### **Before the Oil Conservation Division Examiner Hearing June 27, 2019**

Case No. 20563: Nemesis 7 SB Fee 6H

and

Case No. 20470: Nemesis 7 WXY Fee 1H; Nemesis 7 WA Fee 3H; Nemesis 7 WXY Fee 5H; Nemesis 7 WA Fee 7H; Nemesis 7 WD Fee 2H; Nemesis 7 WD Fee 8H

Marathon Oil

### 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 NO. 20563

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

**CASE NO. 20470** 

#### **AFFIDAVIT**

STATE OF TEXAS	)
	) ss.
COUNTY OF HARRIS	)

Jeffrey Broussard, being duly sworn, deposes and states:

- 1. I am over the age of 18, I am a landman for Marathon Oil Permian LLC and have personal knowledge of the matters stated herein. I have been qualified by the Oil Conservation Division ("Division") as an expert petroleum landman.
- 2. I submit the following information pursuant to NMAC 19.15.4.12.A(1) in support of the above referenced compulsory pooling applications.
- 3. Attached as **Exhibit 1 and 2** are the applications for Case No. 20563 and Case No. 20470.
- 4. The purpose of these applications is to force pool working interest owners into the horizontal spacing unit described below, and in the wells to be drilled in the unit.



Exhibit A-Case Nos. 20563/20470

- 5. 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.
- 6. In Case No. 20563, 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 Sections 7 and 18, Township 23 South. Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Nemesis 7 SB Fee 6H well, to be horizontally drilled.
  - 7. The producing areas for this well will be orthodox.
- 8. In Case No. 20470, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Sections 7 and 18, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Nemesis 7 WXY Fee 1H; Nemesis 7 WA Fee 3H; Nemesis 7 WXY Fee 5H; Nemesis 7 WA Fee 7H; Nemesis 7 WD Fee 2H; Nemesis 7 WD Fee 8H wells, to be horizontally drilled.
  - 9. The producing area for these wells will be orthodox.
  - 10. Attached as Exhibit 3 are the proposed C-102s for the wells.
- The Bone Spring well will develop the Culebra Bluff, Bone Spring, South Pool,
   Pool Code 15011.
- 12. The Wolfcamp wells will develop the Purple Sage Wolfcamp Pool, Pool Code 98220, which is a gas pool.
- 13. A lease tract map outlining the Bone Spring unit being pooled is attached hereto as **Exhibit 4-A**. The parties being pooled and the percent of their interests is also included as part of Exhibit 4-A.

- 14. A lease tract map outlining the Wolfcamp unit being pooled is attached hereto as **Exhibit 4-B**. The parties being pooled and the percent of their interests is also included as part of Exhibit 4-B.
- 15. There are certain unleased mineral interest owners with whom Marathon is currently negotiating to the extent possible. Certain of unleased mineral interests are in the process of or will be determined via probate or other proceedings. Marathon does not seek to pool those interests at this time.
  - 16. There are no depth severances within the Bone Spring formation.
  - 17. There are no depth severances within the Wolfcamp formation.
- 18. 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.
- 19. In my opinion, Marathon has made a good faith effort to obtain voluntary joinder of the working interest owners in the proposed wells.
- 20. Exhibit 5 is an example of the proposal letters sent to working interest owners, along with an example of the proposal letter sent to the New Mexico Department of Transportation.
- 21. Exhibit 6 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.
- 22. 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.

- 23. Marathon requests the maximum cost plus 200% risk charge be assessed against non-consenting working interest owners.
  - 24. Marathon requests that it be designated operator of the wells.
- 25. 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.
  - 26. The parties Marathon is seeking to pool were notified of this hearing.
  - 27. Marathon requests that overriding royalty interest owners be pooled.
- 28. Exhibit 18 is an affidavit of notice prepared by counsel for Marathon that shows the parties who were notified of this hearing, the status of whether they received notice, and an affidavit of publication from the Carlsbad Current-Argus newspaper, showing that notice of this hearing was published on April 18, 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]

Jeffrey Broussard

SUBSCRIBED AND SWORN to before me this 25th day of June, 2019 by Jeffrey

Broussard on behalf of Marathon Oil Permian LLC.

My commission expires: 1/83/8023



## Exhibit 1 Case No. 20563 Application

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

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

<b>CASE</b>	NO.	

#### **APPLICATION**

Marathon Oil Permian LLC ("Marathon"), OGRID Number 372098, through its undersigned attorneys, hereby makes an application to the Oil Conservation Division pursuant to the provisions of NMSA (1978), Section 70-2-17, for an order pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the W/2 E/2 of Sections 7 and 18, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico.

In support of this application, Marathon states as follows:

- 1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
- 2. Marathon seeks to dedicate the W/2 E/2 of Sections 7 and 18, Township 23 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 Nemesis 7 SB Fee 6H well to a depth sufficient to test the Bone Spring formation. This well will be horizontally drilled.
- 4. This well will be located within the Culebra Bluff; Bone Spring, South pool, pool code 15011.



- 5. Marathon sought, but has been unable to obtain, a voluntary agreement from all interest owners in the Bone Spring formation underlying the proposed spacing unit to participate in the drilling of the well or to otherwise commit their interests to the well.
- 6. The pooling of all interests in the Bone Spring formation underlying the proposed unit will prevent the drilling of unnecessary wells, prevent waste and protect correlative rights.
- 7. Marathon further requests that it be allowed one (1) year between the time the well is drilled and completion of the well under the order issued by the Division.

WHEREFORE, Marathon requests this application be set for hearing before an Examiner of the Oil Conservation Division May 2, 2019, and after notice and hearing as required by law, the Division enter its order:

- A. Pooling all mineral interests in the Bone Spring formation underlying a horizontal spacing unit within the W/2 E/2 of Sections 7 and 18, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico;
- B. Designating Marathon as operator of this unit and the well to be drilled thereon;
- C. Authorizing Marathon to recover its costs of drilling, equipping and completing the well;
- D. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure;
- E. Setting a 200% charge for the risk involved in drilling and completing the well in the event a working interest owner elects not to participate in the well.
- F. Allowing a time period of one (1) year between when the well is drilled and when the well is completed under the order.

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

By: Wella M. Bennet

Deana M. Bennett
Post Office Box 2168

500 Fourth Street NW, Suite 1000

Albuquerque, New Mexico 87103-2168

Telephone: 505.848.1800 Attorneys for Applicant CASE NO. \_\_\_\_: Application of Marathon Oil Permian LLC for compulsory pooling, Eddy County, New Mexico. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the W/2 E/2 of Sections 7 and 18, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Nemesis 7 SB Fee 6H well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 2.5 miles Northwest of Loving, New Mexico

### Exhibit 2 Case No. 20470 Application

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

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

CASE NO. 20 470

#### **APPLICATION**

Marathon Oil Permian LLC ("Marathon"), OGRID Number 372098, through its undersigned attorneys, hereby makes an application to the Oil Conservation Division pursuant to the provisions of NMSA (1978), Section 70-2-17, for an order pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Sections 7 and 18, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico.

In support of this application, Marathon states as follows:

- 1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
- 2. Marathon seeks to dedicate the E/2 of Sections 7 and 18, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico to form a 640-acre, more or less, spacing unit.
- 3. Marathon plans to drill the Nemesis 7 WXY Fee 1H; Nemesis 7 WA Fee 3H; Nemesis 7 WXY Fee 5H; Nemesis 7 WA Fee 7H; Nemesis 7 WD Fee 2H; Nemesis 7 WD Fee 4H; Nemesis 7 WD Fee 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, pool code 98220.
- 5. Marathon sought, but has been unable to obtain, a voluntary agreement from all interest owners in the Wolfcamp formation underlying the proposed spacing unit to participate in the drilling of the wells or to otherwise commit their interests to the wells.
- 6. The pooling of all interests in the Wolfcamp formation underlying the proposed unit will prevent the drilling of unnecessary wells, prevent waste and protect correlative rights.
- 7. Marathon further requests that it be allowed one (1) year between the time the 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 May 2, 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 Sections 7 and 18, Township 23 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.

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

Deana M. Bennett

Post Office Box 2168

500 Fourth Street NW, Suite 1000

Albuquerque, New Mexico 87103-2168

Telephone: 505.848.1800 Attorneys for Applicant CASE NO Mexico. 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 Sections 7 and 18, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Nemesis 7 WXY Fee 1H; Nemesis 7 WA Fee 3H; Nemesis 7 WXY Fee 5H; Nemesis 7 WA Fee 7H; Nemesis 7 WD Fee 4H; Nemesis 7 WD Fee 8H wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the wells, and a 200% charge for risk involved in drilling said wells, and allowing a one year period between when the wells are drilled and when the first well is completed. Said area is located approximately 2.5 miles Northwest of Loving, New Mexico.

### Exhibit 3 C-102s

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IIV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

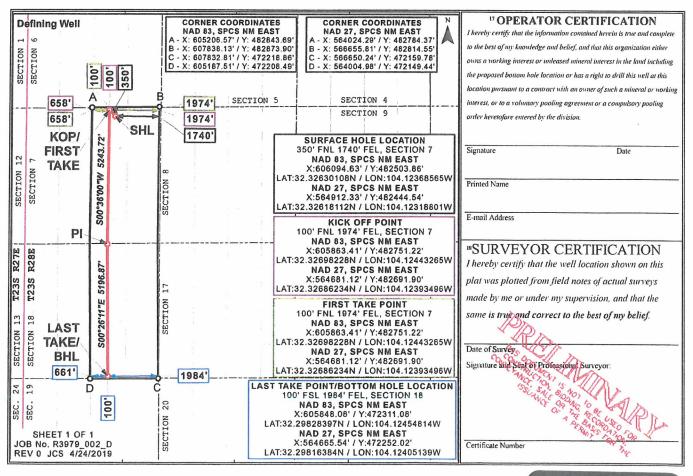
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Numbe	r		<sup>2</sup> Pool Code	?	<sup>3</sup> Pool Name					
	15011 CULEBRA BLUFF; BONE SPR							ING, S	SOUTH		
4 Property	Code				5 Property				<sup>6</sup> Well Number		
					NEMESIS 7	SB FEE				6H	
<sup>7</sup> OGRID					<sup>8</sup> Operator	Name				9 Elevation	
37209	98		MARATHON OIL PERMIAN LLC							3045'	
					<sup>10</sup> Surface 1	Location					
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Eas	t/West line	County	
В	7	23S 28E 350 NORTH 1740 EA					EAS	ST	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 Ea						Ens	t/West line	County	
0	18	23S	28E		100	SOUTH	1984	EAS	ST	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

Signature

3

District.1
1625 N. French Dr., Hobbs, NN 188240
Phone: (575) 393-6161 Fax: (575) 393-0720
District.II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District.III
1000 Rio Brazos Road, Aztec, NN 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District.IIV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

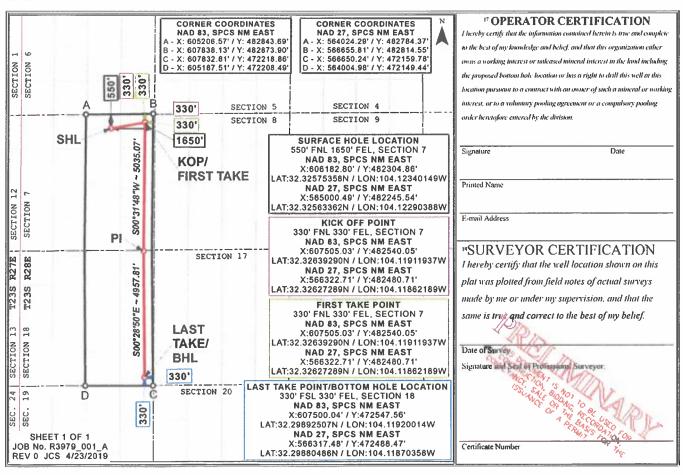
# State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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

■ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

			MELL LC	CATIO	N AND ACK	EAGE DEDIC	A HON PLA	. 1			
ı,	API Numbe	r		<sup>2</sup> Pool Cod	c	<sup>3</sup> Pool Name					
				98220	)	PURPLE SAGE; WOLFCAMP (GAS)					
4 Property (	Code				5 Property	Name			<sup>6</sup> Well Number		
					1H						
OGRID :	No.		* Operator Name   * Elevation								
37209	8		MARATHON OIL PERMIAN LLC 3045'								
			<sup>10</sup> Surface Location								
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County	
В	7	23S	28E		550	NORTH	1650	EAST	EDD	Y	
		`	" Bo	ttom Ho	le 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/We	est line	County	
P	18	23S	28E		330	330	EAST	EDD	Y		
12 Dedicated Acres	13 Joint o	r Infill 14	1 14 Consolidation Code 15 Order No.								
640.0											



District.1
1625 N. French Dr., Hobbs, NN188240
Phone. (575) 393-6161 Fax. (575) 393-0720
District.II
811 S. First St., Artesia, NN188210
Phone. (575) 748-1283 Fax. (575) 748-9720
District.III
1000 Rio Brazos Road, Aztec, NN187410
Phone. (505) 334-6178 Fax. (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe. NN187505

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

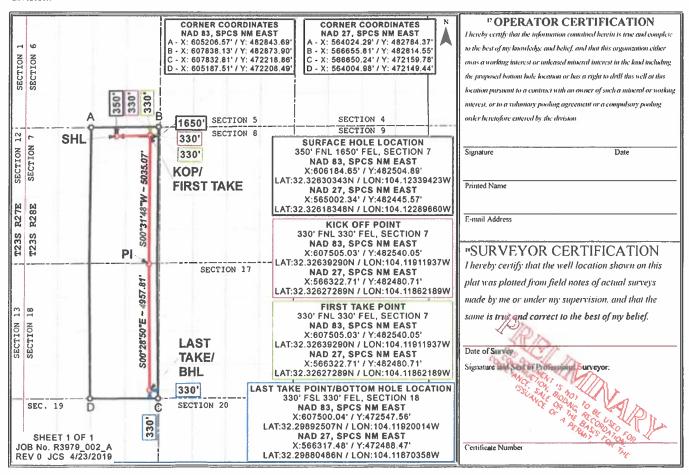
# State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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

AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

			W DDD DC	70/11/10	IT AND ACIO	CITOD DEDIC	71110111 1071	· J			
1	API Numbe	r		<sup>2</sup> Pool Cod	e	<sup>3</sup> Pool Name					
			98220 PURPLE SAGE; WOLFCAMP (GAS)								
4 Property	Code	<sup>5</sup> Property Name									
					NEMESIS 7	WD FEE			2H		
'OGRID	No.		* Operator Name   * Elevation								
37209	98		MARATHON OIL PERMIAN LLC 3045'								
			<sup>10</sup> Surface Location								
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
В	7	23S	28E		350	NORTH	1650	EAST	EDDY		
			" Bo	ttom Ho	le 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		
P	18	23S   28E     330   SOUTH   330   EA						EAST	EDDY		
12 Dedicated Acre	s 13 Joint o	r Infill	fill 14 Consolidation Code 15 Order No.								
640.0											



District 1
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone (575) 748-1283 Fax (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax (505) 476-3462

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

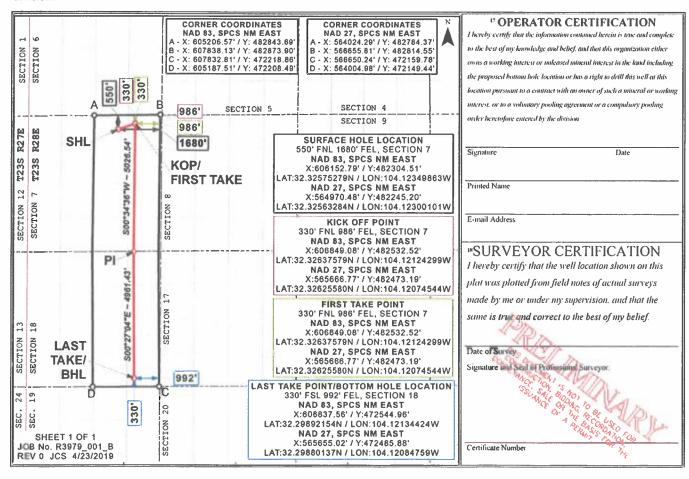
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

■ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

'	API Numbe	er <sup>2</sup> Pool Code <sup>3</sup> Pool Name							
				LFCAMP (G.	AS)				
4 Property	Code				5 Property	Vame		6	Well Number
		NEMESIS 7 WA FEE							3H
7OGRID	No.	* Operator Name							<sup>9</sup> Elevation
37209	98	MARATHON OIL PERMIAN LLC							3045'
		Surface Location							
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
l n	1 7	220 200 100					E A OTE	EDDY	

		1 on manny	1441164	1271 11111		Troiting Goddin time	1 ((1 11 010) 111(	tonan treat time	County
В	7	23S	28E		550	NORTH	1680	EAST	EDDY
			" Во	ttom Hol	le 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
P	18	23S	28E		330	SOUTH	992	EAST	EDDY
12 Dedicated Acres	<sup>13</sup> Joint of	r Infill 14	Consolidation (	Code 15 Or	der No.			····	
640.0									



District.1
1625 N. French Dr., Hobbs, NM 88240
Phone. (575) 393-6161 Fax: (575) 393-0720
District.II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District.III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District.IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

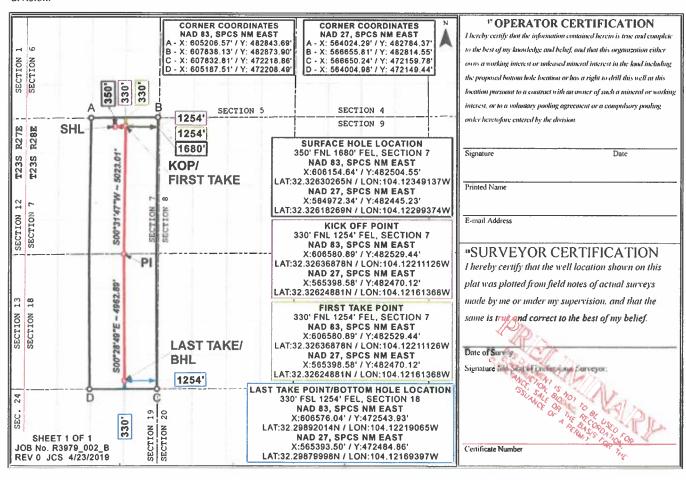
# State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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

☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

			11 222 20	, 0, , , , ,	117111271011	CAOL DEDIC	TELLOTTE DEL	• •		
1,	API Numbe.	r		<sup>2</sup> Pool Cod	e	3 Pool Name				
			98220 PURPLE SAGE; WOLFCAMP (GAS)							
4 Property C	Code				5 Property 1	Name		6	Well Number	
			NEMESIS 7 WD FEE 4H							
OGRID I	No.				<sup>8</sup> Operator l	Name			<sup>9</sup> Elevation	
37209	8		MARATHON OIL PERMIAN LLC 3045'							
			<sup>™</sup> Surface Location							
UL or lot no.	Section	Township	Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	County	
В	7	238	28E		350	NORTH	1680	EAST	EDDY	
			" Bo	ttom Ho	le Location If	Different Fron	Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
P	18	23S	S   28E     330   SOUTH   1254   EAST   ED						EDDY	
12 Dedicated Acres	<sup>13</sup> Joint or	Infill	14 Consolidation Code 15 Order No.							
640.0										



District 1
1625 N. French Dr., Hobbs, NNI 88240
Phone. (575) 393-6161 Fax. (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone. (575) 748-1283 Fax. (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NNI 87410
Phone: (505) 334-6178 Fax. (505) 334-6170
District IIY
1220 S. St. Francis Dr., Santa Fe, NNI 87505
Phone: (505) 476-3460 Fax. (505) 476-3462

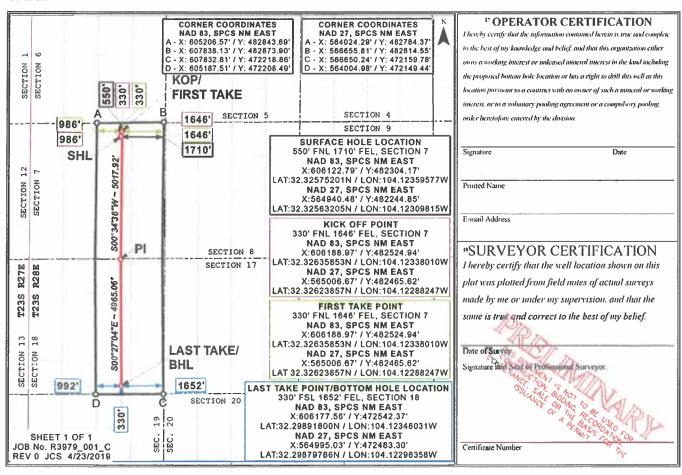
## State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

			WELL LC	CATIO	N AND ACK	LEAGE DEDIC	A HON PLA	k I			
1	API Numbe	r		<sup>2</sup> Pool Code	e	<sup>3</sup> Pool Name					
			98220 PURPLE SAGE; WOLFCAMP (GAS)								
4 Property	Code				5 Property 1	Name			61	Vell Number	
			NEMESIS 7 WXY FEE 5H								
<sup>7</sup> OGRID	No.		······		8 Operator	Name				Elevation Elevation	
37209	98		MARATHON OIL PERMIAN LLC 3045'								
			" Surface Location								
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/	West line	County	
В	7	238	28E		550	NORTH	1710	EAS	T	EDDY	
		,	" Bo	ttom Ho	le 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	
0	18	23S	23S   28E						EDDY		
12 Dedicated Acre	s 13 Joint o	r Infill	14 Consolidation	Code 15 Oi	rder No.	,					
640.0											
	1										



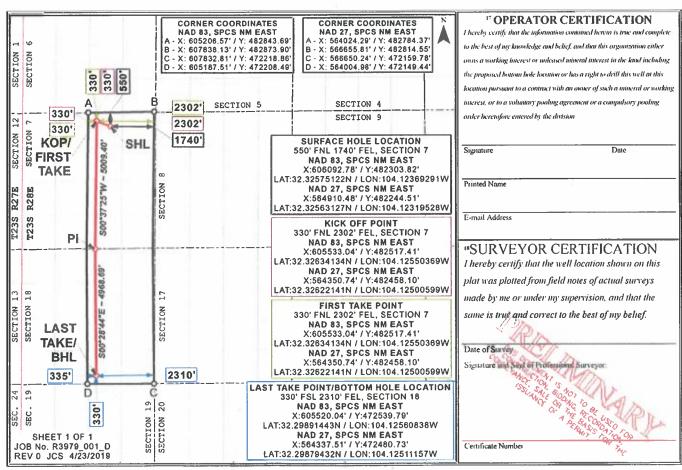
District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

		V	<b>VELL LC</b>	OCATION	N AND ACR	EAGE DEDIC	ATION PLA	l'			
1,	API Number	r		<sup>2</sup> Pool Code		<sup>3</sup> Pool Name					
_				SAGE; WO	OLFCAMP (GAS)						
4 Property (	Code				5 Property I	Name		61	Well Number		
			NEMESIS 7 WA FEE 7H								
7 OGRID	No.				8 Operator !	Name			Elevation 9		
37209	8		MARATHON OIL PERMIAN LLC 3045'								
			□ Surface Location								
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
В	7	23S	28E		550	NORTH	1740	EAST	EDDY		
			" Bo	ttom Hol	e 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		
0	18	23S	3S   28E     330   SOUTH   2310   EAST   EDI						EDDY		
12 Dedicated Acres	13 Joint of	r Infill 14 (	14 Consolidation Code 15 Order No.								
640.0											



District I
1625 N. French Dr., Hobbs, NN1 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IIV
1220 S. St. Francis Dr., Santa Fe, NM1 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

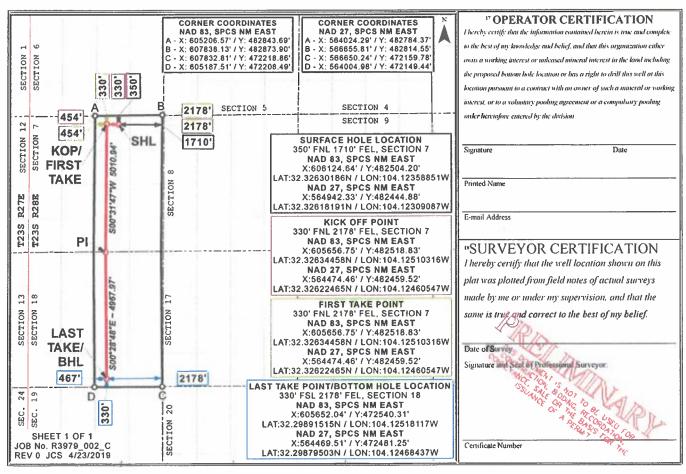
# State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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

☐ AMENDED REPORT

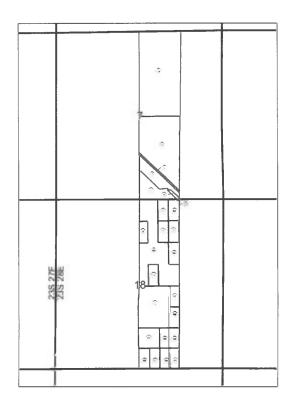
WELL LOCATION AND ACREAGE DEDICATION PLAT

		V		CATIO	I AND ACI	CAGE DEDIC	ATIONILA			
¹ A	API Number	-		<sup>2</sup> Pool Code		3 Pool Name				
				98220		PURPLE	SAGE; WO	LFCAMP (G	AS)	
4 Property C	ode	<sup>5</sup> Property Name <sup>6</sup> Well Numb								
		NEMESIS 7 WD FEE 8H								
OGRID N	No.				8 Operator	Name			<sup>9</sup> Elevation	
37209	8		MARATHON OIL PERMIAN LLC 3045'							
			□ Surface Location □							
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
В	7	23S	28E		350	NORTH	1710	EAST	EDDY	
,			" Bo	ttom Hol	e Location II	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	
0	18	23S	23S   28E						EDDY	
12 Dedicated Acres	13 Joint or	Infill 14 (	fill 14 Consolidation Code 15 Order No.							
640.0										



## Exhibit 4 Lease Tract Map and Interests

Lease Tract Map
Nemesis 7 SB Fee 6H
W/2 E/2 of Sections 7 & 18, T23S-R28E- 320 acres



• All tracts are Fee acreage



### Summary of Interests Nemesis 7 SB Fee 6H W/2 E/2 of Sections 7 & 18, T23S-R28E-320 acres

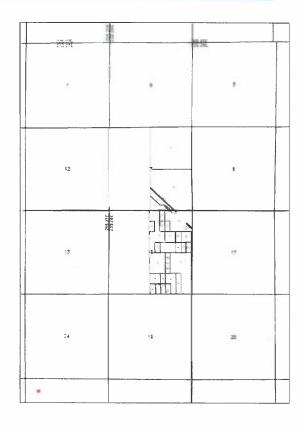
Committed Working Interest:	54.894304%
Marathon Oil Permian LLC	54.894304%
Uncommitted Working Interest:	40.318732%
OXY USA WTP Limited Partnership	23.498148%
Chevron USA Inc.	9.453539%
Fasken Land & Minerals, Ltd.	7.367045%
Unleased Mineral Interest:	0.847989%
State Highway Commission of NM	0.847989%





Lease Tract Map

Nemesis 7 WXY Fee 1H, Nemesis 7 WA Fee 3H, Nemesis 7 WXY Fee 5H, Nemesis 7 WA Fee 7H, Nemesis 7 WD Fee 2H, Nemesis 7 WD Fee 8H E/2 of Sections 7 & 18, T23S-R28E-640 acres

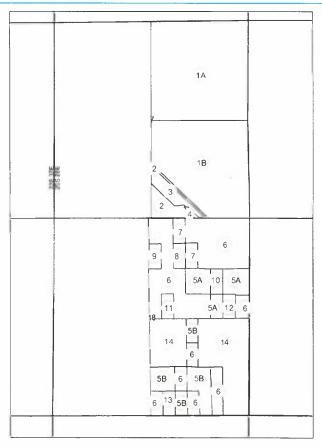


 All tracts are Fee Acreage



Lease Tract Map

Nemesis 7 WXY Fee 1H, Nemesis 7 WA Fee 3H, Nemesis 7 WXY Fee 5H, Nemesis 7 WA Fee 7H, Nemesis 7 WD Fee 2H, Nemesis 7 WD Fee 4H, Nemesis 7 WD Fee 8H E/2 of Sections 7 & 18, T23S-R28E-640 acres





#### **Summary of Interests**

Nemesis 7 WXY Fee 1H, Nemesis 7 WA Fee 3H, Nemesis 7 WXY Fee 5H, Nemesis 7 WA Fee 7H, Nemesis 7 WD Fee 2H, Nemesis 7 WD Fee 4H, Nemesis 7 WD Fee 8H E/2 of Sections 7 & 18, T23S-R28E-640 acres

Committed Working Interest: Marathon Oil Permian LLC	<b>51.414968%</b> 51.414968%
Committed Working Interest (Elections but no JOA): MRC Permian Company	<b>0.5804325%</b>
Uncommitted Working Interest: OXY USA WTP Limited Partnership Chevron USA Inc. Fasken Land & Minerals, Ltd.	45.526091% 24.317024% 13.930379% 7.278688%
Unleased Mineral Interest: State Highway Commission of NM NM Department of Transportation	0.446995% 0.423329% 0.023666%



# Exhibit 5 Well proposal letter

Jeffrey Broussard Landman



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

January 30, 2019

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED 7017 2680 0000 3163 1290

OXY USA WTP Limited Partnership 5 Greenway Plaza, Suite 110 Houston, Texas 77046

Re:

Nemesis 1H, 2H, 3H, 4H, 5H, 6H, 7H, 8H Well Proposals E/2 of Sections 7 & 18, Township 23 South, Range 28 East Eddy County, New Mexico

Dear OXY USA WTP Limited Partnership:

Marathon Oil Permian LLC ("Marathon") proposes the drilling of the following wells located in Sections 7 & 18, 23S-28E, Eddy, New Mexico, all to be drilled from two surface pad locations.

					Target	
Pad	Well Name	SHL	BHL	Proration Unit	TVD	Est. MD
		1650' FEL & 550' FNL	330' FEL & 330' FSL			
1	Nemesis 7 WXY Fee 1H	of Sec. 7	of Sec. 18	E/2 of Secs. 7 & 18	9,380'	19,690'
		1680' FEL & 550' FNL	1000' FEL & 330' FSL			
1	Nemesis 7 WA Fee 3H	of Sec. 7	of Sec. 18	E/2 of Secs. 7 & 18	9,501'	19,742'
		1710' FEL & 550' FNL	1650' FEL & 330' FSL			
1	Nemesis 7 WXY Fee 5H	of Sec. 7	of Sec. 18	E/2 of Secs. 7 & 18	9,375'	19,589'
		1740' FEL & 550' FNL	2310' FEL & 330' FSL		·	
1	Nemesis 7 WA Fee 7H	of Sec. 7	of Sec. 18	E/2 of Secs. 7 & 18	9,495'	19,725'
		1650' FEL & 350' FNL	330' FEL & 330' FSL of			
2	Nemesis 7 WD Fee 2H	of Sec. 7	Sec. 18	E/2 of Secs. 7 & 18	9,960'	20,261'
		1680' FEL & 350' FNL	1254' FEL & 330' FSL			
2	Nemesis 7 WD Fee 4H	of Sec. 7	of Sec. 18	E/2 of Secs. 7 & 18	10,274'	20,495'
		1710' FEL & 350' FNL	2178' FEL & 330' FSL			
2	Nemesis 7 WD Fee 8H	of Sec. 7	of Sec. 18	E/2 of Secs. 7 & 18	9,960'	20,181'
		1740' FEL & 350' FNL	1980' FEL & 100' FSL			
2	Nemesis 7 SB Fee 6H	of Sec. 7	of Sec. 18	E/2 of Secs. 7 & 18	7,825'	18,503'

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

EXHIBIT 5

 Contract area of E/2 of Sections 7 & 18, 23S-28E, covering from the top of the Bone Spring Formation to the base of the Wolfcamp formation

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

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

This term assignment offer terminates on March 1, 2019 and is subject to due diligence and title verification satisfactory to Marathon.

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

Sincerely,

Jeffrey Broussard

Marathon Oil Permian LLC

OXY USA WTP Limited Partnership elects to participate in the drilling, completing, and equipping of the Nemesis 7 WXY Fee 1H. OXY USA WTP Limited Partnership elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 WXY Fee 1H. OXY USA WTP Limited Partnership elects to participate in the drilling, completing, and equipping of the Nemesis 7 WD Fee 2H. OXY USA WTP Limited Partnership elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 WD Fee 2H. OXY USA WTP Limited Partnership elects to participate in the drilling, completing, and equipping of the Nemesis 7 WA Fee 3H. OXY USA WTP Limited Partnership elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 WA Fee 3H. OXY USA WTP Limited Partnership elects to participate in the drilling, completing, and equipping of the Nemesis 7 WD Fee 4H. OXY USA WTP Limited Partnership elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 WD Fee 4H.

OXY USA WTP Limited Partnership elects to participate in the drilling, completing, and equipping
of the Nemesis 7 WXY Fee 5H.
OXY USA WTP Limited Partnership elects NOT to participate in the drilling, completing, and
equipping of the Nemesis 7 WXY Fee 5H.
OXY USA WTP Limited Partnership elects to participate in the drilling, completing, and equipping
of the Nemesis 7 SB Fee 6H.
$\underline{\hspace{1cm}} \text{OXY USA WTP Limited Partnership elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 SB Fee 6H.}$
OXY USA WTP Limited Partnership elects to participate in the drilling, completing, and equipping of the Nemesis 7 WA Fee 7H.
OXY USA WTP Limited Partnership elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 WA Fee 7H.
OXY USA WTP Limited Partnership elects to participate in the drilling, completing, and equipping of the Nemesis 7 WD Fee 8H.
OXY USA WTP Limited Partnership elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 WD Fee 8H.
OXY USA WTP Limited Partnership
By:
Print Name:
Title:
Date:

Jeffrey Broussard Landman



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

January 31, 2019

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED 7017 2680 0000 3163 1306

State of New Mexico, Department of Transportation P.O. Box 1148
Santa Fe, New Mexico 87501

Re:

Nemesis 1H, 2H, 3H, 4H, 5H, 6H, 7H, and 8H Well Proposals E/2 of Sections 7 & 18, Township 23 South, Range 28 East Eddy County, New Mexico

Dear State of New Mexico, Department of Transportation:

The records of Marathon Oil Permian LLC ("Marathon") indicates that you own an unleased mineral interest in the E/2 of Sections 7 & 18, 23S-28E. As an unleased mineral owner, Marathon would like to offer you the opportunity to lease your minerals to Marathon at the below lease terms:

This offer to lease terminates March 1, 2019 and is subject to due diligence and title verification satisfactory to Marathon. Should you be agreeable to this offer to lease, please sign the lease form in the presence of a notary and complete the IRS Form W-9 included in this proposal and return them in the enclosed self-addressed, stamped envelope.

Marathon proposes the drilling of the following wells located in Sections 7 & 18, 23S-28E, Eddy County, New Mexico, all to be drilled from two surface pad locations. Should you not elect to lease, Marathon would also like to offer you the opportunity to participate in the drilling of the wells as a working interest owner.

					Target	1
Pad	Well Name	SHL	BHL	Proration Unit	TVD	Est. MD
		1650' FEL & 550' FNL	330' FEL & 330' FSL	Į		
1	Nemesis 7 WXY Fee 1H	of Sec. 7	of Sec. 18	E/2 of Secs. 7 & 18	9,380'	19,690'
		1680' FEL & 550' FNL	1000' FEL & 330' FSL			
1	Nemesis 7 WA Fee 3H	of Sec. 7	of Sec. 18	E/2 of Secs. 7 & 18	9,501'	19,742'
		1710' FEL & 550' FNL	1650' FEL & 330' FSL			
1	Nemesis 7 WXY Fee 5H	of Sec. 7	of Sec. 18	E/2 of Secs. 7 & 18	9,375'	19,589'
		1740' FEL & 550' FNL	2310' FEL & 330' FSL			
1	Nemesis 7 WA Fee 7H	of Sec. 7	of Sec. 18	E/2 of Secs. 7 & 18	9,495'	19,725'
		1650' FEL & 350' FNL	330' FEL & 330' FSL of		_	
2	Nemesis 7 WD Fee 2H	of Sec. 7	Sec. 18	E/2 of Secs. 7 & 18	9,960'	20,261
		1680' FEL & 350' FNL	1254' FEL & 330' FSL			
_ 2	Nemesis 7 WD Fee 4H	of Sec. 7	of Sec. 18	E/2 of Secs. 7 & 18	10,274'	20,495'

		1710' FEL & 350' FNL	2178' FEL & 330' FSL			
2_	Nemesis 7 WD Fee 8H	of Sec. 7	of Sec. 18	E/2 of Secs. 7 & 18	9,960'	20,181'
		1740' FEL & 350' FNL	1980' FEL & 100' FSL			
2	Nemesis 7 SB Fee 6H	of Sec. 7	of Sec. 18	E/2 of Secs. 7 & 18	7,825'	18,503'

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, and if you are interested in participating, please execute and return the enclosed JOA. The JOA has these general provisions:

- 100%/300%/300% non-consent penalty
- \$7,000/\$700 drilling and producing rates
- Contract area of E/2 of Sections 7 & 18, 23S-28E, covering the depths from the top of the Bone Spring formation to the base of the Wolfcamp formation

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

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

Sincerely,

Jeffrey Broussard Marathon Oil Permian LLC

State of New Mexico, Department of Transportation elects to participate in the drilling, completing, and equipping of the Nemesis 7 WXY Fee 1H.

State of New Mexico, Department of Transportation elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 WXY Fee 1H.

State of New Mexico, Department of Transportation elects to participate in the drilling, completing, and equipping of the Nemesis 7 WD Fee 2H.

State of New Mexico, Department of Transportation elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 WD Fee 2H.

State of New Mexico, Department of Transportation elects to participate in the drilling, and equipping of the Nemesis 7 WA Fee 3H.

State of New Mexico, Department of Transportation elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 WA Fee 3H.

State of New Mexico, Department of Transportation elects to participate in the drilling, completing, and equipping of the Nemesis 7 WD Fee 4H.
State of New Mexico, Department of Transportation elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 WD Fee 4H.
State of New Mexico, Department of Transportation elects to participate in the drilling, completing,
and equipping of the Nemesis 7 WXY Fee 5H.
State of New Mexico, Department of Transportation elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 WXY Fee 5H.
State of New Mexico, Department of Transportation elects to participate in the drilling, completing, and equipping of the Nemesis 7 SB Fee 6H.
State of New Mexico, Department of Transportation elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 SB Fee 6H.
State of New Mexico, Department of Transportation elects to participate in the drilling, completing, and equipping of the Nemesis 7 WA Fee 7H.
State of New Mexico, Department of Transportation elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 WA Fee 7H.
State of New Mexico, Department of Transportation elects to participate in the drilling, completing, and equipping of the Nemesis 7 WD Fee 8H.
State of New Mexico, Department of Transportation elects NOT to participate in the drilling, completing, and equipping of the Nemesis 7 WD Fee 8H.
State of New Mexico, Department of Transportation
Ву:
Print Name:
Title:
Date:

### Exhibit 6 All AFEs

DATE 11/19/2018

DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD

COMPLETION PREPARED BY MATTHENSCHEN

FACILITIES PREPARED BY MATTHENSCHEN

ARTIFICIAL LIFT PREPARED BY BILLY MOORE/MATTH

	ARTIFICAC LIFT PREPARED D	1 BILLI MOOKE/MATT H
Asset Team	PERMIAN	
Fleid	CULEBRA BLUFF;BO FORMATION: 2ND BONE SPRINGS WILDCAT	EXPLORATION
Lease/Facility	Nemesis 7 SB Fee 6H DEVELOPMENT	RECOMPLETION
Location	EDDY COUNTY X EXPLOITATION	WORKOVER
Prospect	MALAGA	
Est Total Depth	18,503 Est Orilling Days Est Completion Day	rs11
LOCATION COST -	INTANGIRI F	
LOCATION COST	MINIGOLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	37,500
7001250	Land Broker Fees and Services	33,750
	TOTAL LOCATION COST - INTANGIBLE	71,250
DRILLING COST - T	ANGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	16,000
7012050	Intermediate Casing 1	55,000
7012050	Intermediate Casing 2	190,000
7012050	Production Casing	133,000
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	556,000
DOULING COST 15	TANGING.	
DRILLING COST - IN	MANGIBLE	
7019200	Drilling Rig Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	471,250
7019040	Directional Drilling Services	155,000
7019020	Cement and Cementing Service Surface	15,000
	Cement and Cementing Service Intermediate 1	
7019020		25,000
7019020	Cement and Cementing Service Intermediate 2	40,000
7019020	Cement and Cementing Service Production	75,000
7019140	Mud Fluids & Services	62,000
7012310	Solids Control equipment	32,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	56,000
7019140	Fuel (Mud)	18,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	14,000
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	19,063
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	72,500
7018150	Rig Equipment and Misc.	9,063
7001110	Telecommunications Services	5,000
7001120	Consulting Services	85,188
7001400	Safety and Environmental	29,000
7018120	Rental Buildings (trailers)	14,500
7019310	Coring (sidewalls & analysis)	24,300
7011010	7% Contingency & Taxes	152,884
7011010	/ A CONTRIGETICY OF TAXES	132,004
	TOTAL DRILLING - INTANGIBLE	\$1,780,947
	TOTAL DRILLING COST	\$2,336,947
COMPLETION - TAP	IGIBLE	
		96
7012580 7012040	Tubing Tubing Accessories (nipple, wireline entry)	
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	13,000
/012360	rackers - compression equipment	
	TOTAL COMPLETION - TANGIRLE	\$15,000



MARATHON OIL PERMIAN LLC DATE 11/19/2018 **DETAIL OF ESTIMATED WELL COSTS** Asset Team PERMIAN Field CULEBRA BLUFF;80 FORMATION: 2ND BONE SPRINGS Lease/Facility Nemesis 7 SB Fee 6H COMPLETION - INTANGIBLE GL CODE DESCRIPTION ESTIMATED COST Location and Access (dress location after rig move, set anchors)
Drilling Rig During Completion 7001270 10,000 7019220 7019140 Mud Fluids & Services Coiled Tubing Services (3 runs) 350,000 7019240 **Snubbing Services** Pulling/Swab Units 7019270 7016350 Fuel (from drig)
Casing Crew and Services 7019020 Cement and Cementing Services 7019080 Well Testing Services (flow hand & equip) 360,000 7019320 Fracturing Services 3,750,000 7019330 300,000 Wireline Services 7019360 15 000 7001460 Water Hauling & Disposal (frac fluids) 285,000 Freight - Truck (haul pipe; drig & compl) 7016180 20,000 7018150 BOP Rental & Testing Rental Tools and Equipment ( incl drig; lightplant, hydra-walk) 7018150 7018150 CT Downhole Rental Equipment (Ie. Bit, BHA) Contract Labor - general 60,000 7000030 7001110 **Telecommunications Services** 120,000 7001400 Safety and Environmental 7001120 **Consulting Services** 100,000 Zipper Manifold 7018150 250,000 7019300 Frack Stack Rentals 85,000 7016190 Freight (Transportation Services) 7018150 Equipment Rental ( w/o operator, frac tanks, lightplants) 160,000 7018120 35,000 Contract Labor - Pumping (pump-down pumps) 7000030 60,000 7011010 8% Contingency & Taxes 431,200 TOTAL COMPLETION - INTANGIBLE \$6,391,200 TOTAL COMPLETION COST \$6,406,200 SURFACE EQUIPMENT - TANGIBLE 7012350 Misc. Piping, Fittings & Valve 85,795 7006640 Company Labor & Burden 7000030 Contract Labor - General 74,150 7001110 Telecommunication equip (Telemetry) 7012410 Line Pipe & Accessories
Miscellaneous Materials (containment system) 27,950 7012270 43,230 7008060 SCADA 7016180 Freight - truck 7001190 **Contract Engineering** 29,115 237,080 Metering and instrumentation 7012290 **I&E Materials** 7012200 **Gas Treating** 7012200 Dehydration 7012010 Compressor 7012350 7012610 Vapor Recovery Unit 7012440 Separator & other pressure vessels 67,350 7012500 193,450 7012100 Heater Treater 17,560 7012640 Flare & Accessories Electrical Labor 7000010 29,115 7000010 Mechanical Labor Rod Pumping unit & Pad 7012180 **Pumping Unit Engine** Electrical Power (electrical cooperative construction costs) 23,290 TOTAL SURFACE EQUIPMENT - TANGIBLE \$839,730 TOTAL SURFACE EQUIPMENT COST \$ 839,730 ARTIFICIAL LIFT 7012580 50,000 7012040 Tubing Accessories (nipple, wireline entry) 5,000 Welthead Equip 7012550 5,000 7012560 Packers - Completion Equipment 7006640 Company Labor 6,000 7012180 Gas Lift Equipment 23,000 7012480 Rod Pumping, Sucker Rods & Rod Pump 7012140 Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services 7019350 42,500 7012270 Materials & Supplies-Tangible 25,000 Surface Wellhead Equipment
Pig Launchers/Receivers & Rel Equip 3,000 7012390 7011010 Contingency & Taxes 5,000 TOTAL ARTIFICIAL LIFT 169,500 TOTAL ARTIFICIAL LIFT COST s 169,500 SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COST TOTAL LOCATION COST 71,250 TOTAL DRILLING COST 2,336,947 TOTAL COMPLETIONS COST 6,406,200 TOTAL SURFACE EQUIPMENT COST 839,730 TOTAL ARTIFICIAL LIFT COST 169,500

**GRAND TOTAL COST** 

\$9,823,627

DATE 11/19/2018

DRILLING & LOCATION PREPARED BY MARTHEW RUGAARD

COMPLETION PREPARED BY JOSH SHANHON

FACULTIES PREPARED BY MATH HENCHEN

ARTIFICIAL LIFT PREPARED BY BILLY MOORE/MATT HE

Asset Team Field	PERMIAN	
	PURPLE SAGE; WOL FORMATION: WOLFCAMP XY WILDCAT	EXPLORATION
Lease/Facility	Nemesis 7 WXY Fee 1M DEVELOPMENT	RECOMPLETION
Location	EDDY COUNTY K EXPLOITATION	WORKOVER
Prospect	MALAGA	
Est Total Depth		ays11
LOCATION COST -	NTANGIBLE	
er eene	D.C.C.D.DTT-O.H	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	37,500
7001250	Land Broker Fees and Services	33,750
	TOTAL LOCATION COST - INTANGIBLE	71,250
DRILLING COST - T	ANGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	16,000
7012050	Intermediate Casing 1	55,000
7012050	Intermediate Casing 2	231,000
7012050	Production Casing	128,000
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
700000	THE COURT OF THE C	
	TOTAL DRILLING - TANGIBLE	592,000
DRILLING COST - II	ITANGIBLE	
7019200	Drilling Rig Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	590,850
7019040	Directional Drilling Services	201,000
7019020	Cement and Cementing Service Surface	15,000
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	40,000
7019020	Cement and Cementing Service Production	60,000
7019140	Mud Fluids & Services	66,600
7012310	Solids Control equipment	41,000
7012020	Bits	70,000
		30,000
7019010	Casing Crew and Services	
7016350	Fuel (Rig)	70,000
7019140	Fuel (Mud)	18,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	-
7019150	Mud Logging+geosteering	19,000
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	21,363
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	90,900
7018150	Rig Equipment and Misc.	11,363
7001110	Telecommunications Services	5,000
7001120	Consulting Services	106,808
7001400	Safety and Environmental	36,360
7018120	Rental Buildings (trailers)	18,180
7019310	Coring (sidewalts & analysis)	10,100
7011010	7% Contingency & Taxes	172,125
7V41V4V	The second state of the second	878,823
	TOTAL DRILLING - INTANGIBLE	\$2,039,047
	TOTAL DRILLING COST	\$2,631,047
COMPLETION - TAI	NGIBLE	
7012580	Tubing	
7012040	Tubing Accessories (nipple, wireline entry)	46.131
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	-
	TOTAL COMPLETION - YANGIBLE	\$15,000

DATE 11/19/2018 **AUTHORITY FOR EXPENDITURE** DETAIL OF ESTIMATED WELL COSTS Asset Team PERMIAN Field PURPLE SAGE; WOL FORMATION: WOLFCAMP XY Nemesis 7 WXY Fee 1H COMPLETION - INTANGIBLE GL CODE DESCRIPTION ESTIMATED COST Location and Access (dress location after rig move, set anchors) 7001270 10,000 Drilling Rig During Completion Mud Fluids & Services Coiled Tubing Services (3 runs) 7019220 350,000 7019030 7019240 **Snubbing Services** Pulling/Swab Units Fuel (from drig) **Casing Crew and Services** 7019010 Coment and Comenting Services
Well Testing Services (flow hand & equip) 7019020 360,000 3,750,000 7019320 Fracturing Services 7019330 Perforating 300,000 7019360 7001460 Wireline Services Water Hauling & Disposal (frac fluids) 7016180 Freight - Truck (haul pipe; drig & compl) 20,000 BOP Rental & Testing
Rental Tools and Equipment (Incl drig; lightplant, hydra-walk) 7018150 CT Downhole Rental Equipment (ie. Bit, BHA) 7018150 Contract Labor - general 60,000 Telecommunications Services Safety and Environmental 7001110 120,000 7001400 100,000 7001120 Consulting Services 7018150 Zapper Manifold 250,000 Freight (Transportation Services) 7016190 Equipment Rental ( w/o operator, frac tanks, lightplants)
Rental Buildings (trailers)
Contract Labor - Pumping (pump-down pumps) 7018150 160,000 35,000 60,000 7011010 8% Contingency & Taxes 431,200 TOTAL COMPLETION - INTANGIBLE \$6,391,200 TOTAL COMPLETION COST \$6,406,200 SURFACE EQUIPMENT - TANGIBLE 7012350 Misc. Piping, Fittings & Valves Company Labor & Burden 7006640 74,150 7000030 Contract Labor - General Telecommunication equip (Telemetry) 27,950 Line Pipe & Accessories 7012410 7012270 Miscellaneous Materials (contamment system) 43,230 SCADA 7016180 Freight - truck 29,115 7001190 Contract Engineering 7012290 Metering and Instrumentation 237,080 7012290 7012200 Gas Treating 7012200 Dehydration Compressor 7012350 7012610 Vapor Recovery Unit 7012440 7012500 Separator & other pressure vessels Yanks 67,350 193,450 17,560 Heater Treater 7012100 7012640 Flare & Accessories 11,645 7000010 Electrical Labor Mechanical Labor 29,115 7012480 Rod Pumping unit & Pad 7012350 23,290 TOTAL SURFACE EQUIPMENT - TANGIBLE \$839,730 TOTAL SURFACE EQUIPMENT COST \$ 839,730 ARTIFICIAL LIFT 7012580 50,000 Yubing Accessories (nipple, wireline entry) 7012040 5,000 7012550 Wellhead Equip 5,000 Packers - Completion Equipment 7012560 5,000 6,000 23,000 Company Labor 7012180 Gas Lift Equipment 7012480 Rod Pumping, Sucker Rods & Rod Pump 7012140 7019350 Elect Sub Pumps (ESP)
Well Services-Well/Wellhead Services 42,500 7012270 Materials & Supplies-Tangible 25,000 7012550 Surface Wellhead Equipment 3,000 7012390 5,000 7011010 Contingency & Taxes TOTAL ARTIFICIAL LIFT 169,500 TOTAL ARTIFICIAL LIFT COST 169,500 SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COST TOTAL LOCATION COST 2,631,047 6,406,200 **TOTAL DRILLING COST** TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST 839,730 **TOTAL ARTIFICIAL LIFT COST** 169,500 GRAND TOTAL COST \$10,117,727 Participant's Approval Name of Company Signature:

Date:

DATE 11/19/2018

DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY MATT HENSCHEN

ARTIFICIAL LIFT PREPARED BY BILLY MOORE/MATT HI

Asset Team	PERMIAN	
Field	PURPLE SAGE; WOL FORMATION: WOLFCAMP D WILDCAT	EXPLORATION
Lease/Facility	Nemesis 7 WD Fee 2H DEVELOPMENT	RECOMPLETION
Location	EDDY COUNTY X EXPLOITATION	WORKOVER
Prospect	MALAGA	
Est Total Depth	20,261 Est Orfiling Days Est Completion Da	ys <u>11</u>
LOCATION COST -	INTANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	37,500
7001250	Land Broker Fees and Services	33,750
	TOTAL LOCATION COST - INTANGIBLE	71,250
DOULING COST. T		
DRILLING COST - T	ANGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	16,000
7012050	Intermediate Casing 1	55,000
7012050	Intermediate Casing 2	231,000
7012050	Production Casing	177,820
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	\$5,000
7012550	Drilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	641,820
DRILLING COST - II	YTANGIBLE	
7019200	Drilling Rig Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	627,250
7019040	Directional Drilling Services	215,000
7019020	Cement and Cementing Service Surface	15,000
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	40,000
7019020	Cement and Cementing Service Production	75,000
7019140	Mud Fluids & Services	68,000
	Solids Control equipment	43,000
7012310		
7012020	Bits .	70,000
7019010	Casing Crew and Services	
7016350	Fuel (Rig)	74,000
7019140	Fuel (Mud)	18,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	- 4
7019150	Mud Logging+geosteering	20,000
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	22,063
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	96,500
7018150	Rig Equipment and Misc.	12,063
7001110	Telecommunications Services	5,000
7001120	Consulting Services	113,388
7001400	Safety and Environmental	38,600
7018120	Rental Buildings (trailers)	19,300
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	181,964
	TOTAL DRILLING - INTANGIBLE	\$2,139,626
	TOTAL DRILLING COST	\$2,781,446
COMPLETION - TA	NGIBLE	
7012500	Yelder	0
7012580	Tubing	-
7012040	Tubing Accessories (nipple, wireline entry)	15,000
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	-
	YOYAL COMPLETION - TANGIBLE	\$15,000

11/19/2018 MARATHON OIL PERMIAN LLC DATE DETAIL OF ESTIMATED WELL COSTS Asset Team Field PURPLE SAGE;WOL FORMATION: WOLFCAMP D Lease/Facility Nemesis 7 WD Fee 2H COMPLETION - INTANGIBLE GL CODE DESCRIPTION ESTIMATED COST 7001270 7019220 Location and Access (dress location after rig move, set anchors)
Drilling Rig During Completion 10,000 7019140 Mud Fluids & Services 350,000 7019030 Colled Tubing Services (3 runs) 7019240 **Snubbing Services** 7019270 Pulling/Swab Units 7016350 Fuel (from drig)
Casing Crew and Services 7019010 7019020 Cement and Cementing Services 7019080 Well Testing Services (flow hand & equip) 360,000 7019320 Fracturing Services 4,100,000 Perforating Wireline Services 15,000 7019360 7001460 Water Hauling & Disposal (frac fluids) 295,000 7016180 Freight - Truck (haul pipe; drig & compl) 20,000 BOP Rental & Testing
Rental Tools and Equipment (Incl drig; lightplant,hydra-walk) 7018150 7018150 7018150 CT Downhole Rental Equipment (ie. Bit, BHA) Contract Labor - general 7001110 Telecommunications Services 120,000 Safety and Environmental 7001120 **Consulting Services** 100,000 Zipper Manifold 7019300 Frack Stack Rentals 85,000 7016190 Freight (Transportation Services) 160,000 7018150 Equipment Rental ( w/o operator, frac tanks, lightplants) 7018120 Rental Buildings (trailers) 35,000 Contract Labor - Pumping (pump-down pumps) 7000030 60,000 7011010 8% Contingency & Taxes 459,200 TOTAL COMPLETION - INTANGIBLE \$6,779,200 TOTAL COMPLETION COST \$6,794,200 SURFACE EQUIPMENT - TANGIBLE 7012350 Misc. Piping, Fittings & Valves 85,795 7006640 Company Labor & Burden 7000030 7001110 Contract Labor - General 74,150 Telecommunication equip (Telemetry) 7012410 Line Pipe & Accessories 27,950 scellaneous Materials (containment system) 43,230 7012270 SCADA Freight - truck 7001190 **Contract Engineering** 29,115 7012290 Metering and Instrumentation 237,080 I&E Materials 7012290 7012200 Gas Treating 7012200 Dehydration 7012010 Compressor 7012350 7012610 Vapor Recovery Unit 67,350 Separator & other pressure vessels 7012440 7012500 193,450 17,560 7012100 Heater Treater 7012640 Flare & Accessories 11.645 29,115 7000010 Electrical Labor 7000010 Mechanical Labor Rod Pumping unit & Pad 7012480 7012180 **Pumping Unit Engine** Electrical Power (electrical cooperative construction costs) 23,290 TOTAL SURFACE EQUIPMENT - TANGIBLE \$839,730 TOTAL SURFACE EQUIPMENT COST 839,730 \$ ARTIFICIAL LIFT 7012580 50,000 7012040 7012550 Tubing Accessories (nipple, wireline entry) 5,000 5,000 Wellhead Equip 7012560 Packers - Completion Equipment 5,000 6,000 Company Labor 7012180 Gas Lift Equipment
Rod Pumping, Sucker Rods & Rod Pump 23,000 7012480 Elect Sub Pumps (ESP)
Well Services-Well/Wellhead Services 7012140 42,500 7012270 Materials & Supplies-Tangible 25,000 7012550 Surface Wellhead Equipm 3,000 Pig Launchers/Receivers & Rel Equip 7012390 5,000 7011010 Contingency & Taxes TOTAL ARTIFICIAL LIFT 169,500 **TOTAL ARTIFICIAL LIFT COST** \$ 169,500 SUMMARY OF ESTIMATED DRILLING WELL COSTS **TOTAL COST** TOTAL LOCATION COST 71,250 TOTAL DRILLING COST 2,781,446 TOTAL COMPLETIONS COST 6,794,200 TOTAL SURFACE EQUIPMENT COST 839,730 TOTAL ARTIFICIAL LIFT COST 169,500

**GRAND TOTAL COST** 

\$10,656,126

DATE 11/19/2018

DRILLING & LOCATION PREPARED BY MATTHEW RUGARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY MATT HENSOMEN

ARTIFICIAL LIFT PREPARED BY BILLY MOORE/MATT HE

Asset Team Field	PERMIAN PURPLE SAGE; WOL	FORMATION: WOLFCAMP		WILDCAT	EXPLORATION
Lease/Facility	Nemesis 7 WA Fee 3H	PORIBATION, TYDEFCAMP		DEVELOPMENT	RECOMPLETION
Location	EDDY COUNTY		x	EXPLOITATION	WORKOVER
Prospect	MALAGA				
-					
Est Total Depth	19,742	Est Drilling Days		Est Completion Day	11
LOCATION COST - I	NTANGIRI E				
LOCATION COST	HANGIBLE				
GL CODE		DESCRIPTION			ESTIMATED COST
7001270	Location and Access				37,500
7001250	Land Broker Fees and Services				33,750
	TOTAL LOCATION COST - INTANGIBLE				71,250
DRILLING COST - TA	ANGIBLE				
7012050	Conductor Pipe				28,000
7012050	Surface Casing				16 000
7012050	Intermediate Casing 1				55,000
7012050	Intermediate Casing 2				231,000
7012050	Production Casing				128,000
7012050	Orig Liner Hanger, Tieback Eq & Cr	a Accessories			55,000
7012550	Drilling Wellhead Equipment	THE STATE OF THE S			50,000
7012040	Casing & Tubing Access				24,000
7012270	Miscellaneous MRO Materials				5,000
	TOTAL DRILLING - TANGIBLE				592,000
DRILLING COST - IN	TANKIN F				
DRILLING COST - IN	TANGIBLE				
7019200	malling the back for each				27 500
7019220	Drilling Rig Mob/Demob Drilling Rig - day work/footage				32,500 590,850
7019040	Directional Drilling Services				201,000
7019020	Cement and Cementing Service		Surface		15,000
7019020			Intermediate 1	<del></del>	25,000
7019020	Cement and Cementing Service Cement and Cementing Service		Intermediate 2		40,000
7019020	Cement and Cementing Service		Production		60,000
7019140	Mud Fluids & Services		riodecoon		66,600
7012310	Solids Control equipment				41,000
7012020	Bits				70,000
7019010	Casing Crew and Services				30,000
7016350	Fuel (Rig)				70 000
7019140	Fuel (Mud)				18,000
7001460	Water (non potable)				25,000
7012350	Water (potable)				5,000
7019000	Well Logging Services				
7019150	Mud Logging+geosteering		-		19,000
7019250	Stabilizers, Hole Openers, Underre	amers (DH rentals)			15,000
7019110	Casing Inspection/cleaning				15,000
7019110	Drill pipe/collar inspection service	\$			10,000
7016180	Freight - truck				25,000
7001460	Water hauling and disposal (included)	les soil farming)			60,000
7001160	Contract Services - Disposal/Non-I	lazardous 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 Service				21,363
7019350	Well Services - Well/Wellhead Ser				10,000
7018150	Rental Tools and Equipment (surfa	ice rentals)			90,900
7018150	Rig Equipment and Misc.				11,363
7001110	Telecommunications Services				5,000
7001120	Consulting Services				106,808
7001400	Safety and Environmental				36,360
7018120	Rental Buildings (trailers)			-	18,180
7019310	Coring (sidewalls & analysis)				
7011010	7% Contingency & Taxes				172,125
	TOTAL DRILLING - INTANGIBLE				\$2,039,047
	TOTAL DRILLING COST				\$2,631,047
					+=100=1041
COMPLETION - TAN	CIOLE				
COMPLETION - TAN	GIBLE				
7012580	Tubing				52
7012040	Tubing Accessories (nipple, wirelin	e entry)			-
7012550	Wellhead Equip	,			15,000
7012560	Packers - Completion Equipment				
	TOTAL COMPLETION - TANGIBLE				\$15,000

Asset Team	PERMIAN	
Field	PERMIAN PURPLE SAGE; WOL FORMATION: WOLFCAMP A	
Lease/Facility	Nemesis 7 WA Fee 3H	
COMPLETION - I	YTANGIBLE	
GL CODE 7001270	DESCRIPTION  Location and Access (dress location after rig move, set anchors)	ESTIMATED COST 10.000
7019220	Drilling Rig During Completion	10,000
7019140	Mud Fluids & Services	
7019030 7019240	Colled Tubing Services (3 runs) Snubbing Services	350,000
7019270	Pulling/Swab Units	
7016350 7019010	Fuel (from drig) Casing Crew and Services	
7019020	Cement and Cementing Services	
7019080 7019320	Well Testing Services (flow hand & equip)	360,000
7019320	Fracturing Services Perforating	3,750,000
7019360	Wireline Services	15,000
7001460 7016180	Water Hauling & Disposal (frac fluids) Freight - Truck (haul pipe; drig & compl)	285,000
7018150	BOP Rental & Yesting	20,000
7018150	Rental Tools and Equipment (Incl drig; lightplant, hydra-walk)	
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)  Contract Labor - general	60,00
7001110	Telecommunications Services	120,00
7001400	Safety and Environmental	
7001120 7018150	Consulting Services Zipper Manifold	250,000
7019300	Frack Stack Rentals	85,000
7016190	Freight (Transportation Services)	
7018150 7018120	Equipment Rental ( w/o operator, frac tanks, lightplants)  Rental Buildings (trailers)	160,000
7000030	Contract Labor - Pumping (pump-down pumps)	60,000
7011010	8% Contingency & Taxes	431,200
	TOTAL COMPLETION - INTANGIBLE	\$6,391,20
	TOTAL COMPLETION COST	\$6,406,20
CHIRCA CE COLUNI	MENT - TANGIBLE	
-		
7012350	Misc. Piping, Fittings & Valves  Company Labor & Burden	85,795
7000030	Contract Labor - General	74,150
7001110	Telecommunication equip (Telemetry)	
7012410 7012270	Line Pipe & Accessories  Miscellaneous Materials (containment system)	27,950
7008060	SCADA	
7016180	Freight - truck	
7001190 7012290	Contract Engineering  Metering and Instrumentation	29,115 237,080
7012290	I&E Materials	
7012200	Gas Treating	. ——
7012200 7012010	Dehydration Compressor	
7012350	Power	
7012610 7012440	Vapor Recovery Unit	
7012500	Separator & other pressure vessels Tanks	67,350
7012100	Heater Treater	17,560
	Flare & Accessories	
7012640		11,645
7012640 7000010 7000010	Electrical Labor Mechanical Labor	11,645
7000010 7000010 7012480	Electrical Labor Mechanical Labor Rod Pumping unit & Pad	11,645
7000010 7000010 7012480 7012180	Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine	11,645 29,115
7000010 7000010 7012480	Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs)	11,645 29,115 23,290
7000010 7000010 7012480 7012180	Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine	11,645 29,115 23,290
7000010 7000010 7012480 7012180	Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs)	23,290 23,290 \$839,730
7000010 7000010 7012480 7012180	Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Ingine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE	29,115 29,115 23,290 \$839,730
7000010 7000010 7012480 7012180 7012350	Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Ingine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE	29,115 29,115 23,290 \$839,730
7000010 7000010 7012480 7012180 7012350  ARTIFICIAL LIFT 7012580 7012040	Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power [electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TAMGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories [nipple, wireline entry]	11,645 29,115 23,290 \$839,730 \$ 839,730
7000010 7000010 7012480 7012180 7012350  ARTIFICIAL LIFT 7012580 7012040 7012050	Electrical Labor Mechanical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TANGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories (nipple, wireline entry) Wellhand Equip	\$ 839,730 50,000 5,000 5,000
7000010 7000010 7012480 7012180 7012350 ARTIFICIAL LIFT 7012580 7012040 7012560 7012560 7012560	Electrical Labor Mechanical Labor Mechanical Labor Rod Pumping Unit & Pad Pumping Unit Replae Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TAMGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories (nippile, wireline entry) Weilhand Equip Packers - Completion Equipment Company Labor	\$ 839,730 \$ 50,000 \$,500 \$,500 \$,500 \$,500
7000010 700010 7012480 7012180 7012350  ARTIFICIAL LIFT 7012580 7012040 7012550 7012560 7006640 7012180	Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TANGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories (nipple, wireline entry) Wellhand Equip Packers - Completion Equipment Company Labor Gas Lift Equipment	\$ 839,730 \$ 50,000 \$,500 \$,500 \$,500 \$,500
7000010 7000010 7012480 7012180 7012350 ARTIFICIAL LIFT 7012580 7012040 7012560 7012560 7012560	Electrical Labor Mechanical Labor Rod Pumping unit Engine Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TANGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories (nipple, wireline entry) Wellhead Equip Paders - Completion Equipment Company Labor Gas Lift Equipment Rod Pumping, Suckar Rods & Rod Pump	\$ 839,730 \$ 50,000 \$,500 \$,500 \$,500 \$,500
7000010 700010 700010 7012480 7012180 7012350  ARTIFICIAL LIFT 7012580 7012040 7012550 7012560 7005640 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TAMGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories (nipple, wireline entry) Wellhaad Equip Padkers - Completion Equipment Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Searvices-Well/Wellhead Services	\$ 839,730 \$ 839,730 \$ 23,290 \$ 839,730 \$ 50,000 \$ 5,000 \$ 5,000 \$ 5,000 \$ 23,000
7000010 7000010 7012480 7012180 7012350 7012350 ARTIFICIAL LIFT 7012580 7012040 701250 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Electrical Labor Mechanical Labor Mechanical Labor Rod Pumping Unit & Pad Pumping Unit Repla Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TANGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories (nipple, wireline entry) Wellhand Equip Packers - Completion Equipment Company Labor Gas Lift Equipment Rod Pumping, Sucker Roots & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhand Services Materials & Supplier-Tangible	\$ 839,730 \$ 839,730 \$ 23,290 \$ 839,730 \$ 50,000 \$ 5,000 \$ 5,000 \$ 6,000 \$ 23,000
7000010 700010 700010 7012480 7012180 7012350  ARTIFICIAL LIFT 7012580 7012040 7012550 7012560 7005640 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TAMGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories (nipple, wireline entry) Wellhaad Equip Padkers - Completion Equipment Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Searvices-Well/Wellhead Services	\$ 839,730 \$ 839,730 \$ 23,290 \$ 839,730 \$ 50,000 \$ 5,000 \$ 5,000 \$ 6,000 \$ 23,000
7000010 700010 700010 7012480 7012180 7012350  ARTIFICIAL LIFT 7012580 7012040 7012550 7012560 7012480 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Ingine Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TANGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories (nipple, wireline entry) Wellhand Equip Packers - Completion Equipment Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhand Equipment	11,645 29,115 23,290 \$839,730 \$ 839,730
7000010 7012480 7012180 7012350 7012350 7012350 701250 701250 701250 701250 701250 701250 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Lisectrical Labor Mechanical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Replae Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TAMBIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories (nipple, wrreline entry) Wellhaad Equip Packers - Completion Equipment Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ISSP) Well Sandres-Well/Wellhaad Services Materials & Supplier-Tangible Surface Wellhand Equipment Pig Launchers/Receivers & Rel Equip	\$ 839,730 \$ 839,730 \$ 839,730 \$ 23,290 \$ 839,730 \$ 50,000 \$ 5,000 \$ 5,000 \$ 5,000 \$ 23,000 \$ 23,000 \$ 3,000
7000010 7012480 7012180 7012350 7012350 7012350 701250 701250 701250 701250 701250 701250 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Electrical Labor Mechanical Labor Mechanical Labor Rod Pumping Unit & Pad Pumping Unit Repla Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TANGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories (nipple, wireline entry) Weilhand Equip Packers - Completion Equipment Company Labor Gas Lift Equipment Rod Pumping, Suckar Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible Surface Weilhand Equipment Pig Launchers/Receivers & Rel Equip Contingency & Taxes	\$ 839,730 \$ 839,730 \$ 839,730 \$ 50,000 \$ 5,000 \$ 5,000 \$ 23,000 23,000 25,000 25,000 25,000 25,000 25,000
7000010 7012480 7012180 7012350 7012350 7012350 701250 701250 701250 701250 701250 701250 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Electrical Labor Mechanical Labor Mechanical Labor Rod Pumping Unit & Pad Pumping Unit Replae Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TANGIBLE  TOTAL SURFACE EQUIPMENT COST   Tubing Accessories (nipple, wrreine entry) Wellband Equip Packers - Completion Equipment Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-well/Wellband Services Materials & Supplies-Tangible Surface Wellband Equipment Pig Launchers/Receivers & Rel Equip Contingency & Taxes  TOTAL ARTIFICIAL LIFT COST	\$ 839,730 \$ 839,730 \$ 839,730 \$ 50,000 5,000 5,000 23,000 42,500 3,000 169,500 \$ 169,500
7000010 7012480 7012180 7012350 7012350 7012350 701250 701250 701250 701250 701250 701250 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Electrical Labor Mechanical Labor Mechanical Labor Rod Pumping Unit & Pad Pumping Unit Replae Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TANGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories (nipple, wireline entry) Wellhand Equip Packers - Completion Equipment Company Labor Gas Lift Equipment End Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhand Services Materials & Supplies-Tangible Surface Wellhand Equipment Pig Launchers/Receivers & Rel Equip Contingency & Taxes  TOTAL ARTIFICIAL LIFT COST  SUMMARY OF ESTIMATED DRILLING WELL COSTS	\$ 839,730 \$ 839,730 \$ 839,730 \$ 50,000 \$ 5,000 \$ 5,000 \$ 23,000 \$ 23,000 \$ 169,500 \$ 169,500 \$ TOTAL COST
7000010 7012480 7012180 7012350 7012350 7012350 701250 701250 701250 701250 701250 701250 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Electrical Labor Mechanical Labor Rod Pumping Unit & Pad Pumping Unit Roffine Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TANGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Accessories (nipple, wireline entry) Wellhand Equip Packers - Completion Equipment Company Labor Gas Lift Equipment Rod Pumping, Suckar Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhand Services Materials & Supplier-Tangible Surface Wellhand Equipment Pig Launchers/Receivers & Rel Equip Contingency & Tazes  TOTAL ARTIFICIAL LIFT COST  SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST	\$ 839,730 \$ 839,730 \$ 839,730 \$ 50,000 \$ 5,000 \$ 5,000 \$ 23,000 \$ 23,000 \$ 25,000 \$ 3,000 \$ 169,500  TOTAL COST \$ 71,250
7000010 7012480 7012180 7012350 7012350 7012350 701250 701250 701250 701250 701250 701250 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Electrical Labor Mechanical Labor Rod Pumping Unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TANGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories (nipple, wireline entry) Wellhand Equip Packers - Completion Equipment Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhand Services Materials & Supplies-Tangible Surface Wellinge Accessories Receivers & Rel Equip Contingency & Taxes  TOTAL ARTIFICIAL LIFT COST  SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL LOCATION COST TOTAL LOCATION COST TOTAL LOCATION COST	\$ 839,730 \$ 839,730 \$ 839,730 \$ 839,730 \$ 50,000 \$ 5,000 \$ 5,000 \$ 23,000 \$ 23,000 \$ 169,500 \$ 169,500  TOTAL COST \$ 71,250 \$ 2,631,047
7000010 7012480 7012180 7012350 7012350 7012350 701250 701250 701250 701250 701250 701250 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Electrical Labor Mechanical Labor Mechanical Labor Rod Pumping Unit & Pad Pumping Unit Replae Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TANGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories (nipple, wireline entry) Wellhand Equip Packers - Completion Equipment Company Labor Gas Lift Equipment Rod Pumping, Suckar Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-well/Wellhead Services Materials & Supplies-Tangible Surface Wellhand Equipment Pig Launchers/Receivers & Rel Equip Contingency & Taxes  TOTAL ARTIFICIAL LIFT COST  SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL LOCATION COST TOTAL COMPLETIONS COST	\$ 839,730 \$ 839,730 \$ 839,730 \$ 839,730 \$ 50,000 5,000 5,000 5,000 23,000 23,000 \$ 25,000 169,500 \$ 71,000 \$ 71,000 \$ 71,000 \$ 71,250 \$ 71,250 \$ 2,631,047 \$ 6,6406,200
7000010 7012480 7012180 7012350 7012350 7012350 701250 701250 701250 701250 701250 701250 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Electrical Labor Mechanical Labor Rod Pumping Unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TANGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Tubing Accessories (nipple, wireline entry) Wellhand Equip Packers - Completion Equipment Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhand Services Materials & Supplies-Tangible Surface Wellinge Accessories Receivers & Rel Equip Contingency & Taxes  TOTAL ARTIFICIAL LIFT COST  SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL LOCATION COST TOTAL LOCATION COST TOTAL LOCATION COST	\$ 839,730  \$ 839,730  \$ 839,730  \$ 839,730  \$ 9,000  \$ 5,000  \$ 5,000  \$ 23,000  \$ 23,000  \$ 169,500  TOTAL COST  \$ 71,250  \$ 2,631,047  \$ 6,406,200  \$ 839,730
7000010 7012480 7012180 7012350 7012350 7012350 701250 701250 701250 701250 701250 701250 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Electrical Labor Mechanical Labor Rod Pumping Unit & Pad Pumping Unit Repine Electrical Power (electrical cooperative construction costs)  TOTAL SURFACE EQUIPMENT - TANGIBLE  TOTAL SURFACE EQUIPMENT COST  Tubing Accessories (nipple, wireline entry) Wellhand Equip Packers - Completion Equipment Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplier-Tangible Surface Wellhand Equipment Pig Launchers/Receivers & Rel Equip Contingency & Taxes  TOTAL ARTIFICIAL LIFT COST  SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL OUR FACE EQUIPMENT COST  TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST	\$ 839,730  \$ 839,730  \$ 839,730  \$ 839,730  \$ 169,500  \$ 169,500  \$ 169,500  TOTAL COST  \$ 71,250  \$ 2,631,047  \$ 6,406,200  \$ 839,730

Date:

DATE 11/19/2018

DRILLING & LOCATION PREPARED BY MATTHEW RUGARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY MATT HENSCHEN

ARTIFICIAL LIFT PREPARED BY BILLY MOORE/MATT HI

Asset Team	PERMIAN	
Fleid	PURPLE SAGE; WOL FORMATION: WOLFCAMP D WILDCAT	EXPLORATION
Lease/Facility	Nemesis 7 WD Fee 4H DEVELOPMENT	RECOMPLETION
Location	EDDY COUNTY X EXPLOITATION	WORKOVER
Prospect	MALAGA	
Est Total Depth	20,495 Est Drilling Days Est Completion Days	11
LOCATION COST - I	NTANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	37,500
7001250	Land Broker Fees and Services	33,750
	TOTAL LOCATION COST - INTANGIBLE	71,250
DRILLING COCT. T	NACIDI E	
DRILLING COST - TA	ANGIBLE	
	And an Mari	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	16,000
7012050	Intermediate Casing 1	55,000
7012050	Intermediate Casing 2	231,000
7012050	Production Casing	177,810
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	641,810
PRILLING COST. IN	*Able this	
DRILLING COST - IN	TANGIBLE	
7019200	Drilling Rig Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	627,250
7019040		
	Directional Drilling Services	215,000 15,000
7019020	Cement and Cementing Service Surface	
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	40,000
7019020	Cement and Cementing Service Production	75,000
7019140	Mud Fluids & Services	68,000
7012310	Solids Control equipment	43,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	74,000
7019140	Fuel (Mud)	18,000
7001460	Water (non potable)	25,000
7012350		5,000
	Water (potable)	3,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	20,000
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	22,063
7019350	Well Services - Well/Wellhead Services	10,000
7018150		
	Rental Tools and Equipment (surface rentals)	96,500
7018150	Rig Equipment and Misc.	12,063
7001110	Telecommunications Services	5,000
7001120	Consulting Services	113,388
7001400	Safety and Environmental	38,600
7018120	Rental Buildings (trailers)	19,300
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	181,963
	TOTAL DRILLING - INTANGIBLE	\$2,139,626
	TOTAL BRILLING - INTAROUGE	02,233,020
_	TOTAL DRILLING COST	\$2,781,436
COMPLETION - TAN	GUBLE	
7012580	Tubing	2
7012040	Tubing Accessories (nipple, wireline entry)	
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	
	TOTAL COMPLETION - TANGIBLE	\$15,000

MARATHON OIL PERMIAN ILC DATE 11/19/2018 AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS Asset Team PERMIAN PURPLE SAGE;WOL FORMATION: WOLFCAMP D Lease/Facility Nemesis 7 WD Fee 4H COMPLETION - INTANGIBLE GL CODE DESCRIPTION ESTIMATED COST 7001270 7019220 Location and Access (dress location after rig move, set anchors) 10,000 **Drilling Rig During Completion** 7019140 Mud Fluids & Services Colled Tubing Services (3 runs) 7019030 350,000 7019240 Snubbing Services Pulling/Swab Units 7019270 7016350 7019010 Fuel (from drig)
Casing Crew and Services Cement and Cementing Services
Well Testing Services (flow hand & equip) 7019020 360,000 7019080 7019320 Fracturing Services 4,100,000 300,000 Wireline Services 7019360 15,000 Water Hauling & Disposal (frac fluids) 295,000 7016180 Freight - Truck (haul pipe; drig & compl) 20,000 BOP Rental & Testing Rental Tools and Equipment ( incl drig; lightplant, hydra-walk) 7018150 7018150 60,000 7000030 Contract Labor - general 7001110 **Telecommunications Services** 120,000 Safety and Environmental 7001400 7001120 Consulting Services
Zipper Manifold 100,000 7018150 250,000 7019300 Frack Stack Rentals 85,000 Freight (Transportation Services) 7018150 Equipment Rental ( w/o operator, frac tanks, lightplants) 160,000 Rental Buildings (trailers) 35,000 7000030 Contract Labor - Pumping (pump-down pumps) 60,000 7011010 8% Contingency & Taxes 459,200 TOTAL COMPLETION - INTANGIBLE \$6,779,200 TOTAL COMPLETION COST \$6,794,200 SURFACE EQUIPMENT - TANGIBLE 7012350 Misc. Piping, Fittings & Valve 85,795 7006640 Company Labor & Burden 7000030 Contract Labor - General 74,150 7001110 Telecommunication equip (Telemetry) 7012410 Line Pipe & Accessories 27,950 7012270 Miscellaneous Materials (containment system) 43,230 SCADA 7016180 Freight - truck 7001190 Contract Engineering Metering and Instrumentation 29,115 237,080 7012290 I&E Materials 7012200 **Gas Treating** 7012200 7012010 Dehydration Compressor 7012350 Vapor Recovery Unit 7012440 Separator & other pressure vessels 67,350 7012500 193,450 Heater Treater 7012100 17,560 7012640 Flare & Accessories 7000010 **Electrical Labor** 29,115 7000010 Mechanical Labo 7012480 Rod Pumping unit & Pad Pumping Unit Engine 7012180 Electrical Power (electrical cooperative construction costs) 7012350 23,290 TOTAL SURFACE EQUIPMENT - TANGIBLE \$839,730 TOTAL SURFACE EQUIPMENT COST \$ 839,730 ARTIFICIAL LIFT 7012580 Tubing 50,000 Tubing Accessories (nipple, wireline entry) 7012040 5,000 7012550 Wellhead Equip 5,000 7012560 5,000 7006640 Company Labor 6,000 7012180 Gas Lift Equipment 23,000 Rod Pumping, Sucker Rods & Rod Pump 7012480 Elect Sub Pumps (ESP)
Well Services-Well/Wellhead Services 7012140 42,500 7019350 7012270 Materials & Supplies-Tangible 25,000 3,000 Surface Wellhead Equipment 7012550 7012390 Pig Launchers/Receivers & Rel Equip 5,000 7011010 Contingency & Taxes TOTAL ARTIFICIAL LIFT 169,500 TOTAL ARTIFICIAL LIFT COST 169,500 SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COST TOTAL LOCATION COST 71,250 TOTAL DRILLING COST 2,781,436 TOTAL COMPLETIONS COST 6,794,200 TOTAL SURFACE EQUIPMENT COST 839,730 **TOTAL ARTIFICIAL LIFT COST** 169,500 **GRAND TOTAL COST** \$10,656,116

DATE 11/19/2018

DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY MATTHE HENGHEN

ARTIFICIAL LIFT PREPARED BY BILLY MOORE/MATT IN

Asset Team	PERMIAN		
Field	PURPLE SAGE; WOL FORMATION: WOLFCAMP XY	( WILDCAT	EXPLORATION
Lease/Facility	Nemesis 7 WXY Fee 5H	DEVELOPMENT	RECOMPLETION
Location	EDDY COUNTY	X EXPLOITATION	WORKOVER
Prospect	MALAGA		,
	Military		
Est Total Depth	19,589 Est Drilling Days	Est Completion Days	11
LOCATION COST -	INTANGIRI F		
GL CODE	DESCRIPTION		ESTIMATED COST
7001270	Location and Access		37,500
7001250	Land Broker Fees and Services		33,750
	TOTAL LOCATION COST - INTANGIBLE		71,250
DRILLING COST - T.	ANGIBLE		
7012050	Conductor Pipe		28,000
7012050	Surface Casing		16,000
7012050	Intermediate Casing 1		55,000
7012050	Intermediate Casing 2		231,000
7012050	Production Casing		128,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories		\$5,000
7012550	Drilling Wellhead Equipment		50,000
7012040	Casing & Tubing Access		24,000
7012270	Miscellaneous MRO Materials		5,000
7012270	MISCERIBLEOUS IVINO MELETIBIS		3,000
	TOTAL DRILLING - TANGIBLE		592,000
	TOTAL DIRECTION TANGETE		392,000
DRILLING COST - IP	ITANGIBLE		
7019200	Drilling Rig Mob/Demob		32,500
7019220	Drilling Rig - day work/footage		590,850
7019040	Directional Drilling Services		201,000
7019020		rface	15,000
7019020		ermediate 1	25,000
7019020	Cement and Cementing Service Inte	ermediate 2	40,000
7019020		oduction	60,000
7019140	Mud Fluids & Services		66,600
7012310	Solids Control equipment		41,000
7012020	Bits		70,000
7019010	Casing Crew and Services		30,000
7016350	Fuel (Rig)		70,000
7019140	Fuel (Mud)		18,000
7001460	Water (non potable)		25,000
7012350	Water (potable)		5,000
7019000	Well Logging Services		
7019150	Mud Logging+geosteering		19,000
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 haufing 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		21,363
7019350	Well Services - Well/Wellhead Services		10,000
7018150	Rental Tools and Equipment (surface rentals)		90,900
7018150	Rig Equipment and Misc.		11,363
7001110	Telecommunications Services		5,000
7001120	Consulting Services		106,808
7001400	Safety and Environmental		36,360
7018120	Rental Buildings (trailers)		18,180
7019310	Coring (sidewalls & analysis)		
7011010	7% Contingency & Taxes		172,125
	TOTAL DRILLING - INTANGIBLE		\$2,039,047
	YOYAL DRULING COCT		62 624 042
	TOTAL DRILLING COST		\$2,631,047
COMPLETION - TAR	VGIBLE		
7012580	Tubing		3.8
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 11/19/2018 **AUTHORITY FOR EXPENDITURE** DETAIL OF ESTIMATED WELL COSTS Asset Team PERMIAN PURPLE SAGE: WOL FORMATION: WOLFCAMP XY Lease/Facility Nemesis 7 WXY Fee 5H COMPLETION - INTANGIBLE GL CODE DESCRIPTION ESTIMATED COST 7001270 Location and Access (dress location after rig move, set anchors) 10,000 Orilling Rig During Completion Mud Fluids & Services Coiled Tubing Services (3 runs) 7019220 7019140 7019030 350,000 Snubbing Services Pulling/Swab Units 7019240 7019270 7016350 Fuel (from drig) Casing Crew and Services
Cement and Cementing Services
Well Testing Services (flow hand & equip) 7019010 7019020 360,000 3,750,000 300,000 7019320 Fracturing Services 7019330 7019360 7001460 15,000 Water Hauling & Disposal (frac fluids) 285,000 Freight - Truck (hauf pipe; drig & compl)
BOP Rental & Testing
Rental Yooks and Equipment (Incl drig; lightplant,hydra-walk) 7016180 20,000 7018150 7018150 7018150 CY Downhole Rental Equipment (ie. Bit, BHA) Contract Labor - general Yelecommunications Services 7000030 7001110 120,000 7001400 Safety and Environmental Consulting Services
Zipper Manifold 100,000 250,000 7001120 7018150 Frack Stack Rentals 85,000 Freight (Transportation Services)
Equipment Rental ( w/o operator, frac tanks, lightplants)
Rental Buildings (trailers) 7016190 7018150 7018120 35,000 7000030 Contract Labor - Pumping (pump-down pumps) 60,000 7011010 8% Contingency & Taxe 431,200 TOTAL COMPLETION - INTANGIBLE \$6,391,200 TOTAL COMPLETION COST \$6,406,200 SURFACE EQUIPMENT - TANGIBLE 7012350 Misc. Piping, Fittings & Valves 85,795 7006640 Company Labor & Burden 7000030 7001110 Contract Labor - General 74,150 Telecommunication equip (Telemetry) 7012410 Line Pipe & Accessories 27,950 7012270 Miscellaneous Materials (containment system) 43,230 7008060 7016180 Freight - truck Contract Engineering
Metering and Instrumentation
I&E Materials 7001190 29,115 7012290 237,080 7012290 7012200 **Gas Treating** 7012200 7012010 Compressor 7012350 Vapor Recovery Unit Separator & other pressure vessels 7012610 701244 67,350 7012500 Tanks 193,450 Heater Treater 7012100 17,560 7012640 Flare & Accessories Electrical Labor 11,645 29,115 7000010 Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) 7012480 7012180 23,290 7012350 **TOTAL SURFACE EQUIPMENT - TANGIBLE** \$839,730 **TOTAL SURFACE EQUIPMENT COST** 839,730 ARTIFICIAL LIFT 7012580 50,000 Tubing Accessories (nipple, wireline entry) 7012040 5,000 Wellhead Equip
Packers - Completion Equipment 5,000 7012550 701256 7006640 Company Labor 6,000 7012180 **Gas Lift Equipment** 23,000 Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services 7012480 7012140 42,500 7019350 25,000 3,000 7012270 Materials & Supplies-Tangible 7012550 7012390 Surface Wellhead Equipment
Pig Launchers/Receivers & Rel Equip 7011010 intingency & Yaxes 5,000 TOTAL ARTIFICIAL LIFT 169,500 TOTAL ARTIFICIAL LIFT COST \$ 169,500 SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COST TOTAL LOCATION COST 71.250 TOTAL DRILLING COST 2,631,047 TOTAL COMPLETIONS COST 6,406,200 TOTAL SURFACE EQUIPMENT COST 839,730 TOTAL ARTIFICIAL LIFT COST 169,500 **GRAND TOTAL COST** \$10,117,727 Participant's Approval Name of Company: Signature: Date:

DATE 11/19/2018

DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD
COMPLETION PREPARED BY JOSH SHAANNON
FACULTIES PREPARED BY MATT HISOSIEN
ARTIFICIAL LIFT PREPARED BY BILLY MOORE/MATT HI

	Asset Team Field	PERMIAN PURPLE SAGE; WOL	FORMATION: WOLFCAMP A	WILDCAT	EXPLORATION
DOCATION COST - INTANGIBLE					
MANAGE					
Est Completion Days					TTO INTO FER
OCATION COST - INTANGIBLE			F-4 0-1911 - 0		
CODE   TOOLSTON   TO			Est Drilling Days	Est Completion I	Эгүз 11
TOTAL DICATION COST - INTAMBLE	LOCATION COST	- INTANGIBLE			
TOTAL COCATION COST - INTAMOBILE   23,   23,   23,   24,   24,   24,   25,   24,			DESCRIPTION		ESTIMATED COST
TOTAL OCATION COST - INTANGIBLE  270.1050  Conductor Fige 28, 701.0050  Conductor Fige 38, 701.0050  Intermediate Casing 1 Intermediate Casing 2 Intermediate Casing 2 Intermediate Casing 3 Intermediate Casing Casin					37,500
PRILLING COST - TANGIBLE	7001250	Land Broker Fees and Servi	ces		33,750
7013090   Conductor Pipe   2.8   15.     7013090   Intermediate Caining   1.5     7013090   Intermediate Caining   2.31,     7013090   Production Caining   2.31,     7013090   Production Caining   2.31,     7013090   Originary Released Eq & Cog & Accessories   5.5     7013090   Originary Released Eq & Cog & Accessories   5.5     7013090   Caining & Tubing & Access   3.5     7013090   Caining & Tubing & Access   3.5     7013270   Miscellineous MIRO Marteriab   5.5     7013270   Miscellineous MIRO Marteriab   5.5     7013270   Miscellineous MIRO Marteriab   5.5     7013270   Dilling Rig & Mobi / Demois   5.5     7013270   Camera and Cermenting Service   Intermediate 1   5.5     7013270   Dilling Rig & Mobi / Demois   5.5     7013270   Dilli		TOTAL LOCATION COST - INTANGI	BLE		71,250
10,000   Sortiec Cairing   16,   10,000   Intermediate Cairing   2,000   15,000   16,000	DRILLING COST -	TANGIBLE			
10,000   Sortiec Cairing   16,   10,000   Intermediate Cairing   2,000   15,000   16,000					
1910/1906   Informmediate Casing 1   15,   1910/1906   Informmediate Casing 2   231,   1910/1906   Informmediate Casing 2   231,   1910/1906   132,   1910/1906   132,   1910/1906   132,   1910/1906   132,   1910/1906   132,   1910/1906   132,   1910/1906   133,   1910/1906   1910/1906   134,   1					28,000
1918/2009   Production Cating   231,   1918/2009   Production Cating   138,   1918/2009   Production Cating   138,   1918/2009   Production Cating   138,   1918/2009   1918,   1918/2009   1918/200					16,000
128,   128,					55,000
Trigotion					231,000
7012550	7012050				128,000
Total Description   Tota	7012050	Orig Liner Hanger, Yieback	Eq & Csg Accessories		55,000
Total Description   Tota	7012550	Drilling Wellhead Equipme	nt		50,000
TOTAL DRILLING - TANGIBLE	7012040				24,000
TOTAL DRILLING - TANGIBLE			ials		5,000
DRILLING COST - INTANGIBLE   7019300					592,000
7019200   Drilling Rig. Hob/Demob   32,   7019200   Drilling Rig day worlt/floctage   590,   7019000   2019000   20190000   201900000   201900000000000000000000000000000000000		TOTAL DISLUNG - TANGIBLE		· <u> </u>	532,000
Total   Tota	DRILLING COST -	INTANGIBLE			
Total   Tota	7019200	Drilling Rig Mob/Demob			32,500
7019040   Directional Drilling Service   201,   7019020   Cement and Cementing Service   Intermediate 1   3.5,   7019020   Cement and Cementing Service   Intermediate 2   40,   7019020   Cement and Cementing Service   Intermediate 2   40,   7019020   Cement and Cementing Service   Intermediate 2   40,   7019020   Cement and Cementing Service   Production   60,   7019140   Mud Philads & Services   Production   65,   7019130   Soleds Control equipment   41,   7012020   BHt   70,   7019101   Caling Crew and Services   30,   7010102   Caling Crew and Services   30,   7010103   Fuel (Rig.)   70,   7019104   Fuel (Rig.)   70,   7019104   Fuel (Rig.)   70,   7019105   Water (non potable)   25,   7019000   Water (non potable)   25,   7019200   Well Logging Services   70,   7019101   Caling (notable)   3,   7019102   Stabilizers, Note Openers, Underteamers (DM rentals)   3,   7019110   Caling Inspection Services   3,   7019110   Prilip Per Coller Inspection Services   3,   7019110   Prilip Per Coller Inspection Services   3,   7019100   Priliph - truck   3,   7010160   Vacuum Trucks   3,   7010160   Vacuum Trucks   3,   7010160   Vacuum Trucks   3,   7010160   Contract Services - Disposal/Non-Hazardous Waste   3,   7010100   Contract Labor - general   3,   7010100   Contract Labor - general   3,   7010100   Contract Labor - general   3,   7010100   Mell Services - Facilities   3,   7010100   Contract Services - Facilities   3,   7010100   Salety and Intronomental   3,   7010101   Rental Building (tradises soil farming)   5,   7010101   Contract Services - Facilities   3,   7010101   Rental Building (tradises soil farming)   5,   7010101   Contract Services - Facilities   3,   7010101   Co		Drilling Rig - day work/foot	age		590,850
15.00					201,000
Topson		Cement and Cementing Ser	vice Surfa	ie .	15,000
2019/02/0   Cement and Cementing Service   Intermediate 2   40,					
Projustion		Coment and Comenting Set	vice Inter-		
Total		Cement and Cementing Ser	vice interi		
7012310   Soleds Control equipment			vice Prode	iction	60,000
Political   Poli					66,600
Total					41,000
Total					70,000
Total	7019010				30,000
Total	7016350	Fuel (Rig)			70,000
Total	7019140	Fuel (Mud)			18,000
Total	7001460	Water (non potable)			25,000
7019000   Well Loging Services   19.9   19	7012350				5,000
7019150					
Total   Tota	7019150				19,000
Total			Indonesia (Ditantale)		
7019110			inderreamers (on rendals)		
Total					
TO01450			services	· · · · · · · · · · · · · · · · · · ·	10,000
TODISO					25,000
TOD1440		Water hauling and disposal	(includes soil farming)		60,000
Total Drilling Contract Labor - general   30,		Contract Services - Disposal	/Non-Hazardous Waste		80,000
TODIS					10,000
7001200	7000030	Contract Labor - general			30,000
TODISON	7000030	Contract Labor - Operations			3,000
7019350	7001200				10,000
7019350					21,363
7018150   Rental Tools and Equipment (surface rentals)   90,5   7018150   Rig Equipment and Milac.   11,1   7001110   Telecommunications Services   5,5   7001120   Consulting Services   106,6   7001400   Safety and Environmental   36,6   7018120   Rental Buildings (trailers)   18,1   7018120   Coring (sidewalls & analysis)   7019310   Coring (sidewalls & analysis)   7011010   7% Contingency & Taxes   172,1    TOTAL DRILLING -INTANGIBLE   \$2,039,  TOTAL DRILLING COST   \$2,631,0    COMPLETION - TANGIBLE   701250   Tubing   Tubing   701250   Wellhead Equip   15,6   701250   Packers - Completion Equipment					10,000
Rig Equipment and Misc.   11.1   11					90,900
Tool			- francisco ( amount		11,363
7001120   Consulting Services   106.4     7001100   Safety and Environmental   36.1     7018120   Rental Buildings (criafers)   16.1     7018120   Coring (sidewalls & analysis)     7019310   Coring (sidewalls & analysis)     7010101   7% Contingency & Taxes   172,					
TODIACO   Safety and Environmental   36;   TODIACO   T			e>		5,000 106,808
7013120   Rental Buildings (trailers)   18,1   7019310   Coring (sidewalls & analysis)   7013010   7% Corningency & Taxes   172,1   7013010   7% Corningency & Taxes   172,1   7014 DRILLING CINTANGIBLE   52,039,					
7019310   Coring (Iddewalls & analysis)   78 Contingency & Taxes   172,					36,360
7013010   7% Contingency & Taxes   172,   TOTAL DRILLING - INTANGIBLE   \$2,039,   TOTAL DRILLING COST   \$2,631,0   COMPLETION - TANGIBLE					18,180
TOTAL DRILLING COST   \$2,631,0			)		172,125
TOTAL DRILLING COST   \$2,631,0					
Tubing   T		TOTAL DRILLING - INTANGIBLE			52,039,047
7012580         Tubing           7012040         Tubing Accessories (nipple, wireline entry)           7012550         Wellhead Equily         15,6           7012560         Packers - Completion Equipment		TOTAL DRILLING COST			\$2,631,047
7012040         Tubing Accessories (nipple, wireline entry)           7012550         Wellhead Equip         15,6           7012560         Packers - Completion Equipment         15,6	COMPLETION - T	ANGIBLE			
7012040         Tubing Accessories (nipple, wireline entry)           7012550         Wellhead Equip         15,6           7012560         Packers - Completion Equipment         15,6	7012580	Tubing			572
7012550         Wellhead Equip         15,6           7012560         Packers - Completion Equipment			wireline entry)		102
7012560 Packers - Completion Equipment		Tuong Accessories (nipple,	mucing entit		15,000
					15,000
TOTAL COMPLETION - TANGIBLE	/012300	Packers - Completion Equip	ment		
		TOTAL COMPLETION - TANGIBLE			\$15,000

Asset Team PERMIAN

Signature:

Sield PURPLE SAGE;WOL FORMATION: WOLFCAMP A Nemesis 7 WA Fee 7H COMPLETION - INTANGIBLE GL CODE DESCRIPTION ESTIMATED COST Location and Access (dress location after rig move, set anchors) 7001270 10,000 Drilling Rig During Completion Mud Fluids & Services 7019220 7019140 Coiled Tubing Services (3 runs) 350,000 7019030 7019240 **Snubbing Services** 7019270 7016350 Pulling/Swab Units Fuel (from drig) 7019010 Casing Crew and Services 7019020 7019080 Cement and Cementing Services
Well Testing Services (flow hand & equip) 360,000 7019320 **Fracturing Services** 3,750,000 Perforating
Wireline Services
Water Hauling & Disposal (frac fluids) 7019330 300,000 7019360 7001460 15,000 285,000 7016180 Freight - Truck (hauf pipe; drig & compl) 20,000 7018150 7018150 BOP Rental & Testing

Rental Tools and Equipment ( incl drig; lightplant\_hydra-walk) CT Downhole Rental Equipment (ie. Bit, BHA) 7018150 Contract Labor - general Telecommunications Services Safety and Environmental 7000030 60,000 7001110 120,000 7001400 7001120 **Consulting Services** 100,000 7018150 7019300 250,000 85,000 Frack Stack Rentals 7016190 Freight (Transportation Services) Equipment Rental ( w/o operator, frac tanks, lightplants)
Rental Buildings (trailers)
Contract Labor - Pumping (pump-down pumps) 7018150 160,000 35,000 60,000 7000030 7011010 8% Contingency & Taxes 431,200 **TOTAL COMPLETION - INTANGIBLE** \$6,391,200 TOTAL COMPLETION COST \$6,406,200 SURFACE EQUIPMENT - TANGIBLE 7012350 Misc. Piping, Fittings & Valves 85,795 Company Labor & Burden 74,150 7000030 Contract Labor - General 7001110 7012410 Telecommunication equip (Telemetry) 27,950 Line Pipe & Accessories 7012270 Miscellaneous Materials (containment system) 43,230 SCADA Freight - truck 7016180 29,115 7001190 Contract Engineering 7012290 Metering and instrumentation 237,080 I&E Materials 7012200 **Gas Yreating** 7012200 7012010 7012350 Compressor 7012610 Vapor Recovery Unit Separator & other pressure vessels
Tanks
Heater Treater 7012440 7012500 67,350 193,450 7012100 17,560 7012640 11,645 Electrical Labor Mechanical Labor 29,115 7012480 Rod Pumping unit & Pad 7012180 7012350 Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE \$839,730 **TOTAL SURFACE EQUIPMENT COST** 839,730 ARTIFICIAL LIFT 7012580 Tubing Accessories (nipple, wireline entry) 7012040 5,000 7012550 Wellhead Equip 5,000 Packers - Completion Equipment Company Labor 6,000 7012180 Gas Lift Equipment 23,000 Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services 7012480 7012140 42,500 7019350 7012270 Materials & Supplies-Tangible 25,000 Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 7012550 3,000 7012390 7011010 Contingency & Taxes 5,000 TOTAL ARTIFICIAL LIFT 169,500 TOTAL ARTIFICIAL LIFT COST 169,500 SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COST TOTAL LOCATION COST 71,250 **TOTAL DRILLING COST** 2,631,047 TOTAL COMPLETIONS COST 6,406,200 TOTAL SURFACE EQUIPMENT COST 839,730 TOTAL ARTIFICIAL LIFT COST 169,500 \$10,117,727 **GRAND TOTAL COST** Participant's Approval Name of

Date: \_\_\_

DATE 11/19/2018

DRILLING & LOCATION PREPARED BY MATTHEW RUGARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY MATT HENSCHEN

ARTIFICIAL LIFT PREPARED BY SILLY MOORE/MATT HI

Asset Team	PERMIAN	
Field Lease/Facility	PURPLE SAGE; WOL FORMATION: WOLFCAMP D  Nemesis 7 WD Fee 8H  DEVELOPMENT	EXPLORATION RECOMPLETION
Location	EDDY COUNTY X EXPLOITATION	WORKOVER
Prospect	MALAGA	
Est Total Depth	20 181 Est Orilling Days Est Completion Da	ays <u>11</u>
LOCATION COST -	INTANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	37,500
7001250	Land Broker Fees and Services	33,750
	TOTAL LOCATION COST - INTANGIBLE	71,250
DRILLING COST - T	ANGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	16,000
7012050	Intermediate Casing 1	55,000
7012050	Intermediate Casing 2	231,000
7012050	Production Casing	177,800
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	641,800
DRILLING COST - II	WANCING	
7019200	Drilling RIg Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	627,250
7019040	Directional Drilling Services	215,000
7019020	Cement and Cementing Service Surface	15,000
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	40,000
7019020	Cement and Cementing Service Production	75,000
7019140	Mud Fluids & Services	68,000
7012310	Solids Control equipment	43,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	74,000
7019140	Fuel (Mud)	18,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	20,000
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	22,063
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	96,500
7018150	Rig Equipment and Misc.	12,063
7001110	Telecommunications Services	5,000
7001120	Consulting Services	113,388
7001400	Safety and Environmental	38,600
7018120	Rental Buildings (trailers)	19,300
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	181,962
	TOTAL DRILLING - INTANGIBLE	\$2,139,62
	TOTAL DRILLING COST	\$2,781,425
COMPLETION - TAI		
7012580	Tubing	
7012040	Tubing Accessories (nipple, wireline entry)	
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	
	TOTAL COMPLETION - TANGIBLE	A
	TOTAL COMPLETION - TANGER	\$15,000

TOTAL ARTIFICIAL LIFT COST

**GRAND TOTAL COST** 

169,500

\$10,656,105

### 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 NO. 20563** 

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

**CASE NO. 20470** 

#### **AFFIDAVIT**

STATE OF TEXAS	)
	) ss
COUNTY OF HARRIS	)

Matt Baker, being duly sworn, deposes and states:

- 1. I am over the age of 18, I am a geologist for Marathon Oil Permian LLC, and have personal knowledge of the matters stated herein. I have been qualified by the Oil Conservation Division ("Division") as an expert petroleum geologist.
- 2. **Exhibit 7** is a structure map of the Base of the Second Bone Spring Sand. The proposed project area is identified by a black-dashed box, and the 6H well is identified by a blue line.
  - 3. Exhibit 7 shows that the structure dips to the East.
- 4. **Exhibit 8** identifies five wells in the vicinity of the proposed Bone Spring well, shown by a line of cross-section running from A to A'.



- 5. **Exhibit 9** is a stratigraphic cross section hung on the base of the Second Bone Spring Sand. The well logs on the cross-section give a representative sample of the Bone Spring 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 Second Bone Spring Sand thickens slightly from North to South.
- 6. **Exhibit 10** is a Gross Interval Isochore from the Second Bone Spring Sand Top to Base. The formation thickens slightly from North to South.
- 7. **Exhibit 11** is a structure map of the top of the Wolfcamp. The proposed project area is identified by a black-dashed box. The proposed horizontal locations are identified by colored lines, and the proposed wells are numbered 1-7.
  - 8. Exhibit 11 shows that the structure dips to the East.
- 9. I have prepared separate exhibits for the proposed Upper Wolfcamp wells and Lower Wolfcamp wells.
- 10. **Exhibit 12** identifies five wells in the vicinity of the proposed Upper Wolfcamp wells, which are the WA and WXY wells, and has a line of cross-section running from A to A'.
- 11. **Exhibit 13** is a stratigraphic cross section hung on the top of the Wolfcamp, also for the Upper Wolfcamp wells. The well logs on the cross-section give a representative sample of the Wolfcamp formation in the area. The target zones for the wells is the Wolfcamp Y Sand and the Wolfcamp A, identified by the words "Producing Zone" and the shaded area across the cross section, along with a red arrow. The Wolfcamp Y is relatively consistent from North to South. The Wolfcamp A thickness varies slightly from North to South.
- 12. **Exhibit 14** is a Gross Interval Isochore of the Wolfcamp to Wolfcamp B. The formation is relatively uniform across the proposed well unit.

- 13. **Exhibit 15** identifies five wells in the vicinity of the proposed Lower Wolfcamp wells, which are the WD wells, and has a line of cross-section running from A to A'.
- 14. **Exhibit 16** is a stratigraphic cross section showing the Wolfcamp D2 datum, also for the Lower Wolfcamp wells. The well logs on the cross-section give a representative sample of the Wolfcamp formation in the area. The target zones for the wells are identified by the words "Producing Zone" and the shaded area across the cross section, along with a red arrow. The Wolfcamp C2 interval thickens from North to South. The Wolfcamp D2 interval thickens from North to South.
- 15. **Exhibit 17** is a Gross Interval Isochore of the Wolfcamp C2 to D3. The formation is relatively uniform across the proposed well unit.
  - 16. 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 unit will contribute more or less equally to production.
- 17. The preferred well orientation in this area is either North/South or East/West.

  This is because SH<sub>max</sub> is roughly 45° from North within this unit.
- 18. Exhibits 7-17 were prepared by my or under my supervision or compiled from company business records.
- 19. The granting of this application is in the interests of conservation and the prevention of waste.

[Signature page follows]

SUBSCRIBED AND SWORN to before me this 25 day of June, 2019 by Matt Baker, on behalf of Marathon Oil Permian LLC.

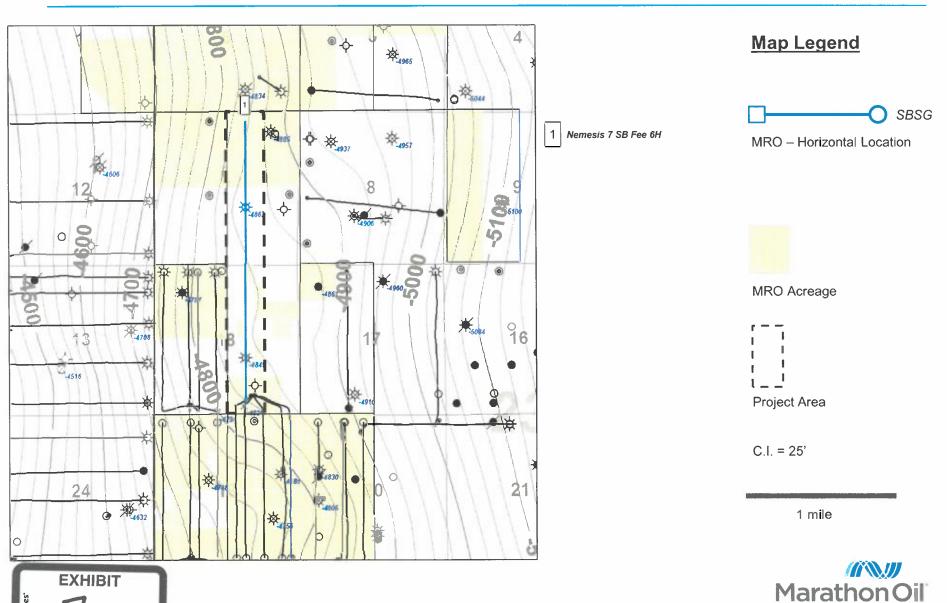
My commission expires:  $1/\partial 3/\partial o \partial 3$ 

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

## Exhibit 7 7 SB Fee 6H (Bone Spring) Structure Map

### **Nemesis 7 Fee Unit**

Structure Map – Base of 2<sup>nd</sup> Bone Spring Sand (TVDSS)

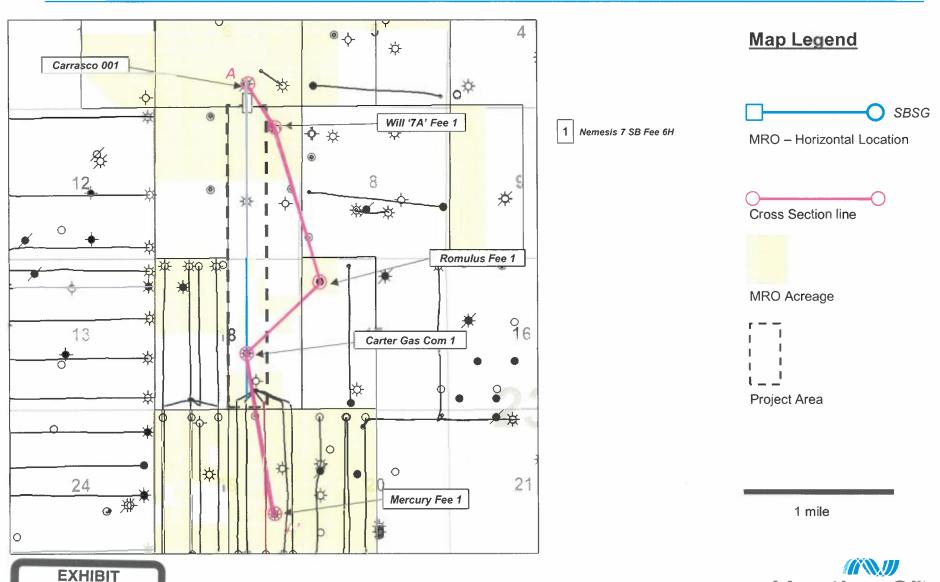


### Exhibit 8

7 SB Fee 6H (Bone Spring) Bone Spring Cross-Section Reference Map

#### **Nemesis 7 Fee Unit**

Reference Map for Cross Section – 2<sup>nd</sup> Bone Spring



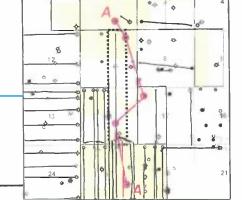
Marathon Oil

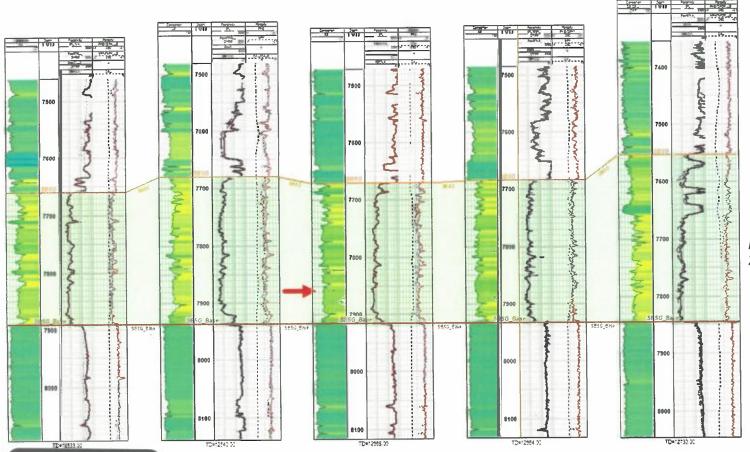
## Exhibit 9 7 SB Fee 6H (Bone Spring) Cross Section

#### **Nemesis 7 Fee Unit**

Stratigraphic Cross Section (Base 2<sup>nd</sup> Bone Spring Sand Datum)







Second Bone Spring Sand thickens slightly from North to South

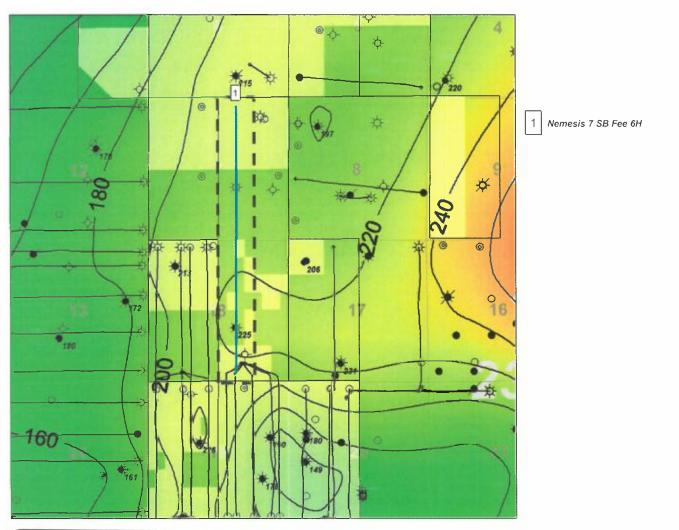
Producing Zone



# Exhibit 10 7 SB Fee 6H (Bone Spring) Isochore

### Nemesis 7 Fee Unit

Gross Interval Isochore – 2<sup>nd</sup> Bone Spring Sand Top to Base



#### Map Legend









C.I. = 25'

1 mile



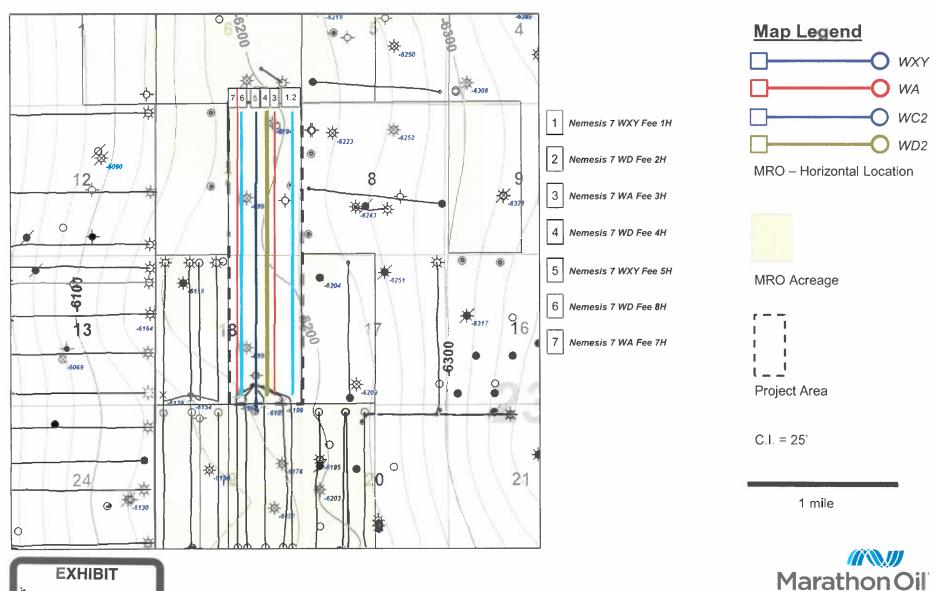




# Exhibit 11 Wolfcamp Structure Map

#### **Nemesis 7 Fee Unit**

Structure Map - Top of Wolfcamp (SSTVD)



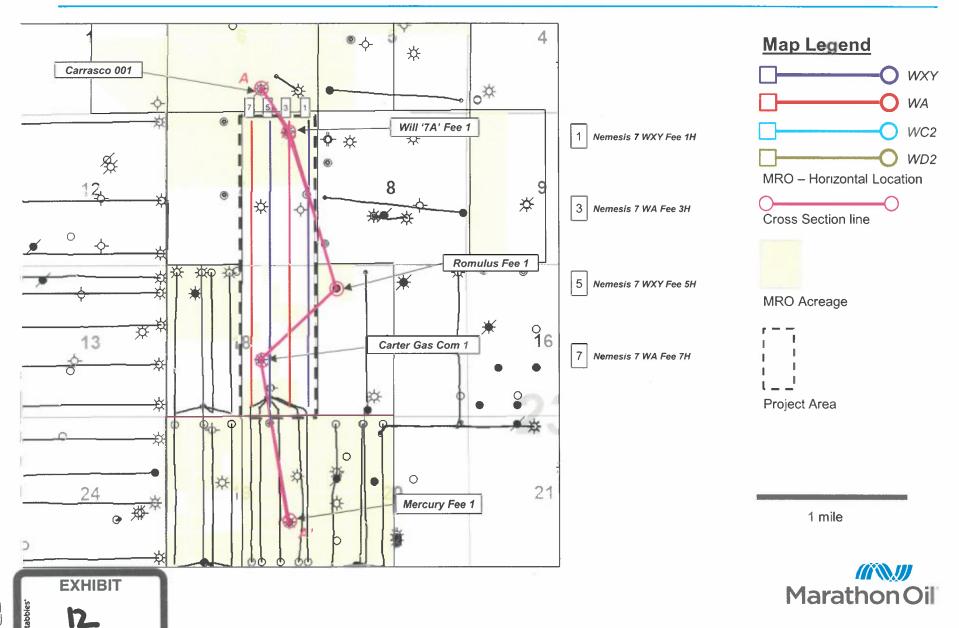


### Exhibit 12

Upper Wolfcamp Cross-Section Reference Map

#### **Nemesis 7 Fee Unit**

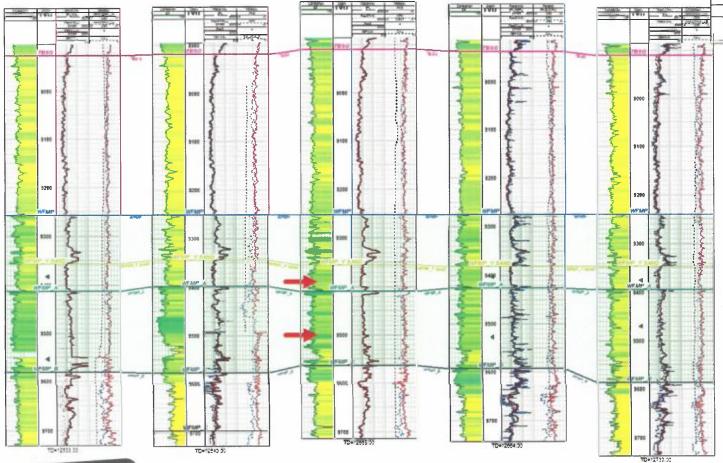
Reference Map for Cross Section – Upper Wolfcamp Wells



## Exhibit 13 Upper Wolfcamp Cross Section

Stratigraphic Cross Section (Top Wolfcamp Datum)





Wolfcamp Y-Sand thickness relatively consistent from North to South 21

Wolfcamp A thickness varies slightly from North to South

Producing Zone

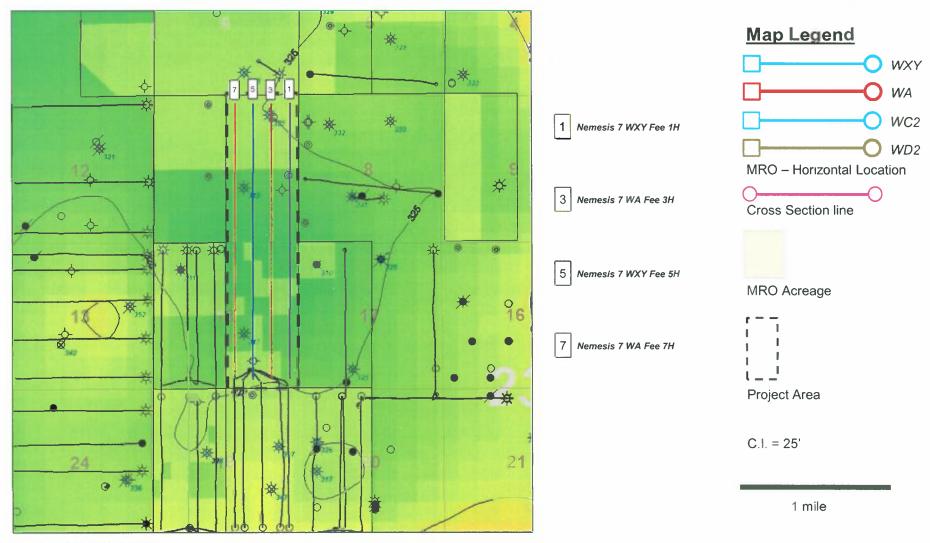
13





# Exhibit 14 Upper Wolfcamp Isochore

Gross Interval Isochore - Wolfcamp to Wolfcamp B

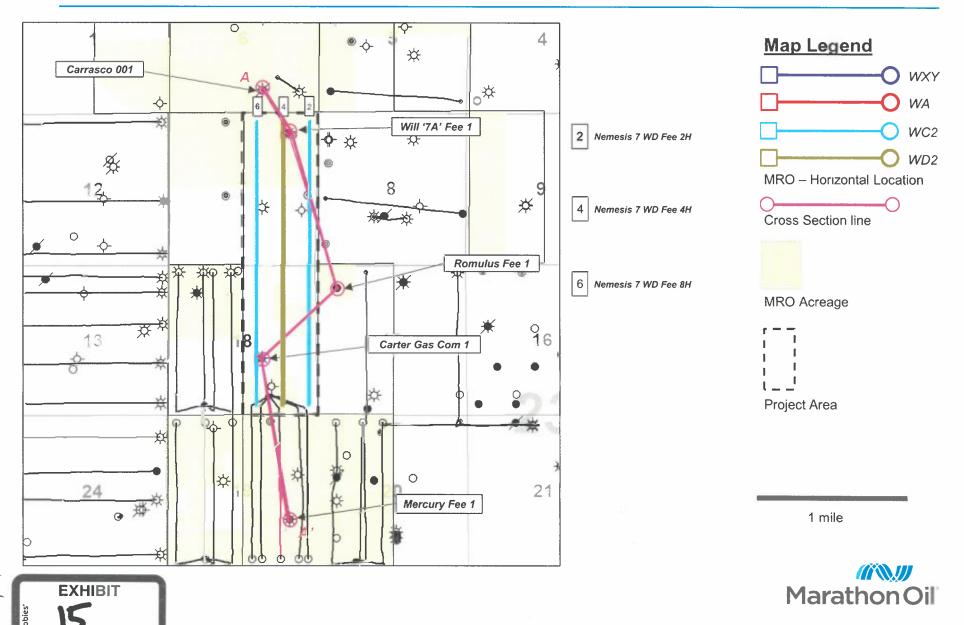






## Exhibit 15 Lower Wolfcamp Cross-Section Reference Map

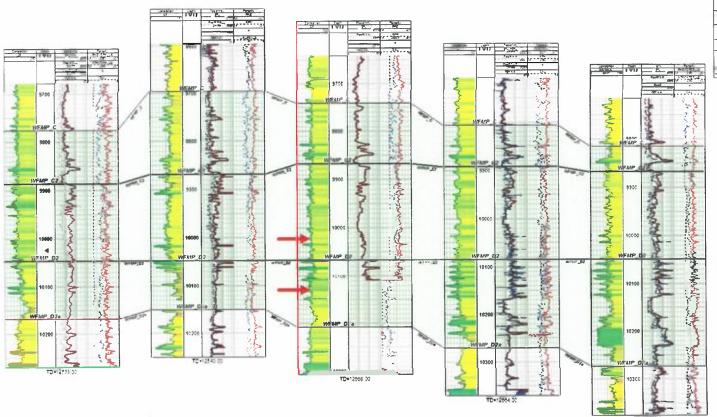
### Reference Map for Cross Section - Lower Wolfcamp Wells

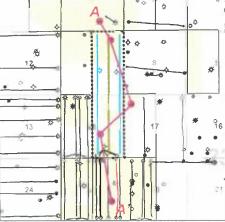


## Exhibit 16 Lower Wolfcamp Cross Section

Stratigraphic Cross Section (Wolfcamp D2 Datum)







Wolfcamp C2 interval thickens from North to South

Wolfcamp D2 interval thickens from North to South

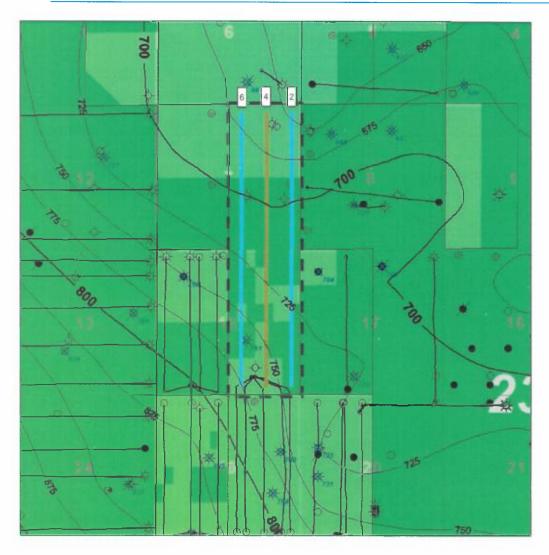
Producing Zone





## Exhibit 17 Lower Wolfcamp Isochore

Gross Interval Isochore – Wolfcamp C2 to Wolfcamp D3



2 Nemesis 7 WD Fee 2H

4 Nemesis 7 WD Fee 4H

6 Nemesis 7 WD Fee 8H



1 mile





## Exhibit 18 Notice Affidavit

#### 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 NO. 20563** (Nemesis)

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

> **CASE NO. 20470** (Nemesis)

#### **AFFIDAVIT**

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

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

SUBSCRIBED AND SWORN to before me this 24th day of June, 2019 by Deana M. Bennett.

OFFICIAL SEAL Karlene Schuman

My Commission Expires: 02-

Notary Public

**EXHIBIT** 

#### **PS Form 3877**

## Type of Mailing: CERTIFIED MAIL 04/12/2019



Firm Mailing Book ID: 165169

81363 -

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference OD4
1	9314 8699 0430 0058 0646 76	Chevron U.S.A. Inc. Attn: Lois Krenek 1400 Smith St. Houston TX 77002	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
2	9314 8699 0430 0058 0646 83	Fasken Land & Minerals, Ltd. 6101 Holiday Hill Rd. Midland TX 79707	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
3	9314 8699 0430 0058 0646 90	OXY USA WTP Limited Partnership 5 Greenway Plaza, Suite 110 Houston TX 77046	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
4	9314 8699 0430 0058 0647 06	Mewbourne Oil Company P.O. Box 7698 Tyler TX 75701	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
5	9314 8699 0430 0058 0647 13	David Petroleum Corp. 116 W. 1st Street Roswell NM 88203	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
6	9314 8699 0430 0058 0647 20	P.O. Box 18496	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
7	9314 8699 0430 0058 0647 37	NBI Properties, înc. 7000 P.O. Box 4470	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
8	9314 8699 0430 0058 0647 44	Tierra Oíl Cómpany, LLC P.O. Box 700968 San Antonio TX 78270	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
9	9314 8699 0430 0058 0647 51	Chalcam Exploration, LLC 403 Tierra Berrenda Roswell NM 88201	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
10	9314 8699 0430 0058 0647 75	MRC Permian Company One Lincoln Centre 5400 LBJ Freeway, Suite 1500 Dallas TX 75240	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
11	9314 8699 0430 0058 0647 82	State of New Mexico, Dept. of Transportation P.O. Box 1148 Santa Fe NM 87501	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
12	9314 8699 0430 0058 0647 99	Santa Elena Minerals, LP P.O. Box 2063 Midland TX 79702	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
13	9314 8699 0430 0058 0648 05	JPH Holdings, LP 4400 Arcady Dallas TX 75205	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice 81363-Nemesis
14	9314 8699 0430 0058 0648 12		\$1.30	\$3.50	\$1.60	\$0.00	



#### **PS Form 3877**

## Type of Mailing: CERTIFIED MAIL 04/12/2019



Firm Mailing Book ID: 165169

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
15	9314 8699 0430 0058 0648 29	Jeri Alexander Magnum and First Financial Trust Trustees of the Cynthia Rhodes Trust P.O. Box 701 Abilene TX 79604	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
16	9314 8699 0430 0058 0648 36	Sally Guitar 10 Woodhaven Circle Abilene TX 79605	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
17	9314 8699 0430 0058 0648 43	Melissa Gray a/k/a Melissa McGcc 2801 S. 25th Street Abilene TX 79605	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
18	9314 8699 0430 0058 0648 50	Sharon Guitar Ellis P.O. Box 469 Valleyford WA 99036	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
19	9314 8699 0430 0058 0648 67	Paul B. Hofer, III and John M. Hofer, co-Trustees of the Laura Jean Hofer Trust 11248 S. Turner Avenue Ontario CA 91761	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
20	9314 8699 0430 0058 0648 74	Murchison-Guitar Family LP 20405 Vintage Dr. Red Bluff CA 96080	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
21	9314 8699 0430 0058 0648 81	Barbara Lee Backman, Inc. 510 W. Riverside Avenue Spokane WA 99201	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
22	9314 8699 0430 0058 0648 98	Truchas Peaks, LLC 110 Louisiana, Suite 500 Midland TX 79701	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
23	9314 8699 0430 0058 0649 04	Guitar Galusha, LP 1202 Sylvan Avenue Abilene TX 79605	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
24	9314 8699 0430 0058 0649 11	Lesli Guitar Nichols 6305 W. County Road 34 Knott TX 79748	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
25	9314 8699 0430 0058 0649 28	John Kelly Guitar 325 Woodland Drive Abilene TX 79603	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
26	9314 8699 0430 0058 0649 35	Woods Dickens Ranch, LP 461 8th Street Lubbock TX 79416	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
27	9314 8699 0430 0058 0649 42	Kelly Woods Leach 4610 8th Street Lubbock TX 79416	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
28	9314 8699 0430 0058 0649 59	Jack G. Woods, Jr. P.O. Box 1159 Abilene TX 79604	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
29	9314 8699 0430 0058 0649 66	Caren G. Lucas a/k/a Caren Gall Lucas Machell P.O. Box 90621 Austin TX 78709	\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice

#### **PS Form 3877**

## Type of Mailing: CERTIFIED MAIL 04/12/2019



Firm Mailing Book ID: 165169

_	Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee		Reference Contents	
	30	9314 8699 0430 0058 0649 73	Caki Family Limited Partnership 3721 Pallos Verdas Dallas TX 75229	\$1.30	\$3.50	\$1.60	\$0.00		81363-Nemesis Notice	
	31	9314 8699 0430 0058 0649 80	Guitar Land & Cattle, LP 451 Pine Street, Suite 352 Abilene TX 79601	\$1.30	\$3.50	\$1.60	\$0.00		81363-Nemesis Notice	
	32	9314 8699 0430 0058 0649 97	Margaret Ann Guitar and John Alexander Guitar, the Earl B. Guitar Jr. Bypass Trust P.O. Box 748 Abilene TX 79604	\$1.30	\$3.50	\$1.60	\$0.00		81363-Nemesis Notice	
	33	9314 8699 0430 0058 0650 00	Judy Guitar Uhey, LLC P.O. Box 632 Elizabethtown KT 42702	\$1.30	\$3.50	\$1.60	\$0.00		81363-Nemesis Notice	
	34	9314 8699 0430 0058 0650 17	Carcn Gall Machell, trustee of the Caren Gall Machell Exempt Trust P.O. Box 90621 Austin TX 79709	\$1.30	\$3.50	\$1.60	\$0.00		81363-Nemesis Notice	
	35	9314 8699 0430 0058 0650 24	Crownrock Minerals, LP P.O. Box 51933 Midland TX 79710	\$1.30	\$3.50	\$1.60	\$0.00		81363-Nemesis Notice	
	36	9314 8699 0430 0058 0650 31	William J. Beesing 950 Etnyre Terrace Oregon IL 61061	\$1.30	\$3.50	\$1.60	\$0.00		81363-Nemesis Notice	
	37	9314 8699 0430 0058 0650 48	Estate of Peggy Lu Beesing Vorel c/o Cheryl M. Ballard 15701 Wood Creek Lane Edmond OK 73013	\$1.30	\$3.50	\$1.60	\$0.00		81363-Nemesis Notice	
	38	9314 8699 0430 0058 0650 55	Dashea Beesing Gelnar 7315 Nichols Rd. Oklahoma City OK 73120	\$1.30	\$3.50	\$1.60	\$0.00		81363-Nemesis Notice	
	39	9314 8699 0430 0058 0650 62	Estates of Phyllis Jean Peal & Roger C. Peal c/o Sally Ann Cundiff 405 E. 10th Street Rolla MO 65401	\$1.30	\$3.50	\$1.60	\$0.00		81363-Nemesis Notice	
	40	9314 8699 0430 0058 0650 79	Lewis C. Sawyer Loving Trust 14390 E. Marina Drive, #209 Aurora CO 80014	\$1.30	\$3.50	\$1.60	\$0.00		81363-Nemesis Notice	
	41	9314 8699 0430 0058 0650 86	Sandra M. Sawyer & the Estate of Edward A. Sawyer P.O. Box 6452 Rochester MN 55903	\$1.30	\$3.50	\$1.60	\$0.00	Ch	81363-Nemesis Notice	
	42	9314 8699 0430 0058 0650 93	Estate of Delta L. Sawyer c/o Lewis C. Sawyer 14390 E. Marina Drive, #209 Aurora CO 80014	\$1.30	\$3.50	\$1.60	\$0.00	ila -	81363-Nemesis Notice	
	43	9314 8699 0430 0058 0651 09	Estate of Duane Housouer a/k/a Douglas Duane Housouer 3836 Azure Lane Addison TX 75001	\$1.30	\$3.50	\$1.60	\$0.00	Hote	81363-Nemesis Notice	Page
										rade.

#### **PS Form 3877**

## Type of Mailing: CERTIFIED MAIL 04/12/2019



Firm Mailing Book ID: 165169

Line	USPS Article Number	Name, Street, City, State, Zip		Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
44	9314 8699 0430 0058 0651 16	Devon Energy Production Company, L.P. 333 West Sheridan Avenue Oklahoma City OK 73102		\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
45	9314 8699 0430 0058 0651 23	Oxy USA WTP Limited Partnership 5 Greenway Plaza, Suite 110 Houston TX 77046		\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
46	9314 8699 0430 0058 0651 30	Stryker Energy, LLC P.O. Box 53448 Houston TX 77052		\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
47	9314 8699 0430 0058 0651 47	Dick Jackson 411 N. Maple Ave. Mountain Grove MO 65711		\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
48	9314 8699 0430 0058 0651 54	Marathon Oil Permian, LLC 5555 San Felipe Street Houston TX 77057		\$1.30	\$3.50	\$1.60	\$0.00	81363-Nemesis Notice
			Totals:	\$62.40	\$168.00	\$76.80	\$0.00	
					Grand	Total:	\$307.20	

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

48



USPS Article Number	Date Created Name 1	Name 2	Address	Cey	State	Zip Mailin	Mailing Status Ser	Service Options	Mail Delivery Date
9314869904300058065154	2019-04-12 12:53 PM Marathon Oil Permian, LLC		5555 San Felipe Street	Houston	TX 77057	57 Delivered		Return Receipt - Electronic, Certified Mail	04-15-2019
9314869904300058065147	2019-04-12 12.53 PM Dick Jackson		411 N. Maple Ave.	Mountain Grove	•	_	_	Return Receipt - Electronic, Certified Mail	04-16-2019
9314869904300058065130	2019-04-12 12:53 PM Stryker Energy, LLC		P.O. Box 53448	Houston		_	_	Return Receipt - Electronic, Certified Mail	04-16-2019
9314869904300058065123	2019-04-12 12:53 PM Oxy USA WTP Limited Partnership		5 Greenway Plaza, Suite 110	Houston				Return Receipt - Electronic, Certified Mail	04-16-2019
9314869904300058065116	2019-04-12 12:53 PM Devon Energy Production Company, L P		333 West Sheridan Avenue	Oklahoma City				Ceturn Receipt - Electronic, Certified Mail	04-15-2019
9314869904300058065109	2019-04-12 12:53 PM Estate of Duane Housouer a/K/a Douglas Duane 3019-04-12 13:53 DM Estate of Dubin Canada Calabara	Housouer	14300 F Admins Drugs #200	Addison	1X 75001	01 Delivered		Return Receipt - Electronic, Certified Mail	04-16-2019
9314869904300058065085	2019-04-12 12:35 PM Estate of Delta L. Sawyer C/O Lewis L. Sawyer 2019-04-12 12:52 DM Candra M Canner R the Fetate of Edward A	Caracas	14550 E. Manna Drive, #205 D.O. Roy 6452	Aurora Rochester	_	_		Return Receipt - Electronic, Certified Mail	04-26-2019
9314869904300058065079	2019-04-12 12:53 PM Lewis C. Sawver Loving Trust		14390 E. Marina Drive, #209	Aurora				Return Receipt - Electronic, Certified Mail	04-26-2019
9314869904300058065062	2019-04-12 12:53 PM Estates of Phyllis Jean Peal & Roger C. Peal	c/o Sally Ann Cundiff	405 E. 10th Street	Rolla		_		Return Receipt - Electronic, Certified Mail	04-16-2019
9314869904300058065055	2019-04-12 12:53 PM Dashea Beesing Gelnar		7315 Nichols Rd.	Oklahoma City		_		Return Receipt - Electronic, Certified Mail	04-15-2019
9314869904300058065048	2019-04-12 12:53 PM Estate of Peggy Lu Beesing Vorel	c/o Cheryl M. Ballard	15701 Wood Creek Lane	Edmond	OK 73013	13 Delivered		Return Receipt - Electronic, Certified Mail	04-15-2019
9314869904300058065031	2019-04-12 12:53 PM William J. Beesing		950 Etnyre Terrace	Oregon	•	_	_	Return Receipt - Electronic, Certified Mail	04-17-2019
9314869904300058065024	2019-04-12 12:53 PM Crownrock Minerals, LP		P.O. Box 51933	Midland		_	_	Return Receipt - Electronic, Certified Mail	04-16-2019
9314869904300058065017	2019-04-12 12:53 PM Caren Gall Machell, trustee of the Caren Gall	Machell Exempt Trust	P.O. Box 90621	Austin				Return Receipt - Electronic, Certified Mail	04-29-2019
9314869904300058065000	2019-04-12 12:53 PM Judy Guitar Uhey, LLC	the state of the s	P.O. Box 632	Elizabethtown	KI 42/02	02 Delivered		Return Receipt - Electronic, Certified Mail	04-18-2019
9314069904300050064997	2019-04-12 12:53 FIN Margaret Anni Guital and John Avexander Guital, 2018 04 12 12:52 DM Guitar Land & Casala 10	the Earl o Contain bypass irust	45.1 Dans Strans Cuits 25.2	Abilene				neturn beceipt - spectronic, certified Mail	04-10-2019
9314869904300058064973	2019-04-12 12:53 PM Caki Family Limited Partnership		3721 Pallos Verdas	Dallas				Setum Receipt - Electronic, Certified Mail	04-15-2019
9314869904300058064966	2019-04-12 12:53 PM Caren G. Lucas a/k/a Caren Gall Lucas Machell		P.O. Box 90621	Austin			-	Return Receipt - Electronic, Certified Mail	04-29-2019
9314869904300058064959	2019-04-12 12:53 PM Jack G. Woods, Jr.		P.O. Box 1159	Abilene		04 Delivered	-	Return Receipt - Electronic, Certified Mail	04-30-2019
9314869904300058064942	2019-04-12 12:53 PM Kelly Woods Leach		4610 8th Street	Lubbock		16 Delivered		Return Receipt - Electronic, Certified Mail	04-16-2019
9314869904300058064935	2019-04-12 12:53 PM Woods Dickens Ranch, LP		461 8th Street	Lubbock				Return Receipt - Electronic, Certified Mail	04-16-2019
9314869904300058064928	2019-04-12 12:53 PM John Kelly Guitar		325 Woodland Drive	Abilene		_		Return Receipt - Electronic, Certified Mail	
9314869904300058064911	2019-04-12 12:53 PM Lesti Guitar Nichols		6305 W. County Road 34	Knott	TX /9/48		1	Return Receipt - Electronic, Certified Mail	04-15-2019
93.14869904300058064904	2015-04-12 12:55 FM Cultar Galusha, LF 2019-04-12 12:52 PM Teaches Deales IIC		110 Louisiana Suite 500	Midland			nunea	Return Receipt - Electronk, Certined Mail Batum Receipt - Florescold Certified Mail	04-17-2019
9314869904300058064881	2019-04-12 12:53 PM Barbara Lee Backman, Inc.		510 W. Riverside Avenue	Spokane			_	Return Receipt - Electronic, Certified Mail	04-15-2019
9314869904300058064874	2019-04-12 12:53 PM Murchison-Gurtar Family LP		20405 Vintage Dr.	Red Bluff				Return Receipt - Electronic, Certified Mail	04-19-2019
9314869904300058064867	2019-04-12 12:53 PM Paul B. Hofer, III and John M. Hofer, co-Trustees	of the Laura Jean Hofer Trust	11248 S. Turner Avenue	Ontario			_	Return Receipt - Electronic, Certified Mail	04-17-2019
9314869904300058064850	2019-04-12 12:53 PM Sharon Guitar Ellis		P.O. Box 469	Valleyford	_	36 Delivered		Return Receipt - Electronic, Certified Mail	04-15-2019
9314869904300058064843			2801 S. 25th Street	Abilene	•	_		Return Receipt - Electronic, Certified Mail	04-16-2019
9314869904300058064836	2019-04-12 12:53 PM Sally Guitar	;	10 Woodhaven Circle	Abilene	TX 79605			Return Receipt - Electronic, Certified Mail	04-16-2019
9314869904300058064829	2019-04-12 12:53 PM Jeff Alexandef Magnum and First Financial Frust	at Trustees of the Cynthia knodes irust	P.U. Box 701	Abilene	1X 79604	1031	Return Receipt - E	Return Receipt - Electronic, Certified Mail	
9314869904300058064805	2019-04-12 12-53 PM IPH Holdings IP		4400 Arcady	Dallas			Return Receipt - E	Return Receipt - Electronic Certified Mail	
9314869904300058064799	2019-04-12 12:53 PM Santa Elena Minerals, LP		P.O. Box 2063	Midland	XT 79702			Return Receipt - Electronic, Certified Mail	04-29-2019
9314869904300058064782	2019-04-12 12:53 PM State of New Mexico, Dept of Transportation		P.O. Box 1148	Santa Fe	_			Return Receipt - Electronic, Certified Mail	04-16-2019
9314869904300058064775	2019-04-12 12:53 PM MRC Permian Company	One Lincoln Centre	5400 LBJ Freeway, Surte 1500	Dallas		40 Delivered		Return Receipt - Electronic, Certified Mail	04-15-2019
9314869904300058064751	2019-04-12 12:53 PM Chalcam Exploration, LLC		403 Tierra Berrenda	Roswell			_	Return Receipt - Electronic, Certified Mail	04-15-2019
9314869904300058064744	2019-04-12 12:53 PM Tierra Oil Company, LLC		P.O. Box 700968	San Antonio	78270 XT	_	_	Return Receipt - Electronic, Certified Mail	04-18-2019
9314869904300058064737	2019-04-12 12:53 PM NB! Properties, Inc.		P.O. Box 4470	Tulsa				Return Receipt - Electronic, Certified Mail	04-17-2019
9314869904300058064720	2019-04-12 12:53 PM. Chesapeake Exploration, L.L.C. 2019-04-12 12:53 PM. Omid Detroloum Corp.		P.O. Box 18496 115 W 1st Street	Oktahoma City Roswell	OK /3154	54 Delivered		Return Receipt - Electronic, Certified Mail Boturn Bocourt - Electronic Corrigad Mail	04-15-2019
9314869904300058064706	2019-04-12 12:53 PM Mewhourne Oil Company		P.O. Box 7698	Tyler				Return Receipt - Flectronic Certified Mail	04-16-2019
9314869904300058064690	2019-04-12 12:53 PM OXY USA WTP Limited Partnership		5 Greenway Płaza, Suite 110	Houston	, .	_		Return Receipt - Electronic, Certifled Mail	04-17-2019
9314869904300058064683	2019-04-12 12:53 PM Fasken Land & Minerals, Ltd.		6101 Holiday Hill Rd.	Midland	TX 79707	07 Delivered		Return Receipt - Electronic, Certified Mail	04-15-2019
21 4 9 5 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									

## URRENT-ARGUS

#### AFFIDAVIT OF PUBLICATION

Ad No. 0001283499

MODRALL SPERLING PO BOX 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:

04/18/19

Legal Clerk

Subscribed and sworn before me this 18th of April 2019.

State of WI, County of

Ad#:0001283499 PO:0001283499 # of Affidavits: 0.00 CASE No. 20470: Notice to all affected parties, as well as the heirs and devisees of JERI ALEXANDER MAGNUM AND FIRST FINANCIAL TRUST TRUSTEES OF THE CYNTHIA RHODES TRUST; SALLY GUITAR; MELISSA GRAY A/K/A MELISSA MCGEE; SHARON GUITAR ELIIS; PAUL B. HOFER, III AND JOHN M. HOFER, COTRUSTEES OF THE LAURA JEAN HOFER TRUST; MURCHISON-GUITAR FAMILY LP; BARBARA LEE BACKMAN, INC.; TRUCHAS PEAKS, LLC; GUITAR GALUSHA, LP; LESLI GUITAR NICHOLS; JOHN KELLY GUITAR; WOODS DICKENS RANCH, LP; KELLY WOODS LEACH; JACK G. WOODS, JR.; CAREN G. LUCAS A/K/A CAREN GALL LUCAS MACHELL; CAKI FAMILY LIMITED PARTNERSHIP; GUITAR LAND & CATTLE, LP; MARGARET ANN GUITAR AND JOHN ALEXANDER GUITAR, THE EARL B. GUITAR JR. BYPASS TRUST; JUDY GUITAR UHEY, LLC; CAREN GALL MACHELL, TRUSTEE OF THE CAREN GALL MACHELL, TRUSTER GALL MACHELL, TRUSTER GAL all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Sections 7 and 18, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Nemesis 7 WXY Fee 1H; Nemesis 7 WA Fee 3H; Nemesis 7 WXY Fee 5H; Nemesis 7 WA Fee 7H; Nemesis 7 WD Fee 4H; Nemesis 7 WD Fee 8H wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing aid wells, the allocation of these costs as well 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 2.5 miles Northwest of Loving, New Mexico.

CASE No. \_\_\_\_\_: Notice to all affected parties, as well as the heirs and devisees of JERI ALEXANDER MAGNUM AND FIRST FINANCIAL TRUST TRUSTEES OF THE CYNTHIA RHODES TRUST; SALLY GUITAR; MELISSA GRAY A/K/A MELISSA MCGEE; SHARON GUITAR ELLIS; PAUL B. HOFER, III AND JOHN M. HOFER, COTRUSTEES OF THE LAURA JEAN HOFER TRUST; MURCHISON-GUITAR FAMILY LP; BARBARA LEE BACKMAN, INC.; TRUCHAS PEAKS, LLC; GUITAR GALUSHA, LP; LESLI GUITAR NICHOLS; JOHN KELLY GUITAR; WOODS DICKENS RANCH, LP; KELLY WOODS LEACH; JACK G.

WOODS, JR.; CAREN G. LUCAS A/K/A CAREN GALL LUCAS MACHELL; CAKI FAMILY LIMITED PARTNERSHIP; GUITAR LAND & CATTLE, LP; MARGARET ANN GUITAR AND JOHN ALEXANDER GUITAR, THE EARL B. GUITAR JR. BYPASS TRUST; JUDY GUITAR UHEY, LLC; CAREN GALL MACHELL, TRUSTEE OF THE CAREN GALL MACHELL, TRUSTEE OF THE CAREN GALL MACHELL, TRUSTEE OF THE CAREN GALL MACHELL, EXEMPT TRUST; CROWNROCK MINERALS, LP; WILLIAM J. BEESING; ESTATE OF PEGGY LU BEESING VOREL C/O CHERYL M. BALLARD; DASHEA BEESING GELNAR; ESTATES OF PHYLLIS JEAN PEAL & ROGER C. PEAL C/O SALLY ANN CUNDIFF; LEWIS C. SAWYER LOVING TRUST; SANDRA M. SAWYER & THE ESTATE OF EDWARD A. SAWYER; ESTATE OF DELTA L. SAWYER C/O LEWIS C. SAWYER; ESTATE OF DUANE HOUSOUER A/K/A DOUGLAS DUANE HOUSOUER; DEVON ENERGY PRODUCTION COMPANY, L.P.; OXY USA WTP LIMITED PARTNERSHIP; STRYKER ENERGY, LLC; DICK JACKSON 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 June 6, 2019. This case has not yet been assigned a case number. In this case, 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 Sections 7 and 18, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit underlying the W/2 E/2 of Sections 7 and 18, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the Nemesis 7 SB Fee 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 c