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

Case No. 16422

Elizabeth Reed Fed 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. 16422**

### **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 Wolfcamp spacing and proration unit for the development of a horizontal well; and (2) 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. 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 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 WA 6H** well to a depth sufficient to test the Wolfcamp 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 Wolfcamp 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 the pooling of all interests in the Wolfcamp 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 Wolfcamp 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 well to be drilled thereon;
- D. Authorizing Marathon to recover its costs of drilling, equipping and completing this 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.

Jennifer Bradfute

Deana M. Bennett

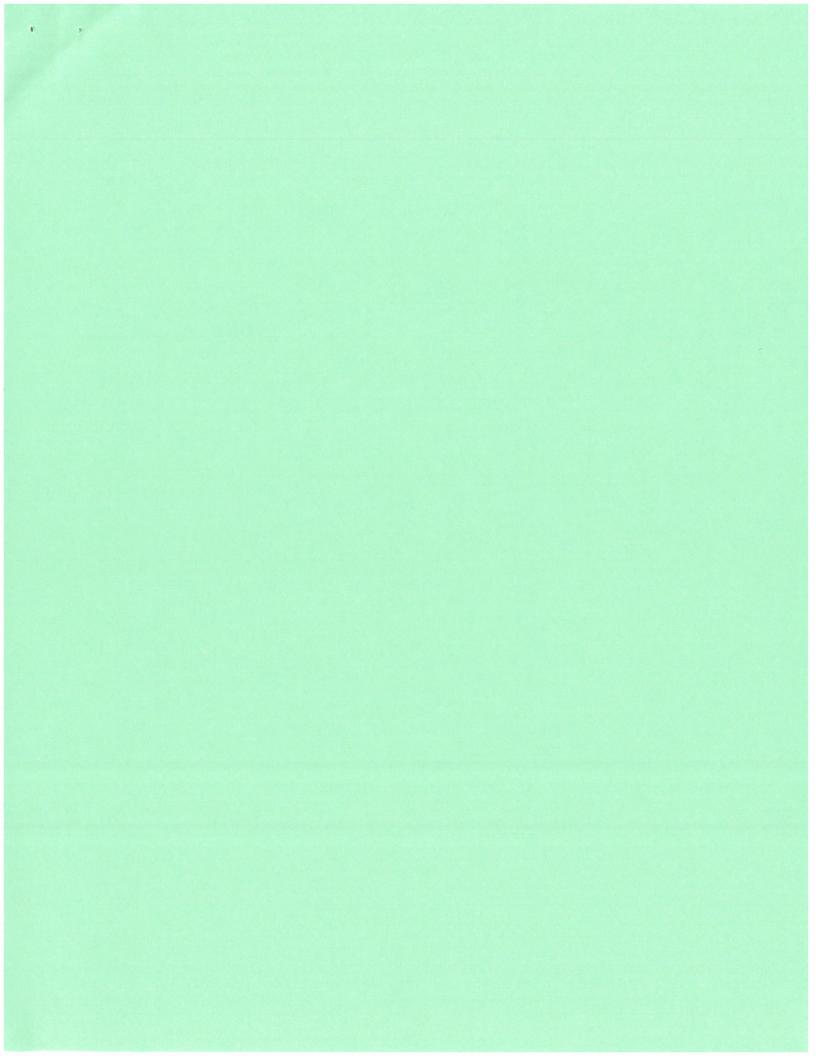
Post Office Box 2168

500 Fourth Street NW, Suite 1000

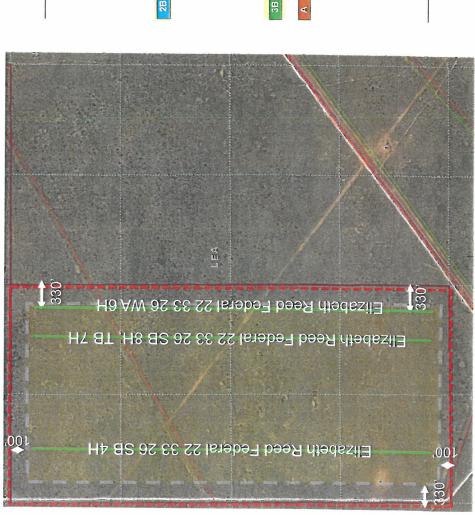
Albuquerque, New Mexico 87103-2168

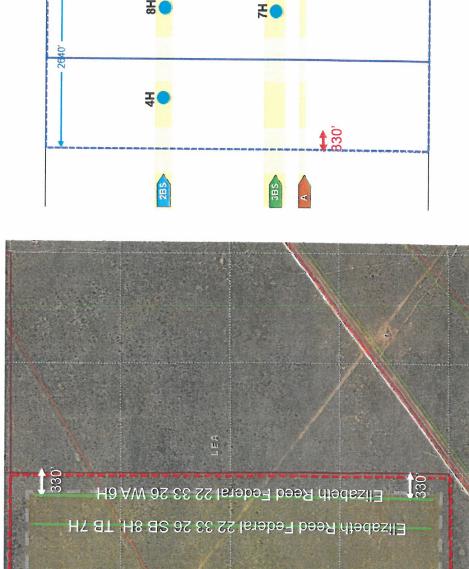
Telephone: 505.848.1800 *Attorneys for Applicant* 

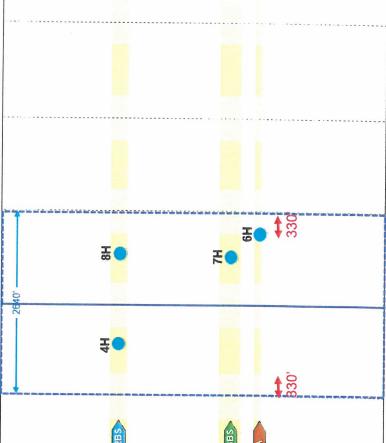
CASE NO. 16422: Amended Application of Marathon Oil Permian LLC for a non-standard spacing and proration unit and compulsory pooling, Lea County, New Mexico. Applicant seeks an order from the Division: (1) to the extent necessary, approving the creation of a non-standard Wolfcamp spacing and proration unit; and (2) 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.



# Elizabeth Reed Federal 22 33 26 Unit Development









### 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. 16422** 

	<b>AFFIDAVIT</b>
STATE OF TEXAS	)
	) ss.
COUNTY OF HARRIS	)

Ryan Gyllenband, 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. I submit the following information pursuant to NMAC 19.15.4.12.A(1) in support of the above referenced compulsory pooling application.
- 3. The purpose of these applications is to force pool working interest owners into the horizontal spacing unit described below, and in the well to be drilled in the unit.
- 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. Marathon seeks an order pooling of all mineral interests in the 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.

- 6. A plat outlining the unit being pooled 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.
  - 7. There are no depth severances within the Wolfcamp formation.
- 8. I have conducted a diligent search of the public records in the county where the wells are located, and conducted phone directory and computer searches to locate contact information for parties entitled to notification, and mailed all parties well proposals, including an Authorization for Expenditure.
- 9. Marathon has made a good faith effort to obtain voluntary joinder of the working interest owners in the proposed wells.
- 10. Attached as **Exhibit B** is a proposed C-102 for the well. The well will develop the Bell Lake, North (Wolfcamp) pool, pool code 5170, which is an oil pool.
- 11. The producing interval for the wells will be orthodox and will comply with the Division's set back requirements.
- 12. **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.
- 13. 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.

- 14. Marathon requests the maximum cost plus 200% risk charge be assessed against non-consenting working interest owners.
  - 15. Marathon requests that it be designated operator of the wells.
- 16. The attachments to this affidavit were prepared by me, or compiled from company business records.
- 17. I attest that the information provided herein is correct and complete to the best of my knowledge and belief.
- 18. The granting of this application is in the interests of conservation and the prevention of waste.

Ryan Gyllenband

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

Notary Public

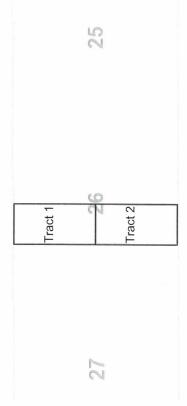
My commission expires: 1/29/2019



Lease Tract Map Elizabeth Reed Fed 22-33-26 WA 6H E/2 W/2 of Section 26, 22S-33E – 160 acres

Tract 1: Federal AcreageTract 2: Federal Acreage

23 24



34 35 36





### MarathonOil

### 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 Summary of Interests Fed 22-33-26 SB 8H

20.00%	50.00%	0.00%
20.00%	50.00%	
Committed Working Interest: Marathon Oil Permian LLC	Uncommitted Working Interest: Devon Energy Production Company, L.P.	Unleased Mineral Interest:

Elizabeth Reed

	Force	Force Pooled Owners			
Owner Name	Address 1	City	State	Zip	Туре
Devon Energy Production Company, L.P.	333 West Sheridan Avenue	Oklahoma City	ОК	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	P.O. Box 1184	Sioux Falls	QS	57101 ORBI	
David B. Engle	38315 Sunset Drive	Oconomowoc	Wi	53066 ORRI	

		Offsets			
Owner Name	Address 1	City	State	Zip	Туре
EOG Y Resources, Inc., EOG M Resources, Inc., EOG A					
Resources, Inc., EOG Resources Assets LLC	105 S 4th Street	Artesia	ΣN	88210 Offset	Iffset
EOG Y Resources, Inc., EOG M Resources, Inc., EOG A					
Resources, Inc., EOG Resources Assets LLC	5509 Champtions Drive	Midland	X	79706 Offset	ffset
OXY Y-1 Company	P.O. Box 27570	Houston	TX	77227 Offset	ffset
Sharbro Oil LTD Co.	P.O. Box 840	Artesia	MM	88210 Offset	Iffset
United States, Department of the Interior - BLM	301 Dinosaur Trail	Santa Fe	NA	87502 U	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 J 1625 N. French Dr., Hobbs, NM 88240 Phone (\$75) 393-6161 Fax: (\$75) 393-0720

811 S First St., Artesia, NM 88210 Phone: (\$75) 748-1283 Fax: (\$75) 748-9720 District JUL 1000 Rio Brazos Road, Aztec, NN187410 Phone: (\$05) 334-6178 First: (\$05) 334-6170

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone. (505) 476-3460 Fax: (505) 476-3462

District JV

State of New Mexico

Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.

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

☐ AMENDED REPORT

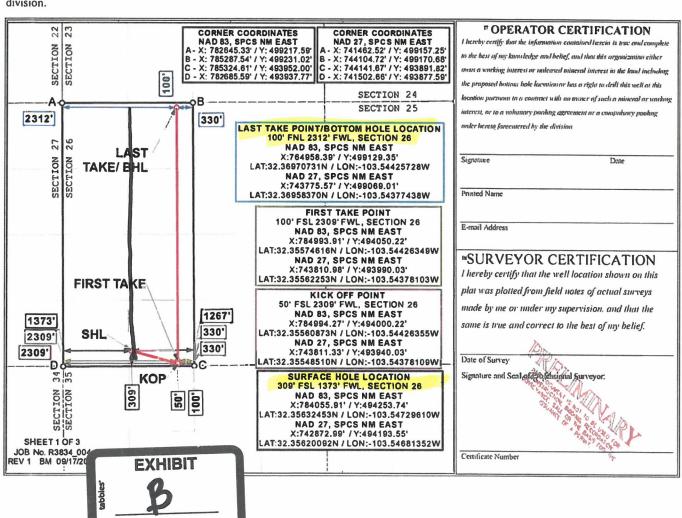
### WELL LOCATION AND ACREAGE DEDICATION PLAT

Santa Fe, NM 87505

1	API Numbe	r		<sup>2</sup> Pool Code			3 Pool Nar	ne				
				5170		BELL LA	KE, NORTH	H (WOLFCA	MP)			
Property (	Code				5 Property	Name		6	Well Number			
			ELIZ REED 22 33 26 WA FED						6H			
OGRID 7	No.	8 Operator Name						Operator Name Elevation				
37209	098 MARATHON OIL PE											
" Surface Location					•							
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County			
N	26	22S	33E		309	SOUTH	1373	WEST	IFA			

"Bottom Hole Location If Different From Surface III. 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 2312 WEST LEA 12 Dedicated Acres <sup>13</sup> Joint or Infill 14 Consolidation Code 15 Order No. 160.0

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.



### 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:

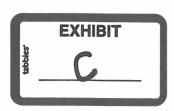
Marathon Oil Permian LLC ("MRO") proposes the drilling of the following wells located in Section 26, 22S-33E, Lea County, New Mexico.

- 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

the Elizabeth Reed Federal 22 33 26 SB 8H well.

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

By:		 	
Print Name:	 		
Title:			
D			

Advance Energy Partners



AUTHORITY FOR EXPENDITURE EXPLORATION & PRODUCTION

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

Permian Asset To	eam				
Field	BRINNINSTOOL		Location 22, 33, 26	Rig	NR5
Lease / Facility	ELIZABETH REED FEDERAL 22 33 26 W	4 6H		NEW MEXICO	INICO
Operator	MARATHON OIL PERMIAN LLC		_ County/Parish		
			Estimated Start Date		
			Estimated Completion Date		
Estimated	Gross Cost This AFE: \$7,402,070			4 500 2010	
Designet Descript	Non 9 December 5 - 5		_		
			plete, & Equip a Horizontal Well		_
This well is pla	anned to be drilled and completed with m	ultista	ge fracturing using plug and perf. The estin	nated cost of drilling	a testina
completing, ar	nd equipping the well is \$7,402,070 as de	tailed	in the provided authority for expenditure do	cument This will i	nclude
installation of	transitional and long term artificial lift sys	ems	in the provided dutilonly for experialitate do	Cornelli. This will I	liciuue
The well will b	e drilled to a total vertical depth of 12 299	and	a total measured depth of 17,212', with an	actimated tractable	lotorol
length of 4.629	9' and will be completed with an estimate	d 30 ¢	stages and approximately 2,500 lbs/ft of prop	esumateu meatable	alerai
, , , , , , , , , , , , , , , , , , ,	and this so completed that an commute	2 00 0	rages and approximately 2,300 lbs/it of prop	ррапі.	
					622
Prepared By:	MATT RUGAARD, JOSH SHANNON, MATTT HENSCH	N, BILL	Y MOORE, .		
1	Final Approval				
(h	m /helenna		11/15/2017		
Title Regio	onal Vive President Permian Asset Team	<b>2</b> :	11/18/101/		
Ologic	The Tresident Tennian Asset Team				
	Pow		ntin Annuarai		
	Fair	icipa	nt's Approval		
	Name of				
	Company:				
	Signature:				
	Title:		Date:		
			Date.		

EXHIBIT P

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

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

Asset Team	PERMIAN	
Field	BRINNINSTOOL FORMATION: WOLFCAMP A WILDCAT	EVELORATION
Lease/Facility	ELIZABETH REED FEDERAL 22 33 26 WA 6H DEVELOPMENT	EXPLORATION RECOMPLETION
Location	LEA COUNTY X EXPLOITATION	WORKOVER
Prospect	RANGER	WORKOVEK
Est Total Depth	17,212 Est Drilling Days #VALUE! Est Completion Days	5.5
LOCATION COST		
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	
7012050	Intermediate Casing 1	\$8,000
7012050	Intermediate Casing 2	138,000
7012050		278,000
	Production Casing	61,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550	Drilling Wellhead Equipment	70,000
7012040	Casing & Tubing Access	
7012270	Miscellaneous MRO Materials	24,000
	TOTAL DRILLING - TANGIBLE	712,000
DRILLING COST - I	NTANGIBLE	
7019200	Drilling Rig Mob/Demob	75,000
7019220	Drilling Rig - day work/footage	
7019040	Directional Drilling Services	465,000
7019020	Cement and Cementing Service Surface	181,250
7019020		35,000
7019020		40,000
	A CONTRACTOR OF THE CONTRACTOR	45,000
7019020	Cement and Cementing Service Production	50,000
7019140	Mud Fluids & Services	70,500
7012310	Solids Control equipment	39,000
7012020	Bits	80,000
7019010	Casing Crew and Services	
7016350	Fuel (Rig)	35,000
7019140	Fuel (Mud)	72,000
7001460	Water (non potable)	18,000
7019000		25,000
	Well Logging Services	
7019150	Mud Logging+geosteering	18,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110	Casing inspection/cleaning	10,000
7019110	Drill pipe/collar inspection services	18,000
7016180	Freight - truck	40,000
7001460	Water hauling and disposal (includes soil farming)	120,000
7001440	Vacuum Trucks	
7000030	Contract Labor - general	20,000
7018150	Rental Tools and Equipment (surface rentals)	35,000
7018150	Rig Equipment and Misc.	116,250
7001110		6,975
	Telecommunications Services	10,000
7001120	Consulting Services	109,275
7001400	Safety and Environmental	10,000
7018120	Rental Buildings (trailers)	
7019310	Coring (sidewalls & analysis)	
7011010	8% Contingency & Taxes	197,700
	TOTAL DRILLING - INTANGIBLE	\$1,956,950
	TOTAL DRILLING COST	
	TOTAL DRILLING COST	\$2,668,950
COMPLETION - TAN	NGIBLE	
7012580	Tubing	75,000
7012040	Tubing Accessories (nipple, wireline entry)	15,000
7012550	Wellhead Equip	20,000
7012560	Packers - Completion Equipment	38,850
		30,030
	TOTAL COMPLETION - TANGIBLE	\$148,850
		Va-10/030

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

Asset Team

PERMIAN

Field FORMATION: WOLFCAMP A Lease/Facility ELIZABETH REED FEDERAL 22 33 26 WA 6H **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 25,000 7019270 Pulling/Swab Units 10,000 7016350 Fuel (from drlg) 7019010 **Casing Crew and Services** 7019020 **Cement and Cementing Services** Well Testing Services (flow hand & equip) 71,000 7019320 Fracturing Services 1.850,000 7019330 Perforating 124,000 7019360 Wireline Services Water Hauling & Disposal (frac fluids) 550,000 7016180 Freight - Truck (haul pipe; drlg & compl) BOP Rental & Testing 7018150 Rental Tools and Equipment ( incl drig; lightplant,hydra-walk) CT Downhole Rental Equipment (ie. Bit, BHA) 7018150 45,000 7000030 Contract Labor - general 75,000 7001110 **Telecommunications Services** 25,000 7001400 Safety and Environmental 7001120 **Consulting Services** 30,000 7018150 57,600 7019300 Frack Stack Rentals 39,000 Freight (Transportation Services) 7016190 7018150 Equipment Rental ( w/o operator, frac tanks, lightplants) 100,000 7018120 Rental Buildings (trailers) 55,000 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 Company Labor & Burden 7000030 Contract Labor - General 69,528 7001110 Telecommunication equip (Telemetry) 7012410 31,445 Miscellaneous Materials (containment system) 7012270 43,047 SCADA 7016180 Freight - truck 7001190 Contract Engineering 29,116 ing and Instru 7012290 216,839 I&E Materials 7012290 7012200 Gas Treating 7012200 Dehydration 7012010 Compressor 7012350 7012610 Vapor Recovery Unit 7012440 Separator & other pressure vessels 105,954 7012500 Tanks 142,674 7012100 Heater Treater 12,997 7012640 Flare & Accessories 29,116 7000010 Mechanical Labor 7012480 Rod Pumping unit & Pad 7012180 7012350 Electrical Power (electrical cooperative construction costs) 23,293 \$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 Elect Sub Pumps (ESP) 7012140 7019350 Well Services-Well/Wellhead Services 22,500 7012270 Materials & Supplies-Tangible 25,000 Surface Wellhead Equipm 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 2,668,950 TOTAL COMPLETIONS COST 3,742,378 TOTAL SURFACE FOUIPMENT COST 808,242 TOTAL ARTIFICIAL LIFT COST 79,000

**GRAND TOTAL COST** 

\$7,402,070

### 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. 16422** 

,	<u>AFFIDAVIT</u>
STATE OF LINAS	)
J 1 .	) ss.
COUNTY OF Names	)

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 Wolfcamp formation. The proposed project area is identified by black-dashed boxes. The proposed horizontal location is identified by a blue line, and the proposed Wolfcamp well is number 4.
- 3. Exhibit A identifies wells in the vicinity of the proposed well, with a line of cross-section, running from A to A'.
  - 4. Exhibit A shows that the structure dips down to the southwest.
- 5. **Exhibit B** 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 Wolfcamp formation in the area. The target zone for the well is the Wolfcamp Y Sand and

Wolfcamp A, 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 Interval Isochore of the Wolfcamp-Wolfcamp B. The Wolfcamp-Wolfcamp B is uniform across the proposed well unit.
  - 7. I conclude from the maps that:
    - 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.
    - Each quarter quarter section in the unit will contribute more or less equally to production.
- 8. The preferred well orientation in this area is north-south. This is because the maximum horizontal stress orientation is roughly east-west.

Ethan Perry

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

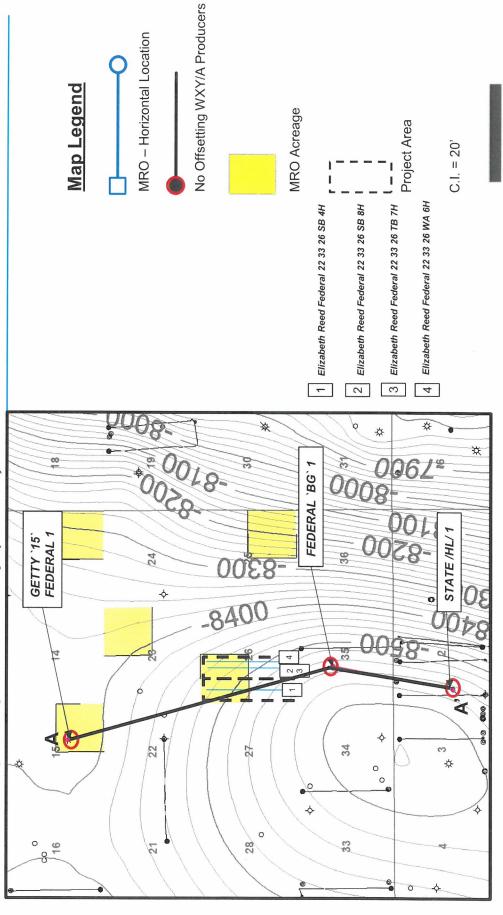
Notary Public

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 Wolfcamp (SSTVD)



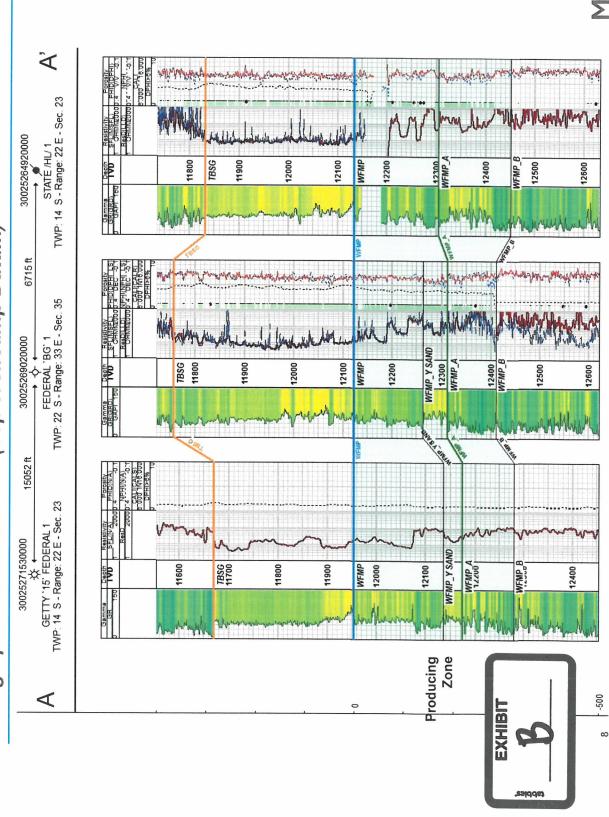




1 mile

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

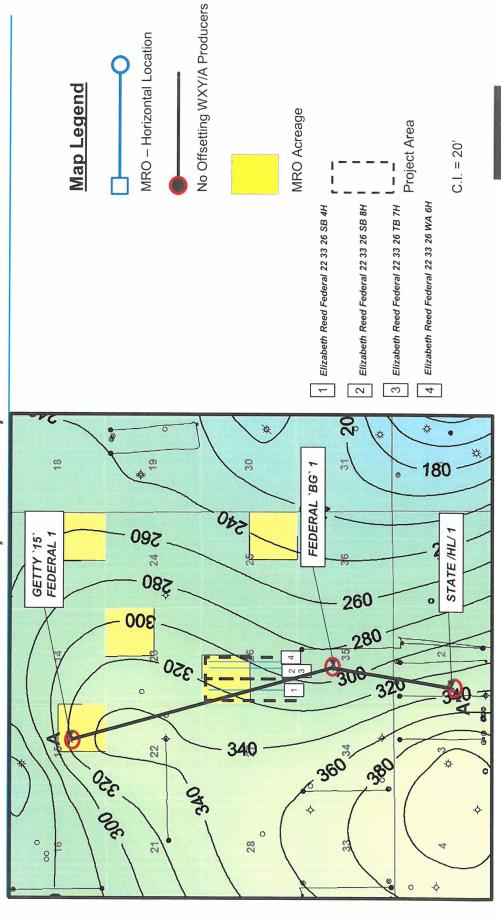
### Stratigraphic Cross Section (Top Wolfcamp Datum)





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

Gross Interval Isochore - Wolfcamp - Wolfcamp B







1 mile

### 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. 16422** 

<b>AFFIDAVIT</b>
------------------

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 STATE OF NEW MEXICO

My commission expires on Expires:

Notary Public

81363



Type of Mailing: CERTIFIED 08/31/2018

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

Firm Mailing Book ID: 150157

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Rest.Del.Fee	Contents	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00
	Reference	81363-0146	- 81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	Grand Total:
	R.R.Fee	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$21.00
	Fee	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$48.30
	Postage	\$1.42	\$1.42	\$1.42	\$1.42	\$1.42	\$1.42	\$1.42	\$1.42	\$1.42	\$1.42	\$1.42	\$1.42	\$1.42	\$1.42	: \$19.88
A Company of the Comp	Name, Street & P.O. Address	Devon Energy Production Company, L.P. 333 West Sheridan Avenue Oklahoma City OK 73102	State Royalty Limited Partnership P.O. Box 911 Breckenridge TX 76424	Alan Jochimsen 4209 Cardinal Lane Midland TX 79707	Monty McLane P.O. Box 9451 Midland TX 79708	Chilmark Properties, LLC 110 W. Louisiana, Suite 404 Midland TX 79701	Fred L. Engle P.O. Box 26245 Milwaukee WI 53226	Scott W. Tanberg P.O. Box 7662 Midland TX 79708	The Rebecca L. Engle Children's Irrevocable Trust P.O. Box 1184 Sioux Falls SD 57101	David B. Engle 38315 Sunset Drive Oconomowoc WI 53066	EOG Y Resources, Inc., EOG M Resources, Inc. EOG A Resources, Inc., EOG Resources 105 S 4th Street Artesia NM 88210	EOG Y Resources, Inc., EOG M Resources, Inc. EOG A Resources, Inc., EOG Resources 5509 Champtions Drive Midland TX 79706	OXY Y-1 Company P.O. Box 27570 Houston TX 77227	Sharbro Oil LTD Co. P.O. Box 840 Artesia NM 88210	United States, Department of the Interior - BLM 301 Dinosaur Trail Santa Fe NM 87502	Totals:
	Article Number	9314 8699 0430 0050 3054 18	9314 8699 0430 0050 3054 25	9314 8699 0430 0050 3054 32	9314 8699 0430 0050 3054 49	9314 8699 0430 0050 3054 56	9314 8699 0430 0050 3054 63	9314 8699 0430 0050 3054 70	9314 8699 0430 0050 3054 87	9314 8699 0430 0050 3054 94	9314 8699 0430 0050 3055 00	9314 8699 0430 0050 3055 17	9314 8699 0430 0050 3055 24	9314 8699 0430 0050 3055 31	9314 8699 0430 0050 3055 48	
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Page 1 2018 Walz CertifiedPro.net

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

Rest.Del.Fee Contents

Reference

R.R.Fee

Fee

Postage

Article Number

Line

Name, Street & P.O. Address

Dated: Postmaster: Name of receiving employee

Total Number of Pieces Received at Post Office

14

List Number of Pieces Listed by Sender

Transaction Report Details - CertifiedPro.net Firm Mail Book ID= 150157 Generated: 9/19/2018 12:01:14 PM

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	Canta Fa	Salitare	Artesia	Houston	Midland	Artesia	Oconomowoc	Sioux Falls	Midland	Milwaukee	Midland	Midland	Midland	Breckenridge	Oklahoma City	
Authors	301 Dinocaur Trail	The Children of the Children o	P.O. Box 840	P.O. Box 27570	5509 Champtions Drive	105 S 4th Street	38315 Sunset Drive	P.O. Box 1184	P.O. Box 7662	P.O. Box 26245	110 W. Louisiana, Suite 404	P.O. Box 9451	4209 Cardinal Lane	P.O. Box 911	333 West Sheridan Avenue	
Name 7					EOG A Resources, Inc., EOG Resources	EOG A Resources, Inc., EOG Resources										
Name 1	United States, Department of the Interior - BLM	Charben Oil ITO Ca	Silainio Oil LID Co.	OXY Y-1 Company	EOG Y Resources, Inc., EOG M Resources, Inc.	EOG Y Resources, Inc., EOG M Resources, Inc.	David B. Engle	The Rebecca L. Engle Children's Irrevocable Trust	Scott W. Tanberg	Fred L. Engle	Chilmark Properties, LLC	Monty McLane	Alan Jochimsen	State Royalty Limited Partnership	Devon Energy Production Company, L.P.	
Raference Number	81363-0146	81363.0146	0410-0010	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	81363-0146	
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Certified Mail Article Number Date Created Reference Number Name	9314869904300050305548	9314869904300050305531	9314869904300050305524	211000000000000000000000000000000000000	931488990430003030331/	9314869904300050305500	9314869904300050305494	9314869904300050305487	9314869904300050305470	9314869904300050305463	9314869904300050305456	9314869904300050305449	9314869904300050305432	9314869904300050305425	9314869904300050305418	

### 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.

hinistrative Coordinator

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

Business Manager

My commission expires January 29, 2019

(Seal)

OFFICIAL SEAL **GUSSIE BLACK** Notary Public State of New Mexico My Commission Expires 2

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

STATE OF THE AND LEADING

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 M Resources, Inc., EOG M Resources, Inc., EOG A Resources, Inc., EOG A Resources, Inc., EOG M Resources, Inc., EOG Resources, Inc., EOG M R

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, Chilimark 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 M Resources, Inc

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 Childran's Irrevocable Trust of 2003. David B. Engle, EOG Y. Resources, Inc., EOG M. Resources, I

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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** 

1	<u>AFFIDAVIT</u>
STATE OF Vexas	)
11	) ss.
COUNTY OF Lauis	)

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.

Saiob Rotalo

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

Notary Public

My commission expires: 1/23/20/9

JESSICA GORMAN
Notary Public, State of Texas
Commission Expires 01-23-2019
Notary ID 13008780-4