Before the Oil Conservation Division Examiner Hearing November 14, 2019

Case No. 20885

Ripley 35 WXY Fed Com 3H, Ripley 35 WA Fed Com 4H, Ripley 35 WXY Fed Com 5H, Ripley 35 WA Fed Com 9H, Ripley 35 WD Fed Com 2H, Ripley 35 WD Fed Com 7H, Ripley 35 WD Fed Com 8H



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

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

CASE NOS. 20885 (Ripley Wolfcamp)

<u>AFFIDAVIT</u>

STATE OF TEXAS)
) ss
COUNTY OF MIDLAND)

Chase Rice, being duly sworn, deposes and states:

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



- 7. No opposition is expected because the interest owners being pooled have been contacted regarding the proposed wells, but have failed or refused to voluntarily commit their interests in the wells.
- 8. In Case No. 20885, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Section 35, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Ripley 35 WXY Fed Com 5H, Ripley 35 WA Fed Com 4H, Ripley 35 WXY Fed Com 3H, Ripley 35 WA Fed Com 9H, Ripley 35 WD Fed Com 2H, Ripley 35 WD Fed Com 7H and Ripley 35 WD Fed Com 8H wells, to be horizontally drilled. The Application is attached hereto as Exhibit 1.
 - 9. Attached as Exhibit 2 are proposed C-102s for the wells.
- 10. 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.
 - 11. The wells will develop the Purple Sage Wolfcamp, Gas pool, pool code, 98220.
 - 12. The Purple Sage; Wolfcamp (Gas) pool is a gas pool with 320-acre building blocks.
- 13. The Purple Sage Wolfcamp pool is governed by special pool rules, which require setbacks at least 330 feet from a unit boundary.
- 14. The locations of the wells will be unorthodox. Marathon will be submitting separate administrative applications for approval of the non-standard locations for these wells.
- 15. The lease tract maps outlining the unit being pooled is included behind **Tab 3**. The parties being pooled and the percent of their interests is also included as part of Exhibit 3.
 - 16. There are no depth severances within the proposed spacing unit.

- 17. I have conducted a diligent search of the public records in the county where the wells are located, and conducted phone directory and computer searches to locate contact information for parties entitled to notification, and mailed all parties well proposals, including an Authorization for Expenditure.
- 18. Marathon has made a good faith effort to obtain voluntary joinder of the working interest owners in the proposed wells.
- 19. Marathon seeks to pool overriding royalty interest owners, and they were provided notice of this hearing.
 - 20. Exhibit 4 is the well proposal letter that I sent to all working-interest owners.
- 21. The proposal letter identifies the proposed surface hole and bottom hole locations and approximate TVD.
- 22. **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.
- 23. 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.
- 24. Marathon requests the maximum cost plus 200% risk charge be assessed against non-consenting working interest owners.
 - 25. Marathon requests that it be designated operator of the wells.

- 26. Marathon requests that it be allowed a period of one (1) year between when the wells are drilled and when the first well is completed under the order.
 - 27. The parties Marathon is seeking to pool were notified of this hearing.
- 28. **Exhibit 6** is an affidavit of notice prepared by counsel for Marathon that shows the parties who were notified of this hearing, the status of whether they received notice, and an affidavit of publication from the Carlsbad Argus newspaper, showing that notice of this hearing was published on October 31, 2019.
- 29. The attachments to this affidavit were prepared by me, or compiled from company business records, or were prepared at my direction.
- 30. I attest that the information provided herein is correct and complete to the best of my knowledge and belief.
- 31. The granting of this application is in the interests of conservation and the prevention of waste.

[Signature page follows]

Chose Rice

Chase Rice

SUBSCRIBED AND SWORN to before me this day of November, 2019 by Chase Rice on behalf of Marathon Oil Permian LLC.

Votary 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, EDDY COUNTY, NEW MEXICO.

CASE NO. 20885

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 E/2 of Section 35, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. In support of this application, Marathon states as follows:

- 1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
- 2. Marathon seeks to dedicate the E/2 of Section 35, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico to form a 320-acre, more or less, spacing unit.
- 3. Marathon plans to drill the Ripley 35 WXY Fed Com 5H, Ripley 35 WA Fed Com 4H, Ripley 35 WXY Fed Com 3H, Ripley 35 WA Fed Com 9H, Ripley 35 WD Fed Com 2H, Ripley 35 WD Fed Com 7H and Ripley 35 WD Fed Com 8H wells to a depth sufficient to test the Wolfcamp formation. These wells will be horizontally drilled.
- 4. These wells will be located within the Purple Sage Wolfcamp Gas Pool, which is subject to special pool rules that establish 330 foot setback requirements.
- These wells do not comply with the Division's setback requirements for this pool.
 Marathon will apply for administrative approval of the non-standard well locations separately.



- 6. 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.
- 7. 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.
- 8. 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 35, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico;
- B. Designating Marathon as operator of this unit and the wells to be drilled thereon;
- C. Authorizing Marathon to recover its costs of drilling, equipping and completing these wells;
- D. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure;
- E. Setting a 200% charge for the risk involved in drilling and completing the wells in the event a working interest owner elects not to participate in the wells.

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

Respectfully submitted,

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

Deana M. Bennett

Lance D. Hough

Post Office Box 2168

500 Fourth Street NW, Suite 1000

Albuquerque, New Mexico 87103-2168

Telephone: 505.848.1800 Attorneys for Applicant

CASE NO. _______: Application of Marathon Oil Permian LLC for compulsory pooling, Eddy County, New Mexico. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Section 35, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Ripley 35 WXY Fed Com 5H, Ripley 35 WA Fed Com 4H, Ripley 35 WXY Fed Com 3H, Ripley 35 WA Fed Com 9H, Ripley 35 WD Fed Com 7H and Ripley 35 WD Fed Com 8H wells, to be horizontally drilled. The producing area for these wells will be unorthodox. 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 3.6 miles southeast of Malaga, New Mexico.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fav: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone (575) 748-1283 Fav: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fav: (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

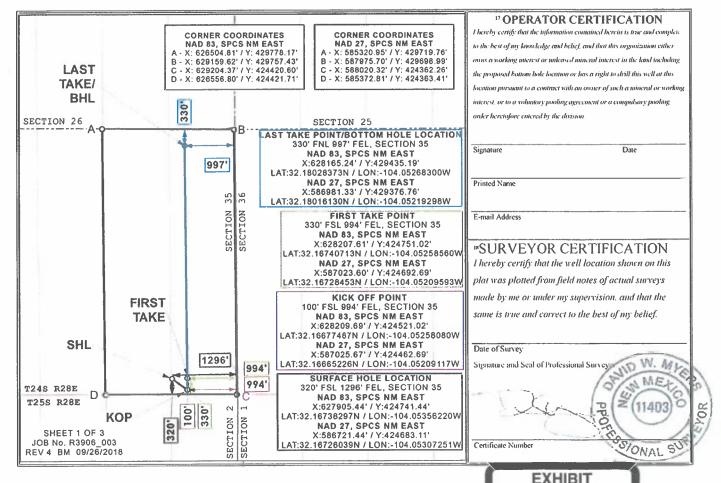
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

'-	API Number Pool Code Pool Name						-		
				98220		PURPLE	SAGE; WOL	JFCAMP (GA	AS)
⁴ Property (5 Property Name							
				RIPLI	EY 35 WX	FED COM			3H
OGRID	No.				8 Operator N	ame			Elevation
37209	8			MARAT	HON OIL F	OIL PERMIAN LLC			2955'
					¹⁰ Surface L	ocation			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
р	35	245	28F	l	320	SOUTH	1296	EAST	EDDY

	P	35	24S	28E		320	SOUTH	1296	EAST	EDDY
١	" 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
	Α	35	24S	28E		330	NORTH	997	EAST	EDDY
	12 Dedicated Acres	¹³ Joint o	r Infill 14 (Consolidation	Code 15 Or	der No.				
	320.0									

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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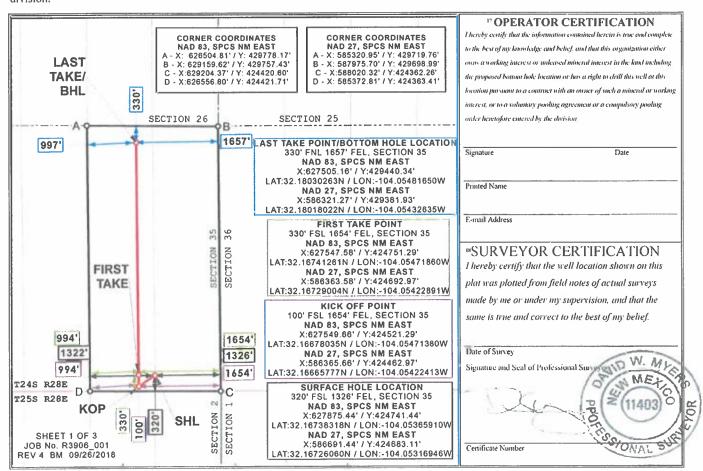
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WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Numbe	г		² Pool Code		3 Pool Name						
				98220		PURPLE SAGE; WOLFCA				MP (GAS)		
4 Property	Code				5 Property N	ame			⁶ Well Number			
	RIPLEY 35 WA FED COM								41-1			
[†] OGRID	No.				8 Operator N				,	Elevation		
37209	98			MARAT	THON OIL F	PERMIAN LLO	2		2955'			
-					" Surface L	ocation						
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/	West line	County		
0	35	24S	28E		320	SOUTH	1326	EAS	T	EDDY		
<u> </u>		,	" Bott	tom 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	35	24S	28E		330	NORTH	1657	EAS	T	EDDY		
12 Dedicated Acre	s 13 Joint o	r Infill	Consolidation C	ode 15 Orde	er No.							
320.0												

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District IV

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

12 Dedicated Acres

320.0

13 Joint or Infill

14 Consolidation Code

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

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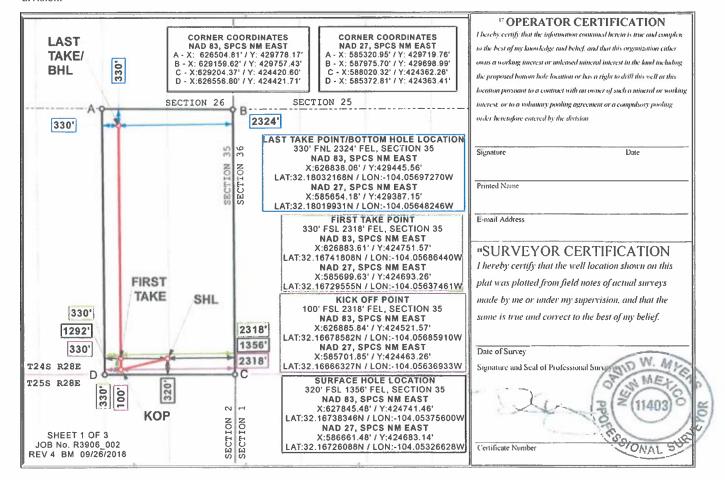
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WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Numbe	r		Pool Code			Pool Na	me		
				98220		PURPLE	LFCAMP (G	MP (GAS)		
⁴ Property	Code				6	⁶ Well Number				
	RIPLEY 35 WXY FED COM								5H	
⁷ OGRID	No.					⁹ Elevation				
37209	372098 MARATHON OIL PERMIAN LLC							2955'		
					Surface I	ocation				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
0	35	24S	28E		320	SOUTH	1356	EAST	EDDY	
	" 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	35	24S	28E	1	330	NORTH	2324	EAST	EDDY	

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.

15 Order No.



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1220 S. St., Francis Dr., Santa Fe. NM 87515

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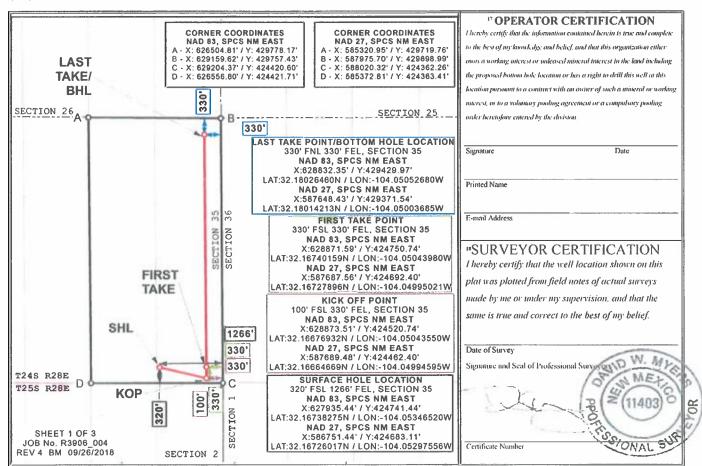
WELL LOCATION AND ACREAGE DEDICATION PLAT

1,	API Number	r	1	² Pool Code ³ Pool Name						
1				98220		PURPLE SAGE; WOLFCAMP (GAS)				
Property Code					5 Property N	iame		6.	⁶ Well Number	
				RIP	LEY 35 WA	FED COM	1 9H			
7OGRID	No.	⁸ Operator Name						⁹ Elevation		
37209	8			MARA	THON OIL	N OIL PERMIAN LLC 2955				
·					" Surface I	Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
Р	35	24S	28E		320	SOUTH	1266	EAST	EDDY	

" Bottom Hole Location If Different From Surface North/South line Lot ldn East/West line UL or lot no. Section Township Range Feet from the Feet from the County 35 **24S** 28E 330 NORTH 330 EAST **EDDY** Α

Dedicated Acres Journal Joint or Infill Jaconsolidation Code Journal Order No.

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



District.1
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District.114
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

UL or lot no.

12 Dedicated Acres

320.0

Section Township

¹³ Joint or Infill

24S

35

Range

28E

14 Consolidation Code

Lot Idn

15 Order No.

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Form C-102
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County

EDDY

WELL LOCATION AND ACREAGE DEDICATION PLAT

I.,	API Numbe	r		² Pool Code ³ Pool Name				ne		
				98220		PURPLE	LFCAMP (GA	MP (GAS)		
4 Property				5 Property N	lame		6,	⁶ Well Number		
	RIPLEY 35 WD FED COM						2H			
OGRID ,	D No. *Operator Name							⁹ Elevation		
37209	8			MARAT	THON OIL I	OIL PERMIAN LLC			2955'	
·—————————————————————————————————————	·····				" Surface I	ocation				
UL or lot no.	or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East						East/West line	County		
0	35	24S	28E		320	SOUTH	1326	EAST EDD		
" Bottom Hole Location If Different From Surface										

North/South line

NORTH

Feet from the

2310

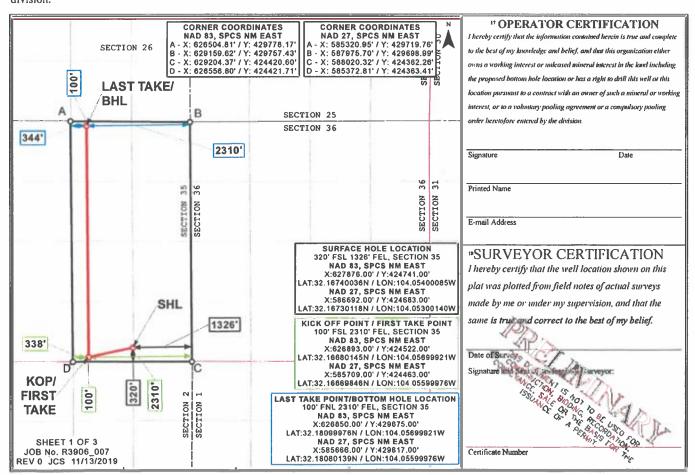
East/West line

EAST

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.

Feet from the

100



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320.0

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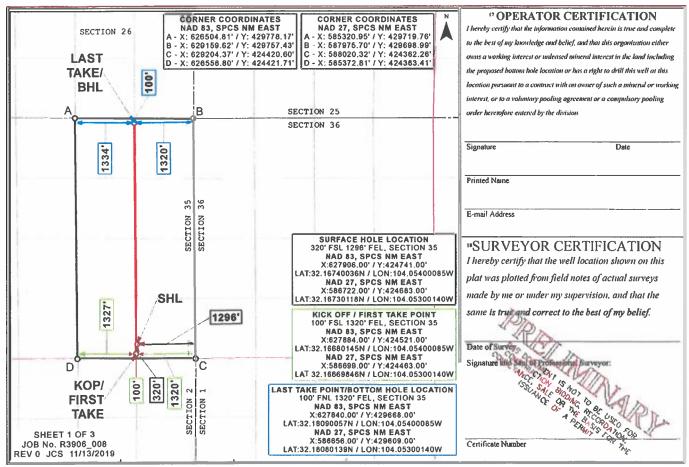
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WELL LOCATION AND ACREAGE DEDICATION PLAT

1.	API Numbe	r	1	² Pool Code			³ Pool Na	nie			
	98220 PURPLE SAGE; WOLFCAM					1P (G/	\S)				
4 Property	Code			⁵ Property Name						⁶ Well Number	
	4			RIPLEY 35 WD FED COM						7H	
⁷ OGRID No. ⁸ Operator Name									² Elevation		
37209	98 MARATHON OIL PERMIAN LLC						2955'				
	" Surface Location										
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/	West line	County	
P	35	24S	28E		320	SOUTH	1296	EAS	T	EDDY	
			" Bo	ttom Ho	e Location If	Different Fron	n Surface				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/	West line	County	
В	35	24S	28E		100	NORTH	1320	EAS	Т	EDDY	
12 Dedicated Acre	s ¹³ Joint o	r Infill	⁴ Consolidation	Code 15 Or	der No.						

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



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District IIV
1220 S. St. Francis Dr., Santa Fe. NNI 87505

Phone (505) 476-3460 Fax: (505) 476-3462

12 Dedicated Acres

320.0

13 Joint or Infill

14 Consolidation Code

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

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WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Numbe	r		² Pool Code			³ Pool Na			
				98220	ľ	PURPLE	LFCAMP (G	AMP (GAS)		
⁴ Property Code					5 Property I	Name	-	6	Well Number	
				RIP		8H				
OGRID				8 Operator 1	Name .			* Elevation		
372098				MARA		2955'				
Control of the Contro					" Surface I	ocation				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
P	35	24S	28E		320	SOUTH	1236	EAST	EDDY	
	" Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County	
A	35	24S	28E		330	NORTH	330	EAST	EDDY	

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.

15 Order No.

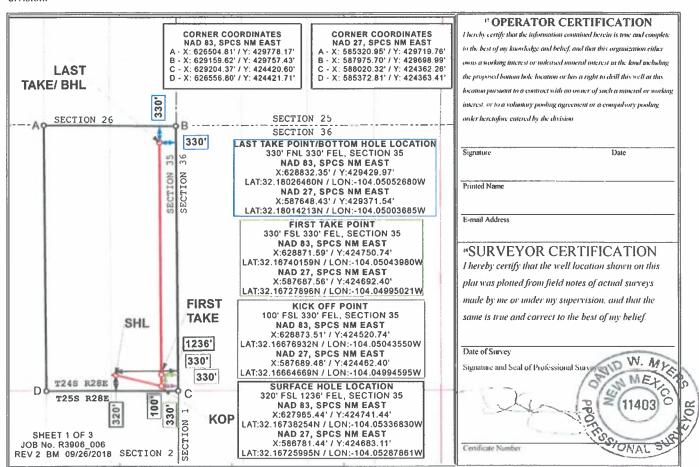
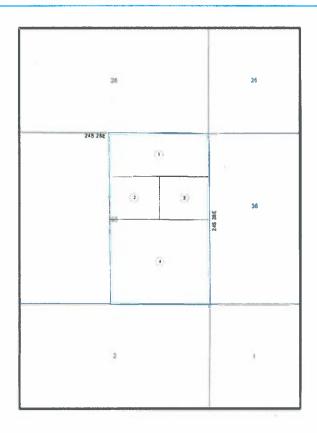


Exhibit "B" Lease Tract Map
Ripley 35 WXY Fed Com 3H, Ripley 35 WA Fed Com 4H, Ripley 35 WXY Fed Com 5H, Ripley 35 WA Fed Com 9H,
Ripley 35 WD Fed Com 2H, Ripley 35 WD Fed Com 7H, Ripley 35 WD Fed Com 8H
E/2 of Section 35 T24S-R28E – 320 acres



- Tract 1: Federal NMNM-025953
- Tract 2: Fee
- Tract 3: Fee
- Tract 4: Fee





Exhibit "C" Summary of Interests

Ripley 35 WXY Fed Com 3H, Ripley 35 WA Fed Com 4H, Ripley 35 WXY Fed Com 5H, Ripley 35 WA Fed Com 9H, Ripley 35 WD Fed Com 2H, Ripley 35 WD Fed Com 8H E/2 of Section 35 T24S-R28E – 320 acres

 Committed Working Interest:
 77.309148%

 Marathon Oil Permian LLC
 77.309148%

 Uncommitted Working Interest:
 22.690853%

 Chevron USA Inc.
 16.145865%

 RKC, Inc
 5.374676%

 XTO Holdings LLC
 1.170311%



Jeffrey Broussard Landman



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

August 19, 2019

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED 7019 0700 0000 8791 1718

Chevron USA, Inc. 6301 Deauville Blvd. Midland, TX 79706

Re:

Ripley 35 Fed Com 2H, 3H, 4H, 5H, 6H, 7H, 8H, 9H & 11H Well Proposals

E/2 of Section 35, Township 24 South, Range 28 East

Eddy County, New Mexico

Dear Chevron USA, Inc.:

Marathon Oil Permian LLC ("Marathon") proposes the drilling of the following wells located in Section 35, 24S-28E, Eddy County, New Mexico, all to be drilled from three surface pad locations.

					Target	
Pad	Well Name	SHL	BHL	Proration Unit	TVD	Est. MD
1	Ripley 35 WXY Fed Com 5H	1356' FEL & 520' FSL	2310' FEL & 100' FNL	E/2 of Sec. 35	9,681'	15,140'
1	Ripley 35 WA Fed Com 4H	1326' FEL & 520' FSL	1650' FEL & 100' FNL	E/2 of Sec. 35	9,792'	15,205'
			00015510 00015111	5/2 / 6 25		
1	Ripley 35 WXY Fed Com 3H	1296' FEL & 520' FSL	990' FEL & 100' FNL	E/2 of Sec. 35	9,681'	15, 089'
1	Ripley 35 WA Fed Com 9H	1266' FEL & 520' FSL	330' FEL & 100' FNL	E/2 of Sec. 35	9,792'_	15,236'
2	Ripley 35 WD Fed Com 2H	1326' FEL & 320' FSL	1320' FEL & 100' FNL	E/2 of Sec. 35	10,378'	15,830'
2	Ripley 35 WD Fed Com 7H	1296' FEL & 320' FSL	330' FEL & 100' FNL	E/2 of Sec. 35	10,717'	16, 116'
2	Ripley 35 WD Fed Com 8H	1266' FEL & 320' FSL	2310' FEL & 100' FNL	E/2 of Sec. 35	10,378'	15,813'
3	Ripley 35 SB Fed Com 6H	1326' FEL & 720' FSL	1980' FEL & 100' FNL	E/2 of Sec. 35	8,358'	13,807'
3	Ripley 35 SB Fed Com 11H	1296' FEL & 720' FSL	660' FWL & 100' FNL	E/2 of Sec. 35	8,358'	13,797'

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.

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

- 100%/300%/300% non-consent penalty
- \$7,000/\$700 drilling and producing rates



• Contract area of the E/2 of Section 35, 24S-28E, 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:

- 3-year term
- \$8,000 bonus consideration per net mineral acre
- Delivering an 80% NRI, proportionately reduced

This term assignment offer terminates on September 19, 2019 and is subject to due diligence and title verification satisfactory to Marathon.

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

Sincerely,

Jeffrey Broussard Marathon Oil Permian LLC

Chevron USA, Inc. elects to participate in the drilling, completing, and equipping of the Ripley 35 WD Fed Com 2H. Chevron USA, Inc. elects NOT to participate in the drilling, completing, and equipping of the Ripley 35 WD Fed Com 2H. Chevron USA, Inc. elects to participate in the drilling, completing, and equipping of the Ripley 35 WXY Fed Com 3H. Chevron USA, Inc. elects NOT to participate in the drilling, completing, and equipping of the Ripley 35 WXY Fed Com 3H. Chevron USA, Inc. elects to participate in the drilling, completing, and equipping of the Ripley 35 WA Fed Com 4H. Chevron USA, Inc. elects NOT to participate in the drilling, completing, and equipping of the Ripley 35 WA Fed Com 4H. Chevron USA, Inc. elects to participate in the drilling, completing, and equipping of the Ripley 35 WXY Fed Com 5H. Chevron USA, Inc. elects NOT to participate in the drilling, completing, and equipping of the Ripley 35 WXY Fed Com 5H.

Chevion OSA, inc. elects to participate in the drining, completing, and equipping of the Ripley 33
SB Fed Com 6H.
Chevron USA, Inc. elects NOT to participate in the drilling, completing, and equipping of the Ripley
35 SB Fed Com 6H.
Chevron USA, Inc. elects to participate in the drilling, completing, and equipping of the Ripley 35
WD Fed Com 7H.
Chevron USA, Inc. elects NOT to participate in the drilling, completing, and equipping of the Ripley
35 WD Fed Com 7H.
JJ WD 1 GG COM 711.
Chevron USA, Inc. elects to participate in the drilling, completing, and equipping of the Ripley 35
WD Fed Com 8H.
Chevron USA, Inc. elects NOT to participate in the drilling, completing, and equipping of the Ripley
35 WD Fed Com 8H.
Chevron USA, Inc. elects to participate in the drilling, completing, and equipping of the Ripley 35
WA Fed Com 9H.
Chevron USA, Inc. elects NOT to participate in the drilling, completing, and equipping of the Ripley
35 WA Fed Com 9H.
Chevron USA, Inc. elects to participate in the drilling, completing, and equipping of the Ripley 35
SB Fed Com 11H.
Chevron USA, Inc. elects NOT to participate in the drilling, completing, and equipping of the Ripley
35 SB Fed Com 11H.
Chevron USA, Inc.
Ву:
Print Name:
Title:
Date:

MARATHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS DATE 7/30/2019

DRILLING & LOCATION PREPARED BY MATTHEW RUGARD

COMMETTION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY RICK LINDSAY

ARTIFICIAL LIFT PREPARED BY RICK LINDSAY

Asset Team	PERMIAN	
Field	Purple Sage; Wolfc FORMATION: WOLFCAMP XY WILDCAT	EXPLORATION
Lease/Facility	Ripley 3S WXY Fed Com 3H DEVELOPMENT	RECOMPLETION
Location	EDDY COUNTY X EXPLOITATION	WORKOVER
Prospect	MALAGA	
Est Total Depth	15 089 Est Drilling Days Est Completion D.	ays 5.5
сэх тохог осран		-10
LOCATION COST -	INTANGIBLE	
	A COMPANY AND A	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	50,250
7001250	Land Broker Fees and Services	33,750
	TOTAL LOCATION COST - INTANGIBLE	84,000
	AAAGAA 6	
DRILLING COST - T	ANGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	19,000
7012050	Intermediate Casing 1	66,000
7012050	Intermediate Casing 2	253,000
7012050	Production Casing	79,000
7012050	Orig Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550	Orilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	579,000
DRILLING COST - IN	ITANGIBLE	
7019200	Drilling Rig Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	448,875
7019040	Directional Drilling Services	140,000
7019020	Cement and Cementing Service Surface	15,000
7019020	Cement and Cementing Service intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	35,000
7019020	Cernent and Cementing Service Production	40,000
7019140	Mud Fluids & Services	60,500
7012310	Soilds Control equipment	30,000
7012020	Bits	72,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	51,000
7019140	Fuel (Mud)	30,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	•
7019150	Mud Logging+geosteering	13,000
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	18,313
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	66,500
7018150	Rig Equipment and Misc.	8,313
7001110	Yelecommunications Services	5,000
7001120	Consulting Services	78,138
7001400	Safety and Environmental	26,600
7018120	Rental Buildings (trailers)	13,300
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	148,123
	TOTAL DRILLING - INTANGIBLE	\$1,685,160
	TOTAL DRILLING COST	\$2,264,160
	TOTAL DILLING COST	\$2,204,100
COMPLETION - TAI	ACIRTE	
7012580	Tubing	
7012580	Tubing Accessories (nipple, wireline entry)	
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	23,000
,022,000	a control of the second of the	
	TOTAL COMPLETION - TANGIBLE	\$15,000

EXHIBIT 5

MARATHON OIL PERMIAN LLC DATE 7/30/2019 **AUTHORITY FOR EXPENDITURE** DETAIL OF ESTIMATED WELL COSTS PERMIAN Asset Team Field Purple Sage; Wolfc FORMATION: WOLFCAMP XY Ripley 35 WXY Fed Com 3H Lease/Facility COMPLETION - INTANGIBLE ESTIMATED COST GL CODE DESCRIPTION 7001270 Location and Access (dress location after rig move, set anchors) 10,000 7019220 **Drilling Rig During Completion** 7019140 Mud Fluids & Services Coiled Tubing Services (3 runs) 210,000 7019030 7019240 **Snubbing Services** 7019270 Pulling/Swab Units Fuel (from drlg) 7016350 Casing Crew and Services
Cement and Cementing Services 7019010 425,000 Well Testing Services (flow hand & equip) 7019080 7019320 7019330 Fracturing Services
Perforating 1,784,200 175,000 7019360 Wireline Services 15,000 Water Hauling & Disposal (frac fluids)
Freight - Truck (haul pipe; drig & compl) 7001460 207,000 7016180 15,000 7018150 **BOP Rental & Testing** Rental Tools and Equipment (incl drig; lightplant,hydra-walk)
CT Downhole Rental Equipment (le. Bit, BHA) 7018150 7018150 35,000 7000030 Contract Labor - general 7001110 Telecommunications Services Safety and Environmental 70,000 7001400 60,000 7001120 **Consulting Services** 120,000 45,000 Zipper Manifold 7018150 Frack Stack Rentals 7019300 Freight (Transportation Services)
Equipment Rental (w/o operator, frac tanks, lightplants) 7016190 75,000 15,000 7018120 Rental Buildings (trailers) Contract Labor - Pumping (pump-down pumps) 30,000 7011010 220,700 8% Contingency & Taxes TOTAL COMPLETION - INTANGIBLE 53,511,900 TOTAL COMPLETION COST \$3,526,900 SURFACE EQUIPMENT - TANGIBLE 17,120 7012350 Misc. Piping, Fittings & Valves 7006640 7000030 Company Labor & Burden Contract Labor - General 62,878 7001110 Telecommunication equip (Telemetry) 7012410 7012270 Line Pipe & Accessories
Miscellaneous Materials (containment system) 35,847 7008060 SCADA 7016180 7,264 5,823 Contract Engineering 7001190 7012290 Metering and Instrumentation I&E Materials 105,326 7012200 **Gas Yreating** 7012200 7012010 Compressor 7012350 7012610 Vapor Recovery Unit 7012440 336,771 Separator & other pressure vessel 7012500 Tanks 235,346 7012100 Heater Treater 23,293 Flare & Accessories 7012640 7000010 Electrical Labor 10,482 Mechanica! Labor Rod Pumping unit & Pad 7012480 Pumping Unit Engine
Electrical Power (electrical cooperative construction costs) 7012180 7012350 \$840,149 TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST \$ 840,149 ARTIFICIAL LIFT 7006640 Company Labor 15,000 7012180 Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump 6,250 7012480 7012140 Elect Sub Pumps (ESP)
Well Services-Well/Wellhead Services 17,500 7019350 6,000 6,000 7012270 Materials & Supplies-Tangible Surface Wellhead Equipment
Pig Launchers/Receivers & Rel Equip 7012550 5,000 6,250 7012390 7011010 8% Contingency & Taxes 3,000 TOTAL ARTIFICIAL LIFT 110,000 TOTAL ARTIFICIAL LIFT COST \$ 110,000 **TOTAL COST** SUMMARY OF ESTIMATED DRILLING WELL COSTS **TOTAL LOCATION COST** 84,000 TOTAL DRILLING COST 2,264,160 TOTAL COMPLETIONS COST 3,526,900 TOTAL SURFACE EQUIPMENT COST 840,149 TOTAL ARTIFICIAL LIFT COST 110,000 **GRAND TOTAL COST** \$6,825,209 Participant's Approval Company Signature: Date:

MARATHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS DATE 7/30/2019

DRILLING & LOCATION PREPARED BY MATTHEW BUGGARD COMPLETION PREPARED BY JOSH SHANNON FACILITIES PREPARED BY RICK LINDSAY ARTIFICIAL LIFT PREPARED BY RICK LINDSAY

Asset Team	PERMIAN	
FleId	Purple Sage; Wolfc FORMATION: WOLFCAMP A WILDCAT	EXPLORATION
Lease/Facility	Ripley 35 WA Fed Com 4H DEVELOPMENT	RECOMPLETION
Location Prospect	EDDY COUNTY X EXPLOITATION	WORKOVER
Prospect	MALAGA	
Est Total Depth	11 205 Est Orilling Days Est Completion D	ays 5.5
LOCATION COST -	INTANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	50,250
7001250	Land Broker Fees and Services	33,750
1007130	ballo di okci recy alio scrites	
	TOTAL LOCATION COST - INTANGIBLE	84,000
DRILLING COST - T	ANGIBLE	
7012050	Conductor Dine	28,000
7012050 7012050	Conductor Pipe Surface Casing	19,000
7012050	Intermediate Casing 1	66,000
7012050	Intermediate Casing 2	253,000
7012050	Production Casing	79,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550	Drilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
- 1011210	Angelight on a first the same of the same	-/
	TOTAL DRILLING - TANGIBLE	579,000
DRILLING COST - I	NTANGIRIE	
DRICCING COST - I	TRAGILL	
7019200	Drilling Rig Mob/Demob	32,500
7019220	Orilling Rig - day work/footage	462,375
7019040	Directional Drilling Services	145,000
7019020	Cement and Cementing Service Surface	15,000
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	35,000
7019020	Cement and Cementing Service Production	40,000
7019140	Mud Fluids & Services	61,000
7012310	Solids Control equipment	31,000
7012020	Bits	72,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	53,000
7019140	Fuel (Mud)	30,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	13,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110	Casing inspection/cleaning	15,000
7019110	Orill 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	18,563
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	68,500
7018150	Rig Equipment and Misc.	8,563
7001110	Telecommunications Services	5,000
7001120	Consulting Services	80,488
7001400	Safety and Environmental	27,400
7018120	Rental Buildings (trailers)	13,700
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	150,086
	TOTAL BOULDIS INTENSIONS	\$1,715,174
	TOTAL DRILLING - INTANGIBLE	\$1,715,174
	TOTAL DRILLING COST	\$2,294,174
COMPLETION - TA	NGIBLE	
COMMISSION - IA		
7012580	Tubing	172
7012040	Tubing Accessories (nipple, wireline entry)	
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	
	TOTAL COMPLETION - TANGIBLE	\$15,000

MARATHON OIL PERMIAN LLC DATE 7/30/2019 **AUTHORITY FOR EXPENDITURE** DETAIL OF ESTIMATED WELL COSTS Asset Team PERMIAN Field Purple Sage; Wolfc FORMATION: WOLFCAMP A Lease/Facility Ripley 35 WA Fed Com 4H COMPLETION - INTANGIBLE GL CODE DESCRIPTION ESTIMATED COST 7001270 Location and Access (dress location after rig move, set anchors) 10,000 7019220 **Drilling Rig During Completion** Mud Fluids & Services
Colled Tubing Services (3 runs) 7019140 7019030 210,000 7019240 **Snubbing Services** 7019270 7016350 Pulling/Swab Units Fuel (from drlg) 7019010 7019020 Casing Crew and Services
Cement and Cementing Services 425,000 7019080 Well Testing Services (flow hand & equip) Fracturing Services
Perforating 7019320 1,784,200 175,000 7019360 Wireline Services 15,000 Water Hauling & Disposal (frac fluids) Freight - Truck (haul pipe; drig & compl) 207,000 15,000 7016180 7018150 **BOP Rental & Testing** Rental Tools and Equipment (incl drig; lightplant,hydra-walk)
CT Downhole Rental Equipment (ie. Bit, BHA) 7018150 7018150 Contract Labor - general Telecommunications Services Safety and Environmental 7000030 35,000 70,000 7001400 7001120 Consulting Services 60,000 120,000 45,000 Zipper Manifold Frack Stack Rentals 7019300 Freight (Transportation Services)
Equipment Rental (w/o operator, frac tanks, lightplants) 7016190 7018150 75,000 15,000 7018120 Rental Buildings (trailers) Contract Labor - Pumping (pump-down pumps) 8% Contingency & Taxes 30,000 220,700 TOTAL COMPLETION - INTANGIBLE \$3,511,900 TOTAL COMPLETION COST \$3,526,900 SURFACE EQUIPMENT - TANGIBLE 7012350 17,120 Misc. Piping, Fittings & Valves 7006640 7000030 Company Labor & Burden Contract Labor - General 62,878 7001110 Telecommunication equip (Telemetry) 7012410 7012270 Line Pipe & Accessories
Miscellaneous Materials (containment system) 35,847 7008060 SCADA 7016180 7001190 Freight - truck Contract Engineering 7,264 7012290 Metering and Instrumentation 5,823 7012290 t&E Materials 105,326 7012200 **Gas Treating** 7012200 7012010 Compressor 7012350 Vapor Recovery Unit Separator & other pressure vessels 7012440 7012500 Tanks 235,346 Heater Treater 23,293 7012640 Flare & Accessories 7000010 Electrical Labor 10,482 Rod Pumping unit & Pad 7012480 Pumping Unit Engine
Electrical Power (electrical cooperative construction costs) 7012180 TOTAL SURFACE EQUIPMENT - TANGIBLE \$840,149 TOTAL SURFACE EQUIPMENT COST \$ 840,149 ARTIFICIAL LIFT 7006640 Company tabor 45,000 7012180 7012480 15,000 6,250 Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump 7012140 Elect Sub Pumps (ESP)
Well Services-Well/Wellhead Services 17,500 7019350 6,000 7012270 Materials & Supplies-Tangible Surface Wellhead Equipment
Pig Launchers/Receivers & Rel Equip 7012550 5.000 7012390 6,250 7011010 8% Contingency & Taxes 3,000 TOTAL ARTIFICIAL LIFT 110,000 TOTAL ARTIFICIAL LIFT COST 110,000 \$ SUMMARY OF ESTIMATED DRILLING WELL COSTS **TOTAL COST TOTAL LOCATION COST** 84,000 TOTAL DRILLING COST 2,294,174 TOTAL COMPLETIONS COST 3,526,900 TOTAL SURFACE EQUIPMENT COST 840.149 TOTAL ARTIFICIAL LIFT COST 110,000 **GRAND TOTAL COST** \$6,855,223 Participant's Approval Name of Company

Date:

Signature:

MARATHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS DATE 7/30/2019

DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY RICK LINDSAY

ARTIFICIAL LIFT PREPARED BY RICK LINDSAY

Asset Team Field	PUTPLE Sage; WORLD FORMATION: WOLFCAMP XY WILDCAT	EXPLORATION
Lease/Facility	Ripley 35 WXY Fed Com SH DEVELOPMENT	RECOMPLETION
Location	EDDY COUNTY X EXPLOITATION	WORKOVER
Prospect	MALAGA	
Est Total Depth	15,240 Est Drilling Days Est Completion Days	5.5
LOCATION COST - I	NTANGIBLE	
		ESTIMATED COST
GL CODE	DESCRIPTION	50,250
7001270 7001250	Location and Access	33,750
7001250	Land Broker Fees and Services	33,730
	TOTAL LOCATION COST - INTANGIBLE	84,000
DRILLING COST - TA	NGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	19,000
7012050	Intermediate Casing 1	66,000
7012050	Intermediate Casing 2	253,000
7012050	Production Casing	79,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550	Drilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	579,000
DRILLING COST - IN	TANGIBLE	
7019200	Drilling Rig Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	454,275
7019040	Directional Drilling Services	142,000
7019020	Cement and Cementing Service Surface	15,000
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	35,000
7019020	Cement and Cementing Service Production	40,000
7019140	Mud Fluids & Services	60,700
7012310	Solids Control equipment	30,000
7012020	Bits	72,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	52,000
7019140	Fuel (Mud)	30,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	13,000
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)	80,000
7001160	Contract Services - Disposal/Non-Hazardous Waste	10,000
7001440	Vacuum Trucks	30,000
7000030	Contract Labor - general	3,000
7001200	Contract Labor - Operations Contract Services - Facilities	10,000
7019300	Well Services - Well Control Services	18,413
7019350	Well Services - Well/Wellhead Services	10,000
7019350	Rental Tools and Equipment (surface rentals)	67,300
		8,413
7018150 7001110	Rig Equipment and Misc.	5,000
7001110	Telecommunications Services Consulting Services	79,078
7001120	Safety and Environmental	26,920
7018120	Rental Buildings (trailers)	13,460
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	148,894
	TOTAL DRILLING - INTANGIBLE	\$1,696,952
	To the difference of the control of	
	TOTAL DRILLING COST	\$2,275,952
COMPLETION - TAP	IGIBLE	
7012580	Tubles	10
7012580	Tubing Tubing Accessories (nipple, wireline entry)	
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	15,000
1444300	- construction of administration of the construction of the constr	
	TOTAL COMPLETION - TANGIBLE	\$15,000

MARATHON OIL PERMIAN LLC DATE 7/30/2019 AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS Asset Team PERMIAN Field Purple Sage; Wolfc FORMATION: WOLFCAMP XY Lease/Facility Ripley 35 WXY Fed Com 5H COMPLETION - INTANGIBLE DESCRIPTION GL CODE 7001270 Location and Access (dress location after rig move, set anchors) 10,000 7019220 **Drilling Rig During Completion** 7019140 Mud Fluids & Services Colled Tubing Services (3 runs) 210,000 7019030 7019240 **Snubbing Services** 7019270 7016350 Pulling/Swab Units Fuel (from drlg) 7019010 **Casing Crew and Services** 7019020 7019080 Cement and Cementing Services 425,000 Well Testing Services (flow hand & equip) Perforating 7019320 1,784,200 7019330 7019360 Wireline Services 15,000 Water Hauling & Disposal (frac fluids)
Freight - Truck (haul pipe; drig & compl) 7001460 7016180 207,000 15,000 7018150 BOP Rental & Testing 7018150 7018150 Rental Tools and Equipment (incl drig; lightplant,hydra-walk)
CT Downhole Rental Equipment (ie. Bit, BHA) 7000030 Contract Labor - general 35,000 7001110 7001400 Telecommunications Services Safety and Environmental 70,000 60,000 7001120 **Consulting Services** 120,000 45,000 Frack Stack Rentals 7019300 7016190 Freight (Transportation Services) Equipment Rental (w/o operator, frac tanks, lightplants) 75,000 15,000 7018120 Rental Buildings (trailers) 7000030 Contract Labor - Pumping (pump-down pumps) 30,000 7011010 220,700 8% Contingency & Taxes TOTAL COMPLETION - INTANGIBLE \$3,511,900 TOTAL COMPLETION COST \$3,526,900 SURFACE EQUIPMENT - TANGIBLE 17,120 7012350 Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General 62,878 7001110 Telecommunication equip (Telemetry) 7012410 Line Pipe & Accessories 7012270 Miscellaneous Materials (containment system) 35,847 SCADA 7016180 Freight - truck Contract Engineering 7,264 7001190 7012290 Metering and Instrumentation 5,823 7012290 I&E Materials 105,326 7012200 **Gas Treating** 7012200 7012010 Compressor 7012350 Power Vapor Recovery Unit Separator & other pressure vessels 7012610 336,771 7012440 7012500 Tanks 235,346 Heater Treater 23,293 Flare & Accessories 7012640 7000010 Electrical Labor 10,482 Mechanical Labor 7012480 Rod Pumping unit & Pad 7012180 **Pumping Unit Engine** Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE \$840,149 TOTAL SURFACE EQUIPMENT COST \$ 840,149 ARTIFICIAL LIFT 7006640 Company Labor 45,000 7012180 7012480 Gas Lift Equipment 15,000 Rod Pumping, Sucker Rods & Rod Pump 6,250 7012140 Elect Sub Pumps (ESP) 17,500 Well Services-Well/Wellhead Services Materials & Supplies-Tangible 7012270 7012550 Surface Wellhead Equipment 5,000 7012390 Pig Launchers/Receivers & Rel Equip 6,250 7011010 8% Contingency & Taxes 3,000 TOTAL ARTIFICIAL LIFT 110,000 TOTAL ARTIFICIAL LIFT COST 110,000 SUMMARY OF ESTIMATED DRILLING WELL COSTS **TOTAL COST TOTAL LOCATION COST** 84,000 TOTAL DRILLING COST 2.275.952 TOTAL COMPLETIONS COST 3,526,900 TOTAL SURFACE EQUIPMENT COST 840,149 TOTAL ARTIFICIAL LIFT COST 110,000 GRAND TOTAL COST \$6,837,000 Participant's Approval Company Signature:

Date:

Title:

MARAYHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS DATE 7/30/2019
DRILLING & LOCATION PREPARED BY MATTHEW RUGARD
COMPLETION PREPARED BY JOSH SHANNON
FACILITIES PREPARED BY RICK LINDSAY
ARTIFICIAL LIFT PREPARED BY RICK LINDSAY

Asset Team	PERMIAN	
Field	Purple Sage; Wolfc FORMATION: WOLFCAMP A WILDCAT	EXPLORATION
Lease/Facility	Ripley 35 WA Fed Com 9H DEVELOPMENT	RECOMPLETION
Location	EDDY COUNTY X EXPLOITATION	WORKOVER
Prospect	MALAGA	
Est Total Depth	15,236 Est Drilling Days Est Completion Day	ays S.S
LOCATION COST - I	NTANCIRIE	
LOCATION COST -	MIANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	50,250
7001250	Land Broker Fees and Services	33,750
	TOTAL LOCATION COST - INTANGIBLE	84,000
DRILLING COST. T	ANCIDIT	
DRILLING COST - TA	ANGIBLE	
7012050	Conductor Pipe	28,000
		19,000
7012050	Surface Casing	
7012050	Intermediate Casing 1	66,000
7012050	Intermediate Casing 2	253,000
7012050	Production Casing	79,000
7012050	Orig Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550		50,000
	Orilling Wellhead Equipment	
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	579,000
DRILLING COST - IN	ITANGIBLE	
7019200	Drilling Rig Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	462,375
7019040	Directional Orliling Services	145,000
		15,000
7019020		
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	35,000
7019020	Cement and Cementing Service Production	40,000
7019140	Mud Fluids & Services	61,000
7012310	Solids Control equipment	31,000
7012020	Bits	72,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	53,000
7019140	Fuel (Mud)	30,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	13,000
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
	water natting and dispose (incubes son terming)	80,000
7001160	Contract Services - Disposal/Non-Hazardous Waste	
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	18,563
7019350		10,000
	Well Services - Well/Wellhead Services	
7018150	Rental Tools and Equipment (surface rentals)	68,500
7018150	Rig Equipment and Misc.	8,563
7001110	Telecommunications Services	5,000
7001120	Consulting Services	80,488
7001400	Safety and Environmental	27,400
7018120	Rental Buildings (trailers)	13,700
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	150,086
	TOTAL DRILLING - INTANGIBLE	\$1,715,174
:		
	TOTAL DRILLING COST	\$2,294,174
COMPLETION - TAI	VGIBLE	
7012580	Tubing	
7012040	Tubing Accessories (nipple, wireline entry)	
		10 000
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	-
	TOTAL COMPLETION - TANGIBLE	\$15,000

MARATHON OIL PERMIAN LLC 7/30/2019 AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS Asset Team PERMIAN FORMATION: WOLFCAMP A Purple Sage; Wolfc Lease/Facility Ripley 35 WA Fed Com 9H COMPLETION - INTANGIBLE GL CODE DESCRIPTION **ESTIMATED COST** Location and Access (dress location after rig move, set anchors) 10,000 7001270 7019220 7019140 Drilling Rig During Completion Mud Fluids & Services 210,000 7019030 Colled Tubing Services (3 runs) 7019240 7019270 Pulling/Swab Units 7016350 Fuel (from drig) Casing Crew and Services
Cement and Cementing Services 7019020 Well Testing Services (flow hand & equip) Fracturing Services 7019080 425,000 1,784,200 175,000 7019320 7019330 Perforating 7019360 7001460 Wireline Services
Water Hauling & Disposal (frac fluids) 15,000 15,000 7016180 Freight - Truck (haul pipe; drig & compl) 7018150 BOP Rental & Testing
Rental Tools and Equipment (Incl drig; Hightplant, hydra-walk) 7018150 7018150 CT Downhole Rental Equipment (ie. 8it, 8HA) 7000030 Contract Labor - general Telecommunications Services 35,000 7001110 70,000 7001400 Safety and Environmental 60,000 7018150 Zipper Manifold 120,000 7019300 7016190 Frack Stack Rentals 45,000 Freight (Transportation Services) 75,000 7018150 Equipment Rental (w/o operator, frac tanks, lightplants) 7018120 7000030 Rental Buildings (trailers)

Contract Labor - Pumping (pump-down pumps) 15.000 30,000 220,700 7011010 8% Contingency & Taxes TOTAL COMPLETION - INTANGIBLE \$3,511,900 TOTAL COMPLETION COST \$3,526,900 SURFACE EQUIPMENT - TANGIBLE Misc. Piping, Fittings & Valves Company Labor & Burden 7012350 17,120 7006640 62,878 7000030 Contract Labor - General 7001110 7012410 Telecommunication equip (Telemetry)
Line Pipe & Accessories 35,847 Miscellaneous Materials (containment system) 7012270 7008060 7016180 Freight - truck Contract Engineering 7,264 7001190 7012290 Metering and Instrumentation 5,823 105,326 7012290 I&E Materials 7012200 7012200 Gas Treating Dehydration 7012010 Compressor 7012350 7012610 Power Vapor Recovery Unit 336,771 7012440 Separator & other pressure vessels 7012500 235,346 Heater Treater 7012100 23,293 7012640 Flare & Accessories 10,482 7000010 Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine 7012480 7012350 Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE \$840,149 TOTAL SURFACE EQUIPMENT COST \$ 840,149 ARTIFICIAL LIFT 7006640 7012180 45,000 Gas Lift Equipment 15,000 Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services 7012480 6,250 7012140 17,500 6,000 7019350 Materials & Supplies-Tangible Surface Wellhead Equipment 7012270 6,000 7012550 5,000 7012390 Pig Launchers/Receivers & Rel Equip 6,250 3,000 7011010 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT 110,000 TOTAL ARTIFICIAL LIFT COST 110,000 SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COST TOTAL LOCATION COST 84,000 **TOTAL DRILLING COST** 2,294,174 TOTAL COMPLETIONS COST 3,526,900 **TOTAL SURFACE EQUIPMENT COST** 840.149 **TOTAL ARTIFICIAL LIFT COST** 110,000 GRAND TOTAL COST \$6,855,223 Participant's Approval Name of Signature

Date:

Title:

MARATHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS DATE 7/30/2019

ORILLING & LOCATION PREPARED BY MATTHEW RUGAARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY RICK LINDSAY

ARTIFICIAL LIFT PREPARED BY RICK LINDSAY

Asset Team	PERMIAN			
Field		N: WOLFCAMP D	WILDCAT	EXPLORATION
Lease/Facility	Ripley 35 WD Fed Com 2H		DEVELOPMENT	RECOMPLETION
Location	EDDY COUNTY	X	EXPLOITATION	WORKOVER
Prospect	MALAGA			
Est Total Depth	15,830 Est	Drilling Days	Est Completion Days	5.5
LOCATION COST - I	TANGIBLE			
LOCATION COST - I	TANGIBLE			
GL CODE	D	ESCRIPTION		ESTIMATED COST
7001270	Location and Access			67,000
7001250	Land Broker Fees and Services			45,000
	TOTAL LOCATION COST - INTANGIBLE			112,000
DRILLING COST - TA	NGIRIE			
DRILLING COST - 17	MOIBLE			
7012050	Conductor Pipe			28,000
7012050	Surface Casing			19,000
7012050	Intermediate Casing 1			66,000
7012050	Intermediate Casing 2			253,000
7012050	Production Casing			79,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessorie	\$		55,000
7012550	Drilling Wellhead Equipment			50,000
7012040	Casing & Tubing Access			24,000
7012270	Miscellaneous MRO Materials			5,000
	TOTAL DRILLING - TANGIBLE			579,000
DRILLING COST - IN	TANGIBLE			
7019200	Drilling Rig Mob/Demob			43,333
7019220	Drilling Rig - day work/footage			613,800
7019040	Directional Orilling Services			199,000
7019020	Cement and Cementing Service	Surface		15,000
7019020	Cement and Cementing Service	Intermediate :	1	25,000
7019020	Cement and Cementing Service	Intermediate :	2	35,000
7019020	Cement and Cementing Service	Production		40,000
7019140	Mud Fluids & Services			66,400
7012310	Solids Control equipment			40,000
7012020	Bits			72,000
7019010	Casing Crew and Services			30,000
7016350	Fuel (Rig)			70,000
7019140	Fuel (Mud)			30,000
7001460	Water (non potable)			25,000
7012350	Water (potable)			5,000
7019000	Well Logging Services			
7019150	Mud Logging+geosteering			18,000
7019250	Stabilizers, Hole Openers, Underreamers (DH n	entals)		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 farm)	ne)		60,000
7001160	Contract Services - Disposal/Non-Hazardous W		***	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			21,367
7019350	Well Services - Well/Wellhead Services			10,000
7018150	Rental Tools and Equipment (surface rentals)			90,933
7018150	Rig Equipment and Misc.			11,367
	Telecommunications Services			5,000
7001110				106,847
7001120	Consulting Services			36,373
7001400	Safety and Environmental			18,187
7018120 7019310	Rental Buildings (trailers) Coring (sidewalls & analysis)			20,207
7019310	7% Contingency & Taxes			172,522
7011010	7% Contingency of Taxes			270,320
	TOTAL DRILLING - INTANGIBLE			\$2,058,129
	TOTAL DRILLING COST			\$2,637,129
COMPLETION	CIRLS			
COMPLETION - TAP	CHOICE			
7012580	Tubing			
7012040	Tubing Accessories (nipple, wireline entry)			
7012550	Wellhead Equip			15,000
7012560	Packers - Completion Equipment			-
	TOTAL COMPLETION - TANGIBLE			\$15,000

MARATHON OIL PERMI		DATE	7/30/2019
AUTHORITY FOR EXPEN DETAIL OF ESTIMATED \			
Asset Team 5	ERMIAN		
leld F	urple Sage; Wolfc FORMATION: WOLFCAMP D		
ease/Facility F	lipley 35 WD Fed Com 2H		
OMPLETION - INTA	NGIBLE		
GL CODE	DESCRIPTION	ESTIM	ATED COST
7001270	Location and Access (dress location after rig move, set anchors)		10,000
7019220	Drilling Rig During Completion	- —	<u>·</u>
7019140 7019030	Mud Fluids & Services Colled Tubing Services (3 runs)		210,000
7019240	Snubbing Services		-
7019270	Pulling/Swab Units		4
7016350	Fuel (from delg)		-
7019010 7019020	Casing Crew and Services Cement and Cementing Services		
7019080	Well Testing Services (flow hand & equip)		425,000
7019320	Fracturing Services		2,062,200
7019330 7019360	Perforatin Wireline Services		175,000 15,000
7001460	Water Hauling & Disposal (frac fluids)	-	158,000
7016180	Freight - Truck (haul pipe; drig & compl)		15,000
7018150	BOP Rental & Testing		· ·
7018150 7018150	Rental Tools and Equipment (incl drig; lightplant, hydra-walk) CT Downhole Rental Equipment (ie. Bit, BHA)		
7000030	Contract Labor - general		35,000
7001110	Telecommunications Services		70,000
7001400 7001120	Safety and Environmental Consulting Services		60,000
7018150	Zipper Manifold	:	120,000
7019300	Frack Stack Rentals	. =	45,000
7016190 7018150	Freight (Transportation Services) Equipment Rental (w/o operator, frac tanks, lightplants)		75,000
7018120	Rental Buildings (trailers)		15,000
7000030	Contract Labor - Pumping (pump-down pumps)		30,000
7011010	8% Contingency & Taxes		243,000
7	OTAL COMPLETION - INTANGIBLE		\$3,763,200
1	TOTAL COMPLETION COST		3,778,200
URFACE EQUIPMEN	T - TANGIBLE		
7012350	Misc. Piping, Fittings & Valves		17,120
7006640 7000030	Company Labor & Burden Contract Labor - General	•	62,878
7001110	Telecommunication equip (Telemetry)	- —	
7012410	Une Pipe & Accessories	_	
7012270	Miscellaneous Materials (containment system)		35,847
7008060 7016180	SCADA Freight - truck		
7001190	Contract Engineering		7,264
7012290	Metering and Instrumentation		5,823
7012290	I&E Materials		105,326
7012200	Gas Treating Dehydration		
7012010	Commessor		
7012350	Power		
7012610	Vapor Recovery Unit Separator & other pressure vessels		336,771
7012500	Tanks		235,346
7012100	Heater Treater		
7012640	Flare & Accessories Electrical Labor	. —	23,293 10,482
7000010 7000010	Mechanical Labor		10,404
7012480	Rod Pumping unit & Pad		1.0
7012180	Pumping Unit Engine	- —	
7012350	Electrical Power (electrical cooperative construction costs)		
т	OTAL SURFACE EQUIPMENT - TANGIBLE		\$840,149
	TOTAL CUIDEACE FOUNDAMENT COST	\$	840,149
'	TOTAL SURFACE EQUIPMENT COST	>	840,143
RTIFICIAL LIFT			
7006640	Company Labor		45,000
7012180	Gas Lift Equipment		15,000
7012480	Rod Pumping, Sucker Rods & Rod Pump		6,250
7012140	Elect Sub Pumps (ESP)	- —	17,500
7019350 7012270	Well Services-Well/Wellhead Services Materials & Supplies-Tangible		6,000
7012550	Surface Wellhead Equipment		5,000
7012390	Pig Launchers/Receivers & Rel Equip	. —	6,250
7011010	8% Contingency & Yaxes		3,000
τ	OTAL ARTIFICIAL LIFT		110,000
1	OTAL ARTIFICIAL LIFT COST	\$	110,000
	SUMMARY OF ESTIMATED DRILLING WELL COSTS	TOT	AL COST
	TOTAL LOCATION COST	\$	112,000
	TOTAL DRILLING COST	\$	2,637,129
	TOTAL COMPLETIONS COST	\$	3,778,200
	TOTAL SURFACE EQUIPMENT COST	\$	840,149
	TOTAL ARTIFICIAL LIFT COST	\$	110,000
	GRAND TOTAL COST		7,477,478
	Participant's Approval		
Nan Comp			
Signa	ture:	-	

MARATHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS DATE 7/30/2019

DRILLING & LOCATION PREPARED BY MATTHEW RUGARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY RICK LINDSAY

ARTIFICIAL LIFT PREPARED BY RICK LINDSAY

Asset Yearn	PERMIAN	
Field	Purple Sage; Wolfc. FORMATION: WOLFCAMP D WILDCAT	EXPLORATION
Lease/Facility	Ripley 35 WD Fed Com 7H DEVELOPMENT	RECOMPLETION
Location		WORKOVER
		_**************************************
Prospect	MALAGA	
Est Total Depth	16.116 Est Drilling Days Est Completion Day	ys 5.5
LOCATION COST -	ANTANCIDIF	
FOCULION COST -	INTANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	67,000
7001250	Land Broker Fees and Services	45,000
7002230	Latte of once Feed with Services	43,000
	TOTAL LOCATION COST - INTANGIBLE	112,000
	AAACIN	
DRILLING COST - T	ANGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	19,000
7012050	Intermediate Casing 1	66,000
7012050	Intermediate Casing 2	253,000
7012050	Production Casing	79,000
7012050	Orig Liner Hanger, Tleback Eq & Csg Accessories	55,000
7012550	Orilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	579,000

DRILLING COST - II	VTANGIBLE	
7019200	Drilling Rig Mob/Demob	43,333
		643,500
7019220	Drilling Rig - day work/footage	
7019040	Directional Orilling Services	210,000
7019020	Cement and Cementing Service Surface	15,000
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	35,000
7019020	Cement and Cementing Service Production	40,000
7019140	Mud Fluids & Services	67,500
7012310		42,000
	Solids Control equipment	
7012020	Bits	72,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	73,000
7019140	Fuel (Mud)	30,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
		2,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	20,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110		15,000
	Casing inspection/cleaning	
7019110	Drill pipe/collar Inspection services	10,000
7016180	Freight - truck	25,000
7001460	Water havling and disposal (includes soil farming)	60,000
7001160		80,000
	Contract Services - Disposal/Non-Hazardous Waste	
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	21,917
7019350	Well Services - Weli/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	95,333
		11,917
7018150	Rig Equipment and Misc.	
7001110	Telecommunications Services	5,000
7001120	Consulting Services	112,017
7001400	Safety and Environmental	38,133
7018120	Rental Buildings (trailers)	19,067
		13,007
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	176,870
	TOTAL DRILLING - INTANGIBLE	62 124 683
	IOIAL DRILLING - INTANGIBLE	\$2,124,587
•		
	TOTAL DRILLING COST	\$2,703,587
		, , , , , , , ,
V		
COMPLETION - TA	NGIBLE	
7012580	Tubing	112
		- 17
7012040	Tubing Accessories (nipple, wireline entry)	
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	
	TOTAL COMPLETION - TANGIBLE	*** ***
	IOIAL COMPLETION - IARTGIBLE	\$15,000

MARATHON OIL PERMIAN LLC DATE 7/30/2019 AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS Asset Team PERMIAN FORMATION: WOLFCAMP D Purple Sage; Wolfc. Lease/Facility Ripley 35 WD Fed Com 7H COMPLETION - INTANGIBLE ESTIMATED COST GL CODE DESCRIPTION 7001270 Location and Access (dress location after rig move, set anchors) 10,000 Drilling Rig During Completion Mud Fluids & Services 7019220 7019140 7019030 Coiled Tubing Services (3 runs) 210,000 7019240 7019270 Pulling/Swab Units 7016350 Fuel (from drig) Casing Crew and Services
Cement and Cementing Services 7019010 7019020 425,000 7019080 Well Testing Services (flow hand & equip) 7019320 7019330 2,062,200 175,000 Fracturing Services Perforating 7019360 7001460 Wireline Services 15,000 Water Hauling & Disposal (frac fluids) 158,000 15,000 7016180 Freight - Truck (haul pipe; drlg & compl) 7018150 7018150 BOP Rental & Testing Rental Tools and Equipment (incl drig; lightplant, hydra-walk) 7018150 CT Downhole Rental Equipment (ie. Bit, BHA) Contract Labor - general Telecommunications Services 35,000 7001110 7001400 Safety and Environmental Consulting Services
Zipper Manifold 7001120 60,000 120,000 7018150 7019300 Frack Stack Rentals 45,000 Freight (Transportation Services)
Equipment Rental (w/o operator, frac tanks, lightplants) 7018150 Rental Buildings (trailers)

Contract Labor - Pumping (pump-down pumps) 7018120 15,000 30,000 243,000 7000030 8% Contingency & Taxes 7011010 \$3,763,200 TOTAL COMPLETION - INTANGIBLE TOTAL COMPLETION COST \$3,778,200 SURFACE EQUIPMENT - TANGIBLE 7012350 Misc. Piping, Fittings & Valve 17,120 7006640 7000030 Company Labor & Burder 62,878 Contract Labor - General 7001110 Telecommunication equip (Telemetry) 7012410 Line Pipe & Accessories 35,847 Miscellaneous Materials (containment system) 7012270 7008060 SCADA 7016180 Freight - truck 7,264 7001190 Contract Engineering 7012290 Metering and Instrumentation I&E Materials 5,823 105,326 7012290 7012200 7012200 Gas Treating Dehydration 7012010 Compressor 7012350 7012610 Power Vapor Recovery Unit 336,771 7012440 Separator & other pressure vessels 7012500 7012100 Yanks Heater Treater 235,346 23,293 7012640 Flare & Accessories 7000010 Electrical Labor 10.482 Mechanical Labor 7000010 7012480 Rod Pumping unit & Pad Pumping Unit Engine
Electrical Power (electrical cooperative construction costs) 7012350 TOTAL SURFACE EQUIPMENT - TANGIBLE \$840,149 TOTAL SURFACE EQUIPMENT COST \$ 840,149 ARTIFICIAL LIFT 7006640 45,000 15,000 7012180 Gas Lift Equipment 7012480 Rod Pumping, Sucker Rods & Rod Pump 6,250 7012140 Elect Sub Pumps (ESP)
Well Services-Well/Wellhead Services 17,500 6,000 7019350 7012270 Materials & Supplies-Tangible 6,000 Surface Wellhead Equipment
Pig Launchers/Receivers & Ref Equip 5.000 6,250 7012390 8% Contingency & Taxes 3,000 7011010 110,000 TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST s 110,000 SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COST TOTAL LOCATION COST 112,000 TOTAL DRILLING COST 2,703,587 **TOTAL COMPLETIONS COST** 3,778,200 TOTAL SURFACE EQUIPMENT COST 840.149 TOTAL ARTIFICIAL LIFT COST 110,000 GRAND TOTAL COST \$7,543,936 Participant's Approval Name of Company: Signature:

Date: _

Title:

MARATHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS DATE 7/30/2019

DRILLING & LOCATION PREPARED BY MATTHEW RUGARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY RICK LINDSAY

ARTIFICIAL LIFT PREPARED BY RICK LINDSAY

Asset Team	PERMIAN	
Field	Purple Sage; Wolfc FORMATION: WOLFCAMP D WILDCAT	EXPLORATION
Lease/Facility	Ripley 35 WD Fed Com 8H DEVELOPMENT	RECOMPLETION
Location	EDDY COUNTY X EXPLOITATION	WORKOVER
Prospect	MALAGA	_
Est Total Depth	15,813 Est Orilling Days Est Completion Day	rs 5.5
Est Total Deptil	13,013	
LOCATION COST - I	NTANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	67,000
7001250	Land Broker Fees and Services	45,000
	TOTAL LOCATION COST - INTANGIBLE	112,000
DRILLING COST - TA	NGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	19,000
7012050	Intermediate Casing 1	66,000
7012050	Intermediate Casing 2	253,000
7012050	Production Casing	79,000
7012050	Orig Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550	Drilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	\$79,000
	TOTAL DRILLING - TANGIBLE	3/3,000
DRILLING COST - IN	TANGIRIE	

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7019200	Drilling Rig Mob/Demob	43,333
7019220	Drilling Rig - day work/tootage	613,800
7019040	Directional Drilling Services	199,000
7019020	Cement and Cementing Service Surface	15,000
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	35,000
7019020	Cement and Cementing Service Production	40,000
7019140	Mud Fluids & Services	66,400
		40,000
7012310	Solids Control equipment	
7012020	Bits	72,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	70,000
		30,000
7019140	Fuel (Mud)	
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	
7019150		18,000
	Mud Logging+geosteering	
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		60,000
	Water hauling and disposal (includes soil farming)	
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	21,367
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	90,933
7018150		11,367
	Rig Equipment and Misc.	
7001110	Telecommunications Services	5,000
7001120	Consulting Services	106,847
7001400	Safety and Environmental	36,373
7018120	Rental Buildings (trailers)	18,187
7019310		
	Coring (sidewalls & analysis)	120.000
7011010	7% Contingency & Taxes	172,522
	TOTAL DRILLING - INTANGIBLE	\$2,058,129
•		
	TOTAL DRILLING COST	\$2,637,129
		,,
COMPLETION - TAI	IGIBLE	
7012580	Tubing	
7012040	Tubing Accessories (nipple, wireline entry)	****
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	
	TOTAL COMPLETION - TANGIBLE	\$15,000
		,

MARATHON OIL PERMIAN LLC DATE 7/30/2019 **AUTHORITY FOR EXPENDITURE** DETAIL OF ESTIMATED WELL COSTS PERMIAN Asset Team Field Purple Sage; Wolfc FORMATION: WOLFCAMP D Ripley 35 WD Fed Com 8H Lease/Facility COMPLETION - INTANGIBLE DESCRIPTION ESTIMATED COST GL CODE 7001270 Location and Access (dress location after rig move, set anchors) 10,000 7019220 **Drilling Rig During Completion** 7019140 7019030 Mud Fluids & Services Colled Tubing Services (3 runs) 210,000 7019240 **Snubbing Services** 7019270 Pulling/Swab Units Fuel (from drig) 7016350 7019010 **Casing Crew and Services** 7019020 Cement and Cementing Service: Well Testing Services (flow hand & equip) 7019080 7019320 7019330 Fracturing Services
Perforating 2,062,200 175,000 7019360 Wireline Services 15,000 Water Hauling & Disposal (frac fluids)
Freight - Truck (haul pipe; drig & compl) 7001460 7016180 158,000 15,000 7018150 BOP Rental & Testing Rental Tools and Equipment (incl drig; lightplant,hydra-walk)
CT Downhole Rental Equipment (ic. Bit, 8HA) 7018150 7000030 7001110 Contract Labor - general 35,000 Telecommunications Services Safety and Environmental 70,000 7001400 60,000 Consulting Services
Zipper Manifold 7001120 120,000 45,000 7018150 Frack Stack Rentals 7019300 Freight (Transportation Services)
Equipment Rental (w/o operator, frac tanks, lightplants) 7016190 75,000 15,000 7018120 Rental Buildings (trailers) 7000030 7011010 Contract Labor - Pumping (pump-down pumps) 30,000 243,000 8% Contingency & Taxes TOTAL COMPLETION - INTANGIBLE \$3,763,200 TOTAL COMPLETION COST \$3,778,200 SURFACE EQUIPMENT - TANGIBLE 17,120 7012350 Misc. Piping, Fittings & Valves 7006640 7000030 Company Labor & Burden Contract Labor - General 62,878 7001110 Telecommunication equip (Telemetry) 7012410 7012270 Line Pipe & Accessories
Miscellaneous Materials (containment system) 35,847 7008060 SCADA 7016180 7001190 Contract Engineering 7,264 5,823 7012290 Metering and Instrumentation I&E Materials 105,326 7012200 **Gas Treating** 7012200 7012010 Compressor 7012350 7012610 7012440 Vapor Recovery Unit Separator & other pressure vessels 336,771 7012500 Tanks 235,346 7012100 Heater Treater 23,293 7012640 Flare & Accessories 7000010 Electrical Labor 10,482 Mechanical Labor Rod Pumping unit & Pad 7012480 Pumping Unit Engine
Electrical Power (electrical cooperative construction costs) 7012180 7012350 TOTAL SURFACE EQUIPMENT - TANGIBLE \$840,149 TOTAL SURFACE EQUIPMENT COST \$ 840,149 ARTIFICIAL LIFT 7006640 Company Labor 45,000 15,000 7012180 Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump 6,250 7012480 7012140 7019350 Elect Sub Pumps (ESP)
Well Services-Well/Wellhead Services 17,500 6,000 7012270 Materials & Supplies-Tangible 7012550 Surface Wellhead Equipment 5,000 Pig Launchers/Receivers & Rel Equip 6,250 7012390 7011010 8% Contingency & Taxes 3,000 TOTAL ARTIFICIAL LIFT 110,000 TOTAL ARTIFICIAL LIFT COST 110,000 \$ SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COST **TOTAL LOCATION COST** 112,000 TOTAL DRILLING COST 2.637.129 TOTAL COMPLETIONS COST 3,778,200 TOTAL SURFACE EQUIPMENT COST 840,149 TOTAL ARTIFICIAL LIFT COST 110,000 **GRAND TOTAL COST** \$7,477,478 Participant's Approval Name of Company: Signature: Date:

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

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

CASE NOS. 20883, 20884, 20885

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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: 2-27-21







October 24, 2019

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

CASE NO. 20883

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

CASE NO. 20884

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

CASE NO. 20885

TO: AFFECTED PARTIES

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

In Case No. 20883, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the W/2 E/2 of Section 35, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Ripley 35 SB Fed Com 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.

In Case No. 20884, 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 35, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Ripley 35 SB Fed Com 11H well, to be horizontally drilled. The producing

Deana M. Bennett 505.848.1834 dmb@modrall.com

Lance D. Hough 505.848.1826 Idh@modrall.com

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 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..

In Case No. 20885, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Section 35, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Ripley 35 WXY Fed Com 5H, Ripley 35 WA Fed Com 4H, Ripley 35 WXY Fed Com 3H, Ripley 35 WD Fed Com 2H, Ripley 35 WD Fed Com 7H and Ripley 35 WD Fed Com 8H wells, to be horizontally drilled. The producing area for these wells will be unorthodox. 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.

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, Mecha H Bennett

Deana M. Bennett Lance D. Hough

Attorneys for Applicant



LAWYERS

October 29, 2019

Deana M. Bennett 505.848.1834 dmb@modrall.com

VIA FEDEX OVERNIGHT

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

Lance D. Hough 505.848.1826 Idh@modrall.com

CASE NOS. 20883-20885 (RIPLEY)

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

CASE NOS. 20864-20868 (VALKYRIE)

TO: AFFECTED PARTIES

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

Ripley Applications:

In Case No. 20883, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the W/2 E/2 of Section 35, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Ripley 35 SB Fed Com 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.

In Case No. 20884, 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 35, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Ripley 35 SB Fed Com 11H 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

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 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. 20885, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Section 35, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Ripley 35 WXY Fed Com 5H, Ripley 35 WA Fed Com 4H, Ripley 35 WXY Fed Com 3H, Ripley 35 WA Fed Com 9H, Ripley 35 WD Fed Com 2H, Ripley 35 WD Fed Com 7H and Ripley 35 WD Fed Com 8H wells, to be horizontally drilled. The producing area for these wells will be unorthodox. 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.

Valkyrie Applications:

In Case No. 20864, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the S/2 of Section 12, Township 23 South, Range 28 East and Section 7 of Township 23 South, Range 29 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Valkyrie 12 WA Federal Com 7H, Valkyrie 12 WXY Federal Com 9H, Valkyrie 12 WA Federal Com 11H, Valkyrie 12 WD Federal Com 8H, Valkyrie 12 WD Federal Com 10H, Valkyrie 12 WD Federal Com 12H, to be horizontally drilled. The producing area for these wells will be unorthodox. 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. 20865, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the S/2 N/2 of Section 12 of Township 23 South, Range 28 East; and Section 7 of Township 23 South, Range 29 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Valkyrie 12 SB Federal Com 13H 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.

In Case No. 20866, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the N/2 of Section 12, Township 23 South, Range 28 East and Section 7 of Township 23 South, Range 29 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Valkyrie 12 WXY Federal Com 1H, Valkyrie 12 WA Federal Com 3H, Valkyrie 12 WXY Federal Com 5H, Valkyrie 12 WD Federal Com 2H, Valkyrie 12 WD Federal Com 4H, Valkyrie 12 WD Federal Com 6H wells, to be horizontally drilled. The producing area for these wells will be unorthodox. 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. 20867, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the N/2 S/2 of Section 12 of Township 23 South, Range 28 East; and Section 7 of Township 23 South, Range 29 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Valkyrie 12 SB Federal Com 14H 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.

In Case No. 20868, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the S/2 S/2 of Section 12 of Township 23 South, Range 28 East; and Section 7 of Township 23 South, Range 29 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Valkyrie 12 SB Federal Com 15H 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.

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, Nema H Bennett

Deana M. Bennett

Lance D. Hough

Attorneys for Applicant

Ripley 20683

W2 E2 of Section 35, Township 24 South, Range 28 East, NMPM Eddy County, New Mexico Bone Spring Formations

Interes	t Ty Owner Name/Address					
	Chevron USA Inc.					
	6301 Deauville					
WI	Midland, TX 79706-2964					
	RKC, Inc.					
	1527 Hillside Road					
WI	Fairfield, CT 06490					
	XTO Holdings LLC					
	810 Houston Street					
WI	Fort Worth, TX 76102					
	Sempra Energy Production Company					
	8235 Douglas Ave, Suite 525					
	Dallas, TX 75225					
ORRI						
	Sandford Starman and Shirley Starman, Co-Trustees of the Sanford and Shirley Starman					
	1991 Revocable Trust dated May 23, 1991					
	P.O. Box 3606					
0001	Westlake Village, CA 91360					
ORRI	Bukisan Oil 9 Cas ID					
	Rubicon Oil & Gas, LP 508 W. Wall St., Suite 500					
	Midland, TX 79701					
ORRI	Wildiana, 1X 79701					
<u> </u>						
	Michael D. Hayes and Kathryn Hayes, Co-Trustees of the Hayes Revocable Trust					
	3608 Meadowridge					
	Midland, TX 79707					
ORRI						
	Curtis W. Mewbourne, Trustee					
	500 West Texas, Suite 1020					
	Midland, TX 79701					
DRRI						

Ripley · 20884
E2 E2 of Section 35, Township 24 South, Range 28 East, NMPM **Eddy County, New Mexico Bone Spring Formations**

Interes	t Ty Owner Name/Address
	Chevron USA Inc.
	6301 Deauville
WI	Midland, TX 79706-2964
	RKC, Inc.
	1527 Hillside Road
wı	Fairfield, CT 06490
	XTO Holdings LLC
	810 Houston Street
WI	Fort Worth, TX 76102
	Sempra Energy Production Company
	8235 Douglas Ave, Suite 525
	Dallas, TX 75225
ORRI	
0.001	Sandford Starman and Shirley Starman, Co-Trustees of the Sanford and Shirley Starman 1991 Revocable Trust dated May 23, 1991 P.O. Box 3606 Westlake Village, CA 91360
ORRI	Rubicon Oil & Gas, LP
	508 W. Wall St., Suite 500
	Midland, TX 79701
ORRI	
	Michael D. Hayes and Kathryn Hayes, Co-Trustees of the Hayes
	Revocable Trust
	3608 Meadowridge
	Midland, TX 79707
ORRI	
	Curtis W. Mewbourne, Trustee
	500 West Texas, Suite 1020
ORRI	Midland, TX 79701

Ripley - 20885

E/2 of Section 35, Township 24 South, Range 28 East, NMPM

Eddy County, New Mexico

Wolfcamp Formations

Interest Type	Owner Name/Address
	Chevron USA Inc.
	6301 Deauville
wı	Midland, TX 79706-2964
	RKC, Inc.
	1527 Hillside Road
WI	Fairfield, CT 06490
	XTO Holdings LLC
	810 Houston Street
wı	Fort Worth, TX 76102
	Sempra Energy Production Company
	8235 Douglas Ave, Suite 525
	Dallas, TX 75225
ORRI	
	Sandford Starman and Shirley Starman, Co-Trustees of the Sanford and Shirley
	Starman 1991 Revocable Trust dated May 23, 1991
	P.O. Box 3606
0001	Westlake Village, CA 91360
ORRI	Dubines Oil 9 Con LD
	Rubicon Oil & Gas, LP 508 W. Wall St., Suite 500
	Midland, TX 79701
ORRI	, IN 73701
	Michael D. Hayes and Kathryn Hayes, Co-Trustees of the Hayes Revocable Trust
	3608 Meadowridge
	Midland, TX 79707
ORRI	
	Curtis W. Mewbourne, Trustee
	500 West Texas, Suite 1020
	Midland, TX 79701
ORRI	

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: 177817

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0064 8778 95	Chevron 6301 Deauville Midland TX 79706	\$1.30	\$3.50	\$1.60	\$0.00	81363-0204 Ripley Notice
2	9314 8699 0430 0064 8779 01	RKC, Inc. 1527 Hillside Road Fairfield CT 06490	\$1.30	\$3.50	\$1.60	\$0.00	81363-0204 Ripley Notice
3	9314 8699 0430 0064 8779 18	XTO Holdings LLC 810 Houston Street Fort Worth TX 76102	\$1.30	\$3.50	\$1.60	\$0.00	81363-0204 Ripley Notice
4	9314 8699 0430 0064 8779 25	Sempra Energy Production Company 8235 Douglas Ave., Suite 525 Dallas TX 75225	\$1.30	\$3.50	\$1.60	\$0.00	81363-0204 Ripley Notice
5	9314 8699 0430 0064 8779 32	Sandford Starman and Shirley Starman co-Trustees Starman 1991 Revocable Trust P.O. Box 3606 Westlake Village CA 91360	\$1.30	\$3.50	\$1.60	\$0.00	81363-0204 Ripley Notice
6	9314 8699 0430 00 64 8779 4 9	Rubicon Oil & Gas, LP 508 W. Wall St., Suite 500 Midland TX 79701	\$1,30	\$3.50	\$1.60	\$0.00	81363-0204 Ripley Notice
7	9314 8699 0430 0064 8779 56	Michael D. Hayes & Kathryn Hayes, co-Trustees of Hayes Revocable Trust 3608 Meadowridge Midland TX 79707	\$1.30	\$3.50	\$1.60	\$0.00	81363-0204 Ripley Notice
8	9314 8699 0430 0064 8779 63	Curtis W. Mewbourne, Trustee 500 West Texas, Suite 1020 Midland TX 79701	\$1.30	\$3.50	\$1,60	\$0.00	81363-0204 Ripley Notice
		Total	als: \$10.40	\$28.00	\$12.80	\$0.00	
				Grand	d Total:	\$51.20	

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

Transaction Report Details - CertifiedPro net Firm Mail Book ID= 177817 Generated: 11/12/2019 8 05 55 AM

The second second									美国的
USPS Article Number	Date Created Reference Number	Name I	Name 2	Crt	State	Zíp	Mailing Status	Service Options	Mail Dalivery Date
9314869904 00064877963	2019-10-24 11:19 AM 81363-0204 Ripley	Curtis W. Mewbourne, Trustee		Midland	TX	79701	Undelivered	Return Receipt - Electronic, Certified Mail	
9314869904300064877956	2019-10-24 11:19 AM 81363-0204 Ripley	Michael D. Hayes & Kathryn Hayes, co-Trustees of	Hayes Revocable Trust	Midland	TX	79707	To be Returned	Return Receipt - Electronic, Certified Mail	
9314869904300064877949	2019-10-24 11:19 AM 81363-0204 Ripley	Rubicon Oil & Gas, LP		Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	10-28-2019
9314869904300064877932	2019-10-24 11:19 AM 81363-0204 Ripley	Sandford Starman and Shirley Starman co-Trustee	s Starman 1991 Revocable Trust	Westlake Village	CA	91360	Delivered	Return Receipt - Electronic, Certified Mail	10-30-2019
9314869904300064877925	2019-10-24 11:19 AM 81363-0204 Ripley	Sempra Energy Production Company		Dallas	TX	75225	Mailed	Return Receipt - Electronic, Certified Mail	
9314869904300064877918	2019-10-24 11:19 AM 81363-0204 Ripley	XTO Holdings LLC		Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail	10-29-2019
9314869904300064877901	2019-10-24 11:19 AM 81363-0204 Ripley	RKC, Inc.		Fairfield	ст	06490	Delivered	Return Receipt - Electronic, Certified Mail	11-07-2019
9314869904300064877895	2019-10-24 11:19 AM 81363-0204 Ripley	Chevron		Midland	TX	79706	Undelivered	Return Receipt - Electronic, Certified Mail	

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

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



Shipment Facts

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

Carlsbad Current Argus.

Affidavit of Publication Ad # 0003873592

MODRALL SPERLING POBOX 2168

ALBUQUERQUE, NM 87103

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

October 31, 2019

Legal Clerk

Subscribed and sworn before me this October 31,

2019:

State of WI, County of Brown NOTARY PUBLIC

My commission expires

Ad # 0003873592 PO #: 20883, 20884, 20885 # of Affidavits : 1



CASE NO. 20883: Notice to all affected parties, as well as the heirs and devisees of Bureau of Land Management, Chevron USA Inc., RKC, Inc., XTO Holdings LLC, Sempra Energy Production Company, Sandford Starman and Shirley Starman Co-Trustees of the Sanford and Shirley Starman 1991 Revocable Trust dated May 23 1991, Rubicon Oil & Gas LP, Michael D. Hayes and Kathryn Hayes Co-Trustees of the Hayes Revocable Trust, Curtis W. Mewbourne Trustee, of Marathon Oil Permian LLC's application for compulsory pooling, Eddy County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on 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 underlying the W/2 E/2 of Section 35, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Ripley 35 SB Fed Com 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 allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 3.6 miles southeast of Malaga, New Mexico.

CASE NO. 20884: Notice to all affected parties, as well as the heirs and devisees of Bureau of Land Management, Chevron USA Inc., RKC, Inc., XTO Holdings LLC, Sempra Energy Production Company, Sandford Starman and Shirley Starman Co-Trustees of the Sanford and Shirley Starman 1991 Revocable Trust dated May 23 1991, Rubicon Oil & Gas LP, Michael D. Hayes and Kathryn Hayes Co-Trustees of the Hayes Revocable Trust, Curtis W. Mewbourne Trustee, of Marathon Oil Permian LLC's application for compulsory pooling, Eddy County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on 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 underlying the E/2 E/2 of Section 35, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Ripley 35 SB Fed Com 11H 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 3.6 miles southeast of Malaga, New Mexico.

CASE NO. 20885: Notice to all affected parties, as well as the heirs and devisees of Bureau of Land Management, Chevron USA Inc., RKC, Inc., XTO Holdings LLC, Sempra Energy Production Company, Sandford Starman and Shirley Starman Co-Trustees of the Sanford and Shirley Starman 1991 Revocable Trust dated May 23 1991, Rubicon Oil & Gas LP, Michael D. Hayes and Kathryn Hayes Co-Trustees of the Hayes Revocable Trust, Curtis W. Mewbourne Trustee, of Marathon Oil Permian LLC's application for compulsory pooling, Eddy County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on November 14, 2019, to consider this application. Applicant seeks an order from the Division pooling all un-

committed mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Section 35, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Ripley 35 WXY Fed Com 5H, Ripley 35 WA Fed Com 4H, Ripley 35 WXY Fed Com 3H, Ripley 35 WA Fed Com 9H, Ripley 35 WD Fed Com 2H, Ripley 35 WD Fed Com 7H and Ripley 35 WD Fed Com 8H wells, to be horizontally drilled. The producing area for these wells will be unorthodox. 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 3.6 miles southeast of Malaga, New Mexico.

October 31, 2019

October 31, 2019

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

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

CASE NO. 20885 (Ripley Wolfcamp)

AFFIDAVIT

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

Rebecca Horne, being duly sworn, deposes and states:

- 1. I am over the age of 18, I am a geologist for Marathon Oil Permian LLC, and have personal knowledge of the matters stated herein. I have previously testified before the Oil Conservation Division ("Division") and my credentials as an expert petroleum geologist were accepted by the Division as a matter of record.
- 2. My area of responsibility at Marathon includes the area of Eddy County in New Mexico.
 - 3. I am familiar with the application filed by Marathon in this case.
- 4. **Exhibit 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 Ripley development plan.
- 6. The exhibits behind **Tab 9** are the geology study I prepared for the Ripley 35 WXY Fed Com 5H; Ripley WA Fed Com 4H; Ripley WXY Fed Com 3H; and Ripley 35 WA Fed Com 9H, which are upper Wolfcamp wells.



- 7. **Exhibit 9-A** is structure map of the top of the Wolfcamp, and is the structure map for the upper Wolfcamp wells. The proposed project area is identified by a black-dashed box, and the proposed wells are identified by purple and red lines. The contour interval used this exhibit is 25 feet. This exhibit shows that the structure dips to the east.
- 8. **Exhibit 9-B** is the reference map for the wells I chose for the cross-section. The slide identifies three wells in the vicinity of the proposed upper 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 upper Wolfcamp 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. The producing zones are the Wolfcamp XY and the Wolfcamp A.
- 10. In my opinion, the gross interval thickness is relatively consistent from north to south.
- 11. **Exhibit 9-D** is a Gross Interval Isochore of the Wolfcamp to Wolfcamp B. This slide shows the gross interval thickness is relatively consistent from north to south.
- 12. The exhibits behind **Tab 10** are the geology study I prepared for the Ripley 35 WD Fed Com 2H; Ripley 35 WD Fed Com 7H; and Ripley 35 WD Fed Com 8H, which are the lower Wolfcamp wells.
- 13. **Exhibit 10-A** is structure map of the top of the Wolfcamp C2, and is the structure map for the lower Wolfcamp wells. The proposed project area is identified by a black-dashed box, and the proposed wells are identified green lines. The contour interval used this exhibit is 25 feet. This exhibit shows that the structure dips to the east.

- 14. **Exhibit 10-B** is the reference map for the wells I chose for the cross-section. The slide identifies three wells in the vicinity of the proposed lower Wolfcamp wells, shown by a line of cross-section running from A to A'.
- 15. **Exhibit 10-C** is a stratigraphic cross section hung on the top of the Wolfcamp C2. The well logs on the cross-section give a representative sample of the lower Wolfcamp 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. The producing zones are the Wolfcamp C2 and the Wolfcamp D2.
 - 16. In my opinion, the gross interval thickness increases from north to south.
- 17. Exhibit 10-D is a Gross Interval Isochore of the Wolfcamp C2 to Wolfcamp D3.

 This slide shows the gross interval thickness increases from north to south.
 - 18. 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.
- 19. Exhibit 11 provides an overview of the stress orientation in the area based on the 2018 Snee-Zoback paper.
- 20. The preferred well orientation in this area is either north/south or east/west. This is because the S_{Hmax} is at approximately 45 degrees in mid-Eddy County. Marathon is proposing east/west orientation to maximize the lateral length given Marathon's acreage.

- 21. Exhibits 7-11 were prepared by my or under my supervision or compiled from company business records.
- 22. In my opinion, the granting of Marathon's application is in the interests of conservation and the prevention of waste.

Rebecca Horne

SUBSCRIBED AND SWORN to before me this 13 day of 15, 2019 by Rebecca Horne, on behalf of Marathon Oil Permian LLC.

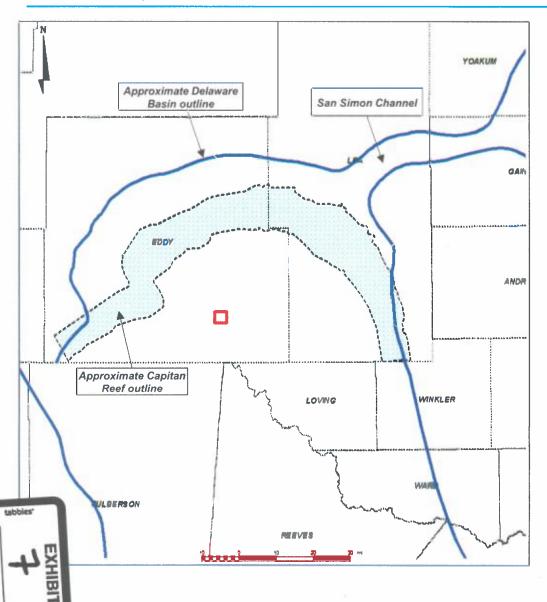
Notary Public

My commission expires: 02 -27-21

OFFICIAL SEAL
Karlene Schuman
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 02-27-21

Locator Map

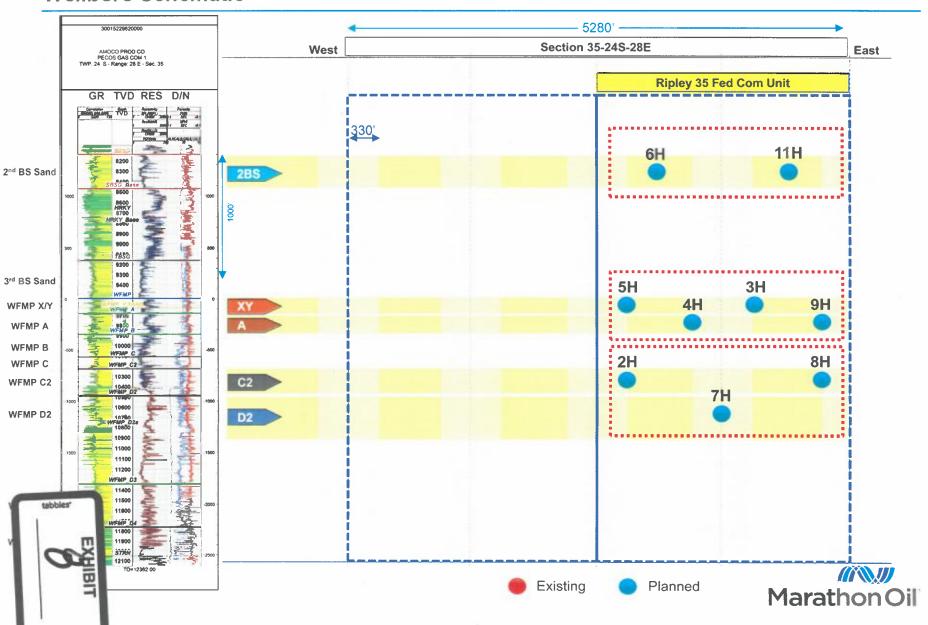
50



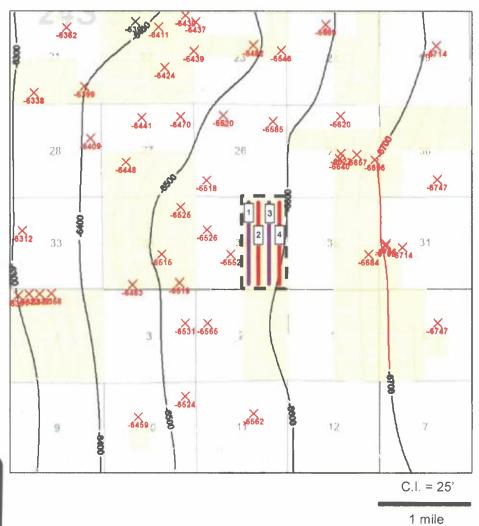
- Approximate location of proposed Ripley 35 Fed Com well locations shown with red box
- Located basinward of the Capitan Reef
- Mid Eddy county



Wellbore Schematic



Structure Map for Upper Wolfcamp Wells – Top of Wolfcamp (TVDSS)



Map Legend



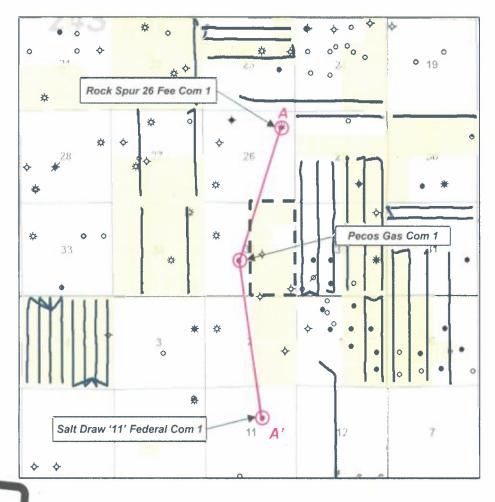


- 1 Ripley 35 WXY Fed Com 5H
- 2 Ripley 35 WA Fed Com 4H
- 3 Ripley 35 WXY Fed Com 3H
- 4 Ripley 35 WA Fed Com 9H





Reference Map for Cross Section – Upper Wolfcamp Wells



1 mile





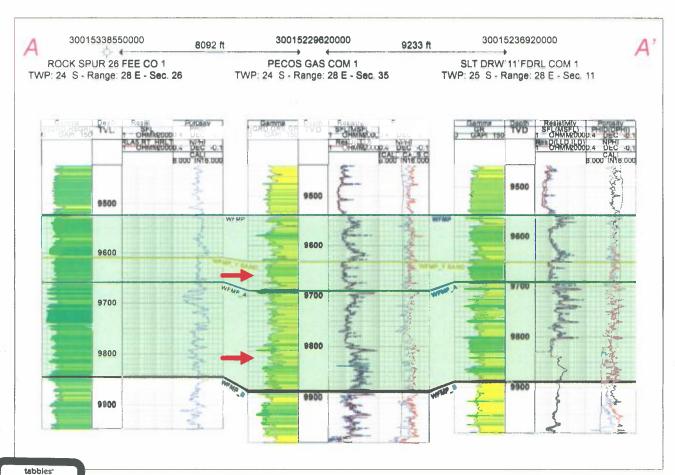
Producing WFMP XY & A Wells

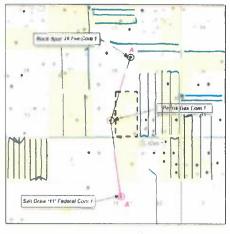


Cross Section Line



Stratigraphic Cross Section (Top Wolfcamp Datum)





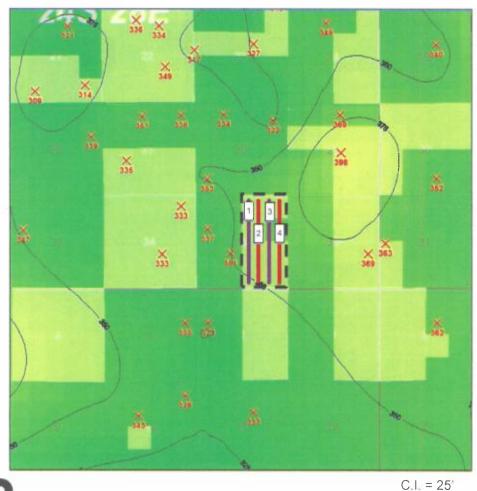
Gross interval thickness relatively consistent from north to south

Producing Zone – Wolfcamp XY & WFMP A

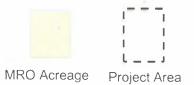




Gross Interval Isochore – Wolfcamp to Wolfcamp B



Map Legend





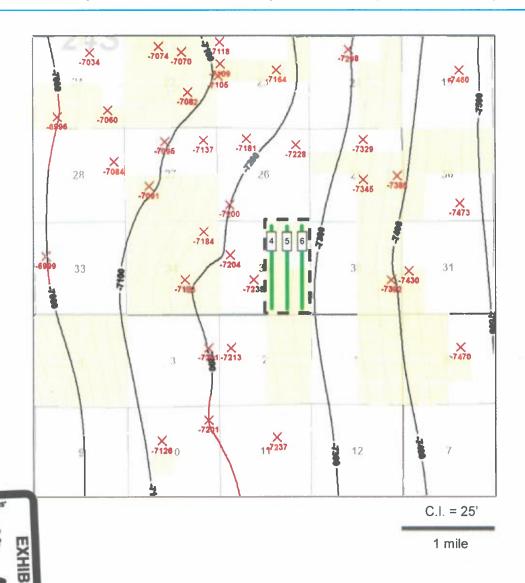
- 1 Ripley 35 WXY Fed Com 5H
- 2 Ripley 35 WA Fed Com 4H
- 3 Ripley 35 WXY Fed Com 3H
- 4 Ripley 35 WA Fed Com 9H

1 mile

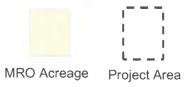




Structure Map for Lower Wolfcamp Wells – Top of Wolfcamp C2 (TVDSS)



Map Legend

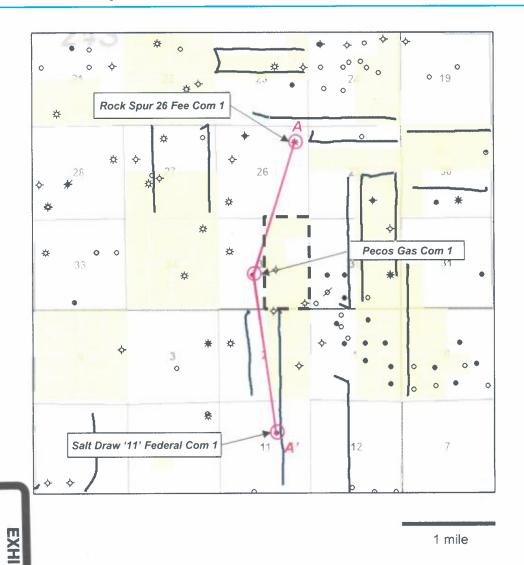




- 4 Ripley 35 WD Fed Com 2H
- 5 Ripley 35 WD Fed Com 7H
- 6 Ripley 35 WD Fed Com 8H



Reference Map for Cross Section - Lower Wolfcamp Wells







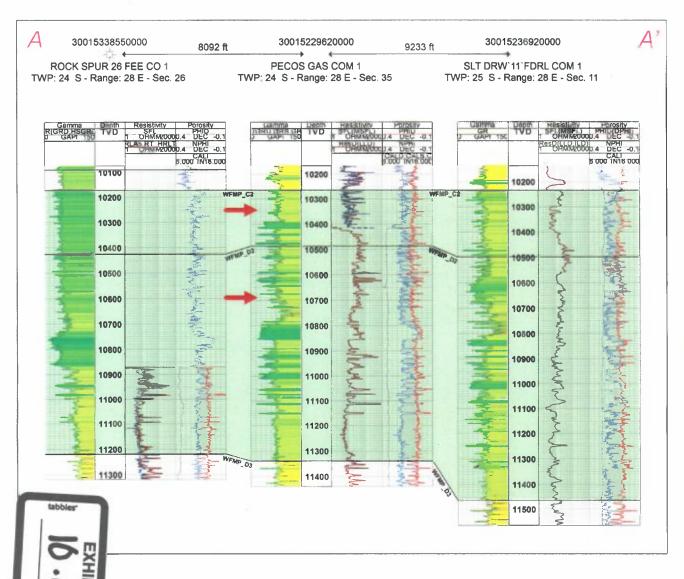
Producing WFMP D Wells

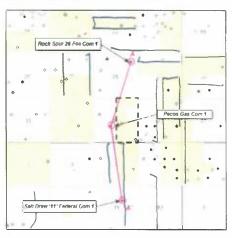


Cross Section Line



Stratigraphic Cross Section (Top Wolfcamp C2 Datum)



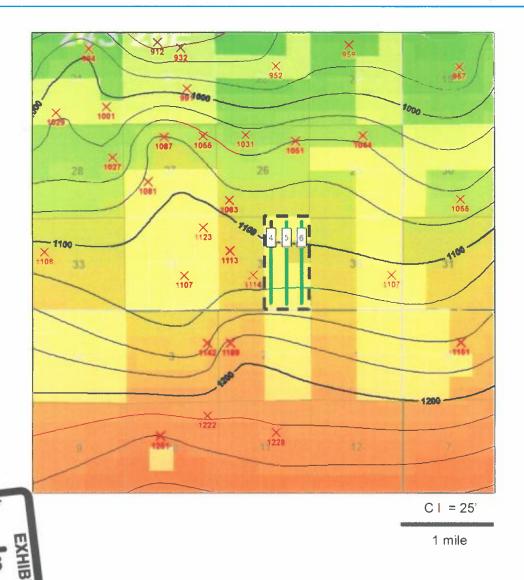


Gross interval thickness increases from north to south

Producing Zone – Wolfcamp C2 & D2



Gross Interval Isochore – Wolfcamp C2 to Wolfcamp D3



Map Legend





MRO – Horizontal Location

- 4 Ripley 35 WD Fed Com 2H
- 5 Ripley 35 WD Fed Com 7H
- 6 Ripley 35 WD Fed Com 8H



Preferred Well Orientation - SHmax

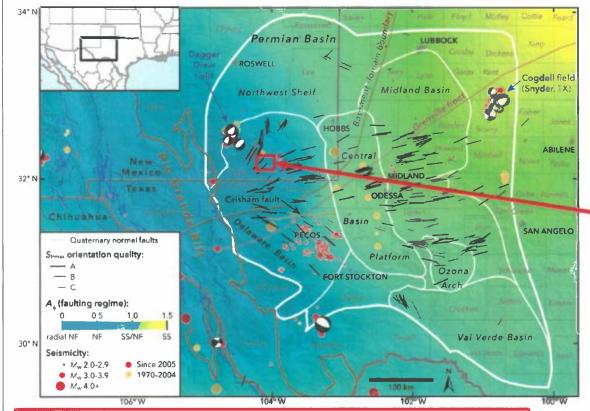


Figure 1. State of stress in the Permian Basin. Texas and New Mexico Black lines are the measured orientations of the maximum horizontal stress (S_{acc}), with line tengin scaled by data quality. The colored background is an interpolation of measured relative principal stress magnitudes (raunting regime) expressed using the A_a parameter (see text 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, 2000). The boundary between the Shawnee and Mazatzal basement domains is from Lund et al. (2015). and the Precambrian Genville 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 Program, and Gan and Frohlich (2013). Focal mechanisms are from Saint Louis University (Hermann et al., 2011).

Source:

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

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

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

