Before the Oil Conservation Division Examiner Hearing November 14, 2019

Case No. 20869:

Ender Wiggins 14 WA FC 14H, Ender Wiggins 14 WA FC 19H, Ender Wiggins 14 WA FC 20H



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

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

CASE NO. 20869

A	F	F	I	D	A	V	I	T

STATE OF TEXAS)
) ss
COUNTY OF MIDLAND)

Ryan Gyllenband, being duly sworn, deposes and states:

- 1. I am over the age of 18, I am a land supervisor for Marathon Oil Permian LLC and have personal knowledge of the matters stated herein. I have previously testified before the Oil Conservation Division ("Division") and my credentials as an expert petroleum landman were accepted by the Division as a matter of record.
- 2. My area of responsibility at Marathon includes the area of Lea County in New Mexico.
 - 3. I am familiar with the application filed by Marathon in this case.
 - 4. I am familiar with the status of the lands that are subject to the application.
- 5. I submit the following information pursuant to NMAC 19.15.4.12.A(1) in support of the above referenced compulsory pooling application.
- 6. No opposition is expected because the interest owners being pooled have been contacted regarding the proposed wells, but have failed or refused to voluntarily commit their interests in the wells.



- 7. In the application Marathon filed, Marathon seeks to force pool the working interests owner into the horizontal spacing unit described in the application, and in the wells to be drilled in the unit.
- 8. Attached as **Exhibit 1** is the application for Case No. 20869. In Case No. 20869, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Section 11 and the NE/4 of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the **Ender Wiggins 14 WA FC 14H, Ender Wiggins 14 WA FC 19H, Ender Wiggins 14 WA FC 20H** wells, to be horizontally drilled.
- 9. The completed interval for the **Ender Wiggins 14 WA FC 19H** well is less than 330 feet from the adjoining tracts and the Division's rules allow for the inclusion of proximity tracts within the proposed spacing unit for the wells.
 - 10. Attached as **Exhibit 2** are the proposed C-102s for the wells.
- 11. The C-102s identify the proposed surface hole locations, first take point, and bottom hole locations. The C-102s also identify the pool and pool code.
- 12. The pool is the Pitchfork Ranch; Wolfcamp, South Pool, pool code 96994, which is an oil pool and has 40-acre building blocks.
- 13. Lease tract maps outlining the units being pooled are attached hereto as **Exhibit 3**. The parties being pooled and the percent of their interests is also included as part of Exhibit 3.
- 14. There are two depth severances within the Wolfcamp formation. One depth severance occurs at approximately 12,530 feet and the other occurs at approximately 12,780 feet.
 - 15. The depth severances create a difference in working interest ownership.
 - 16. The language creating the depth severances is also provided in Exhibit 3.

- 17. Marathon proposes the following allocation formula in its application to address the difference in working in interest ownership, assuming a 500-foot producing interval for the Wolfcamp oil pool, between 12,460 feet (the top of the Wolfcamp Formation) and 12,960 feet. Marathon proposed to allocate 14% of production to the working interest owners who own interests between 12,460 and 12,530 feet, 50% of the production to the working interest owners who own interests between 12,530 and 12,780 feet, and 36% of production to working interest owners who own interests between 12,780 and 12,960 feet. This same allocation formula would apply to allocation of costs.
 - 18. No party has opposed Marathon's proposed allocation formula.
 - 19. Marathon requests that this allocation formula be approved.
- 20. Marathon seeks to pool overriding royalty interest owners, and they were provided notice of this hearing.
- 21. Marathon 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.
- 22. Also included in Exhibit 3 is a summary of my contacts with working interest owners.
- 23. In my opinion, Marathon has made a good faith effort to obtain voluntary joinder of the working interest owners in the proposed wells.
- 24. **Exhibit 4** is a copy of a representative proposal letters sent to the working interest owners.

- TVD.

 The proposal letter identifies the proposed first and last take points and approximate
- 26. Exhibit 5 contains the Authorization for Expenditure for the proposed wells. The estimated cost of the wells set forth therein is fair and reasonable, and is comparable to the costs of other wells of similar depths and length drilled in this area of New Mexico.
- 27. Marathon requests overhead and administrative rates of \$7500.00/month for drilling a well and \$750.00/month for a producing well. These rates are fair, and comparable to the rates charged by other operators for wells of this type in this area of Southeastern, New Mexico. Marathon requests that these rates be adjusted periodically as provided in the COPAS Accounting Procedure.
- 28. Marathon requests the maximum cost plus 200% risk charge be assessed against non-consenting working interest owners.
 - 29. Marathon requests an expedited order for this case.
 - 30. Marathon requests that it be designated operator of the wells.
- 31. Marathon requests that it be allowed a period of one (1) year between when the wells are drilled and when the first well is completed under the order.
- 32. **Exhibit 6** is an affidavit of notice prepared by counsel for Marathon that shows the parties who were notified of this hearing, the status of whether they received notice, and an affidavit of publication from the Hobbs-News Sun newspaper, showing that notice of this hearing was published on November 1, 2019.
- 33. The attachments to this affidavit were prepared by me, or compiled from company business records, or were prepared at my direction.

- 34. I attest that the information provided herein is correct and complete to the best of my knowledge and belief.
- 35. 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 / day of November, 2019 by Ryan Gyllenband on behalf of Marathon Oil Permian LLC.

Notary Public

My commission expires: 1/23/2023

JESSICA GORMAN
Notary Public, State of Texas
Commission Expires 01-23-2023
Notary ID 13008780-4

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

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

CASE NO. 20869

APPLICATION

Marathon Oil Permian LLC ("Marathon"), OGRID Number 372098, through its undersigned attorneys, hereby makes an application to the Oil Conservation Division pursuant to the provisions of NMSA (1978), Section 70-2-17, for an order pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Section 11 and the NE/4 of Section 14, Township 25 South, Range 34 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 of Section 11 and the NE/4 of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico to form a 480-acre, more or less, spacing unit.
- 3. Marathon plans to drill the Ender Wiggins 14 WA FC 14H, Ender Wiggins 14 WA FC 19H, Ender Wiggins 14 WA FC 20H wells to a depth sufficient to test the Wolfcamp formation. These wells will be horizontally drilled and will be drilled at orthodox locations under the Division's rules.
- 4. The completed interval for the Ender Wiggins 14 WA FC 19H well is less than 330 feet from the adjoining tracts and the Division's rules allow for the inclusion of proximity tracts within the proposed spacing unit for the wells.



- 5. All references to depths below are to the stratigraphic equivalent of depths shown on the log of the Fairview 14 Fee #1 well (API 30-025-27083) located in Section 14, 25S-34E.
- 6. There are two depth severances within the Wolfcamp formation. One depth severance occurs at approximately 12,530 feet and the other occurs at approximately 12,780 feet.
 - 7. The depth severances create a difference in working interest ownership.
- 8. Marathon proposes the following allocation formula to address the difference in working in interest ownership, assuming a 500-foot producing interval for the Wolfcamp oil pool, between 12,460 feet (the top of the Wolfcamp Formation) and 12,960 feet. Marathon proposes to allocate 14% of production to the working interest owners who own interests between 12,460 and 12,530 feet, 50% of the production to the working interest owners who own interests between 12,530 and 12,780 feet, and 36% of production to working interest owners who own interests between 12,780 and 12,960 feet. This same allocation formula would apply to allocation of costs.
- 9. 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 wells or to otherwise commit their interests to the wells.
- 10. 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.
- 11. Marathon further requests that it be allowed one (1) year between the time the wells are drilled and completion of the first well under the order issued by the Division.

WHEREFORE, Marathon requests this application be set for hearing before an Examiner of the Oil Conservation Division on November 14, 2019, and after notice and hearing as required by law, the Division enter its order:

A. Pooling all mineral interests in the Wolfcamp formation underlying a horizontal spacing unit within the E/2 of Section 11 and the NE/4 of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico;

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

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

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

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

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

Respectfully submitted,

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

3v: 1

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. ______: Application of Marathon Oil Permian LLC for compulsory pooling, Lea County, New Mexico. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Section 11 and the NE/4 of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Ender Wiggins 14 WA FC 14H, Ender Wiggins 14 WA FC 19H, Ender Wiggins 14 WA FC 20H wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the wells, and a 200% charge for risk involved in drilling said wells, and allowing a one year period between when the wells are drilled and when the first well is completed. Said area is located approximately 14 miles west of Jal, New Mexico.

District 1
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

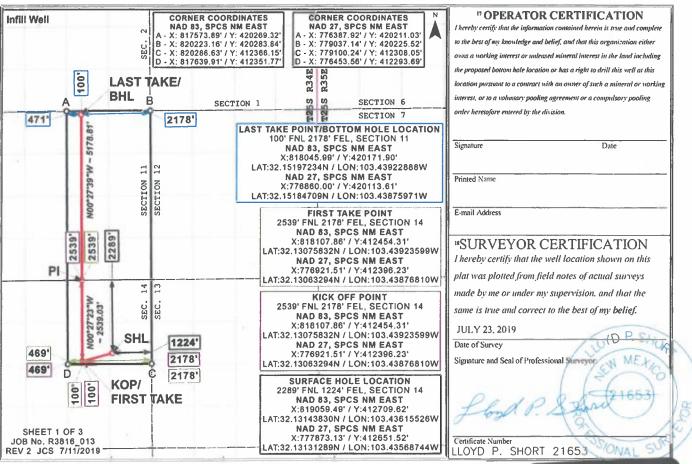
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

ENDER WIGGINS 14 WA FC OGRID No. *Operator Name PE	ell Number 14H							
ENDER WIGGINS 14 WA FC OGRID No. *Operator Name PE	14H							
OGRID No. SOperator Name 9E								
	Elevation							
372098 MARATHON OIL PERMIAN LLC 3	9 Elevation							
	3358'							
" Surface Location								
UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line	County							
H 14 25S 34E 2289 NORTH 1224 EAST	LEA							

H	14	25S	34E		2289	NORTH	1224	EAST	LEA
" 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
В	11	25S	34E		100	NORTH	2178	EAST	LEA
12 Dedicated Acres	13 Joint of	Infill 14 (Consolidation (Code 15 Or	der No.				
480.0									

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.



Distances/areas relative to NAD 83 Combined Scale Factor: 0.999997455 Convergence: 00°28'38.15090"



District.1
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
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District.JII
1000 Rio Birazos 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

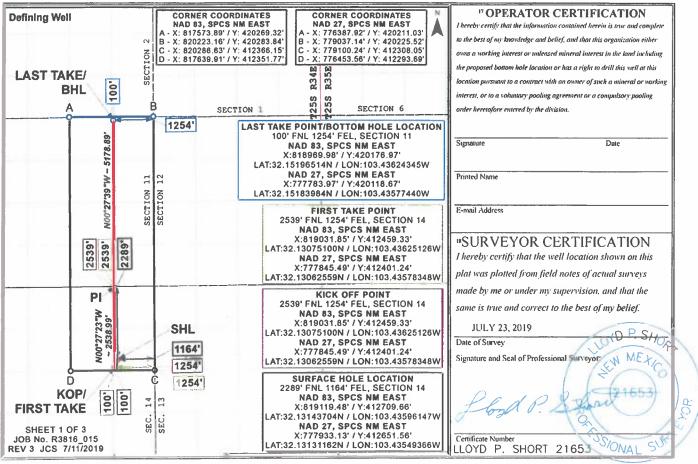
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

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WELL LOCATION AND ACREAGE DEDICATION PLAT

			A DITT TO	JUATIC	IN AND ACT	CEAGE DEDIC	AHONFLA	. 1		
API Number 2 Poor					ie	3 Pool Name				
				96994	1	PITCHFORK RANCH; WOLFCAMP, SOUTH				UTH
1 Property	Code				5 Property	Name			6 Wel	l Number
				ENI	ENDER WIGGINS 14 WA FC 19H				9H	
⁷ OGRID	No.				8 Operator	Name	77		, El	levation
37209	98			MARATHON OIL PERMIAN LLC				3358'		
Surface Location										
UL or lot no.	Section	Township	Range	Lot Id:	Feet from the	North/South line	Feet from the	East/W	est line	County
H	14	25S	34E		2289	NORTH	1164	EAST	,	LEA
			" Bo	ttom Ho	le Location I	Different Fron	n Surface			
UL or lot no.	Section	Township	Range	Lot Idi	Feet from the	North/South line	Feet from the	East/W	est line	County
Α	11	25S	34E		100	NORTH	1254	EAST		LEA
12 Dedicated Acres	s t3 Joint or	Infill 14	Consolidation	Code 15 O	rder No.					
480.0										

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.



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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Numbe	r		² Pool Code			me		
				96994		PITCHFORK RANCH; WOLFCAMP, SO			
4 Property	Code				5 Property 1	Name		Well Number	
			ENDER WIGGINS 14 WA FC 2			20H			
⁷ OGRID	No.	* Operator Name					⁹ Elevation		
37209	98			MARAT	THON OIL	OIL PERMIAN LLC 3361'			
* Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Н	14	25S	34E		2290	NORTH	1105	EAST	LEA

" Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	11	25S	34E		100	NORTH	330	EAST	LEA
12 Dedicated Acres	13 Joint o	r Infili	Consolidation	Code 15 Or	der No.				
480.0									

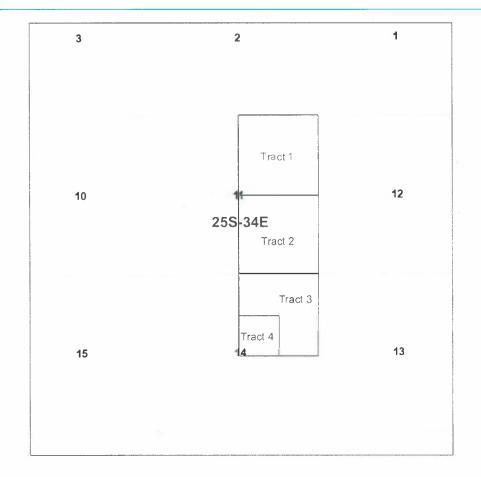
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

LAST TAKE BHL	NAD 83, 8 A - X: 817573 B - X: 820223 C - X: 820286 D - X: 817639	COORDINATES PCS NM EAST .89' /Y: 420269.32' .16' /Y: 420283.84' .63' /Y: 412366.15' .91' /Y: 412351.77' D	"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.
	2739*W - 5478.98* ION 11 330,	LAST TAKE POINT/BOTTOM HOLE LOCATION 100' FNL 330' FEL, SECTION 11 NAD 83, SPCS NM EAST X:819893.97' / Y:420182.03' LAT:32.15195786N / LON:103.43325802W NAD 27, SPCS NM EAST X:778707.95' / Y:420123.72' LAT:32.15183252N / LON:103.43278910W	Signature Date Printed Name
	2539' N00'27'39'W 2539' SECTION 11	FIRST TAKE POINT 2539' FNL 330' FEL, SECTION 14 NAD 83, SPCS NM EAST X:819855.84' / Y:412464.36' LAT:32.13074362N / LON:103.43326652W NAD 27, SPCS NM EAST X:778769.46' / Y:412406.26' LAT:32.13061818N / LON:103.43279886W	E-mail Address **SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys
SHL	N00.277.23 W	KICK OFF POINT 2539' FNL 330' FEL, SECTION 14 NAD 83, SPCS NM EAST X:819855.84' / Y:412464.36' LAT:32.13074362N / LON:103.43326652W NAD 27, SPCS NM EAST X:778769.46' / Y:412406.26' LAT:32.13061818N / LON:103.43279886W	made by me or under my supervision, and that the same is true and correct to the best of my belief. JULY 23, 2019 Date of Survey Signature and Seal of Professional Surveyor WME +
FIRST TAK SHEET 1 OF 3 JOB No. R3816_01 REV 2 JCS 7/11/20	E 1000 14 100 a	SURFACE HOLE LOCATION 2290' FNL 1105' FEL, SECTION 14 NAD 83, SPCS NM EAST X:819179.36' / Y:412709.57' LAT:32.13143544N / LON:103.43576805W NAD 27, SPCS NM EAST X:777993.00' / Y:412651.47' LAT:32.13131002N / LON:103.43530025W	Certificate Number LLOYD P. SHORT 21653

Distances/areas relative to NAD 83 Combined Scale Factor: 0.999997455 Convergence: 00°28'38.15090"

Lease Tract Map Ender Wiggins 14 WA FC 14H, Ender Wiggins 14 WA FC 19H, Ender Wiggins 14 WA FC 20H E/2 of Section 11, 25S-34E, and NE/4 of Section 14, 25S-34E – 480 acres

Tract 1: Federal Acreage
Tract 2: Federal Acreage
Tract 3: Fee Acreage
Tract 4: Fee Acreage







L _____ Jummary of Interests

Ender Wiggins 14 WA FC 14H, Ender Wiggins 14 WA FC 19H, Ender Wiggins 14 WA FC 20H E/2 of Section 11, 25S-34E, and NE/4 of Section 14, 25S-34E – 480 acres

Committed Working Interest:		56.251157%
Marathon Oil Permian LLC	56.251157% **	
the constituted Manking Indonesia		42 7400420/
Uncommitted Working Interest:		43.748843%
Chevron U.S.A. Inc.	16.812721%	
Chevron Midcontinent, L.P.	8.333333%	
OXY Y-1	8.187279%	
EOG Resources Inc.	7.458334% **	
COG Operating LLC	1.759260%	
Energen Resources Corporation	0.446528% **	
Ozark Royalty Co., LLC	0.211111% **	
Crown Oil Partners V, LP	0.189097% **	
Crump Energy Partners II, LLC	0.189097% **	
Nadel and Gussman Delaware, LLC	0.162083% **	

*The above interests were calculated using an allocation formula to address the difference in working in interest ownership. Assuming a 500-foot producing interval between 12,460 feet and 12,960 feet, Marathon proposes to allocate 14% of production to the working interest owners who own interests between 12,460 and 12,530 feet, 50% of the production to the working interest owners who own interests between 12,530 and 12,780 feet, and 36% of production to working interest owners who own interests between 12,780 and 12,960 feet. This same allocation formula would apply to allocation of costs.



^{**}Only those owners with (**) next to their interest had their percentage changed based on the depth severance and use of allocation formula.

Exhibit "D" Depth Severance Ender Wiggins 14 WA FC 14H, Ender Wiggins 14 WA FC 19H, Ender Wiggins 14 WA FC 20H

3) If at the end of the expiration of the primary term of this lease, oil or gas is not being produced on said land, or any lands with which this lease may be pooled, but Lessee is then engaged in operations for drilling of any well on the leased land or lands pooled herewith, this lease shall remain in force so long as drilling operations are prosecuted with no cessation of more than one hundred-twenty (120) consecutive days. However, at the end of the primary term of this lease or at the end of any extension earned pursuant to the above described drilling activity, whichever is the later date, this lease shall nevertheless expire as to all that part of said land on which there is no producing oil or gas well, unless such land has been pooled into such producing oil or gas well, and this lease shall expire as to all depths below the stratigraphic equivalent of 100', below the base of the deepest producing horizon in each producing well then located on this lease or lands pooled therewith. Upon the date that this lease shall expire, Lessee shall select and designate a producing unit around and including each producing oil and gas well. Such designated units are to be as nearly as practical in the form of a square, with the well bore being as close to the center as possible. The acres in each producing unit is to be limited to or expanded to conform with the minimum area provided for or established directly or indirectly, in the applicable rules and regulations of the regulatory authority having jurisdiction of the premises with reference to the spacing of wells or the size of producing units. As to each unit so designated, this lease shall continue in force so long as oil or gas is produced in paying quantities therefrom or so long as drilling or reworking operations are prosecuted thereon as provided for in Paragraph 6 herein; and Lessee shall execute a release of this lease as to the balance of the land covered hereby.



Lessee shall have the option after the expiration of the primary term of this lease to commence a continuous drilling program on the leased premises and thereafter continue such program until all New Mexico Oil Conservation Division proration units have been drilled, allowing not more than one hundred eighty (180) days to elapse between the completion of one well and the commencement of another well. Commencement of actual drilling of the first such continuous development well shall be within ninety (90) days after the end of the primary term if a well was completed as a producer or a dry hole within the primary term or within ninety (90) days after the completion of any well which is being drilled at the end of the primary term, whichever the later date. "Completion" for the purpose of this provision shall be the date of the official New Mexico Oil Conservation Division C-105 potential test on said well (if a producer). or the date on which a well is plugged and abandoned (if a dry hole). "Commencement of actual drilling" shall be deemed to be the date Lessee begins dirt work on the location for the drilling of such well. Should Lessee fail to commence this program, or subsequently fail to commence actual drilling of another well within the required period thereof, then in either event this lease shall terminate as to all lands covered hereby, save and except for the proration unit surrounding each well then capable of producing oil/and or gas from the surface down to one hundred (100) feet below the stratigraphic equivalent of the deepest depth drilled on the leased premises or lands pooled therewith. Loss of these undeveloped rights shall be Lessee's only liability for failure to conduct or continue this continuous drilling program. The term "proration unit" as used herein means any acreage designated as a drilling unit or production unit in accordance with the rules of the New Mexico Cil Conservation Division. In the absence of special pool rules, a proration unit shall be forty (40) acres for wells classified as oil wells and 320 acres for wells classified as gas wells, with an acreage tolerance of plus or minus ten percent.



Summary of Attempted Contacts: Ender Wiggins

- Marathon sent well proposal letters on July 3, 2019.
- According to Marathon's records, all of the proposal letters were received by the parties to whom they were sent.
- Marathon sent Joint Operating Agreements to the working interest owners on September 19, 2019 to see if they would participate in the well and/or execute a joint operating agreement.
- Marathon has continued to work with the working interest owners to accommodate their change requests on the Joint Operating 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 at the time of the filing of the application.
- Marathon then also published notice in a newspaper of general circulation in the county where the wells will be located.

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

July 1, 2019

VIA CERTIFIED RETURN RECEIPT MAIL

Chevron U.S.A. Inc. 6301 Deauville Blvd. Midland, TX 79706

Re:

Ender Wiggins 14H, 17H, 19H, 20H and 35H Well Proposals

Sections 11 & 14, T25S-R34E Lea County, New Mexico

Dear Chevron U.S.A. Inc.:

Marathon Oil Permian LLC ("MRO") proposes the drilling of the following wells located in the E/2 of Section 11, and the NE/4 of Section 14, 25S-34E, Lea County, New Mexico all to be drilled from the same surface pad location.

Well Name	FTP	LTP	TVD	MD	AFE Cost
Ender Wiggins 14 WA FC 14H	2,178' FEL/2,540' FNL	2,178' FEL/100' FNL	12,684'	20,693'	\$7,998,785
Ender Wiggins 14 TB FC 17H	792' FEL/2,540' FNL	792' FEL/100' FNL	12,470'	20,447'	\$7,998,785
Ender Wiggins 14 WA FC 19H	1,254' FEL/2,540' FNL	1,254' FEL/100' FNL	12,706'	20,679'	\$7,998,785
Ender Wiggins 14 WA FC 20H	330' FEL/2,540' FNL	330' FEL/100' FNL	12,735'	20,731'	\$7,998,785
Ender Wiggins 14 TB FC 35H	1,716' FEL/2,540' FNL	1,716' FEL/100' FNL	12,439'	20,423'	\$7,998,785

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
- \$7,500/\$750 drilling and producing rates
- Contract area of E/2 Section 11 & NE/4 Section 14, 25S-34E, covering all depths

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:

•

-



This term assignment offer terminates August 1, 2019 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,

Date:

Ryan Gyllenband

Ryan Gyllenband

Ender Wiggins 14H, 17H, 19H, 20H and 35H

	elects to participate in the drilling, completing, and equipping of the Ender Wiggins 14 WA FC 14H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ender Wiggins
	14 WA FC 14H well.
	elects to participate in the drilling, completing, and equipping of the Ender Wiggins 14
	TB FC 17H well. elects NOT to participate in the drilling, completing, and equipping of the Ender Wiggins
	14 TB FC 17H well.
	elects to participate in the drilling, completing, and equipping of the Ender Wiggins 14 WA FC 19H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ender Wiggins 14 WA FC 19H well.
	elects to participate in the drilling, completing, and equipping of the Ender Wiggins 14 WA FC 20H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ender Wiggins 14 WA FC 20H well.
	elects to participate in the drilling, completing, and equipping of the Ender Wiggins 14 TB FC 35H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ender Wiggins 14 TB FC 35H well.
	Chevron U.S.A. Inc.
Ву:	
Print Name:	
Title:	

MARATHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS DATE 6/24/2019
DRILLING & LOCATION PREPARED BY MATTHEW RUGARD
COMPLETION PREPARED BY JOSH SHAMNON
FACILITIES PREPARED BY HOLLY MURPHY
ARTIFICIAL UFT PREPARED BY HOLLY MURPHY

Asset Team	PERMIAN	
Fleld	FORMATION: WOLFCAMP A WILDCAT	EXPLORATION
Lease/Facility	ENDER WIGGINS 14 WA FC 14H DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY X EXPLOITATION	WORKOVER
Prospect	RED HILLS	
Est Total Depth	20,693 Est Orilling Days 27 Est Completion Days	8.25
LOCATION COST - I	NTANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	40,200
7001250	Land Broker Fees and Services	27,000
	TOTAL LOCATION COST - INTANGIBLE	67,200
DRILLING COST - TA	ANGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	40,000
7012050	Intermediate Casing 1	147,000
7012050	Intermediate Casing 2	293,000
7012050	Production Casing	111,000
7012050	Orig Liner Hanger, Tieback Eq & Csg Accessories	\$5,000
7012550	Drilling Wellhead Equipment	\$0,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	753,000
DRILLING COST - IN	TANGIRIE	
Dittieting CO31 - In	IMMODE	
7019200	Pulling Die Stab (Para de	35.000
7019200	Drilling Rig Mob/Demob	26,000
	Orilling Rig - day work/footage	729,000
7019040	Directional Drilling Services	245,000
7019020	Cement and Cementing Service Surface	25,000
7019020	Cement and Cementing Service Intermediate 1	40,000
7019020	Cement and Cementing Service Intermediate 2	40,000
7019020	Cement and Cementing Service Production	60,000
7019140	Mud Fluids & Services	71,000
7012310	Solids Control equipment	49,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	83,000
7019140	Fuel (Mud)	30,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	23,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110	Casing Inspection/cleaning	15,000
7019110	Drill pipe/collar inspection services	10,000
7016180	Freight - truck	25,000
7001460	Water hauling and disposal (includes soil farming)	60,000
7001160	Contract Services - Disposal/Non-Hazardous Waste	80,000
7001440	Vacuum Trucks	10,000
7000030	Contract Labor - general	30,000
7000030	Contract Labor - Operations	3,000
7001200	Contract Services - Facilities	10,000
7019300	Well Services - Well Control Services	23,500
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	108,000
7018150	Rig Equipment and Misc.	13,500
7001110	Telecommunications Services	5,000
7001120	Consulting Services	126,900
7001400	Safety and Environmental	43,200
7018120	Rental Buildings (trailers)	21,600
7019310	Coring (sidewalls & analysis)	22,000
7011010	7% Contingency & Taxes	203,959
7022020	Fre contingency in 1949	203,333
	TOTAL DRILLING - INTANGIBLE	es ses ess
	TOTAL DRILLING - INTANGIBLE	\$2,364,659
	TOTAL DRILLING COST	\$3,117,659
		V=1441,033
COMPLETION - TAN	GIBLE	
7010-00	W.A.Co.	
7012580	Tubing	
7012040	Tubing Accessories (nipple, wireline entry)	4
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	-
	TOTAL COMPLETION TANGEN	***
	TOTAL COMPLETION - TANGIBLE	\$15,000

EXHIBIT 5

Title:

MARATHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS DATE 6/24/2019

DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY HOLLY MURPHY

ARTIFICIAL LIFT PREPARED BY HOLLY MURPHY

Asset Team	PERMIAN	
Field	FORMATION: WOLFCAMP A WILDCAT	EXPLORATION
Lease/Facility Location	ENDER WIGGINS 16 WA FC 19H DEVELOPMENT LEA COUNTY X EXPLOITATION	RECOMPLETION WORKOVER
Prospect	RED HILLS	WONNOVEN
Est Total Depth	20 679 Est Drilling Days 27 Est Completion Days	8.25
LOCATION COST - I	NTANGIRI F	
COCATION COST -1	arangiote .	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	40,200
7001250	Land Broker Fees and Services	27 000
	TOTAL LOCATION COST - INTANGIBLE	67,200
		
DRILLING COST - TA	INGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	40,000
7012050	Intermediate Casing 1	147,000
7012050	Intermediate Casing 2	293,000
7012050	Production Casin	111,000
7012050	Dilg Liner Hanger, Tieback Eq & Csg Accessories	\$\$,000
7012550	Orilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	753,000
DRILLING COST - IN	TANGIBLE	
7019200	Drilling Rig Mob/Demob	26,000
7019220	Drilling Rig - day work/footage	729,000
7019040	Directional Drilling Services	245,000
7019020	Cement and Cementing Service Surface	25,000
7019020	Cement and Cementing Service Intermediate 1	40,000
7019020	Cement and Cementing Service Intermediate 2	40,000
7019020	Cement and Cementing Service Production	60,000
7019140	Mud Fluids & Services	71,000
7012310_	Solids Control equipment	49,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	83,000
7019140	Fuel (Mud)	30,000
7001460	Water [non potable]	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	23,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110	Casing inspection/cleaning	15,000
7019110	Drill pipe/collar inspection services	10,000
7016180	Freight - truck	25,000
7001460	Water hauling and disposal (includes soil farming)	60,000
7001160	Contract Services - Disposal/Non-Hazardous Waste	80,000
7001440	Vacuum Trucks	10,000
7000030	Contract Labor - general	30,000
7000030	Contract Labor - Operations	3,000
7001200	Contract Services - Facilities	10,000
7019300	Well Services - Well Control Services	23,500
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	108,000
7018150	Rig Equipment and Misc.	13,500
7001110	Telecommunications Services	5,000
7001120	Consulting Services	126,900
7001400	Safety and Environmental	43,200
7018120	Rental Buildings (trailers)	21,600
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	203,959
	TOTAL DRILLING - INTANGIBLE	\$2,364,659
	-	
	TOTAL DRILLING COST	\$3,117,659
COMPLETION - TAN	GIBLE	
7012580	Tubing	
7012040	Tubing Accessories (nipple, wireline entry)	
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	
	TOTAL COMPLETION - TANGIBLE	\$15,000

MARATHON OIL PERM AUTHORITY FOR EXPE DETAIL OF ESTIMATES	NDITURE	DATE 6/24/2019
Asset Team	PERMIAN	
Field	FORMATION: WOLFCAMP A	
Lease/Facility	ENDER WIGGINS 14 WA FC 19H	
COMPLETION - INT	ANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	10,000
7019220	Drilling Rig During Completion	·
7019140	Mud Fluids & Services	
7019030	Colled Yubing Services (3 runs)	225,000
7019240 7019270	Snubbing Services Pulling/Swab Units	20
7016350	Full (from drig)	+
7019010	Casing Crew and Services	7
7019020	Cement and Cementing Services	
7019080	Well Testing Services (flow hand & equip)	425,000
7019320	Fracturing Services	1,935,300
7019330 7019360	Perforating Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids)	460,000
7016180	Freight - Truck (haul pipe; drig & compl)	15,000
7018150	BOP Rental & Testing	
7018150	Rental Tools and Equipment (Incl drig; lightplant, hydra-walk)	
7018150	CT Downhole Rental Equipment (ie. Blt, BHA)	25,000
7000030 7001110	Contract Labor - general Telecommunications Sarvices	70,000
7001110	Safety and Environmental	
7001120	Consulting Services	60,000
7018150	Zipper Manifold	120,000
7019300	Frack Stack Rentals	45,000
7016190	Freight (Transportation Services)	75,000
7018150 7018120	Equipment Rental (w/o operator, frac tanks, lightplants) Rental Buildings (trailers)	15,000
7018120	Contract Labor - Pumping (pump-down pumps)	30,000
7011010	8% Contingency & Taxes	234,400
	TOTAL COMPLETION - INTANGIBLE	\$3,934,700
	TOTAL COMMITTION COLT	\$3,949,700
	TOTAL COMPLETION COST	33,343,700
SURFACE EQUIPME	NT - TANGIBLE	
	Adles Bleles Flaters B Maless	15,664
7012350 7006640	Misc. Piping, Fittings & Valves Company Labor & Burden	25,007
7000030	Contract Labor - General	53,774
7001110	Telecommunication equip (Telemetry)	
7012410	Line Pipe & Accessories	
7012270	Miscellaneous Materials (containment system)	
7008060	SCADA Scalaba Swidt	120
7016180 7001190	Freight - truck Contract Engineering	5,153
7012290	Metering and Instrumentation	3,882
7012290	I&E Materials	101,444
7012200	Gas Treating	
7012200	Dehydration	7
7012010	Compressor	
7012350 7012610	Power Vapor Recovery Unit	- 1
7012440	Separator & other pressure vessels	285,995
7012500	Tanks	235,346
7012100	Heater Treater	
7012640	Flare & Accessories	15,528
7000010	Electrical Labor Mechanical Labor	9,026
7012480	Rod Pumping unit & Pad	4
7012180	Pumping Unit Engine	- 4
7012350	Electrical Power (electrical cooperative construction costs)	
	TOTAL SURFACE EQUIPMENT - TANGIBLE	\$754,226
	TOTAL SURFACE EQUIPMENT COST	\$ 754,226
ARTIFICIAL LIFT		
7006640	Company Labor	6,250
7012180	Gas Lift Equipment	6,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	5,000
7012140 7019350	Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services	6,000 17,500
7012270	Materials & Supplies-Tangible	6,250
7012550	Surface Wellhead Equipment	3,000
7012390	Pig Launchers/Receivers & Rel Equip	45,000
7011010	8% Contingency & Taxes	15,000
	TOTAL ARTIFICIAL LIFT	110,000
	TOTAL ARTIFICIAL LIFT COST	\$110,000
		-
	SUMMARY OF ESTIMATED DRILLING WELL COSTS	TOTAL COST
	TOTAL LOCATION COST	\$ 67,200
	TOTAL DRILLING COST	\$ 3,117,659
	TOTAL DRILLING COST TOTAL COMPLETIONS COST	\$ 3,949,700
	TOTAL COMPLETIONS COST	\$ 754,226
	•	\$ 110,000
	TOTAL ARTIFICIAL LIFT COST	
	GRAND TOTAL COST	\$7,998,785
	Phone All all and All	
	Participant's Approval	
	ame of hopany.	
Col		-
Sign	nature:	_

MARATHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS DATE 6/24/2019

ORILLING & LOCATION PREPARED BY MATTHEW RUGARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY HOLLY MURPHY

ARTIFICIAL LIFT PREPARED BY HOLLY MURPHY

Asset Team	PERMIAN	
Field	FORMATION: WOLFCAMP A WILDCAT	EXPLORATION
Lease/Facility	ENDER WIGGINS 14 WA FC 20H DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY X EXPLOITATION	WORKOVER
Prospect	RED HILLS	
Est Total Depth	20 732 Est Drilling Days 27 Est Completion I	Days 8.25
LOCATION COST - I	NTANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	40,200
7001250	Land Broker Fees and Services	27,000
	TOTAL LOCATION COST - INTANGIBLE	67,200
DRILLING COST - TA	ANGIBLE	
7012050	Conductor Pape	28,000
7012050	Surface Casing	40,000
7012050	Intermediate Casing 1	147,000
7012050	Intermediate Casing 2	293,000
7012050	Production Casing	111,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	\$5,000
7012550	Drilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
7022270	IMISCENSING MARCHAIS	3,000
	TOTAL DRILLING - TANGIBLE	753,000
DRILLING COST - IN	M'ANGIBLE	
7019200	Drilling Rig Mob/Demob	26,000
7019220	Orilling Rig - day work/footage	729,000
7019040	Directional Drilling Services	245,000
7019020	Cement and Cementing Service Surface	25,000
7019020	Cement and Cementing Service Intermediate 1	40,000
7019020	Cement and Cementing Service Intermediate 2	40,000
7019020	Cement and Cementing Service Production	60,000
7019140	Mud Fluids & Services	71,000
7012310	Solids Control equipment	49,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	83,000
7019140	Fuel (Mud)	30,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	-
7019150	Mud Logging+geosteering	23,000
7019250	Stabilizers, Hole Openers, Underreamers (OH rentals)	15,000
7019110	Casing inspection/cleaning	15,000
7019110	Drill pipe/collar inspection services	10,000
		25,000
7016180	Freight - truck	
7001460 7001160	Water hauling and disposal (includes soil farming)	60,000
	Contract Services - Disposal/Non-Hazardous Waste	80,000
7001440	Vacuum Trucks	10,000
7000030	Contract Labor - general	30,000
7000030	Contract Labor - Operations	3,000
7001200	Contract Services - Facilities	10,000
7019300	Well Services - Well Control Services	23,500
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	108,000
7018150	Rig Equipment and Misc.	13,500
7001110	Telecommunications Services	5,000
7001120	Consulting Services	126,900
7001400	Safety and Environmental	43,200
7018120	Rental Bulldings (trailers)	21,600
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	203,959
	TOTAL DRILLING - INTANGIBLE	\$2,364,659
	TOTAL DRILLING COST	\$3,117,659
COMPLETION - TAN	IGIBLE	
******	# A1	
7012580	Tubing	
7012040	Tubing Accessories (nipple, wireline entry)	
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	
	YOVAL COMMISSION VANCING	***
	YOYAL COMPLETION - YANGIBLE	\$15,000

MARATHON OIL PERM AUTHORITY FOR EXPE		DATE 6/24/2019
DETAIL OF ESTIMATED	WELL COSTS	
Asset Team	PERMIAN	
Fleld Lease/Facility	FORMATION: WOLFCAMP A ENDER WIGGINS 14 WA FC 20H	
COMPLETION - INTA		
GL CODE	DESCRIPTION	ESTIMATED COST
7001270 7019220	Location and Access (dress location after rig move, set anchors) Drilling Rig During Completion	10,000
7019140	Mud Fluids & Services	
7019030	Coiled Tubing Services (3 runs)	225,000
7019240	Snubbing Services	-
7019270 7016350	Pulling/Swab Units Fuel (from drig)	
7019010	Casing Crew and Services	- 1
7019020	Cement and Cementing Services	
7019080	Well Testing Services (flow hand & equip)	425,000
7019320 7019330	Fracturing Services Perforating	1,935,300
7019360	Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids)	460,000
7016180	Freight - Truck (hauf pipe; drig & compl)	15,000
7018150	BOP Rental & Testing Rental Tools and Equipment (incl drig; lightplant, hydra-walk)	- 4
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	
7000030	Contract Labor · general	25,000
7001110	Telecommunications Services	70,000
7001400	Safety and Environmental Consulting Services	60,000
7018150	Zipper Manifold	120,000
7019300	Frack Stack Rentals	45,000
7016190	Freight (Transportation Services)	
7018150 7018120	Equipment Rental (w/o operator, frac tanks, lightplants) Rental Buildings (trailers)	75,000 15,000
7000030	Contract Labor - Pumping (pump-down pumps)	30,000
7011010	8% Contingency & Taxes	234,400
	TOTAL COMPLETION - INTANGIBLE	\$3,934,700
	TOTAL COMPLETION - INTANGIBLE	33,734,700
	TOTAL COMPLETION COST	\$3,949,700
	TOTAL COMPLETION COST	73,343,700
SURFACE EQUIPME	NT - TANGIBLE	
		10.000
7012350 7006640	Misc. Piping, Fittings & Valves Company Labor & Burden	15,664
7000030	Contract Labor - General	53,774
7001110	Telecommunication equip (Telemetry)	
7012410	Line Pipe & Accessories	
7012270	Miscellaneous Materials (containment system) SCADA	28,413
7008060	Freight - truck	+
7001190	Contract Engineering	5,153
7012290	Metering and instrumentation	3,882
7012290	I&E Materials	101,444
7012200 7012200	Gas Treating Dehydration	
7012010	Compressor	1
7012350	Power	+1
7012610	Vapor Recovery Unit	285,995
7012440 7012500	Separator & other pressure vessels Tanks	235,346
7012100	Heater Treater	
7012640	Flare & Accessories	15,528
7000010	Electrical Labor Mechanical Labor	9,026
7000010 7012480	Rod Pumping unit & Pad	-
7012180	Pumping Unit Engine	+
7012350	Electrical Power (electrical cooperative construction costs)	7
	TOTAL SURFACE EQUIPMENT - TANGIBLE	\$754,226
	TOTAL SURFACE EQUIPMENT COST	\$ 754,226
ARTIFICIAL LIFT		
7006640	Company Labor	6,250
7012180	Gas Lift Equipment	6,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	5,000
7012140 7019350	Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services	6,000 17,500
7019350	Materials & Supplies-Tangible	6,250
7012550	Surface Welthead Equipment	3,000
7012390	Pig Launchers/Receivers & Rei Equip	45,000
7011010	8% Contingency & Taxes	15,000
	TOTAL ARTIFICIAL LIFT	110,000
	TOTAL ADDICION LIET COST	\$ 110,000
	TOTAL ARTIFICIAL LIFT COST	\$ 110,000
	CURABAN OF FOUNDAMED DOWN IN COOK	TOTAL COST
	SUMMARY OF ESTIMATED DRILLING WELL COSTS	TOTAL COST
	TOTAL LOCATION COST	\$ 67,200
	TOTAL DRILLING COST	\$ 3,117,659
	TOTAL COMPLETIONS COST	\$ 3,949,700
	TOTAL SURFACE EQUIPMENT COST	\$ 754,226
	TOTAL ARTIFICIAL LIFT COST	\$ 110,000
	GRAND TOTAL COST	\$7,998,785
		. ,,.
	Participant's Approval	
	me of	
Con	pany:	-
Sina	ature:	
ugn		-

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

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

CASE NO. 20869

AFF	IDA	VIT

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

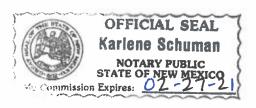
Deana M. Bennett, attorney in fact and authorized representative of Marathon Oil Permian LLC, the Applicant herein, being first duly sworn, upon oath, states that the above-referenced Applications were sent under a notice letter attached hereto and that proof of receipt is attached hereto.

Deana M. Bennett

SUBSCRIBED AND SWORN to before me this 12 day of November, 2019 by Deana M. Bennett.

Notary Public

My commission expires: 02-27-21





October 24, 2019

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

Deana M. Bennett 505.848.1834 dmb@modrall.com

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

CASE NO. 20869

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

CASE NO. 20870

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

CASE NO. 20871

TO: AFFECTED PARTIES

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

In Case No. 20869, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Section 11 and the NE/4 of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Ender Wiggins 14 WA FC 14H, Ender Wiggins 14 WA FC 19H, Ender Wiggins 14 WA FC 20H wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the wells, and a 200% charge for risk involved in drilling said wells, and allowing a one year period between when the wells are drilled and when the first well is completed.

In Case No. 20870, Marathon seeks an order from the Division pooling all uncommitted mineral interests within the Bone Spring formation underlying

Modrall Sperling Roehl Harris & Sisk P.A.

500 Fourth Street NW Suite 1000 Albuquerque, New Mexico 87102

PO Box 2168 Albuquerque, New Mexico 87103-2168

Tel: 505.848.1800 www.modrall.com the W/2 E/2 of Section 11 and the W/2 NE/4 of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Ender Wiggins 14 TB FC 35H 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.

In Case No. 20871, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 E/2 of Section 11 and the E/2 NE/4 of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Ender Wiggins 14 TB FC 17H 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.

These cases have been set for hearing before a Division Examiner on November 14, 2019, starting at 8:15 a.m. The hearing will be held in Porter Hall in the Oil Conservation Division's Santa Fe Office located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505. As a party who may be affected by these applications, we are notifying you of your right to appear at the hearing and participate in the cases, including the right to present evidence either in support of or in opposition to the applications. Failure to appear at the hearing may preclude you from any involvement in the cases at a later date.

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

Sincerely, Millia M Bennett

Deana M. Bennett

Attorney for Applicant



October 29, 2019

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

Deana M. Bennett 505.848.1834 dmb@modrall.com

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

CASE NO. 20869

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

CASE NO. 20870

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

CASE NO. 20871

TO: AFFECTED PARTIES

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

In Case No. 20869, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Section 11 and the NE/4 of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Ender Wiggins 14 WA FC 14H, Ender Wiggins 14 WA FC 19H, Ender Wiggins 14 WA FC 20H wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the wells, and a 200% charge for risk involved in drilling said wells, and allowing a one year period between when the wells are drilled and when the first well is completed.

In Case No. 20870, Marathon seeks an order from the Division pooling all uncommitted mineral interests within the Bone Spring formation underlying

Modrall Sperling Roehl Harris & Sisk P.A.

500 Fourth Street NW Suite 1000 Albuquerque, New Mexico 87102

PO Box 2168 Albuquerque, New Mexico 87103-2168

Tel: 505.848.1800 www.modrall.com the W/2 E/2 of Section 11 and the W/2 NE/4 of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Ender Wiggins 14 TB FC 35H 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.

In Case No. 20871, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 E/2 of Section 11 and the E/2 NE/4 of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Ender Wiggins 14 TB FC 17H 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.

These cases have been set for hearing before a Division Examiner on November 14, 2019, starting at 8:15 a.m. The hearing will be held in Porter Hall in the Oil Conservation Division's Santa Fe Office located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505. As a party who may be affected by these applications, we are notifying you of your right to appear at the hearing and participate in the cases, including the right to present evidence either in support of or in opposition to the applications. Failure to appear at the hearing may preclude you from any involvement in the cases at a later date.

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

Sincerely, Welle H Bennett

Deana M. Bennett

Attorney for Applicant

	Unit Owner to be Force Poo	led			
Name	Address 1	City	State	Zip	Attention
Chevron U.S.A. Inc	6301 Deauville Blvd	Midland	TX	79706	
Chevron Midcontinent, L.P.	6301 Deauville Blvd	Midland	TX	79706	
OXY Y-1	5 Greenway Plaza, Suite 110	Houston	TX	77046	
EOG Resources Inc.	5509 Champions Drive	Midland	TX	79706	
COG Operating LLC	600 West Illinois	Midland	TX	79701	
Crown Oil Partners V, LP	P.O. Box 50820	Midland	TX	79710	
Crump Energy Partners II, LLC	P.O. Box 50820	Midland	TX	79710	
Nadel and Gussman Delaware, LLC	15 East Fifth St., Suite 3300	Tulsa	OK	74103	
nergen Resources Corportation	500 West Texas Ave., Suite 1200	Midland	TX	79701	
Dzark Royalty Co., LLC	111 S. Highland St. Suite 352	Memphis	TN	38111	

	Owners that will be unleased late 201	or early 2020			
3.H.C.H Mineral, Ltd	5111 Broadway	San Antonio	TX	78209	
Bates Family Investment Company, LLC	P.O. Box 3627	Tulsa	ОК	74101	
ohn V. McCarthy, II	57200 E Highway 125, Unit 3631	Afton	ОК	74331	
Susan Duff	50 Sequoyah	Shawnee	ОК	74801	
The Nommensen Investment Company	12411 Broken Bough	Houston	TX	77024	42
Texas State Bank, Trustee of the Lucille Chism Bates Testamentary Trust	P.O. Box 3782	San Angelo	TX	76902	
	ORRI Owners in Unit				
Name	Address 1	City	State	Zip	Attention
Tha Allar Company	P.O. Box 1567	Graham	TX	76450	
EOG A Resources, Inc.	5509 Champions Drive	Midland	TX	79706	
EOG M Resources, Inc.	5509 Champions Drive	Midland	TX	79706	
Cornerstone Family Trust	P.O. Box 17656	Golden	CO	80402	
Crownrock Minerals, L.P.	P.O. Box 51933	Midland	TX	79710	
Allar Development LLC	P.O. Box 1567	Graham	TX	76450	
Regeneration Energy Corp.	P.O. Box 210	Artesia	NM	88211	
	Offset Owners		- i		
Name	Address 1	City	State	Zip	Attention

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

PS Form 3877

Type of Mailing: CERTIFIED MAIL 10/24/2019



Firm Mailing Book ID: 177813

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0064 8763 31	Chevron U.S.A. Inc. 6301 Deauville Blvd. Midland TX 79706	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
2	9314 8699 0430 0064 8763 48	Chevron Midcontinent, L.P. 6301 Deauville Blvd. Midland TX 79706	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
3	9314 8699 0430 0064 8763 55	OXY Y-1 5 Greenway Plaza, Suite 110 Houston TX 77046	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
4	9314 8699 0430 0064 8763 62	EOG Resources Inc. 5509 Champions Drive Midland TX 79706	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
5	9314 8699 0430 0064 8763 79	COG Operating LLC 600 West Illinois Midland TX 79701	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
6	9314 8699 0430 0064 8763 86	Crown Oil Partners V, LP P.O. Box 50820 Midland TX 79710	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
7	9314 8699 0430 0064 8763 93	Crump Energy Partners II, LLC P.O. Box 50820 Midland TX 79710	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
8	9314 8699 0430 0064 8764 09	Nadel and Gussman Delaware, LLC 15 East Fifth St., Suite 3300 Tulsa OK 74103	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
9	9314 8699 0430 0064 8764 16	Energen Resources Corportation 500 West Texas Ave., Suite 1200 Midland TX 79701	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
10	9314 8699 0430 0064 8764 23	Ozark Royalty Co., LLC 111 S. Highland St. Suite 352 Memphis TN 38111	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
11	9314 8699 0430 0064 8764 30	•	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
12	9314 8699 0430 0064 8764 47	Bates Family Investment Company, LLC P.O. Box 3627 Tulsa OK 74101	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
13	9314 8699 0430 0064 8764 54	John V. McCarthy, II 57200 E Highway 125, Unit 3631 Afton OK 74331	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
14	9314 8699 0430 0064 8764 61		\$1.30	\$3,50	\$1.60	\$0.00	81363-0151 EW Notice
15	9314 8699 0430 0064 8764 78		\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice

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

PS Form 3877

Type of Mailing: CERTIFIED MAIL 10/24/2019



Firm Mailing Book ID: 177813

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
16	9314 8699 0430 0064 8764 85	Texas State Bank, Trustee of the Lucille Chism Bates Testamentary Trust P.O. Box 3782 San Angelo TX 76902	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
17	9314 8699 0430 0064 8764 92	Tha Allar Company P.O. Box 1567 Graham TX 76450	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
18	9314 8699 0430 0064 8765 08	EOG A Resources, Inc. 5509 Champions Drive Midland TX 79706	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
19	9314 8699 0430 0064 8765 15	EOG M Resources, Inc. 5509 Champions Drive Midland TX 79706	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
20	9314 8699 0430 0064 8765 22	Cornerstone Family Trust P.O. Box 17656 Golden CO 80402	30	\$3.50	\$1.60	\$0.00	8136 3-0151 EW Notice
21	9314 8699 0430 0064 8765 39	Crownrock Minerals, L.P. P.O. Box 51933 Midland TX 79710	130 35	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
22	9314 8699 0430 0064 8765 46	Allar Development LLC P.O. Box 1567 Graham TX 76450	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
23	9314 8699 0430 0064 8765 53	Regeneration Energy Corp. P.O. Box 210 Artesia NM 88211	\$1.30	\$3.50	\$1.60	\$0.00	81363-0151 EW Notice
		Τ	otals: \$29.90	\$80.50	\$36.80	\$0.00	
				Grand	Total:	\$147.20	

List Number of Pieces Total Number of Pieces Postmaster: Dated:
Listed by Sender Received at Post Office Name of receiving employee

23

Transaction Report Details - CertifiedPro.net Firm Mail Book ID= 177813 Generated: 11/12/2019 8:25:15 AM

USPS Article Number	Date Created	Reference Number	Name 1	Name 2	City	State	Zip	Mailing Status	Service Options	Mail Delivery Date
9314869904300064876553	2019-10-24 11:00 AM	81363-0151 EW	Regeneration Energy Corp.		Artesia	NM	88211	Delivered	Return Receipt - Electronic, Certified Mail	10-28-2019
9314869904300064876546	2019-10-24 11:00 AM	81363-0151 EW	Allar Development LLC		Graham	TX	76450	Delivered	Return Receipt - Electronic, Certified Mail	10-28-2019
9314869904300064876539	2019-10-24 11:00 AM	81363-0151 EW	Crownrock Minerals, L.P.		Midland	TX	79710	Delivered	Return Receipt - Electronic, Certified Mail	11-04-2019
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9314869904300064876515	2019-10-24 11:00 AM	81363-0151 EW	EOG M Resources, Inc.		Midland	TX	79706	Delivered	Return Receipt - Electronic, Certified Mail	10-28-2019
9314869904300064876508	2019-10-24 11:00 AM	81363-0151 EW	EOG A Resources, Inc.		Midland	TX	79706	Delivered	Return Receipt - Electronic, Certified Mail	10-28-2019
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9314869904300064876485	2019-10-24 11:00 AM	81363-0151 EW	Texas State Bank, Trustee of the Lucille Chism	Bates Testamentary Trust	San Angelo	TX	76902	Delivered	Return Receipt - Electronic, Certified Mail	10-30-2019
9314869904300064876478	2019-10-24 11:00 AM	81363-0151 EW	The Nommensen Investment Company		Houston	TX	77024	Undelivered	Return Receipt - Electronic, Certified Mail	
9314869904300064876461	2019-10-24 11:00 AM	1 81363-0151 EW	Susan Duff		Shawnee	OK	74801	Delivered	Return Receipt - Electronic, Certified Mail	10-28-2019
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9314869904300064876393	2019-10-24 11:00 AM	1 81363-0151 EW	Crump Energy Partners II, LLC		Midland	TX	79710	Delivered	Return Receipt - Electronic, Certified Mail	11-01-2019
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9314869904300064876379	2019-10-24 11:00 AM	1 81363-0151 EW	COG Operating LLC		Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	10-28-2019
9314869904300064876362	2019-10-24 11:00 AM	1 81363-0151 EW	EOG Resources Inc.		Midland	TX	79706	Delivered	Return Receipt - Electronic, Certified Mail	10-28-2019
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9314869904300064876331	2019-10-24 11:00 AM	1 81363-0151 EW	Chevron U.S.A. Inc.		Midland	TX	79706	Undelivered	Return Receipt - Electronic, Certified Mail	

Affidavit of Publication

STATE OF NEW MEXICO COUNTY OF LEA

I, Daniel Russell, Publisher 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 November 01, 2019 and ending with the issue dated November 01, 2019.

Sworn and subscribed to before me this 1st day of November 2019.

Business Manager

My commission expires January 29, 2023



OFFICIAL SEAL GUSSIE BLACK Notary Public State of New Mexico My Commission Expired -29-2

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 **NOVEMBER 1, 2019**

CASE NO. 20869: Notice to all affected parties, as well as the heirs and CASE NO. 20869: Notice to all affected parties, as well as the heirs and devisees of Bureau of Land Management, Chevron USA Inc., Chevron Midcontinent LP, OXY Y-1, EOG Resources Inc., COG Operating LLC, Crown Oil Partners V LP, Crump Energy Partners II LLC, Nadel and Gussman Delaware LLC, Energen Resources Corporation, Ozark Royalty CO LLC, B.H.C.H Mineral LTD, Bates Family Investment Company LLC, John V. McCarthy II, Susan Duff, The Nommensen Investment Company, Texas State Bank Trustee of the Lucille Chism Bates Testamentary Trust, The Allar Company, EOG A Resources Inc., EOG M Resources Inc., Cornerstone Family Trust, Crownrock Minerals LP, Allar Develoment LLC, Regeneration Energy Corp., of Marathon Oil Permian LLC's application for 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 November 14, 2019, to consider this application. Applicant seeks an order from the Division pooling all Division will conduct a public hearing at 8:15 a.m. on November 14, 2019, to consider this application. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Section 11 and the NE/4 of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Ender Wiggins 14 WA FC 14H, Ender Wiggins 14 WA FC 19H, Ender Wiggins 14 WA FC 20H wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the wells, and a 200% charge for risk involved in drilling said wells, and allowing a one year period between when the wells are drilled and when the first well is completed. Said area is located approximately 14 miles west of Jal, New Mexico. 14 miles west of Jal, New Mexico.

CASE NO. 20870: Notice to all affected parties, as well as the heirs and devisees of Bureau of Land Management, Chevron USA Inc., Chevron Midcontinent LP, OXY Y-1, EOG Resources Inc., COG Operating LLC, Crown Oil Partners V LP, Crump Energy Partners II LLC, Nadel and Gussman Delaware LLC, Energen Resources Corporation, Ozark Royalty CO LLC, B.H.C.H Mineral LTD, Bates Family Investment Company LLC, John V. McCarthy II, Susan Duff, The Nommensen Investment Company, Texas State Bank Trustee of the Lucille Chism Bates Testamentary Trust, The Allar Company, EOG A Resources Inc., EOG M Resources Inc., Cornerstone Family Trust, Crownrock Minerals LP, Allar Develoment LLC, Regeneration Energy Corp., of Marathon Oil Permian LLC's application for 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 November 14, 2019, to consider this application. Applicant seeks an order from the Division pooling all uncommitted mineral interests within the Bone Spring formation underlying the W/2 E/2 of Section 11 and the W/2 NE/4 of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Ender Wiggins 14 TB FC 35H 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 operator of the well, and a 2009% charge for supervision, designation of Marathon as operator of the well, and a 2009% charge for supervision, designation of Marathon as operator of the well, and a 2009% charge for supervision, designation of Marathon as operator of the well, and a 2009% charge for supervision, designation of the section of the section of the well and a 2009% charge for supervision, designation of the section of t 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 14 miles west of Jal, New Mexico.

CASE NO. 20871: Notice to all affected parties, as well as the heirs and devisees of Bureau of Land Management, Chevron USA Inc., Chevron Midcontinent LP, OXY Y-1, EOG Resources Inc., COG Operating LLC, Crown Oil Partners V LP, Crump Energy Partners II LLC, Nadel and Gussman Delaware LLC, Energen Resources Corporation, Ozark Royalty CO LLC, B.H.C.H Mineral LTD, Bates Family Investment Company LLC, John V. McCarthy II, Susan Duff, The Nommensen Investment Company, Texas State Bank Trustee of the Lucille Chism Bates Testamentary Trust, The Allar Company, EOG A Resources Inc., EOG M Resources Inc., Cornerstone Family Trust, Crownrock Minerals LP, Allar Develoment LLC, Regeneration Energy Corp., of Marathon Oil Permian LLC's application for 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 November 14, 2019, to consider this application. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit consider this application. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 E/2 of Section 11 and the E/2 NE/4 of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Ender Wiggins 14 TB FC 17H 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 14 miles west of Jal, New Mexico.

INDUITALL, OF LITERING, ... TIL, MARRIO &

P. O. BOX 2168 ALBUQUERQUE, NM 87103-2168

Your package has been delivered

Tracking # 776846021896

Ship date:

Tue, 10/29/2019

Karlene Schuman Albuquerque, NM 87102



Delivery date:

Wed, 10/30/2019 9 52

am

US

Bureau of Land Management 310 Dinosaur Trail SANTA FE, NM 87508



Our records indicate that the following package has been delivered.

Tracking number:

776846021896

Status:

Delivered: 10/30/2019 09:52 AM Signed for By: R.DURAN

Reference:

81363.0205 DMB

Signed for by:

R.DURAN

Delivery location:

SANTA FE, NM

Delivered to:

Shipping/Receiving

Service type:

FedEx Standard Overnight®

Packaging type:

FedEx® Envelope

Number of pieces:

1

Weight:

0.50 lb.

Special handling/Services:

Deliver Weekday

Standard transit:

10/30/2019 by 4:30 pm



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

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

CASE NO. 20869 (Ender Wiggins Wolfcamp)

AFFIDAVIT

STATE OF TEXAS)
) ss.
COUNTY OF MIDLAND)

Thomas Lockwood, being duly sworn, depose and states:

- 1. I am over the age of 18, I am a geologist for Marathon Oil Permian LLC, and have personal knowledge of the matters stated herein. I have previously testified before the Oil Conservation Division ("Division") and my credentials as an expert petroleum geologist were accepted by the Division as a matter of record.
- 2. My area of responsibility at Marathon includes the area of Lea County in New Mexico.
 - 3. I am familiar with the application filed by Marathon in this case.
- 4. Exhibit 7 is a locator map showing the approximate location of the proposed wells in relation to the Capitan Reef.
- 5. **Exhibit 8** is a wellbore schematic showing the proposed Wolfcamp wells within the unit, as well as the proposed Bone Spring wells.



- 6. The exhibits behind **Tab 9** are the geology study I prepared for the Ender Wiggins 14 WA FC 14H, Ender Wiggins 14 WA FC 19H, and Ender Wiggins 14 WA FC 20H wells, which are Wolfcamp wells.
- 7. Exhibit 9-A is structure map of the base of the Top of the Wolfcamp A. The proposed project area is identified by a black-dashed box, and the proposed wells are identified by green lines. The contour interval used this exhibit is 25 feet. This exhibit shows that the Wolfcamp A dips toward the east.
- 8. Exhibit 9-B identifies four wells in the vicinity of the proposed Wolfcamp wells, shown by a line of cross-section running from A to A'.
- 9. Exhibit 9-C 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 A formation in the area. The target zone is identified by the words "Producing Zone" and the shaded area across the cross section, along with a red arrow.
- 10. In my opinion, the Wolfcamp A generally has consistent thickness across the unit, but thins slightly in the middle of the unit.
- 11. Exhibit 9-D is a Gross Interval Isochore of the Wolfcamp A. The Wolfcamp A interval is generally consistent across the unit, but thins slightly in the middle of the unit.
 - 12. I conclude from the maps that:
 - a. The horizontal spacing unit is justified from a geologic standpoint.
 - b. There are no structural impediments or faulting that will interfere with horizontal development.
 - c. Each quarter quarter section in the proposed unit will contribute more or less equally to production.

- 13. Exhibit 10 provides an overview of the stress orientation in the area based on the 2018 Snee-Zoback paper.
- 14. The preferred well orientation in this area is North/South. This is because the S_{Hmax} is at approximately 70-80 degrees in southern-Lea County.
- 15. Exhibits 7-10 were prepared by my or under my supervision or compiled from company business records.
- 16. In my opinion, the granting of Marathon's application is in the interests of conservation and the prevention of waste.

Thomas Lackwood

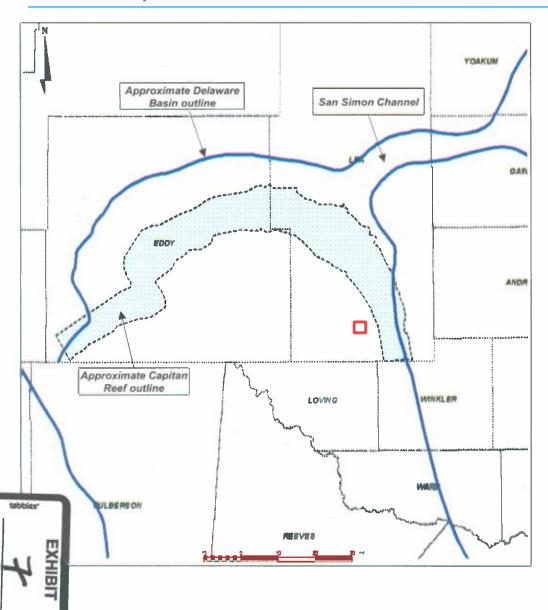
SUBSCRIBED AND SWORN to before me this 12th day of Movement 2019 by Thomas Lockwood, on behalf of Marathon Oil Permian LLC.

Notary Public

My commission expires: 1/23/8023

JESSICA GORMAN
Notary Public, State of Texas
Commission Expires 01-23-2023
Notary ID 13008780-4

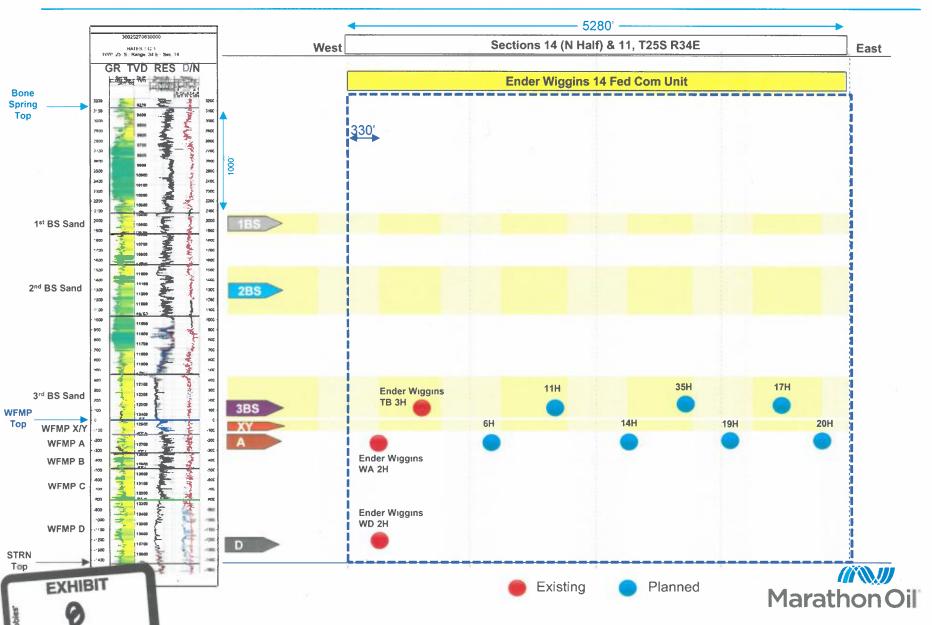
Locator Map



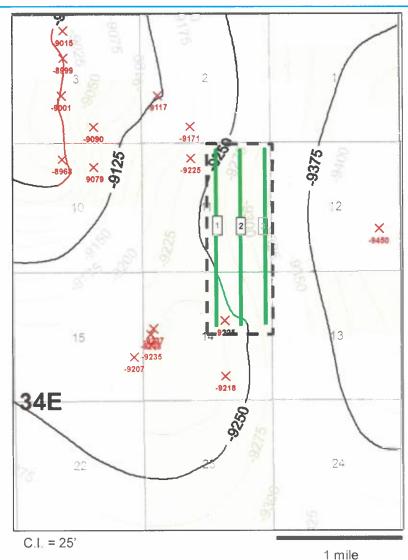
- Approximate location of proposed Ender Wiggins 14 Fed Com well locations shown with red box
- Located basinward of the Capitan Reef
- Southern Lea county



Wellbore Schematic



Structure Map - Top of Wolfcamp A (TVDSS)



Map Legend

MRO – Horizontal Location

- 1 Ender Wiggins 14 WA FC 14H
- 2 Ender Wiggins 14 WA FC 19H
- 3 Ender Wiggins 14 WA FC 20H



MRO Acreage

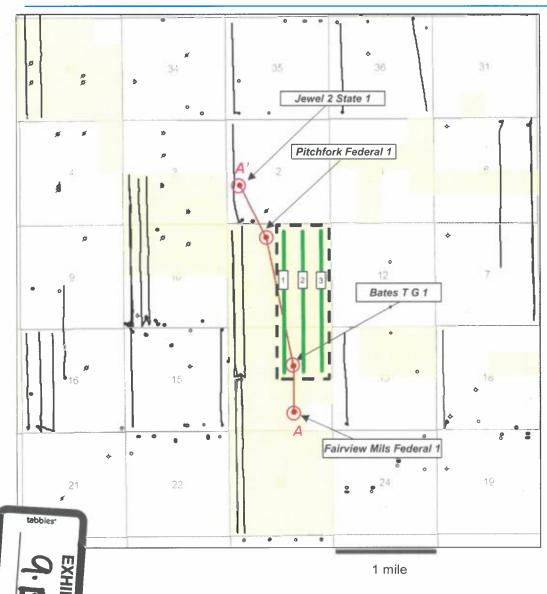


The top of the Wolfcamp A dips towards the east.





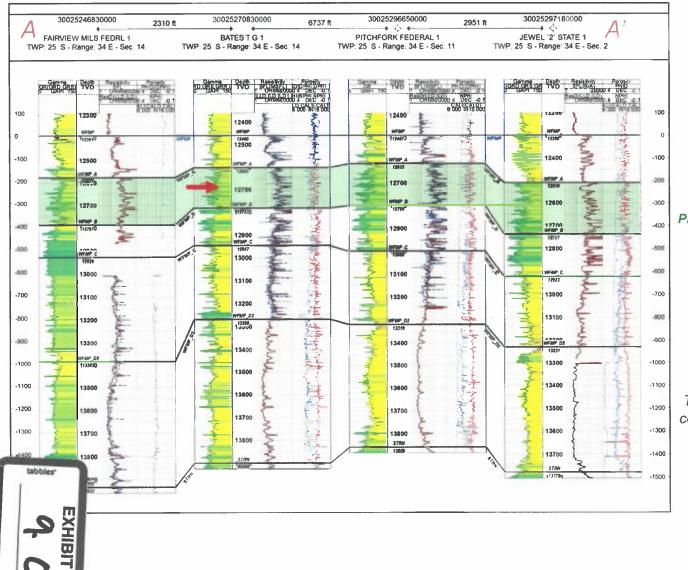
Reference Map for Cross Section – Wolfcamp Wells

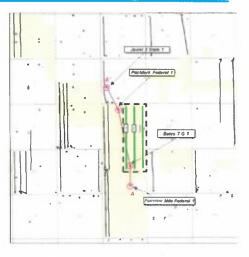


MAP Legend WFMP MRO – Horizontal Location 1 Ender Wiggins 14 WA FC 14H 2 Ender Wiggins 14 WA FC 19H 3 Ender Wiggins 14 WA FC 20H MRO Acreage Project Area



Stratigraphic Cross Section (Top Wolfcamp Datum)



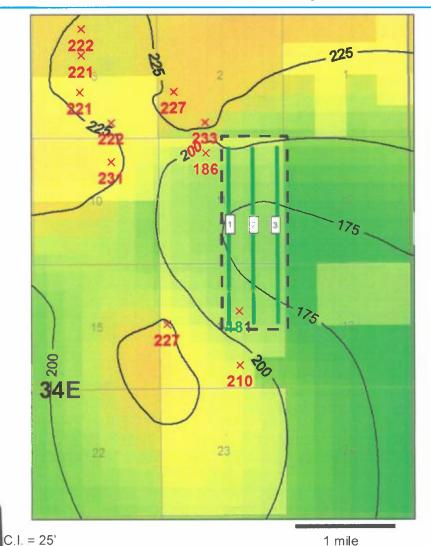


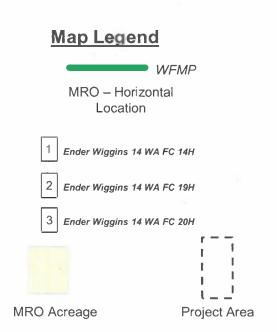
Producing Zone - WFMP A

The Wolfcamp A interval generally has consistent thickness across the unit, but thins slightly in the middle of the unit.



Gross Interval Isochore - Wolfcamp A





The Wolfcamp A interval generally has consistent thickness across the unit, but thins slightly in the middle of the unit.





Preferred Well Orientation - SHmax

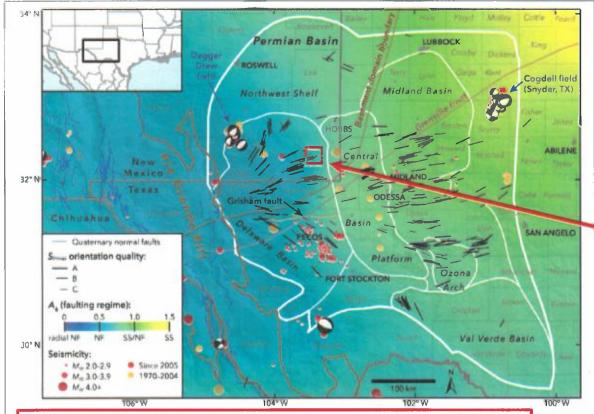


Figure 1. State of stress in the Permian Basin. Texas and New Mexico. Black lines are the measured orientations of the maximum horizontal stress (S_{a-a}) with line length scaled by data quality. The colored background is an interpolation of measured relative principal stress magnitudes trauming regime? expressed using the A_a parameter (see fext for details) of Simpson (1997). Blue lines are fault traces known to have experienced normal-sense offset within the past 1.6 Ma. from the USGS Quaternary Faults and Folds Database (Crone and Wheeler, 2001). The boundary between the Shawnee and Mazatzal basement domains is from Lund et al. (2015), and the Precambrian Grenville Front is from Thomas (2006). The Permian Basin boundary is from the U.S. Energy Information Administration, and the subbasin boundaries are from the Texas Bureau of Economic Geology Permian Basin Geological Synthesis Project. Earthquakes are from the USGS National Earthquake Information Center, the TexNet Seismic Monitoring Program, and Gan and Frohlich (2013). Focal mechanisms are from Saint Louis University (Herrmann et al., 2011).

Source:

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

Preferred well orientation is N/S.

As outlined in Snee & Zoback (2018), SHmax is at approximately 70-80 degrees in southern Lea county. It is preferable to have N/S oriented wellbores at the Ender Wiggins unit (outlined with red box) since hydraulic fractures will prefer to propagate outwards at 70-80 degrees.

