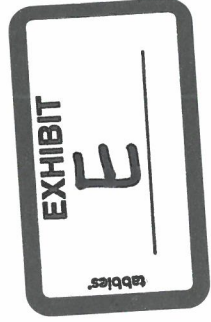
Project Area

C.I. = 20'



1 mile

- 1 Elizabeth Reed Federal 22 33 26 SB 4H
- 2 Elizabeth Reed Federal 22 33 26 SB 8H
- 3 Elizabeth Reed Federal 22 33 26 TB 7H
- 4 Elizabeth Reed Federal 22 33 26 WA 6H



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

**AMENDED APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL
OF A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO.**

CASE NO. 16421

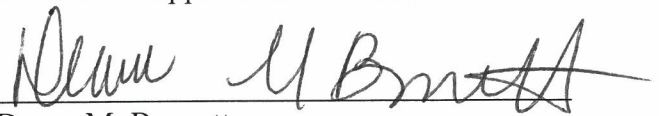
**AMENDED APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL
OF A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO.**

CASE NO. 16423

AFFIDAVIT

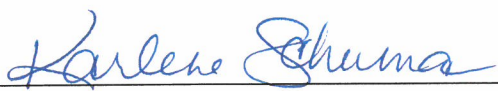
STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

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 provided under the notice letter and that proof of receipt is attached hereto. Marathon has conducted a good faith, diligent effort to find the names and correct addresses for the interest owners entitled to receive notice of the application filed herein.


Deana M. Bennett

SUBSCRIBED AND SWORN to before me this 19th day of September, 2018 by Deana M. Bennett.




Notary Public

Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87114

PS Form 3877

Type of Mailing: CERTIFIED
08/31/2018

81363-
146



Firm Mailing Book ID: 150157

Line	Article Number	Name, Street & P.O. Address	Postage	Fee	R.R.Fee	Reference	Rest.Del.Fee Contents
1	9314 8699 0430 0050 3054 18	Devon Energy Production Company, L.P. 333 West Sheridan Avenue Oklahoma City OK 73102	\$1.42	\$3.45	\$1.50	81363-0146	\$0.00 Notice
2	9314 8699 0430 0050 3054 25	State Royalty Limited Partnership P.O. Box 911 Breckenridge TX 76424	\$1.42	\$3.45	\$1.50	81363-0146	\$0.00 Notice
3	9314 8699 0430 0050 3054 32	Alan Jochimsen 4209 Cardinal Lane Midland TX 79707	\$1.42	\$3.45	\$1.50	81363-0146	\$0.00 Notice
4	9314 8699 0430 0050 3054 49	Monty McLane P.O. Box 9451 Midland TX 79708	\$1.42	\$3.45	\$1.50	81363-0146	\$0.00 Notice
5	9314 8699 0430 0050 3054 56	Chilmark Properties, LLC 110 W. Louisiana, Suite 404 Midland TX 79701	\$1.42	\$3.45	\$1.50	81363-0146	\$0.00 Notice
6	9314 8699 0430 0050 3054 63	Fred L. Engle P.O. Box 26245 Milwaukee WI 53226	\$1.42	\$3.45	\$1.50	81363-0146	\$0.00 Notice
7	9314 8699 0430 0050 3054 70	Scott W. Tanberg P.O. Box 7662 Midland TX 79708	\$1.42	\$3.45	\$1.50	81363-0146	\$0.00 Notice
8	9314 8699 0430 0050 3054 87	The Rebecca L. Engle Children's Irrevocable Trust P.O. Box 1184 Sioux Falls SD 57101	\$1.42	\$3.45	\$1.50	81363-0146	\$0.00 Notice
9	9314 8699 0430 0050 3054 94	David B. Engle 38315 Sunset Drive Oconomowoc WI 53066	\$1.42	\$3.45	\$1.50	81363-0146	\$0.00 Notice
10	9314 8699 0430 0050 3055 00	EOG Y Resources, Inc., EOG M Resources, Inc. EOG A Resources, Inc., EOG Resources 105 S 4th Street Artesia NM 88210	\$1.42	\$3.45	\$1.50	81363-0146	\$0.00 Notice
11	9314 8699 0430 0050 3055 17	EOG Y Resources, Inc., EOG M Resources, Inc. EOG A Resources, Inc., EOG Resources 5509 Champtions Drive Midland TX 79706	\$1.42	\$3.45	\$1.50	81363-0146	\$0.00 Notice
12	9314 8699 0430 0050 3055 24	OXY Y-1 Company P.O. Box 27570 Houston TX 77227	\$1.42	\$3.45	\$1.50	81363-0146	\$0.00 Notice
13	9314 8699 0430 0050 3055 31	Sharbro Oil LTD Co. P.O. Box 840 Artesia NM 88210	\$1.42	\$3.45	\$1.50	81363-0146	\$0.00 Notice
14	9314 8699 0430 0050 3055 48	United States, Department of the Interior - BLM 301 Dinosaur Trail Santa Fe NM 87502	\$1.42	\$3.45	\$1.50	81363-0146	\$0.00 Notice
Totals:			\$19.88	\$48.30	\$21.00	Grand Total:	\$0.00 \$89.18

Karlene Schuman
 Modrall Sperling Roehl Harris & Sisk P.A.
 500 Fourth Street, Suite 1000
 Albuquerque NM 87114

PS Form 3877

Type of Mailing: CERTIFIED
 08/31/2018

Firm Mailing Book ID: 150157



Line	Article Number	Name, Street & P.O. Address	Postage	Fee	R.R.Fee	Reference	Rest.Del.Fee
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List Number of Pieces Listed by Sender	Total Number of Pieces Received at Post Office	Postmaster: Name of receiving employee	Dated:
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Transaction Report Details - CertifiedPro.net
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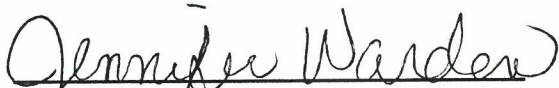
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9314869904300050305500	2018-08-31 12:53 PM	81363-0146	EOG Y Resources, Inc., EOG M Resources, Inc.	EOG A Resources, Inc., EOG Resources	105 S 4th Street	Artesia	NM	88210	Delivered	Return Receipt - Electronic	09-07-2018
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9314869904300050305487	2018-08-31 12:53 PM	81363-0146	The Rebecca L. Engle Children's Irrevocable Trust		P.O. Box 1184	Sioux Falls	SD	57101	Delivered	Return Receipt - Electronic	09-12-2018
9314869904300050305470	2018-08-31 12:53 PM	81363-0146	Scott W. Tanberg		P.O. Box 7662	Midland	TX	79708	Delivered	Return Receipt - Electronic	09-07-2018
9314869904300050305463	2018-08-31 12:53 PM	81363-0146	Fred L. Engle		P.O. Box 26245	Milwaukee	WI	53226	Delivered	Return Receipt - Electronic	09-07-2018
9314869904300050305456	2018-08-31 12:53 PM	81363-0146	Chilmark Properties, LLC		110 W. Louisiana, Suite 404	Midland	TX	79701	Delivered	Return Receipt - Electronic	09-10-2018
9314869904300050305449	2018-08-31 12:53 PM	81363-0146	Monty McLane		P.O. Box 9451	Midland	TX	79708	Delivered	Return Receipt - Electronic	09-04-2018
9314869904300050305432	2018-08-31 12:53 PM	81363-0146	Alan Jochimsen		4209 Cardinal Lane	Midland	TX	79707	Delivered	Return Receipt - Electronic	09-04-2018
9314869904300050305425	2018-08-31 12:53 PM	81363-0146	State Royalty Limited Partnership		P.O. Box 911	Breckenridge	TX	76024	Delivered	Return Receipt - Electronic	09-04-2018
9314869904300050305418	2018-08-31 12:53 PM	81363-0146	Devon Energy Production Company, L.P.		333 West Sheridan Avenue	Oklahoma City	OK	73102	Delivered	Return Receipt - Electronic	09-04-2018

Affidavit of Publication

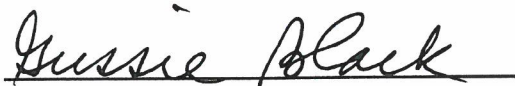
STATE OF NEW MEXICO
COUNTY OF LEA

I, Jennifer Warden, Administrative Coordinator of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

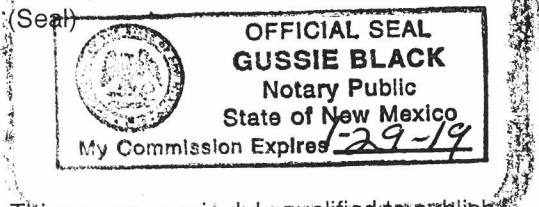
Beginning with the issue dated
September 07, 2018
and ending with the issue dated
September 07, 2018.


Administrative Coordinator

Sworn and subscribed to before me this
7th day of September 2018.


Business Manager

My commission expires
January 29, 2019



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL NOTICE
September 7, 2018

CASE No. 16421: Notice to all affected parties, as well as the heirs and devisees of Devon Energy Production Company, L.P., State Royalty Limited Partnership, Alan Jochimsen, Monty McLane, Chilmark Properties, LLC, Fred L. Engle, Scott W. Tanberg, The Rebecca L. Engle Children's Irrevocable Trust of 2003, David B. Engle, EOG Y Resources, Inc., EOG M Resources, Inc., EOG A Resources, Inc., EOG Resources Assets LLC, EOG Y Resources, Inc., EOG M Resources, Inc., EOG A Resources, Inc., EOG Resources Assets LLC, OXY Y-1 Company, Sharbro Oil LTD Co., United States, Department of the Interior - BLM of Marathon Oil Permian LLC's amended application for a non-standard spacing and proration unit and compulsory pooling, Lea 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 20, 2018, to consider this application. Applicant seeks an order from the Division: (1) to the extent necessary, approving the creation of a non-standard Bone Spring spacing and proration unit; and (2) pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the W/2 W/2 of Section 26, Township 22 South, Range 33 East, NMPM, Lea County, New Mexico. This proposed spacing unit will be dedicated to the Elizabeth Reed Federal 22-33-26 SB 4H well, to be horizontally drilled. The producing area for the 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 23 miles west south west of Eunice, New Mexico.

CASE NO. 16423: Notice to all affected parties, as well as the heirs and devisees of Devon Energy Production Company, L.P., State Royalty Limited Partnership, Alan Jochimsen, Monty McLane, Chilmark Properties, LLC, Fred L. Engle, Scott W. Tanberg, The Rebecca L. Engle Children's Irrevocable Trust of 2003, David B. Engle, EOG Y Resources, Inc., EOG M Resources, Inc., EOG A Resources, Inc., EOG Resources Assets LLC, EOG Y Resources, Inc., EOG M Resources, Inc., EOG A Resources, Inc., EOG Resources Assets LLC, OXY Y-1 Company, Sharbro Oil LTD Co., United States, Department of the Interior - BLM of Marathon Oil Permian LLC's amended application for a non-standard spacing and proration unit and compulsory pooling, Lea County, New Mexico. Applicant seeks an order from the Division: approving the creation of a non-standard Bone Spring spacing and proration unit; and pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 W/2 of Section 26, Township 22 South, Range 33 East, NMPM, Lea County, New Mexico. This proposed spacing unit will be dedicated to the Elizabeth Reed Federal 22-33-26 TB 7H and Elizabeth Reed Federal 22-33-26 SB 8H 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 wells are completed. Said area is located approximately 23 miles west south west of Eunice, New Mexico.

CASE NO. 16422: Notice to all affected parties, as well as the heirs and devisees of Devon Energy Production Company, L.P., State Royalty Limited Partnership, Alan Jochimsen, Monty McLane, Chilmark Properties, LLC, Fred L. Engle, Scott W. Tanberg, The Rebecca L. Engle Children's Irrevocable Trust of 2003, David B. Engle, EOG Y Resources, Inc., EOG M Resources, Inc., EOG A Resources, Inc., EOG Resources Assets LLC, EOG Y Resources, Inc., EOG M Resources, Inc., EOG A Resources, Inc., EOG Resources Assets LLC, OXY Y-1 Company, Sharbro Oil LTD Co., United States, Department of the Interior - BLM of Marathon Oil Permian LLC's amended application for a non-standard spacing and proration unit and compulsory pooling, Lea County, New Mexico. Applicant seeks an order from the Division: to the extent necessary, approving the creation of a non-standard Wolfcamp spacing and proration unit; and pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 W/2 of Section 26, Township 22 South, Range 33 East, NMPM, Lea County, New Mexico. This proposed spacing unit will be dedicated to the Elizabeth Reed Federal 22-33-26 WA 6H 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 23 miles west south west of Eunice, New Mexico.

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DOLORES SERNA
MODRALL, SPERLING, ROEHL, HARRIS &
P. O. BOX 2168
ALBUQUERQUE, NM 87103-2168

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

AMENDED APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL
OF A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 16421

AMENDED APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL
OF A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 16422

AMENDED APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL
OF A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 16423

AFFIDAVIT

STATE OF Texas)
) ss.
COUNTY OF Harris)

Jacob Rotolo being duly sworn, deposes and states:

1. I am over the age of 18, I am an engineer for Marathon Oil Permian LLC ("Marathon"), and have personal knowledge of the matters stated herein.
2. I received a BS in Petroleum Engineering from LSU in May of 2007.
3. I have worked for Marathon Oil as a Reservoir Engineering Supervisor since February of 2018. In total I have eleven years industry experience in Petroleum Engineering. Prior to my employment with Marathon Oil, I worked for Hess Corporation as a Reservoir Engineer in

their North Dakota Asset and also for Occidental Petroleum as a Reservoir Engineer in their Permian Basin Asset.

4. My work for Marathon involves Lea County, and I am familiar with the engineering matters involved in these cases.

5. Marathon, in its amended applications that it submitted for the **Elizabeth Reed Federal 22-33-26 SB 4H**, **Elizabeth Reed Federal 22-33-26 WA 6H**, and the **Elizabeth Reed Federal 22-33-26 TB 7H** and **Elizabeth Reed Federal 22-33-26 SB 8H wells**, requested 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.

6. Marathon requests a modification to the time allowed between the time the well is drilled and completion of the well to allow for 240 days, rather than year.

7. Marathon requests additional time between the time the well is drilled and completion of the well because Marathon is currently using one fracturing rig and one completion crew.

Jacob Rotalo
Jacob Rotalo

SUBSCRIBED AND SWORN to before me this 18th day of September, 2018
by Jacob Rotalo, on behalf of Marathon Oil Permian LLC.

Jessica Gorman
Notary Public

My commission expires: 1/23/2019

