Before the Oil Conservation Division Examiner Hearing October 31, 2019

Case No. 20822

Frizzle Fry 15 TB FC 14H; Frizzle Fry 15 SB FC 15H; Frizzle Fry 15 TB 17H; Frizzle Fry 15 SB FC 22H; Frizzle Fry 15 FB FC 30H; Frizzle Fry 15 FB FC 31H; Frizzle Fry 15 AV FC 26H; Frizzle Fry 15 AV FC 27H

Case No. 20823

Frizzle Fry 15 WA FC 11H; Frizzle Fry 15 WXY FC 18H



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

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

CASE NOS. 20822 & 20823 (FRIZZLE FRY)

<u>AFFIDAVIT</u>

STATE OF TEXAS)
) ss
COUNTY OF MIDLAND)

Travis Prewett, being duly sworn, deposes and states:

- 1. I am over the age of 18, I am a landman for Marathon Oil Permian LLC (OGRID Number 372098) and have personal knowledge of the matters stated herein. I have previously testified before the Oil Conservation Division ("Division") and my credentials as an expert petroleum landman were accepted by the Division as a matter of record.
- 2. My area of responsibility at Marathon includes the area of Lea County in New Mexico.
 - 3. I am familiar with the applications filed by Marathon in these cases.
 - 4. I am familiar with the status of the lands that are subject to these applications.
- 5. I submit the following information pursuant to NMAC 19.15.4.12.A(1) in support of the above referenced compulsory pooling applications.
- 6. The purpose of these applications is to force pool working interest owners into the horizontal spacing units described below, and in the wells to be drilled in the units.



- 7. No opposition is expected because the interest owners being pooled have been contacted regarding the proposed wells, but have failed or refused to voluntarily commit their interests in the wells.
- 8. Attached as Exhibit 1 is the application for Case No. 20822. In Case No. 20822, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 of Sections 15 and 22, Township 22 South, Range 32 East, N.M.P.M., Lea County, New Mexico. This proposed spacing unit will be dedicated to Frizzle Fry 15 TB FC 14H; Frizzle Fry 15 TB FC 17H; Frizzle Fry 15 FB FC 30H; Frizzle Fry 15 SB FC 15H; Frizzle Fry 15 FB FC 31H; Frizzle Fry 15 SB FC 22H; Frizzle Fry 15 AV FC 26H; Frizzle Fry 15 AV FC 27H wells, to be horizontally drilled.
 - 9. Marathon seeks to form a 640-acre, more or less, spacing unit.
- 10. The location of the **Frizzle Fry 15 SB FC 15H** well is less than 330' from the adjoining 40-acre tracts and the Division's rules allow for the inclusion of proximity tracts within the proposed spacing unit for the wells.
 - 11. The proposed first and last take points for each well are as follows:

Frizzle Fry 15 TB FC 14H: Proposed First Take Point 1650' from the East line of Section 15 and 100' from the North line of Section 15; Proposed Last Take Point 1650' from the East line of Section 22 and 100' from the South line of Section 22.

Frizzle Fry 15 TB FC 17H: Proposed First Take Point 330' from the East line of Section 15 and 100' from the North line of Section 15; Proposed Last Take Point 330' from the East Line of Section 22 and 100' from the South Line of Section 22.

Frizzle Fry 15 FB FC 30H: Proposed First Take Point 1980' from the East line of Section 15 and 100' from the North line of Section 15; Proposed Last Take Point 1980' from the East line of Section 22 and 100' from the South line of Section 22.

Frizzle Fry 15 SB FC 15H: Proposed First Take Point 1600' from the East line of Section 15 and 100' from the North line of Section 15; Proposed Last Take Point 1600' from the East line of Section 22 and 100' from the South line of Section 22.

Frizzle Fry 15 FB FC 31H: Proposed First Take Point 660' from the East line of Section 15 and 100' from the North line of Section 15; Proposed Last Take Point 660' from the East line of Section 22 and 100' from the South line of Section 22.

Frizzle Fry 15 SB FC 22H: Proposed First Take Point 330' from the East line of Section 15 and 100' from the North line of Section 15; Proposed Last Take Point 330' from the East line of Section 22 and 100' from the South line of Section 22.

Frizzle Fry 15 AV FC 26H: Proposed First Take Point 1980' from the East line of Section 15 and 100' from the North line of Section 15; Proposed Last Take Point 1980' from the East line of Section 22 and 100' from the South line of Section 22.

Frizzle Fry 15 AV FC 27H: Proposed First Take Point 660' from the East line of Section 15 and 100' from the North line of Section 15; Proposed Last Take Point 660' from the East line of Section 22 and 100' from the South line of Section 22.

- 12. The producing area for these wells will be orthodox and will comply with the Division's statewide horizontal well rules.
- 13. Attached as Exhibit 2 is the application for Case No. 20823. In Case No. 20823, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the E/2 of Sections 15 and 22, Township 22 South,

Range 32 East, N.M.P.M., Lea County, New Mexico. This spacing unit will be dedicated to Frizzle Fry 15 WA FC 11H and the Frizzle Fry 15 WXY FC 18H wells, to be horizontally drilled.

- 14. Marathon seeks to form a 640-acre, more or less, spacing unit.
- 15. The location of the **Frizzle Fry 15 WXY FC 18H** well is less than 330' from the adjoining 40-acre tracts and the Division's rules allow for the inclusion of proximity tracts within the proposed spacing unit for the wells.
 - 16. The proposed first and last take points for each well are as follows:

Frizzle Fry 15 WA FC 11H: Proposed First Take Point 2310' from the East line of Section 15 and 100' from the North line of Section 15; Proposed Last Take Point 2310' from the East line of Section 22 and 100' from the South line of Section 22.

Frizzle Fry 15 WXY FC 18H: Proposed First Take Point 1040' from the East line of Section 15 and 100' from the North line of Section 15; Proposed Last Take Point 1040' from the East line of Section 22 and 100' from the South line of Section 22.

- 17. The producing area for these wells will be orthodox and will comply with the Division's statewide horizontal well rules.
 - 18. There are no depth severances in the Bone Spring or Wolfcamp formations.
 - 19. Attached as **Exhibit 3** are the proposed C-102s for the wells.
- 20. The C-102s identify the proposed surface hole locations, first take point, and bottom hole locations. The C-102s also identify the pool and pool code.
- 21. For Case Number 20822, which is the application for the Bone Spring unit, the pool is the Red Tank/Bone Spring East, pool code 51683. The building block size for this pool is 40 acres.

- 22. For Case Number 20823, which is the application for the Wolfcamp unit, the pool is WC-025 G-09 S233216K, Upper Wolfcamp, pool code 98166. The building block size for this pool is 40 acres.
- 23. Lease tract maps outlining the units being pooled are attached hereto as **Exhibit 4.**The parties being pooled and the percent of their interests is also included as part of Exhibit 4.
- 24. Marathon seeks to pool overriding royalty interest owners, and they were provided notice of this hearing.
- 25. Marathon have conducted a diligent search of the public records in the county where the wells are located, and conducted phone directory and computer searches to locate contact information for parties entitled to notification, and mailed all parties well proposals, including an Authorization for Expenditure.
- 26. In my opinion, Marathon has made a good faith effort to obtain voluntary joinder of the working interest owners in the proposed wells.
 - 27. There were no unlocatable parties.
- 28. **Exhibit 5** is a copy of a representative proposal letters sent to the working interest owners,
- 29. The proposal letter identifies the proposed first and last take points and approximate TVD.
- 30. **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.
- 31. Marathon requests overhead and administrative rates of \$7500.00/month for drilling a well and \$750.00/month for a producing well. These rates are fair, and comparable to

the rates charged by other operators for wells of this type in this area of Southeastern, New Mexico.

Marathon requests that these rates be adjusted periodically as provided in the COPAS Accounting

Procedure.

- 32. Marathon requests the maximum cost plus 200% risk charge be assessed against non-consenting working interest owners.
 - 33. Marathon requests that it be designated operator of the wells.
- 34. 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.
- 35. **Exhibit 7** is an affidavit of notice prepared by counsel for Marathon that shows the parties who were notified of this hearing, the status of whether they received notice, and an affidavit of publication from the Hobbs-News Sun newspaper, showing that notice of this hearing was published on September 19, 2019.
- 36. The attachments to this affidavit were prepared by me, or compiled from company business records, or were prepared at my direction.
- 37. I attest that the information provided herein is correct and complete to the best of my knowledge and belief.
- 38. The granting of this application is in the interests of conservation and the prevention of waste.

[Signature page follows]

Jeans Frewett

SUBSCRIBED AND SWORN to before me this 30th day of October, 2019 by Travis Prewett on behalf of Marathon Oil Permian LLC.

Notary Public

My commission expires: 1/23/2023



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

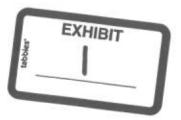
APPLICATION OF MARATHON OIL PERMIAN LLC FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 20822

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 E/2 of Sections 15 and 22, Township 22 South, Range 32 East, N.M.P.M., Lea County, New Mexico. In support of this application, Marathon states as follows:

- 1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
- 2. Marathon seeks to dedicate the E/2 of Sections 15 and 22, Township 22 South, Range 32 East, N.M.P.M., Lea County, New Mexico to form a 640-acre, more or less, spacing unit.
- 3. Marathon seeks to drill the the Frizzle Fry 15 TB FC 14H; Frizzle Fry 15 TB FC 17H; Frizzle Fry 15 FB FC 30H; Frizzle Fry 15 SB FC 15H; Frizzle Fry 15 FB FC 31H; 15 Frizzle Fry SB FC 22H; Frizzle Fry 15 AV FC 26H; Frizzle Fry AV FC 27H wells to a depth sufficient to test the Bone Spring formation. These wells will be horizontally drilled.



- 4. The location of the Frizzle Fry 15 SB FC 15H well is less than 330' from the adjoining 40-acre tracts and the Division's rules allow for the inclusion of proximity tracts within the proposed spacing unit for the wells.
 - 5. These wells will comply with the Division's setback requirements.
- 6. Marathon sought, but has been unable to obtain, a voluntary agreement from all interest owners in the Bone Spring formation underlying the proposed spacing unit to participate in the drilling of the wells or to otherwise commit their interests to the wells.
- 7. 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.
- 8. Marathon further requests that it be allowed one (1) year between the time the wells are drilled and completion of the first well under the order issued by the Division.

WHEREFORE, Marathon requests this application be set for hearing before an Examiner of the Oil Conservation Division on October 3, 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 E/2 of Sections 15 and 22, Township 22 South, Range 32 East, N.M.P.M., Lea County, New Mexico;
 - B. Designating Marathon as operator of this unit and the wells to be drilled thereon;
- C. Authorizing Marathon to recover its costs of drilling, equipping and completing the 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 completion of the first well under the order issued by the Division.

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

By: No. 200 M. Danier

Deana M. Bennett Lance D. Hough Post Office Box 2168

500 Fourth Street NW, Suite 1000

Albuquerque, New Mexico 87103-2168

Telephone: 505.848.1800

dmb@modrall.com ldh@modrall.com Attorneys for Applicant

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

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

CASE	NO.	20823	

APPLICATION

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

By: Wella H Bennett

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dmb@modrall.com ldh@modrall.com Attorneys for Applicant

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District.1V
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Phone: (505) 476-3460 Fax: (505) 476-3462

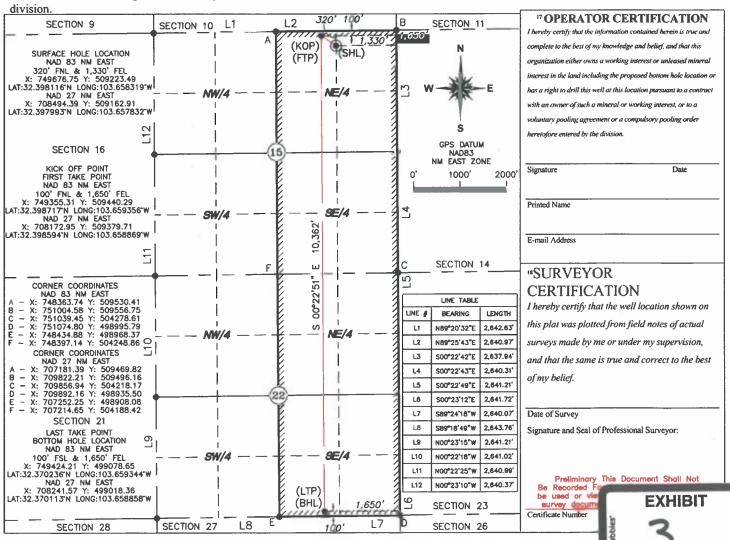
State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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

■ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Numbe	r		² Pool Cod 51683	- 1		³ Pool Na RED TANK; BO		
⁴ Property (Code				⁵ Property N FRIZZLE FRY 1			٠٠	Vell Number 14H
⁷ OGRID 37209		* Operator Name * Operator Name MARATHON OIL PERMIAN, LLC * Elevation TBD							
					" Surface I	Location			
UL or lot no.	Section 15	Township 22-S		Lot Idn	Feet from the 320'	North/South line NORTH	Feet from the 1,330'	East/West line EAST	County LEA
,	•		" Bo	ottom Ho	le Location If	Different Fron	Surface		
UL or lot no.	Section 22	Township Range Lot Idn Feet from the North/South line Feet from the 22-S 32-E 100' SOUTH 1,650' EAST					County LEA		
12 Dedicated Acres	¹³ Joint o	r Infill	14 Consolidation	Code 15 Oi	rder No.				



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District IV
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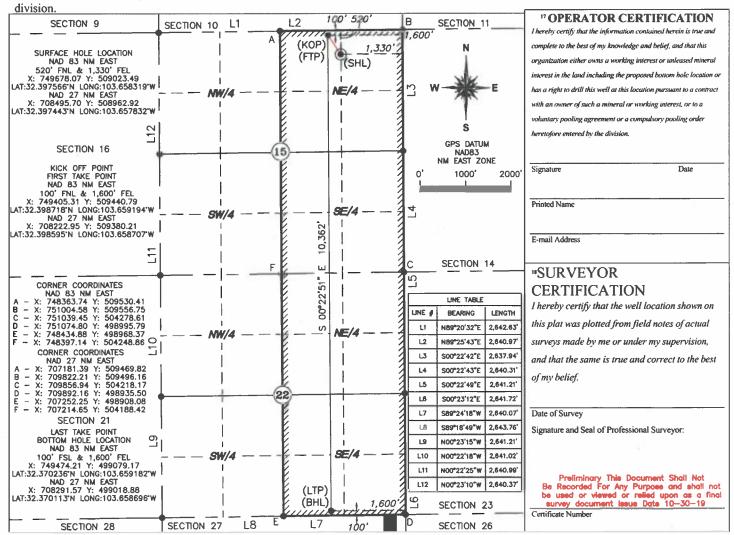
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WELL LOCATION AND ACREAGE DEDICATION PLAT

1,	API Numbe	r		² Pool Code 51683	e		³ Pool Nat RED TANK; BO		
⁴ Property (Code					Property Name * Well Number E FRY 15 SB FC 15H			
⁷ OGRID No. SOperator Name Page 19 Agrangian Superator Name MARATHON OIL PERMIAN, LLC TBD							Elevation TBD		
					" Surface I	ocation			-
UL or lot no. B	Section 15	Township 22-S	Range 32-E	Lot Idn	Feet from the 520'	North/South line NORTH	Feet from the 1,330'	East/West line EAST	County LEA
			" Bo	ttom Ho	le Location If	Different Fron	n Surface		
UL or lot no.	Section 22	Township 22-S	1 ° I	Lot Idn	Feet from the 100'	North/South line SOUTH	Feet from the 1,600'	East/West line EAST	County LEA
12 Dedicated Acres	13 Joint o	r Infill	¹⁴ Consolidation	Code 15 Or	rder No.		,		



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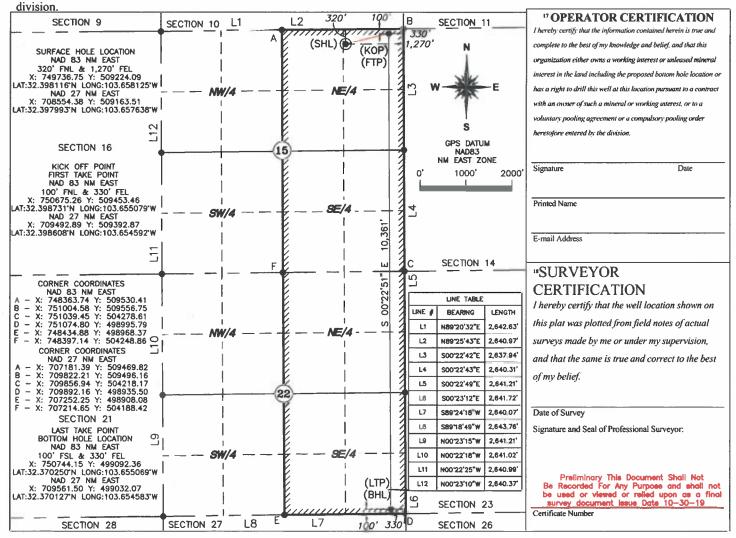
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WELL LOCATION AND ACREAGE DEDICATION PLAT

			*******			Erioe Debic				
''	API Number	r		² Pool Code 51683	e	³ Pool Name RED TANK; BONE SPRING				
⁴ Property (Code				S Property I FRIZZLE FRY			6 Well Number 17H		
⁷ OGRID ! 37209		* Operator Name ** Elevation MARATHON OIL PERMIAN, LLC TBD								
					" Surface I	Location				
UL or lot no. A	Section 15	Township 22-S	Range 32-E	Lot Idn	Feet from the 320'	North/South line NORTH	Feet from the 1,270'	East/West line EAST	County LEA	
			" Bo	ttom Ho	le Location If	Different Fron	n Surface			
UL or lot no.	Section	Township	Range	Lot 1dn	Feet from the	North/South line	Feet from the	East/West line	County	
Р	22 22-S 32-E 100' SOUTH 330'						EAST	LEA		
12 Dedicated Acres 640	13 Joint of	r Infill 14	Consolidation	Code 15 Oi	rder No.					



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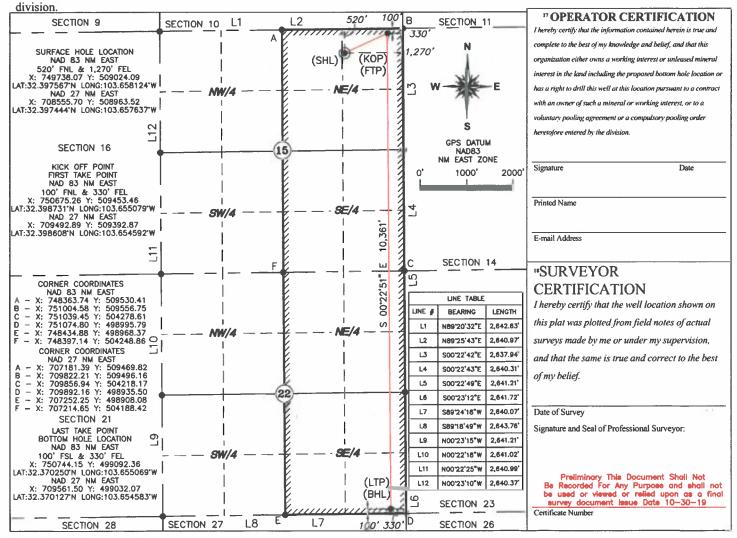
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WELL LOCATION AND ACREAGE DEDICATION PLAT

		VV	ELL LC	CATIO	V AND ACK	EAGE DEDIC	ATIONILA	1	
'	API Numbe	r		² Pool Code 51683			³ Pool Nan RED TANK; BON		
⁴ Property	Code		•	-	6,	6 Well Number 22H			
							⁹ Elevation TBD		
					" Surface I	ocation			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Α	15	22-\$	32-E		520'	NORTH	1,270'	EAST	LEA
·	•	·	" Bo	ttom Hol	e Location If	Different From	Surface		<u></u>
UL or lot no.	Section	Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line					County		
₽	22	22-S	32-E	32-E 100' SOUTH 330' EAST				LEA	
12 Dedicated Acre	s ¹³ Joint of	r Infill 14 Co	onsolidation	Code 15 Ore	der No.	,,,,	· · · · ·		_



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

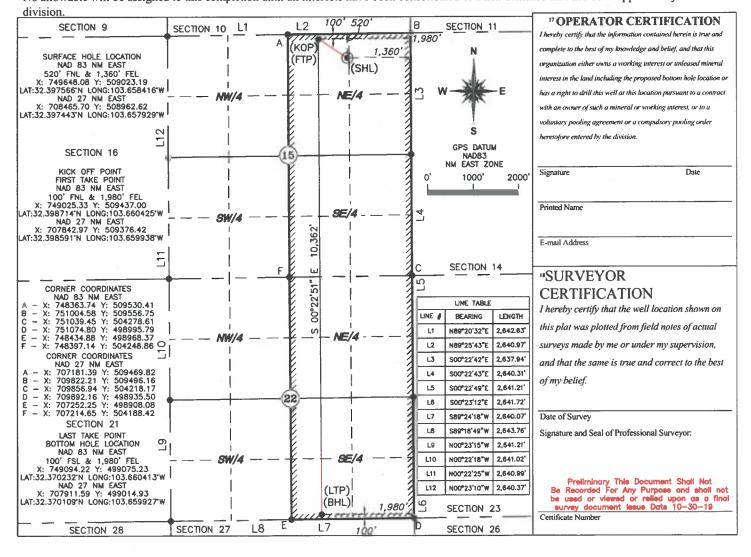
Santa Fe, NM 87505

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☐ AMENDED REPORT

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

			1			EAGE DEDICA				
' /	API Numbe	r		² Pool Code	:	,	³ Pool Name			
				51683		ł	RED TANK; BONI	E SPRING		
⁴ Property (Code	***	⁵ Property Name						6 Well Number	
						30H				
OGRID!	No.				* Operator No	ame	-	,	Elevation	
37209	372098 MARATHON OIL PERMIAN, LLC TBD									
-					" Surface L	ocation				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
В	15	22-S	32-E		520'	NORTH	1,360'	EAST	LEA	
			" Bo	ttom Hol	le 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	
O 22 22-S 32-E 100' SOUTH								EAST	LEA	
12 Dedicated Acres	13 Joint o	r Infill	nsolidation (Code 15 Or	der No.			•		
640	1									



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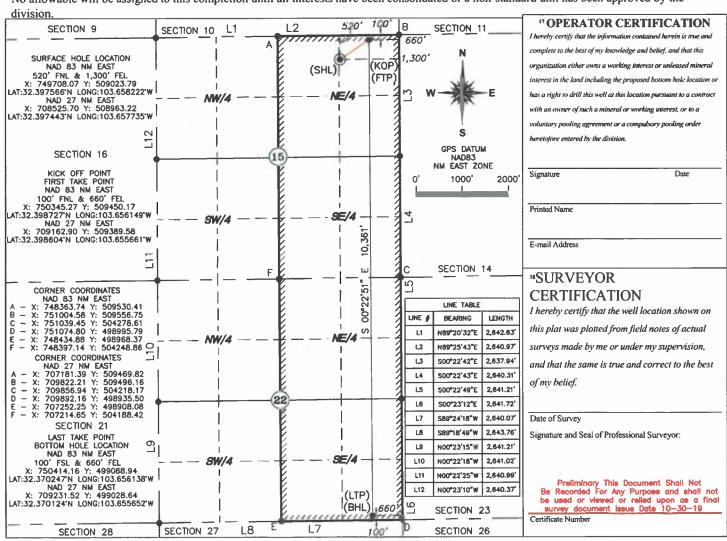
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State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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

☐ AMENDED REPORT

			WELL LO	<u>JCATIO</u>	N AND ACK	EAGE DEDIC	A HON PLA	1	
	API Numbe	r		² Pool Code 51683	:		³ Pool Nan RED TANK; BO		
⁴ Property	Code		.		⁵ Property FRIZZLE FRY			*\	Vell Number 31H
OGRID No. Operator Name Elevation 372098 MARATHON OIL PERMIAN, LLC TBD									
					" Surface I	Location			
UL or lot no. A	Section 15	Townshi 22-S	.	Lot Idn	Feet from the 520'	North/South line NORTH	Feet from the 1,300'	East/West line EAST	County LEA
	•		" Bo	ottom Ho	le Location If	Different Fron	n Surface		
UL or lot no. P	Section 22	Townshi	. .	Lot Idn	Feet from the 100'	North/South line SOUTH	Feet from the 660'	East/West line EAST	County LEA
12 Dedicated Acre	s ¹³ Joint o	r Infill	¹⁴ Consolidation	Code 15 Or	der No.				



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12 Dedicated Acres

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

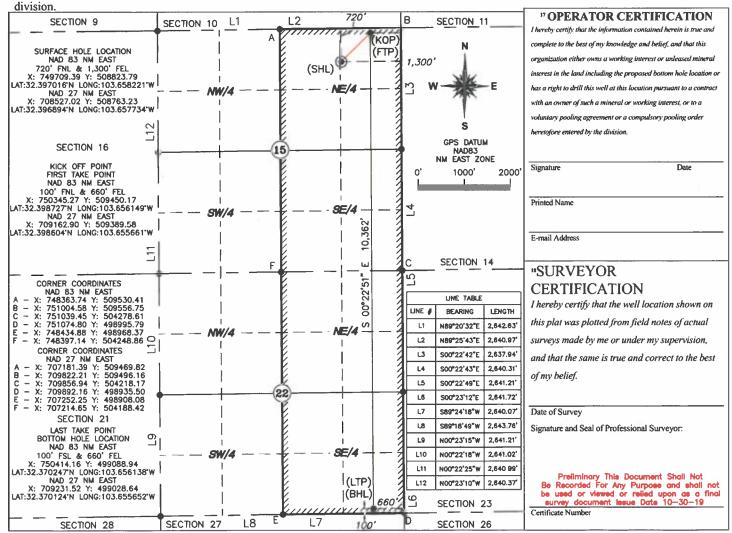
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Number	r		² Pool Code 51683	•		³ Pool Na RED TANK; BO		-	
⁴ Property	Code			⁵ Property Name FRIZZLE FRY 15 AV FC					⁶ Well Number 26H	
⁷ OGRID No. 8 Operator Name							*Elevation TBD			
					" Surface 1	Location		-		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
В	15	22-\$	32-E		720'	NORTH	1,300'	EAST	LEA	
			" 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	22	22-S	32-E		100'	SOUTH	660'	EAST	LEA	

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

¹⁵ Order No.



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

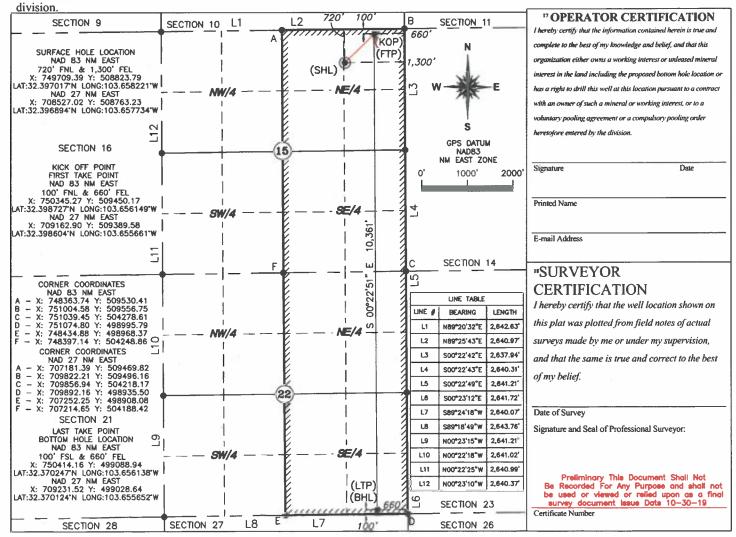
1220 S. St. Francis Dr., Santa Fc, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

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	ELL LU	CATIO	N AND ACK	EAGE DEDIC	A HON PLA	1	
1	API Number	r		² Pool Code 51683			³ Pool Nan RED TANK; BON		
⁴ Property (Code		<u> </u>		⁵ Property N FRIZZLE FRY 1			6	Well Number 27H
OGRID No. *Operator Name *Elevation 372098 MARATHON OIL PERMIAN, LLC TBD									
				·	" Surface L	ocation			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	15	22-\$	32-E		720'	NORTH	1,300'	EAST	LEA
	•		" 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	22	22-S	32-E		100'	SOUTH	660'	EAST	LEA
12 Dedicated Acres	Joint o	r Infill 14 C	onsolidation (Code 15 Or	der No.	· · · · · · · · · · · · · · · · · · ·			



District |

1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 <u>District II</u> 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

Phone: (505) 334-6178 Fax: (505) 334-6170 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

640

State of New Mexico

Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

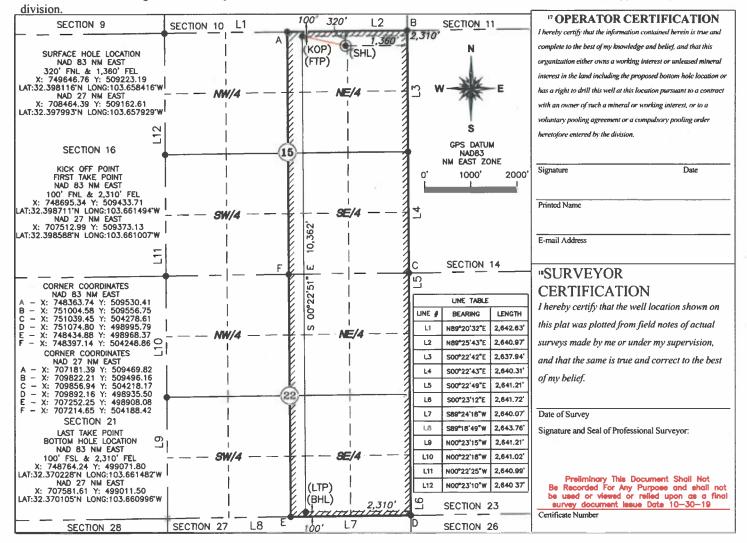
1220 South St. Francis Dr. Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Number	r		² Pool Code 98166		WC-025	³ Pool Nai G-09 S233216K;	me UPPER WOLFCAN	MP		
⁴ Property	Code				⁵ Property N FRIZZLE FRY 1			6,	Vell Number 11H		
OGRID No. Operator Name Elevation 372098 MARATHON OIL PERMIAN, LLC TBD											
		it.			" Surface I	Location					
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
В	15	22-S	32-E		320'	NORTH	1,360'	EAST	LEA		
	•		" Bo	ttom Hol	e Location If	Different From	Surface				
UL or lot no.	Section	Township	ownship Range Lot Idn Feet from the North/South line Feet from the East/West li					East/West line	County		
0	22	22-S	32-E		100'	SOUTH	2,310'	EAST LEA			
12 Dedicated Acre	s 13 Joint of	r Infill 4 C	onsolidation (Code 15 On	der No.			,			



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

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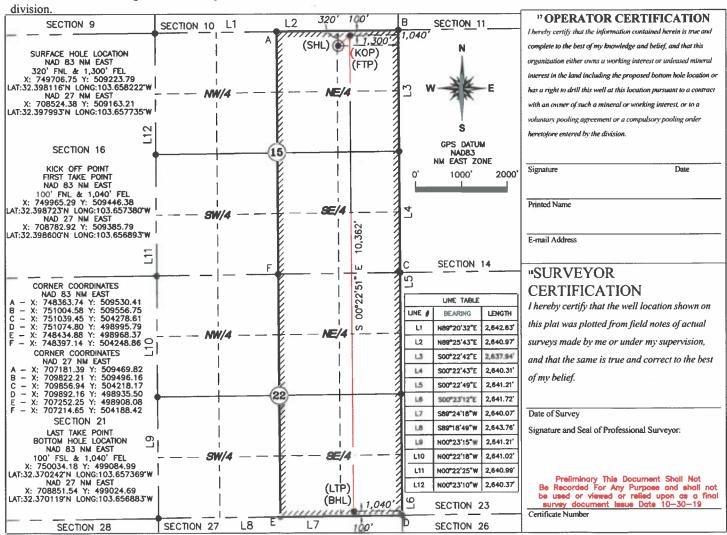
State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

			WELL DO	<i>J</i> C21110.	TTTT TICK	EATOL DEDIC			
'	API Numbe	r		² Pool Code	2		3 Pool Na		
				98166		WC-025	G-09 S233216K;	UPPER WOLFCAM	/IP
⁴ Property	Code		t		⁵ Property I FRIZZLE FRY 1			• 1	Vell Number 18H
7OGRID	No.	⁸ Operator Name ⁹ Elevat							Elevation
37209	72098 MARATHON OIL PERMIAN, LLC TBD							TBD	
/					" Surface l	Location			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Α	15	22-S	32-E		320'	NORTH	1,300'	EAST	LEA
			" 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
Р	22	22-S	32-E		100'	SOUTH	1,040'	EAST	LEA
12 Dedicated Acre	s ¹³ Joint o	r Infill	Consolidation	Code 15 Or	rder No.				
640	- 1								



Frizzle Fry East Half Development Plans, as proposed to each Working Interest Owner E/2 of Section 15 and the E/2 of Section 22, T22S-R32E, Lea County, New Mexico;

					Target	
Pad	Well Name	SHL	BHL	Proration Unit	TVD	Est. MD
		1360' FEL & 320' FNL	2310' FEL & 100' FSL of			
1	Frizzle Fry 15 WA FC 11H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	12,336'	22,986'
		1330' FEL & 320' FNL	1650' FEL & 100' FSL of			
1	Frizzle Fry 15 TB FC 14H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	11,996'	22,614'
	T.	1300' FEL & 320' FNL	1040' FEL & 100' FSL of			
1	Frizzle Fry 15 WXY FC 18H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	12,178'	22,795'
		1270' FEL & 320' FNL	330' FEL & 100' FSL of			
1	Frizzle Fry 15 TB FC 17H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	12,011'	22,662'
		1360' FEL & 520' FNL	1980' FEL & 100' FSL of			
2	Frizzle Fry 15 FB FC 30H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	10,084'	20,723'
		1330' FEL & 520' FNL	1600' FEL & 100' FSL of			
2	Frizzle Fry 15 SB FC 15H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	10,845'	21,468'
		1300' FEL & 520' FNL	660' FEL & 100' FSL of			
2	Frizzle Fry 15 FB FC 31H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	10,099'	20,740'
		1270' FEL & 520' FNL	330' FEL & 100' FSL of			
2	Frizzle Fry 15 SB FC 22H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	10,845	21,506'
		1330' FEL & 720' FNL	1980' FEL & 100' FSL of			
3	Frizzle Fry 15 AV FC 26H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	9,578'	20,231'
		1300' FEL & 720' FNL	660' FEL & 100' FSL of			
3	Frizzle Fry 15 AV FC 27H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	9,593'	20,247'



Lease Tract Map Frizzle Fry East Half

E/2 of Section 15 and the E/2 of Section 22, T22S-R32E, Lea County, New Mexico;

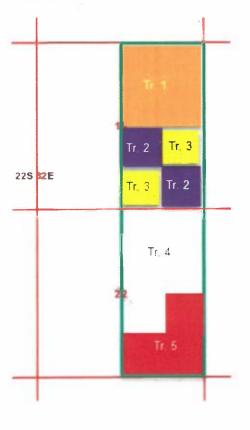
Tract 1: Federal Acreage: NMNM 027805

Tract 2: Federal Acreage: NMNM 027805

Tract 3: Federal Acreage: NMNM 027805

Tract 4: Federal Acreage: NMNM 081272

Tract 5: Federal Acreage: NMNM 081272







Summary of Interests

Frizzle Fry East Half E/2 of Section 22, T22S-R32E, Lea County, New Mexico;

Working Interest Owners	WI Decimal
Committed Interest	0.60884070
Marathon Oil Permian LLC	0.59712193
Andes Energy LLC	0.00390628
Read & Stevens, Inc.	0.00781250
Uncommitted Interest	0.39115930
Roden Participants, Ltd.	0.00150221
Roden Associates, Ltd.	0.00030044
MCM Energy Partners, LLC	0.00585938
Javelina Partners	0.00390624
Zorro Partners, Ltd.	0.00390624
HighPoint Operating Corporation	0.08593750
Warwick Energy Group	0.03125000
Francis Hill Hudson, Trustee of Lindy's Living Trust u/t/a date	d
July 8, 1994	0.00585938
WPX Energy	0.04290522
EOG Resources, Inc.	0.02223270
OXY USA Inc.	0.18750000
Unleased Interest	0.00000000
Total	1.00000000



Jeffrey Broussard Landman



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

August 20, 2019

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

7019 0700 0000 8791 1800

Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 6300 Ridglea Place, Suite 1005-A Fort Worth, TX 76116

Re:

Frizzle Fry 15 FC 11H, 14H, 15H, 17H, 18H, 22H, 26H, 27H, 30H & 31H Well Proposals E/2 of Sections 15 and 22, Township 22 South, Range 32 East Lea County, New Mexico

Dear Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002:

Marathon Oil Permian LLC ("Marathon") proposes the drilling of the following wells located in Sections 15 & 22, 22S-32E, Lea County, New Mexico, all to be drilled from three surface pad locations.

					Target	
Pad	Well Name	SHL	BHL	Proration Unit	TVD	Est. MD
		1360' FEL & 320' FNL	2310' FEL & 100' FSL of			
1	Frizzle Fry 15 WA FC 11H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	12,336'	22,986'
		1330' FEL & 320' FNL	1650' FEL & 100' FSL of			
1	Frizzle Fry 15 TB FC 14H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	11,996'	22,614'
		1300' FEL & 320' FNL	1040' FEL & 100' FSL of			
1	Frizzle Fry 15 WXY FC 18H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	12,178'	22,795'
		1270' FEL & 320' FNL	330' FEL & 100' FSL of			
1	Frizzle Fry 15 TB FC 17H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	12,011'	22,662'
		1360' FEL & 520' FNL	1980' FEL & 100' FSL of			
2	Frizzle Fry 15 FB FC 30H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	10,084'	20,723'
		1330' FEL & 520' FNL	1600' FEL & 100' FSL of			
2	Frizzle Fry 15 SB FC 15H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	10,845'	21,468'
		1300' FEL & 520' FNL	660' FEL & 100' FSL of			
2	Frizzle Fry 15 FB FC 31H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	10,099'	20,740'
		1270' FEL & 520' FNL	330' FEL & 100' FSL of			
2	Frizzle Fry 15 SB FC 22H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	10,845'	21,506'
		1330' FEL & 720' FNL	1980' FEL & 100' FSL of			
3	Frizzle Fry 15 AV FC 26H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	9,578'	20,231'
		1300' FEL & 720' FNL	660' FEL & 100' FSL of			
3	Frizzle Fry 15 AV FC 27H	of Sec. 15	Sec. 22	E/2 of Secs. 15 & 22	9,593'	20,247'

These proposed locations and target depths are subject to change depending on any surface or subsurface concerns encountered. The AFEs represent an estimate of the costs that will be incurred to drill and complete the wells, but those electing to participate in the wells are responsible for their proportionate share of the actual costs incurred.

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



- 100%/300%/300% non-consent penalty
- \$7,000/\$700 drilling and producing rates
- Contract area of the E/2 of Sections 15 & 22, 22S-32E, covering all depths

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

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

This term assignment offer terminates on September 20, 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

Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects to participate in the drilling, completing, and equipping of the Frizzle Fry 15 WA FC 11H. Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects NOT to participate in the drilling, completing, and equipping of the Frizzle Fry 15 WA FC 11H.
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects to participate in the drilling, completing, and equipping of the Frizzle Fry 15 TB FC 14H. Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects NOT to participate in the drilling, completing, and equipping of the Frizzle Fry 15 TB FC 14H.
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects to participate in the drilling, completing, and equipping of the Frizzle Fry 15 SB FC 15H. Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects NOT to participate in the drilling, completing, and equipping of the Frizzle Fry 15 SB FC 15H.
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects to participate in the drilling, completing, and equipping of the Frizzle Fry 15 TB FC 17H. Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects NOT to participate in the drilling, completing, and equipping of the Frizzle Fry 15 TB FC 17H.

Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects to participate in the drilling, completing, and equipping of the Frizzle Fry 15 WXY FC 18H.
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002
elects NOT to participate in the drilling, completing, and equipping of the Frizzle Fry 15 WXY FC 18H.
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects to participate in the drilling, completing, and equipping of the Frizzle Fry 15 SB FC 22H
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects NOT to participate in the drilling, completing, and equipping of the Frizzle Fry 15 SB FC 22H.
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002
elects to participate in the drilling, completing, and equipping of the Frizzle Fry 15 AV FC 26H.
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects NOT to participate in the drilling, completing, and equipping of the Frizzle Fry 15 AV FC 26H.
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects to participate in the drilling, completing, and equipping of the Frizzle Fry 15 AV FC 27H.
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002
elects NOT to participate in the drilling, completing, and equipping of the Frizzle Fry 15 AV FC 27H.
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects to participate in the drilling, completing, and equipping of the Frizzle Fry 15 FB FC 30H
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects NOT to participate in the drilling, completing, and equipping of the Frizzle Fry 15 FB FC 30H.
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects to participate in the drilling, completing, and equipping of the Frizzle Fry 15 FB FC 31H.
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002 elects NOT to participate in the drilling, completing, and equipping of the Frizzle Fry 15 FB FC 31H.
Delmar Hudson Lewis, Trustee of the Delmar Hudson Living Trust u/t/a dated September 9, 2002
By:
Print Name:
Title:
Date:

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

DATE 7/30/2019
DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD
COMPLETION PREPARED BY JOSH SHANNON

		TIES PREPARED BY RICK LINDSAY
	ARTIFICAL	LIFT PREPARED BY RICK LINDSAY
Asset Team	PERMIAN	
Field	Red Tank; Bone Spi FORMATION: Avalon WILDCAT	EXPLORATION
Lease/Facility	Frizzie Fry 15 AV FC 26H DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY X EXPLOITATION	WORKOVER
Prospect	RANGER	
Est Total Depth	20,231 Est Drilling Days Es	t Completion Days 11
LOCATION COST	INTANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	100,500
7001250	Land Broker Fees and Services	67,500
	TOTAL LOCATION COST - INTANGIBLE	168,000
DRILLING COST -	TANGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	41,000
7012050	Intermediate Casing 1	133,000
7012050	Intermediate Casing 2	227,000
7012050	Production Casing	144,000
7012050		55,000
	Drig Liner Hanger, Tieback Eq & Csg Accessories	
7012550	Drilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	707,000
DRILLING COST -	INTANGIBLE	
7019200	Drilling Rig Mob/Demob	65,000
7019220	Drilling Rig - day work/footage	735,750
7019040	Directional Orilling Services	240,000
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	80,000
7019140	Mud Fluids & Services	70,500
7012310	Solids Control equipment	48,000
7012020	Bits	72,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	84,000
7019140	Fuel (Mud)	30,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	23,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110		15,000
	Casing inspection/cleaning	10,000
7019110	Orill pipe/collar inspection services	
7016180	Freight - truck	25,000
7001460 7001160	Water hauling and disposal (includes soll farming)	80,000
7001160	Contract Services - Disposal/Non-Hazardous Waste	10,000
	Vacuum Trucks	
7000030	Contract Labor - general	30,000
7000030	Contract Labor - Operations	3,000
7001200	Contract Services - Facilities	10,000
7019300	Well Services - Well Control Services	23,625
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	109,000
7018150	Rig Equipment and Misc.	13,625
7001110	Telecommunications Services	5,000
7001120	Consulting Services	128,075
7001400	Safety and Environmental	43,600
7018120	Rental Buildings (trailers)	21,800
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	203,558
	TOTAL DRILLING - INTANGIBLE	\$2,404,533
	TOTAL DRILLING COST	\$3,111,533
COMPLETION - T	ANGIBLE	
7012580	Tubing	-
7012040	Tubing Accessories (nipple, wireline entry)	
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	
	TOTAL COMPLETION - TANGIBLE	\$15,000

MARATHON OIL PER	PENDITURE	DATE 7/30/2019
DETAIL OF ESTIMATI		
Asset Team Field	PERMIAN Red Tank; Bone Spi FORMATION: Avalon	
Lease/Facility	Frizzie Fry 15 AV FC 26H	
************	TANCING CO.	
COMPLETION - IN		
GL CODE 7001270	DESCRIPTION	ESTIMATED COST 10,000
7019220	Location and Access (dress location after rig move, set anchors) Drilling Rig During Completion	10,000
7019140	Mud Fluids & Services	19
7019030	Coiled Tubing Services (3 runs)	350,000
7019240 7019270	Snubbing Services Pulling/Swab Units	
7016350	Fuel (from drig)	100
7019010	Casing Crew and Services	(+)
7019020 7019086	Cement and Cementing Services Well Testing Services (flow hand & equip)	470,000
7019320	Fracturing Services	3,452,600
7019330	Perforating	300,000
7019360	Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids) Freight - Truck (haul pipe; drig & compl)	358,000 20,000
7018150	BOP Rental & Testing	
7018150	Rental Tools and Equipment (incl drig; lightplant,hydra-walk)	12
7018150 7000030	CT Downhole Rental Equipment (ie. Bit, BHA) Contract Labor - general	60,000
7001110	Telecommunications Services	100,000
7001400	Safety and Environmental	<u> </u>
7001120	Consulting Services	100,000
7018150 7019300	Zipper Manifold Frack Stack Rentals	220,000 85,000
7016190	Freight (Transportation Services)	
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	100,000
7018120 7000030	Rental Buildings (trailers) Contract Labor - Pumping (pump-down pumps)	35,000 60,000
7011010	8% Contingency & Taxes	407,400
		66 143 000
	TOTAL COMPLETION - INTANGIBLE	\$6,143,000
	TOTAL COMPLETION COST	\$6,158,000
SURFACE EQUIPM	IENT - TANGIBLE	
7012350	Misc. Piping, Fittings & Valves	17,120
7006640	Company Labor & Burden	
7000030 7001110	Contract Labor - General Telecommunication equip (Telemetry)	62,878
7012410	Line Pipe & Accessories	19
7012270	Miscellaneous Materials (containment system)	35,847
7008060 7016180	SCADA Freight - truck	
7001190	Contract Engineering	7,264
7012290	Metering and Instrumentation	5,823
7012290	IBE Materials	105,326
7012200 7012200	Gas Treating Dehydration	· ·
7012010	Compressor	(4)
7012350	Pawat	- +
7012610	Vapor Recovery Unit Separator & other pressure vessels	336,771
7012500	Tanks	235,346
7012100	Heater Treater	
7012640	Flare & Accessories	23,293
7000010 7000010	Electrical Labor Mechanical Labor	10,462
7012480	Rod Pumping unit & Pad	+
7012180	Pumping Unit Engine	
7012350	Electrical Power (electrical cooperative construction costs)	
	YOTAL SURFACE EQUIPMENT - TANGIBLE	\$840,149
	TOTAL SURFACE EQUIPMENT COST	\$ 840,149
ARTIFICIAL LIFT		
7006640	Company Labor	45,000
7012180	Gas Lift Equipment	15,000
7012480 7012140	Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP)	6,250
7019350	Well Services Well/Wellhead Services	6,000
7012270	Materials & Supplies-Tangible	6,000
7012550 7012390	Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip	5,000 6,250
7011010	8% Contingency & Taxes	3,000
		110,000
	TOTAL ARTIFICIAL LIFT	110,000
	TOTAL ARTIFICIAL LIFT COST	\$ 110,000
	SUMMARY OF ESTIMATED DRILLING WELL COSTS	TOTAL COST
	TOTAL LOCATION COST	\$ 168,000
	TOTAL DRILLING COST	\$ 3,111,533
	TOTAL COMPLETIONS COST	\$ 6,158,000
	TOTAL SURFACE EQUIPMENT COST	\$ 840,149
	TOTAL ARTIFICIAL LIFT COST	\$ 110,000
	GRAND TOTAL COST	\$10,387,682

	TOTAL ARTIFICIAL LIFT COST				
	GRAND TOTAL COST				
Name of	Participant's Approval				
Signature:					
Title:		Date:			

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

DATE	7/30/2019
DRILLING & LOCATION PREPARED BY	MATTHEW RUGAARD
COMPLETION PREPARED BY	JOSH SHANNON
FACILITIES PREPARED BY	RICK LINDSAY
ARTIFICIAL LIFT PREPARED BY	RICK LINDSAY

		FACILITIES PREPARED 8	Y RICK LINDSAY
		ARTIFICIAL LIFT PREPARED 8	
Asset Team	PERMIAN		
Field	Red Tank; Bone Sps FORMATION: Avalon	WILDCAT	EXPLORATION
Lease/Facility	Frizzie Fry 15 AV FC 27H	DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY	X EXPLOITATION	WORKOVER
Prospect	RANGER	_	
Est Total Depth	20,247 Est Drilling Days	Est Completion Day	rs <u>11</u>
LOCATION COST -	INTANGIBLE		
GL CODE	DESCRIPTION		ESTIMATED COST
7001270	Location and Access		100,500
7001250	Land Broker Fees and Services		67,500
	TOTAL LOCATION COST - INTANGIBLE		168,000
DRILLING COST - T	ANGIBLE		
7012050	Conductor Pipe		28,000
7012050	Surface Casing		41,000
7012050	Intermediate Casing 1		133,000
7012050	Intermediate Casing 2		227,000
7012050	Production Casing		144,000
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		\$,000
	The state of the s		
	TOTAL DRILLING - TANGIBLE		707,000
DRULING COCT. II	UTA NICIOLE		
DRILLING COST - IN	FIANGIBLE		
7010000	D-101 DI- AA-1 (D		65,000
7019200 7019220	Orilling Rig Mob/Demob Orilling Rig - day work/footage		735,750
7019040	Oirectional Orilling Services		240,000
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	80,000
7019140	Mud Fluids & Services	rioducaon	70,500
7012310	Solids Control equipment		48,000
7012020	Bits		72,000
7019010	Casing Crew and Services		30,000
7016350	Fuel (Rig)		84,000
7019140	Fuel (Mud)		30,000
7001460	Water (non potable)		25,000
7012350	Water (potable)		5,000
7019000	Well Logging Services		-
7019150	Mud Logging+geosteering		23,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)		15,000
7019110	Casing Inspection/cleaning		15,000
7019110	Drill pipe/collar inspection services		10,000
7016180	Freight - truck		25,000
7001460	Water hauling and disposal (includes soil farming)		60,000
7001160	Contract Services - Disposal/Non-Hazardous Waste		80,000
7001440	Vacuum Trucks		10,000
7000030	Contract Labor - general		30,000
7000030	Contract Labor - Operations		3,000
7001200	Contract Services - Facilities		10,000
7019300	Well Services - Well Control Services		23,625
7019350	Well Services - Well/Wellhead Services		10,000
7018150	Rental Tools and Equipment (surface rentals)		109,000
7018150	Rig Equipment and Misc.		13,625
7001110	Telecommunications Services		5,000
7001120	Consulting Services Safety and Environmental		128,075
7018120 7019310	Rental Buildings (trailers)		21,800
	Coring (sidewalls & analysis)		203,558
7011010	7% Contingency & Taxes		203,336
	TOTAL DRILLING - INTANGIBLE		\$2,404,533
	TOTAL DRILLING - INTANGIBLE		32,404,333
	TOTAL DRILLING COST		\$3,111,533
COMPLETION - TAI	NGIRIE		
CONFECTION - IA	TOIGHT		
7012580	Tubing		
7012040	Tubing Accessories (nipple, wireline entry)	 -	
7012550	Wellhead Equip		15,000
7012560	Packers - Completion Equipment		
	TOTAL COMPLETION - TANGIBLE		\$15,000

\$6,143,000

\$

840,149

TOTAL COST

MARATHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS PERMIAN Asset Team Red Tank; Bone Spi Frizzle Fry 15 AV FC 27H Lease/Facility COMPLETION - INTANGIBLE GL CODE 7001270 Orilling Rig During Completion Mud Fluids & Services 7019220 7019140 Coiled Tubing Services (3 runs) 7019030 7019240 Snubbing Services Pulling/Swab Units 7019270 7016350 Fuel (from drlg) 7019010 7019020 Casing Crew and Services
Cement and Cementing Services 7019080 Well Testing Services (flow hand & equip) 7019320 Fracturing Services 7019330 Perforating 7019360 Wireline Services 7001460 Water Hauling & Disposal (frac fluids) 7016180 Freight - Truck (haul pipe; drig & compl) 7018150 7018150 7018150 CY Downhole Rental Equipment (ie. Bit, BHA) Contract Labor - general Telecommunications Services 7001110 7001400 Safety and Environmental Consulting Services Zipper Manifold 7018150 7019300 Frack Stack Rentals 7016190 7018150 Rental Buildings (trallers)

Contract Labor - Pumping (pump-down pumps)

8% Contingency & Taxes 7018120 7000030 7011010 TOTAL COMPLETION - INTANGIBLE

ESTIMATED COST DESCRIPTION Location and Access (dress location after rig move, set anchors) 10,000 350,000 470,000 3,452,600 300,000 15,000 358,000 20,000 BOP Rental & Testing
Rental Tools and Equipment (incl drig; lightplant,hydra-walk) 60,000 100,000 100,000 85,000 Freight (Transportation Services)
Equipment Rental (w/o operator, frac tanks, lightplants) 100,000 35,000 60,000

TOTAL COMPLETION COST \$6,158,000

SURFACE EQUIPMENT - TANGIBLE

7012350	Misc. Piping, Fittings & Valves	17,120
7006640	Company Labor & Burden	
7000030	Contract Labor - General	62,878
7001110	Telecommunication equip (Telemetry)	
7012410	Line Pipe & Accessories	
7012270	Miscellaneous Materials (containment system)	35,847
7008060	SCADA	
7016180	Freight - truck	
7001190	Contract Engineering	7,264
7012290	Metering and instrumentation	5,823
7012290	I&E Materials	105,326
7012200	Gas Treating	
7012200	Dehydration	
7012010	Compressor	
7012350	Power	
7012610	Vapor Recovery Unit	
7012440	Separator & other pressure vessels	336,771
7012500	Tanks	235,346
7012100	Heater Treater	
7012640	Flare & Accessories	23,293
7000010	Electrical Labor	10,482
7000010	Mechanical Labor	
7012480	Rod Pumping unit & Pad	
7012180	Pumping Unit Engine	
7012350	Electrical Power (electrical cooperative construction costs)	
	TOTAL SURFACE EQUIPMENT - TANGIBLE	\$840,149

ARTIFICIAL LIFT 7006640 Company Labor Gas Lift Equipment 45,000 15,000 6,250 7012180 Rod Pumping, Sucker Rods & Rod Pump 7012480 7012140 7019350 Elect Sub Pumps (ESP)
Well Services-Well/Wellhead Services 17,500 6,000 7012270 Materials & Supplies-Tangible 7012550 Surface Wellhead Equipment
Pig Launchers/Receivers & Rel Equip 5,000 7012390 7011010 8% Contingency & Taxes 3,000

TOTAL ARTIFICIAL LIFT COST \$ 110,000

SUMMARY OF ESTIMATED DRILLING WELL COSTS

 TOTAL LOCATION COST
 \$ 168,000

 TOTAL DRILLING COST
 \$ 3,111,533

 TOTAL COMPLETIONS COST
 \$ 6,158,000

 TOTAL SURFACE EQUIPMENT COST
 \$ 840,149

 TOTAL ARTIFICIAL LIFT COST
 \$ 10,000

 GRAND TOTAL COST
 \$10,387,682

Participant's Approval

Title:

TOTAL SURFACE EQUIPMENT COST

Company:	 	
Signature:	 	

DATE	7/30/2019
DRILLING & LOCATION PREPARED BY	MATTHEW RUGAARD
COMPLETION PREPARED BY	JOSH SHANNON
FACILITIES PREPARED BY	RICK LINDSAY
ARTIFICIAL LIFT PREPARED BY	RICK LINDSAY

				ARTIFICIAL LIFT PREPA	RED BY RICK LINDSAY
Asset Team	PERMIAN				
Field	Red Tank; Sone Spi	FORMATION: 3RD BONES	PRINGS	WILDCAT	EXPLORATION
Lease/Facility	Fritzle Fry 15 TB FC 14H			DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY			X EXPLOITATION	WORKOVER
Prospect	RANGER				
Est Total Depth	22 614	Est Drilling Days		Est Completio	on Days 11
LOCATION COST	- INTANGIBLE				
		000001071041			7070AA700 COCT
GL CODE		DESCRIPTION			ESTIMATED COST
7001270	Location and Access				50,250
7001250	Land Broker Fees and Servi	ces			33,750
	TOTAL LOCATION COST - INTANGIE	BLE			84,000
DRILLING COST -	TANGIBLE				
DRIEGING COST -	TANGIBLE				
7012050					28,000
	Conductor Pipe				41,000
7012050	Surface Casing				
7012050	intermediate Casing 1				133,000
7012050	Intermediate Casing 2				280,000
7012050	Production Casing				144,000
7012050	Drig Liner Hanger, Tleback	Eq & Csg Accessories			55,000
7012550	Drilling Wellhead Equipme	nt			50,000
7012040	Casing & Tubing Access				24,000
7012270	Miscellaneous MRO Mater	lais			5,000
	TOTAL ORILLING - TANGIBLE				760,000
	TOTAL DIRECTIO - TRIBUILLE				
DRILLING COST -	INTANGIBLE				
7019200	Drilling Rig Mob/Demob				32,500
7019220	Drilling Rig - day work/foot				853,875
7019040	Directional Drilling Service:				290,000
7019020	Cement and Cementing Ser	rvice	Surface		15,000
7019020	Cement and Cementing Ser	rvke	Intermed	Sate 1	25,000
7019020	Cement and Cementing Ser	rvice	Intermed	Sate 2	40,000
7019020	Cement and Cementing Ser	rvice	Production	on	80,000
7019140	Mud Fluids & Services				75,500
7012310	Solids Control equipment				57,000
7012020	Bits				72,000
7019010	Casing Crew and Services				30,000
7016350	Fuel (Rig)				97,000
					30,000
7019140	Fuel (Mud)				25,000
7001460	Water (non potable)				
7012350	Water (potable)				
7019000	Well Logging Services				
7019150	Mud Logging+geosteering				28,000
7019250		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 disposa				60,000
7001160	Contract Services - Disposa	I/Non-Hazardous Waste			80,000
7001440	Vacuum Trucks				10,000
7000030	Contract Labor - general				
7000030	Contract Labor - Operation	\$			3,000
7001200	Contract Services - Facilitie				10,000
7019300	Well Services - Well Contro				25,813
7019350	Well Services - Well/Wellho				10,000
7018150	Rental Tools and Equipmen				126,500
7018150	Rig Equipment and Misc.	- (January			15,813
	Telecommunications Service				5,000
7001110					148,638
7001120	Consulting Services	· · · · · · · · · · · · · · · · · · ·			50,600
7001400	Safety and Environmental				25,300
7018120	Rental Buildings (trailers)				25,300
7019310	Coring (sidewalls & analysi	s)			222,708
7011010	7% Contingency & Taxes	<u> </u>			
	TOTAL DRILLING - INTANGIBLE				\$2,644,245
-	TOTAL DRILLING COST				\$3,404,245
COMPLETION - 1	rangible				
7012580	Tubing				
7012040	Tubing Accessories (nipple	, wireline entry)			
7012550	Wellhead Equip				15,000
7012560	Packers - Completion Equip	ement			
	TOTAL COMPLETION - TANGIBLE				\$15,000
	I O I AL COMPLETION - I ANGISTE				

Asset Team Field

PERMIAN Red Tank; Bone Spi

field	Red Tank; Bone Spi FORMATION: 3RD BONE SPRINGS	
Lease/Facility	Frizzie Fry 15 TB FC 14H	
COMPLETION - INTA	NGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	10,000
7019220	Drilling Rig During Completion	
7019140 7019030	Mud Fluids & Services Colled Tubing Services (3 runs)	350,000
7019240	Snubbing Services	
7019270	Pulling/Swab Units	141
7016350	Fuel (from drig)	- 1
7019010 7019020	Casing Crew and Services Cement and Cementing Services	-
7019080	Well Testing Services (flow hand & equip)	470,000
7019320	Fracturing Services	3,452,600
7019330 7019360	Perforating Wireline Services	300,000 15,000
7001460	Water Hauling & Disposal (frac fluids)	412,000
7016180	Freight - Truck (haul pipe; drig & compl)	20,000
7018150	BOP Rental & Testing	
7018150 7018150	Rental Tools and Equipment (Incl drig; lightplant, hydra-walk) CT Downhole Rental Equipment (ie. Bit, BHA)	-
7000030	Contract Labor - general	60,000
7001110	Telecommunications Services	100,000
7001400 7001120	Safety and Environmental Consulting Services	100,000
7018150	Zipper Manifold	220,000
7019300	Frack Stack Rentals	85,000
7016190	Freight (Transportation Services)	100,000
7018150 7018120	Equipment Rental (w/o operator, frac tanks, lightplants) Rental Buildings (trailers)	35,000
7000030	Contract Labor - Pumping (pump-down pumps)	60,000
7011010	8% Contingency & Taxes	407,400
	TOTAL COMPLETION - INTANGIBLE	\$6,197,000
	TOTAL COMPLETION COST	\$6,212,000
SURFACE EQUIPMEN	NT - TANGIBLE	
7012350	Misc. Piping, Fittings & Valves	17,120
7006640	Company Labor & Burden	62,878
7000030	Contract Labor - General Telecommunication equip (Telemetry)	<u> 62,878</u>
7012410	Line Pipe & Accessories	191
7012270	Miscellaneous Materials (containment system)	35,847
7008060	SCADA	· ·
7016180	Freight - truck Contract Engineering	7,264
7012290	Metering and instrumentation	5,823
7012290	I&E Materials	105,326
7012200	Gas Treating	-
7012200 7012010	Dehydration Com essor	- 1
7012350	Power	7.2
7012610	Vapor Recovery Unit	226 721
7012440 7012500	Separator & other pressure vessels Tanks	336,771 235,346
7012100	Heater Treater	-
7012640	Flare & Accessories	23,293
7000010	Electrical Labor	10,482
7000010 7012480	Mechanical Labor Rod Pumping unit & Pad	14
7012180	Pumping Unit Engine	(3)
7012350	Electrical Power (electrical cooperative construction costs)	-
	TOTAL SURFACE EQUIPMENT - TANGIBLE	\$840,149
	TOTAL SURFACE EQUIPMENT COST	\$ 840,149
ARTIFICIAL LIFT	· · · · · · · · · · · · · · · · · · ·	
7006640	Company Labor	45,000
7012180	Gas Lift Equipment	15,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	6,250
7012140	Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services	17,500 6,000
7019350 7012270	Well Services-Well/Wellhead Services Materials & Supplies-Tangible	6,000
7012550	Surface Wellhead Equipment	5,000
7012390	Pig Launchers/Receivers & Rel Equip	6,250
7011010	8% Contingency & Taxes	3,000
	TOTAL ARTIFICIAL LIFT	110,000
	TOTAL ARTIFICIAL LIFT COST	\$ 110,000
	SUMMARY OF ESTIMATED DRILLING WELL COSTS	TOTAL COST
	TOTAL LOCATION COST	
	TOTAL LOCATION COST TOTAL DRILLING COST	\$ 84,000 \$ 3,404,245
	TOTAL DRILLING COST TOTAL COMPLETIONS COST	\$ 6,212,000
	TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST	\$ 840,149
	TOTAL ARTIFICIAL LIFT COST	\$ 110,000
	GRAND TOTAL COST	\$10,650,394
	GRAND TOTAL COST	310,030,334
	Participant's Approval	
Nar	me of	
Com	pany:	
Sinns	ature:	
Signa	ature;	

DATE	7/30/2019
DRILLING & LOCATION PREPARED BY	MATTHEW RUGAARD
COMPLETION PREPARED BY	JOSH SKANNON
FACILITIES PREPARED BY	RICK LINDSAY
ARTIFICIAL LIFT PREPARED BY	RICK LINDSAY

				ANTICICAL LIET AREA AREA BY	
				ARTIFICIAL UFT PREPARED BY	RICK UNUSAT
Asset Team	PERMIAN				
Field		ATION: 2ND BONE	PRINGS	WILDCAT	EXPLORATION
Lease/Facility	Frizzle Fry 15 S8 FC 15H	X110.11. 2110 00.11C		DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY		•	X EXPLOITATION	WORKOVER
Prospect	RANGER				• • • • • • • • • • • • • • • • • • • •
riospeci	TOTAL		•		
Est Total Depth	21,468	Est Drilling Days		Est Completion Days	11
Est roun beptin					
LOCATION COST	INTANGIRIE				
COLATION COST	THE PROPERTY OF THE PROPERTY O				
GL CODE		DESCRIPTION			ESTIMATED COST
7001270	Location and Access				50,250
7001250	Land Broker Fees and Services				33,750
7,001230					
	TOTAL LOCATION COST - INTANGIBLE				84,000
	TOTAL LOCATION COST - INTANDREC				
DRILLING COST -	ANGIRLE				
DRILLING COST .	ANGIBLE				
7012050	Conductor Pipe				28,000
7012050	Surface Casing				41,000
7012050	Intermediate Casing 1				133,000
7012050	Intermediate Casing 2				227,000
7012050	Production Casing				144,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Acces	sories			\$5,000
7012550	Drilling Wellhead Equipment				50,000
7012040	Casing & Tubing Access				24,000
7012270	Miscellaneous MRO Materials				5,000
	TOTAL DRILLING - TANGIBLE				707,000
DRILLING COST -	NTANGIBLE				
7019200	Drilling Rig Mob/Demob				32,500
7019220	Drilling Rig - day work/footage				718,875
7019040	Directional Drilling Services				240,000
7019020	Cement and Cementing Service		Surface		15,000
7019020	Cement and Cementing Service		Intermed	Hate 1	25,000
7019020	Cement and Cementing Service		Intermed		40,000
7019020	Cement and Cementing Service		Productio		80,000
7019140	Mud Fluids & Services				70,500
7012310	Solids Control equipment				48,000
7012020	Bits				72,000
7019010	Casing Crew and Services				30,000
7016350	Fuel (Rig)				82,000
7019140	Fuel (Mud)				30,000
7001460	Water (non potable)				25,000
7012350	Water (potable)				5,000
7019000	Well Logging Services				
7019150	Mud Logging+geosteering				23,000
7019250	Stabilizers, Hole Openers, Underreamers	(DH rentals)			15,000
7019110	Casing inspection/cleaning				15,000
7019110	Drill pipe/collar inspection services				10,000
7016180	Freight - truck				25,000
7001460	Water hauling and disposal (includes soil				60,000
7001160	Contract Services - Disposal/Non-Hazardo	ous Waste			80,000
7001440	Vacuum Trucks				10,000
7000030	Contract Labor - general				30,000
7000030	Contract Labor - Operations				3,000
7001200	Contract Services - Facilities				10,000
7019300	Well Services - Well Control Services				23,313
7019350	Well Services - Well/Wellhead Services				10,000
7018150	Rental Tools and Equipment (surface rem	tals)			106,500
7018150	Rig Equipment and Misc.				13,313
7001110	Telecommunications Services				5,000
7001120	Consulting Services				125,138
7001400	Safety and Environmental				42,600
7018120	Rental Buildings (trailers)				21,300
7019310	Coring (sidewalls & analysis)				
7011010	7% Contingency & Taxes				199,433
	TOTAL DRILLING - INTANGIBLE				\$2,341,470
	TOTAL DRILLING COST				\$3,048,470
	TOTAL DRILLING COST				33,040,470
COMPLETION - TA	NGIBLE				
7012580	Tubing				
7012040	Tubing Accessories (nipple, wireline entry	0			
7012550	Wellhead Equip				15,000
7012560	Packers - Completion Equipment				
	TOTAL COMPLETION - TANGIBLE				\$15,000

Asset Team

PERMIAN

Asset Team	PERMIAN	
Field	Red Tank; Bone Spi FORMATION: 2ND BONE SPRINGS	
Lease/Facility	Frizzle Fry 15 SB FC 15H	
	TANGIN C	
COMPLETION - IN	TANGBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	10,000
7019220	Drilling Rig During Completion	
7019140	Mud Fluids & Services	4
7019030	Colled Tubing Services (3 runs)	350,000
7019240	Snubbing Services	
7019270	Pulling/Swab Units	
7016350	Fuel (from drig)	
7019010	Casing Crew and Services	
7019020	Cement and Cementing Services	+
7019080	Well Testing Services (flow hand & equip)	470,000
7019320	Fracturing Services	3,452,600
7019330	Perforating	300,000
7019360	Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids)	358,000
7016180	Freight - Truck (haul pipe; drig & compl)	20,000
7018150	BOP Rental & Testing	
7018150	Rental Tools and Equipment (incl drig; lightplant, hydra-walk)	
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	
		60,000
7000030	Contract Labor - general	
7001110	Telecommunications Services	100,000
7001400	Safety and Environmental	
7001120	Consulting Services	100,000
7018150	Zipper Manifold	220,000
7019300	Frack Stack Rentals	85,000
7016190	Freight (Transportation Services)	
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	100,000
7018120	Rental Buildings (trailers)	35,000
7000030	Contract Labor - Pumping (pump-down pumps)	60,000
7011010	8% Contingency & Taxes	407,400
	TOTAL COMPLETION - INTANGIBLE	\$6,143,000
	TOTAL COMPLETION COST	\$6,158,000
	The second secon	
SURFACE EQUIPM	IENT - TANGIBLE	
7012350	Misc. Piping, Fittings & Valves	17,120
7006640	Company Labor & Burden	
7000030	Contract Labor - General	62,878
7001110	Telecommunication equip (Telemetry)	
7012410	Line Pipe & Accessories	190
7012270	Miscellaneous Materials (containment system)	35,847
7008060	SCADA	
7016180	Freight - truck	-
7001190	Contract Engineering	7,264
		5,823
7012290	Metering and instrumentation	105,326
7012290	I&E Materials	103,326
7012200	Gas Treating	-
7012200	Dehydration	
7012010	Compressor	
7012350	Power	-
7012610	Vapor Recovery Unit	
7012440	Separator & other pressure vessels	336,771
7012500	Tanks	235,346
7012100	Heater Treater	•
7012640	Flare & Accessories	23,293
7000010	Electrical Labor	10,482
	Mechanical Labor	20,402
7000010		
7012480	Rod Pumping unit & Pad	-
7012180	Pumping Unit Engine	
7012350	Electrical Power (electrical cooperative construction costs)	-
	TOTAL SURFACE EQUIPMENT - TANGIBLE	\$840,149
	TOTAL SONTALE EQUITATION THROUGH	
	TOTAL SURFACE EQUIPMENT COST	\$ 840,149
ARTIFICIAL LIFT		
PROTEIN SHEET		
7006640	Company Labor	45,000
7012180	Gas Lift Equipment	15,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	6,250
7012140	Elect Sub Pumps (ESP)	17,500
7019350	Well Services-Well/Wellhead Services	6,000
		6,000
7012270	Materials & Supplies-Tangible	5,000
7012550	Surface Wellhead Equipment	6,250
7012390	Pig Launchers/Receivers & Rel Equip	
7011010	8% Contingency & Taxes	3,000
	TOTAL ARTIFICIAL LIFT	110,000
	TOTAL ARTIFICIAL CITY	110,000
		A
	TOTAL ARTIFICIAL LIFT COST	\$110,000
	SUMMARY OF ESTIMATED DRILLING WELL COSTS	TOTAL COST
	TOTAL LOCATION COST	\$ 84,000
	TOTAL DRILLING COST	\$ 3,048,470
	TOTAL COMPLETIONS COST	
	TOTAL SURFACE EQUIPMENT COST	\$ 840,149
	TOTAL ARTIFICIAL LIFT COST	\$ 110,000
	GRAND TOTAL COST	\$10,240,619
	Participant's Approval	
r	lame of	

Signature: Title: Date:

7/30/2019
MATTHEW RUGAARD
JOSH SHANNON
RICK LINDSAY
RICK LINDSAY

				ARTIFICIAL LIFT PREPARED BY	
					HICK ENTOSAT
Asset Team	PERMIAN		-		
Field	Red Tank; Bone Spi	FORMATION: 3RD BONE S	SPRINGS	WILDCAT	EXPLORATION
Lease/Facility	Fritzle Fry 15 TB FC 17H			DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY		_	X EXPLOITATION	_ WORKOVER
Prospect	RANGER				
Est Total Depth	22,662	Est Drilling Days		Est Completion Day	s 11
LOCATION COST -	INTANGIRI F				
COCATION COST	ii TAIGIDEE				
GL CODE		DESCRIPTION			ESTIMATED COST
		DESCRIPTION			
7001270	Location and Access				50,250
7001250	Land Broker Fees and Services				33,750
	TOTAL LOCATION COST - INTANGIBLE				84,000
DRILLING COST - T	ANGIBLE				
7012050	Conductor Pipe				28,000
7012050	Surface Casing				41,000
7012050	Intermediate Casing 1				133,000
7012050	Intermediate Casing 2				280,000
7012050	Production Casing				144,000
7012050	Orlg 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				760,000
DRILLING COST - II	NTANGIRLE				

2010200	B-401				22.500
7019200	Drilling Rlg Mob/Demob				32,500
7019220	Drilling Rig - day work/footage				853,875
7019040	Directional Drilling Services				290,000
7019020	Cement and Cementing Service		Surface		15,000
7019020	Cement and Cementing Service		Intermed	Hate 1	25,000
7019020	Cement and Cementing Service		Intermed		40,000
7019020	Cement and Cementing Service	-	Productio		80,000
			Productio	on	
7019140	Mud Fluids & Services				75,500
7012310	Solids Control equipment				57,000
7012020	Bits				72,000
7019010	Casing Crew and Services				30,000
7016350	Fuel (Rig)				97,000
7019140	Fuel (Mud)				30,000
7001460					25,000
	Water (non potable)				
7012350	Water (potable)				5,000
7019000	Well Logging Services				
7019150	Mud Logging+geosteering				28,000
7019250	Stabilizers, Hole Openers, Under	rreamers (DH rentals)			15,000
7019110	Casing inspection/cleaning	-			15,000
7019110	Drill pipe/collar inspection service	ces			10,000
7016180	Freight - truck	***		_	25,000
	Water hauling and disposal (Incl	ludes self-fermine)			60,000
7001460					
7001160	Contract Services - Disposal/Nor	1-Mazardous 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 Serv	rices			25,813
7019350	Well Services - Well/Wellhead S				10,000
					126,500
7018150	Rental Tools and Equipment (sur	rrace rentals)			
7018150	Rig Equipment and Misc.				15,813
7001110	Telecommunications Services				5,000
7001120	Consulting Services				148,638
7001400	Safety and Environmental				50,600
7018120	Rental Buildings (trailers)				25,300
7019310	Coring (sidewalls & analysis)				
					222,708
7011010	7% Contingency & Taxes				222,708
	TOTAL DRILLING - INTANGIBLE				\$2,644,245
	TOTAL DRILLING COST				\$3,404,245
					\$3,404,245
	TOTAL DRILLING COST				\$3,404,245
COMPLETION - TA	TOTAL DRILLING COST				\$3,404,245
	TOTAL DRILLING COST				\$3,404,245
7012580	TOTAL DRILLING COST NGIBLE Tubing				\$3,404,245
	TOTAL DRILLING COST	line entry)			\$3,404,245
7012580	TOTAL DRILLING COST NGIBLE Tubing	line entry)			\$3,404,245
7012580 7012040 7012550	TOTAL DRILLING COST NGIBLE Tubing Tubing Accessories (hipple, wire) Wellhead Eguip				
7012580 7012040	TOTAL DRILLING COST NGIBLE Tubing Tubing Accessories (hippie, wire)				
7012040 7012550	TOTAL DRILLING COST NGIBLE Tubing Tubing Accessories (hipple, wire) Wellhead Eguip				

Asset Team PERMIAN FORMATION: 3RD BONE SPRINGS Red Tank; Bone Spi Frizzle Fry 15 TB FC 17H Lease/Facility COMPLETION - INTANGIBLE GL CODE DESCRIPTION **ESTIMATED COST** Location and Access (dress location after rig move, set anchors) 7001270 10,000 Orilling Rig During Completion Mud Fluids & Services 7019220 7019140 Colled Tubing Services (3 runs) 350,000 7019030 7019240 Snubbing Services 7019270 Pulling/Swab Units Fuel (from drig)
Casing Crew and Services
Cement and Cementing Services 7016350 7019020 Well Testing Services (flow hand & equip) Fracturing Services 470,000 7019080 7019320 7019330 Perforating 300,000 7019360 7001460 Wireline Services
Water Hauling & Disposal (frac fluids) 15,000 7016180 Freight - Truck (haul pipe; drig & compl) 20,000 7018150 BOP Rental & Testing
Rental Tools and Equipment (incl drig; lightplant,hydra-walk) 7018150 7018150 CT Downhole Rental Equipment (le. Bit, BHA) Contract Labor - general Telecommunications Services 60,000 100,000 7001110 7001400 Safety and Environmental 100,000 **Consulting Services** 7018150 Zipper Manifold 220,000 7019300 Frack Stack Rentals 85,000 Freight (Transportation Services) 100,000 7018150 Equipment Rental (w/o operator, frac tanks, lightplants) Rental Buildings (trailers)

Contract Labor - Pumping (pump-down pumps) 7018120 35,000 60,000 407,400 7011010 8% Contingency & Taxes TOTAL COMPLETION - INTANGIBLE \$6,197,000 TOTAL COMPLETION COST \$6,212,000 SURFACE FOUIPMENT - TANGIBLE Misc. Piping, Fittings & Valves Company Labor & Burden 7012350 17,120 7006640 62,878 Contract Labor - General 7001110 Telecommunication equip (Telemetry) 7012410 Line Pipe & Accessories 35,847 Miscellaneous Materials (containment system) 7012270 7016180 Freight - truck 7,264 Contract Engineering
Metering and Instrumentation 7001190 7012290 5,823 105,326 7012290 I&E Materials 7012200 Gas Treating 7012200 Dehydration 7012010 Compressor 7012350 7012610 Power Vapor Recovery Unit 336,771 7012440 Separator & other pressure vessels Tanks Heater Treater 7012500 235,346 7012100 23,293 7012640 Flare & Accessories Electrical Labor Mechanical Labor 10,482 7000010 7012480 Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) 7012350 TOTAL SURFACE EQUIPMENT - TANGIBLE \$840,149 TOTAL SURFACE EQUIPMENT COST \$ 840,149 ARTIFICIAL LIFT Company Labor 45,000 15,000 7012180 Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services 7012480 6,250 7012140 17,500 6,000 7019350 Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 7012270 6,000 6,250 7012390 3,000 7011010 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT 110,000 110,000 TOTAL ARTIFICIAL LIFT COST \$ SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COST TOTAL LOCATION COST 84,000 **TOTAL DRILLING COST** 3,404,245 TOTAL COMPLETIONS COST 6,212,000 TOTAL SURFACE EQUIPMENT COST 840,149 TOTAL ARTIFICIAL LIFT COST 110,000 **GRAND TOTAL COST** \$10,650,394 Participant's Approval Name of Company: Signature:

Title:

DATE	7/30/2019
DRILLING & LOCATION PREPARED BY	MATTHEW RUGAARD
COMPLETION PREPARED BY	JOSH SHANNON
FACILITIES PREPARED BY	RICK LINDSAY
ARTIFICIAL LIFT PREPARED BY	RICK LINDSAY

	FACILITIES PREPARED B	Y RICK LINDSAY
	ARTIFICIAL LIFT PREPARED 8	Y RICK LINDSAY
Asset Team	PERMIAN	
Field	Red Tank; Bone Spi FORMATION: 2ND BONE SPRINGS WILDCAT	EXPLORATION
Lease/Facility	Fritzie Fry 15 SB FC 22H DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY X EXPLOITATION	WORKOVER
Prospect	RANGER	_
Est Total Depth	21,506 Est Drilling Days Est Completion Day	rs 11
LOCATION COST -	INTANGIRLE	
COCKIIOITCOST	THE STATE OF THE S	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	50,250
7001250	Land Broker Fees and Services	33,750
7002230	Carrot of Orient Petra Services	
		84.000
	TOTAL LOCATION COST - INTANGIBLE	84,000
		**
DRILLING COST - T	ANGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	41,000
7012050	Intermediate Casing 1	133,000
7012050	Intermediate Casing 2	227,000
7012050	Production Casing	144,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550	Orilling Welthead Equipment	\$0,000
7012040	Casing & Yubing Access	24,000
7012270		5,000
7012270	Miscellaneous MRO Materials	
	TOTAL DRILLING - TANGIBLE	707,000
	TOTAL DRILLING - TANGIBLE	707,000
	 -	
DRILLING COST - II	NTANGIBLE	
7019200	Drilling Rig Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	718,875
7019040	Directional Drilling Services	240,000
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	80,000
7019140	Mud Fluids & Services	70,500
7012310	Solids Control equipment	48,000
7012020	Bits	72,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	82,000
7019140	fuel (Mud)	30,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	23,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110	Casing inspection/cleaning	15,000
7019110	Drill pipe/collar inspection services	10,000
7016180	Freight - truck	25,000
7001460	Water hauling and disposal (includes soil farming)	60,000
7001160	Contract Services - Disposal/Non-Hazardous Waste	80,000
7001440	Vacuum Trucks	10,000
7000030	Contract Labor - general	30,000
7000030	Contract Labor - Operations	3,000
7001200	Contract Services - Facilities	10,000
7019300	Well Services - Well Control Services	23,313
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	106,500
7018150	Rig Equipment and Misc.	13,313
7001110	Telecommunications Services	5,000
7001120	Consulting Services	125,138
7001400	Safety and Environmental	42,600
7018120	Rental Buildings (trailers)	21,300
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	199,433
	TOTAL DRILLING - INTANGIBLE	\$2,341,470
	The second secon	70,5-0,610
	TOTAL DRILLING COST	\$3,048,470
COLUMN PRICATE	ALCON P	
COMPLETION - TA	MOIDLE	
7012580	Tubing	
7012040	Tubing Accessories (nipple, wireline entry)	7.2
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	23,000
7042300	- Sampreson equipment	
	TOTAL COMPLETION - TANGIBLE	\$15,000
		7.2,500

Asset Team	PERMIAN	
Field Lease/Facility	Red Tank; Bone Spi FORMATION: 2ND BONE SPRINGS Frizzle Fry 15 SB FC 22H	
COMPLETION - IN		
GL CODE 7001270	DESCRIPTION Location and Access (dress location after rig move, set anchors)	ESTIMATED COST 10,000
7019220	Drilling Rig During Completion	
7019140	Mud Fluids & Services	
7019030 7019240	Colled Tubing Services (3 runs)	350,000
7019270	Snubbling Services Pulling/Swab Units	
7016350	Fuel (from drig)	
7019010	Casing Crew and Services	
7019020 7019080	Cement and Cementing Services Well Testing Services (flow hand & equip)	470,000
7019320	Fracturing Services	3,452,600
7019330	Perforating	300,000
7019360	Wireline Services	15,000
7001460 7016180	Water Hauling & Disposal (frac fluids) Freight - Truck [haul pipe; drig & compl)	358,000
7018150	BOP Rental & Testing	
7018150	Rental Tools and Equipment (Incl drig; lightplant, hydra-walk)	
7018150	CT Downhole Rental Equipment (Ie. Bit, BHA)	60,000
7000030	Contract Labor - general Telecommunications Services	100,000
7001400	Safety and Environmental	
7001120	Consulting Services	100,000
7018150	Zipper Manifold	220,000 85,000
7019300 7016190	Frack Stack Rentals Freight (Transportation Services)	85,000
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	100,000
7018120	Rental Buildings (trailers)	35,000
7000030	Contract Labor - Pumping (pump-down pumps)	60,000
7011010	8% Contingency & Taxes	407,400
	TOTAL COMPLETION - INTANGIBLE	\$6,143,000
		45.450.000
	TOTAL COMPLETION COST	\$6,158,000
SURFACE EQUIPM	ENT - TANGIBLE	
7012350	Misc. Piping, Fittings & Valves	17,120
7006640	Company Labor & Burden	
7000030	Contract Labor - General	62,878
7001110	Telecommunication equip (Telemetry)	
7012410	Line Pipe & Accessories Miscellaneous Materials (containment system)	35,847
7008060	SCADA	
7016180	Freight - truck	
7001190	Contract Engineering	7,264
7012290	Metering and Instrumentation	5,823 105,326
7012290	I&E Materials Gas Treating	103,320
7012200	Dehydration	
7012010	Compressor	
7012350	Power	
7012610	Vapor Recovery Unit	336,771
7012440	Separator & other pressure vessels Tanks	235,346
7012100	Heater Treater	
7012640	Flare & Accessories	23,293
7000010	Electrical Labor	10,482
7000010 7012480	Mechanical Labor Rod Pumping unit & Pad	-
7012180	Pumping Unit Engine	
7012350	Electrical Power (electrical cooperative construction costs)	
	TOTAL SURFACE EQUIPMENT - TANGIBLE	\$840,149
	TOTAL SURFACE EQUIPMENT COST	\$ 840,149
ARTIFICIAL LIFT		
		47
7006640	Company Labor Gas Lift Equipment	45,000 15,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	6,250
7012140	Elect Sub Pumps (ESP)	17,500
7019350	Well Services-Well/Wellhead Services	6,000
7012270	Materials & Supplies-Tangible Surface Wellhead Equipment	5,000 5,000
7012390	Pig Launchers/Receivers & Rel Equip	6,250
7011010	8% Contingency & Taxes	3,000
	TOTAL ARTIFICIAL LIFT	110,000
	TOTAL ARTIFICIAL LIFT COST	\$ 110,000
	SUMMARY OF ESTIMATED DRILLING WELL COSTS	TOTAL COST
	TOTAL LOCATION COST	\$ 84,000
	TOTAL DRILLING COST	\$ 3,048,470
	TOTAL COMPLETIONS COST	\$ 6,158,000
	TOTAL SURFACE EQUIPMENT COST	\$ 840,149
	TOTAL ARTIFICIAL LIFT COST	\$ 110,000
	GRAND TOTAL COST	\$10,240,619
	Participant's Approval	
	lame of	
Co	mpany:	
Sig	nature:	
	Title	
	Title: Date:	

DATE	7/30/2019
DRILLING & LOCATION PREPARED BY	MATTHEW RUGAARD
COMPLETION PREPARED BY	JOSH SHANNON
FACILITIES PREPARED BY	RICK LINDSAY
ARTIFICIAL LIFT PREPARED BY	RICK LINDSAY

	FACILITIES PREPARED ARTIFICIAL LIFT PREPARED	
	AN ITEMAL LIFT PREPARED	BI AICK DINDSRI
Asset Team	PERMIAN	
Fleid	Red Tank; Bone Spi FORMATION: 1ST BONE SPRINGS WILDCAT	EXPLORATION
Lease/Facility	Frizzie Fry 15 FB FC 30H DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY X EXPLOITATION	WORKOVER
Prospect	RANGER	
Est Total Depth	20,723 Est Drilling Days Est Completion Da	nys11
LOCATION COST	INTANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	50,250
7001250	Land Broker Fees and Services	33,750
	TOTAL LOCATION COST - INTANGIBLE	84,000
DRILLING COST -	TANGIBLE	-
7012050	Conductor Pipe	28,000
7012050	Surface Casing	41,000
7012050	Intermediate Casing 1	133,000
7012050	Intermediate Casing 2	227,000
7012050	Production Casing	144,000
7012050	Orig Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550	Drilling Welihead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	707,000
DRILLING COST -	INTANGIBLE	
7019200	Drilling Rig Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	718,875
7019040	Directional Drilling Services	240,000
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	80,000
7019140	Mud Fluids & Services	70,500
7012310	Solids Control equipment	48,000
7012020	Bits	72,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	82,000
7019140	Fuel (Mud)	30,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	3,000
7019150	Mud Logging services Mud Logging-geosteering	23,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019230	Casing inspection/cleaning	15,000
7019110		10,000
7015110	Drill pipe/collar inspection services	25,000
7001460	Freight - truck Water hauling and disposal (includes soil farming)	60,000
7001160	Contract Services - Disposal/Non-Hazardous Waste	80,000
7001440	Vacuum Trucks	10,000
7000030	Contract Labor - general	30,000
7000030	Contract Labor - Operations	3,000
7001200	Contract Services - Facilities	10,000
7019300	Well Services - Well Control Services	23,313
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	106,500
7018150	Rig Equipment and Misc.	13,313
7001110	Telecommunications Services	5,000
7001120	Consulting Services	125,138
7001400	Safety and Environmental	42,600
7018120	Rental Buildings (trailers)	21,300
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	199,433
	TOTAL DRILLING - INTANGIBLE	52,341,470
	TOTAL DRILLING COST	\$3,048,470
COMPLETION - TA	a NGIRLF	
7012580	Tubing	
7012040	Tubing Accessories (nipple, wireline entry)	40.000
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	<u>_</u>
	TOTAL COMPLETION - TANGIBLE	\$15,000

Asset Team

PERMIAN

Title:

FORMATION: 1ST BONE SPRINGS Red Tank; Bone Sp Lease/Facility Frizzle Fry 15 FB FC 30H COMPLETION - INTANGIBLE ESTIMATED COST GL CODE DESCRIPTION 10,000 Location and Access (dress location after rig move, set anchors) 7001270 Drilling Rig During Completion Mud Fluids & Services 7019220 7019140 Coiled Tubing Services (3 runs) 350,000 7019030 7019240 7019270 Snubbing Services
Pulling/Swab Units 7016350 Fuel (from drig) Casing Crew and Services **Cement and Cementing Services** 7019020 Well Testing Services (flow hand & equip)
Fracturing Services 470,000 7019320 7019330 Perforating 300,000 7019360 7001460 Wireline Services
Water Hauling & Disposal (frac fluids) 15,000 7016180 Freight - Truck (haul pipe; drig & compl) 20,000 BOP Rental & Testing
Rental Tools and Equipment (incl drig; lightplant, hydra-walk) 7018150 7018150 CT Downhole Rental Equipment (ie. Bit, BHA) Contract Labor - general 60,000 100,000 7001110 Telecommunications Services 7001400 Safety and Environmental 100,000 220,000 Zipper Manifold 7018150 7019300 Frack Stack Rentals 85,000 Freight (Transportation Services) 7016190 Equipment Rental (w/o operator, frac tanks, lightplants) 100,000 7018150 Rental Buildings (trailers)

Contract Labor - Pumping (pump-down pumps) 35,000 60,000 407,400 7000030 7011010 8% Contingency & Taxes TOTAL COMPLETION - INTANGIBLE \$6,143,000 TOTAL COMPLETION COST \$6,158,000 SURFACE EQUIPMENT - TANGIBLE Misc. Piping, Fittings & Valves Company Labor & Burden 7012350 17,120 62,878 7000030 Contract Labor - General 7001110 7012410 Telecommunication equip (Telemetry) tine Pipe & Accessories 35,847 7012270 Miscellaneous Materials (containment system) 7016180 Freight - truck 7,264 7001190 Contract Engineering Metering and Instrumentation I&E Materials 7012290 5.823 105,326 7012290 7012200 Gas Treating 7012200 Dehydration 7012010 Compressor 7012350 7012610 Vapor Recovery Unit 336,771 7012440 Separator & other pressure vessels Tanks Heater Treater 235,346 7012100 23,293 7012640 Flare & Accessories 7000010 Electrical Labor 10,482 7000010 Mechanical Labor 7012480 Rod Pumping unit & Pad Pumping Unit Engine
Electrical Power (electrical cooperative construction costs) 7012350 TOTAL SURFACE FOUIPMENT - TANGIBLE \$840,149 TOTAL SURFACE EQUIPMENT COST Ś 840,149 ARTIFICIAL LIFT Gas Lift Equipment 15,000 7012180 Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services 7012480 6,250 7012140 7019350 7012270 Materials & Supplies-Tangible 6,000 5,000 6,250 Surface Wellhead Equipmen 7012550 Pig Launchers/Receivers & Rel Equip 7012390 7011010 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT 110,000 TOTAL ARTIFICIAL LIFT COST \$ 110,000 SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COST TOTAL LOCATION COST 84,000 TOTAL DRILLING COST 3,048,470 **TOTAL COMPLETIONS COST** 6,158,000 **TOTAL SURFACE EQUIPMENT COST** 840 149 **TOTAL ARTIFICIAL LIFT COST** 110,000 GRAND TOTAL COST \$10,240,619 Participant's Approval Name of Signature Date:

DATE	7/30/2019
DRILLING & LOCATION PREPARED BY	MATTHEW RUGAARD
COMPLETION PREPARED BY	JOSH SHANNON
FACILITIES PREPARED BY	RICK LINDSAY
ARTIFICIAL LIFT PREPARED BY	RICK LINDSAY

	FACILITIES PREPARED BY	
	ARTIFICIAL LIFT PREPARED BY	RICK LINDSAY
Asset Team	PERMIAN	
Field	Red Tank; Bone Spt FORMATION: 1ST BONE SPRINGS WILDCAT	EXPLORATION
Lease/Facility	Frizzle Fry 15 FB FC 31H DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY X EXPLOITATION	WORKOVER
Prospect	RANGER	•
Est Total Depth	20,740 Est Drilling Days Est Completion Days	11
est rousi deptii	20740 Est Dinning Days	
LOCATION COST	- INTANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	50,250
7001250	Land Broker Fees and Services	33,750
	TOTAL LOCATION COST - INTANGIBLE	84,000
	TOTAL LOCATION COST - INTRINSIPLE	
DRILLING COST -	TANGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	41,000
7012050	Intermediate Casing 1	133,000
7012050	Intermediate Casing 2	227,000
7012050	Production Casing	144,000
7012050	Drig Liner Hanger, Tleback Eq & Csg Accessories	55,000
7012550	Drilling Wellhead Equipment	50,000
7012040	Casing & Yubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	707,000
DRILLING COST -	INTANGIBLE	
7019200	Drilling Rig Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	718,875
7019040	Directional Drilling Services	240,000
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	80,000
7019140	Mud Fluids & Services	70,500
		48,000
7012310	Solids Control equipment	
7012020	Bits	72,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	82,000
7019140	Fuel (Mud)	30,000
7001460	Water (non potable)	25,000
		5,000
7012350	Water (potable)	3,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	23,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110	Casing inspection/cleaning	15,000
7019110	Drill pipe/collar inspection services	10,000
		25,000
7016180	Freight - truck	
7001460	Water hauling and disposal (includes soll farming)	60,000
7001160	Contract Services - Disposal/Non-Hazardous Waste	80,000
7001440	Vacuum Trucks	10,000
7000030	Contract Labor - general	30,000
7000030	Contract Labor - Operations	3,000
7001200	Contract Services - Facilities	10,000
7019300	Well Services - Well Control Services	23,313
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	106,500
7018150	Rig Equipment and Misc.	13,313
7001110	Telecommunications Services	5,000
7001120	Consulting Services	125,138
7001400	Safety and Environmental	42,600
7018120	Rental Buildings (trailers)	21,300
7019310	Coring (sidewalls & analysis)	-
7011010	7% Contingency & Yaxes	199,433
	TOTAL DRILLING - INTANGIBLE	\$2,341,470
	TOTAL DRILLING COST	\$3,048,470
	The print of the print print of the print of	V2/040/470
COMPLETION - T	ANGIBLE	
7012580	Tubing	
7012040		- W
	Tubing Accessories (nipple, wireline entry)	15,000
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	
	TOTAL COMMITTION, TANCING	616,000

Asset Team Field	PERMIAN Red Tank: Bone Spi FORMATION: 1ST BONE SPRINGS	
Lease/Facility	Frizzle Fry 15 F8 FC 31M	
COMPLETION - II	ITANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors) Drilling Rig During Completion	10,000
7019140	Mud Fluids & Services	14
7019030	Colled Tubing Services (3 runs)	350,000
7019240	Snubbing Services Pulling/Swab Units	-
7016350	Fuel (from drig)	- 1
7019010	Casing Crew and Services	-
7019020 7019080	Cement and Cementing Services Well Testing Services (flow hand & equip)	470,000
7019320	Fracturing Services	3,452,600
7019330	Perforating	300,000
7019360 7001460	Wireline Services Water Hauling & Disposal (frac fluids)	15,000 358,000
7016180	Freight - Truck (haul pipe; drig & compl)	20,000
7018150	80P Rental & Testing	-
7018150	Rental Tools and Equipment (incl drig; lightplant,hydra-walk)	
7018150 7000030	CT Downhole Rental Equipment (ic. Bit, BHA) Contract Labor - general	60,000
7001110	Telecommunications Services	100,000
7001400	Safety and Environmental	
7001120	Zipper Manifold	100,000
7018150 7019300	Frack Stack Rentals	85,000
7016190	Freight (Transportation Services)	
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	100,000
7018120	Rental Buildings (trailers) Contract Labor - Pumping (pump-down pumps)	35,000
7011010	8% Contingency & Taxes	407,400
	TOTAL COMPLETION - INTANGIBLE	\$6,143,000
	TOTAL COMPLETION COST	\$6,158,000
SURFACE EQUIP	AENT - TANGIBLE	
7012350	Misc. Piping, Fittings & Valves	17,120
7006640	Company Labor & Burden	62,878
7000030 7001110	Contract Labor - General Telecommunication equip (Telemetry)	02,070
7012410	Line Pipe & Accessories	
7012270	Miscellaneous Materials (containment system)	35,847
7008060	SCADA Freight - truck	
7001190	Contract Engineering	7,264
7012290	Metering and instrumentation	5,823
7012290	I&E Materials	105,326
7012200	Gas Treating Dehydration	
7012010	Compressor	9
7012350	Power	-
7012610	Vapor Recovery Unit Separator & other pressure vessels	336,771
7012500	Tanks	235,346
7012100	Heater Treater	
7012640	Flare & Accessories	23,293
7000010	Electrical Labor Mechanical Labor	10,482
7012480	Rod Pumping unit & Pad	: 6
7012180	Pumping Unit Engine	
7012350	Electrical Power (electrical cooperative construction costs)	
	TOTAL SURFACE EQUIPMENT - TANGIBLE	\$840,149
	TOTAL SURFACE EQUIPMENT COST	\$ 840,149
ARTIFICIAL LIFT		
	Company labor	45,000
7006640	Company Labor Gas Lift Equipment	15,000
7012180	Rod Pumping, Sucker Rods & Rod Pump	6,250
7012140	Elect Sub Pumps (ESP)	17,500
7019350	Well Services-Well/Wellhead Services	6,000
7012270 7012550	Materials & Supplies-Tangible Surface Wellhead Equipment	5,000
7012390	Pig Launchers/Receivers & Rel Equip	6,250
7011010	8% Contingency & Yaxes	3,000
	TOTAL ARTIFICIAL LIFT	110,000
	TOTAL ARTIFICIAL LIFT COST	\$ 110,000
	TOTAL ANTIFICIAL DIFF COST	7
	SUMMARY OF ESTIMATED DRILLING WELL COSTS	TOTAL COST
	TOTAL LOCATION COST	\$ 84,000
	TOTAL DRILLING COST	\$ 3,048,470
	TOTAL COMPLETIONS COST	\$ 6,158,000
	TOTAL SURFACE EQUIPMENT COST	\$ 840,149
	TOTAL ARTIFICIAL LIFT COST	\$ 110,000
	GRAND TOTAL COST	\$10,240,619
	Provide to a sale Assessment	
	Participant's Approval	
	Name of ompany:	
Si	gnature:	
	Title: Date:	

DATE	7/30/2019
DRILLING & LOCATION PREPARED BY	MATTHEW RUGAARD
COMPLETION PREPARED BY	JOSH SHANNON
FACILITIES PREPARED BY	RICK LINDSAY
ARTIFICIAL LIFT PREPARED BY	RICK LINDSAY

				S PREPARED BY RICK LINDSAY
			ARTIFICIAL LIF	T PREPARED BY RICK LINDSAY
Asset Team	PERMIAN			
Field	WC-025 G-09 52332	FORMATION: WOLFCAMP		EXPLORATION
Lease/Facility	Fritzle Fry 15 WA FC 11H		DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY		X EXPLOITATION	WORKOVER
Prospect	RANGER			
Est Total Depth	22,986	Est Orilling Days	Feet Co	ompletion Days 11
est rotal beptil	22,500	Cit orming pays		11
LOCATION COST	INTANGIBLE			
EDEATION COST	THE TOTAL STREET			
GL CODE		DESCRIPTION		ESTIMATED COST
7001270	Location and Access			50,250
7001250	Land Broker Fees and Services			33,750
	_			
	TOTAL LOCATION COST - INTANGIBLE			84,000
DRILLING COST -	FANGIBLE			
7012050	Conductor Pipe			28,000
7012050	Surface Casing			41,000
7012050	Intermediate Casing 1			133,000
7012050	Intermediate Casing 2			280,000
7012050	Production Casing			144,000
7012050	Orlg Uner Hanger, Tieback Eq & G	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			760,000
DRILLING COST -	INTANGIBLE			
7019200	Drilling Rig Mob/Demob			32,500
7019220	Drilling Rig - day work/footage			853,875
7019040	Directional Drilling Services			290,000
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 7019140	Cement and Cementing Service		Production	80,000
	Mud Fluids & Services			75,500
7012310	Solids Control equipment Bits			57,000 72,000
7012020 7019010	Casing Crew and Services			30,000
7016350	Fuel (Rig)			97,000
7019140	Fuel (Mud)			30,000
7001460	Water (non potable)		-	25,000
7012350	Water (potable)			5,000
7019000	Well Logging Services			
7019150	Mud Logging+geosteering		-	28,000
7019250	Stabilizers, Hole Openers, Under	reamers (DH rentals)		15,000
7019110	Casing Inspection/cleaning		-	15,000
7019110	Drill pipe/collar inspection service	es		10,000
7016180	Freight - truck			25,000
7001460	Water hauling and disposal (inck			60,000
7001160	Contract Services - Disposal/Non	-Hazardous Waste		80,000 10,000
7001440	Vacuum Trucks			30,000
7000030 7000030	Contract Labor - general Contract Labor - Operations			3,000
7001200	Contract Services - Facilities			10,000
7019300	Well Services - Well Control Servi	lces		25,813
7019350	Well Services - Well/Wellhead Se			10,000
7018150	Rental Tools and Equipment (sur			126,500
7018150	Rig Equipment and Misc.			15,813
7001110	Telecommunications Services			5,000
7001120	Consulting Services			148,638
7001400	Safety and Environmental			50,600
7018120	Rental Buildings (trailers)			25,300
7019310	Coring (sidewalls & analysis)			
7011010	7% Contingency & Taxes			222,708
	TOTAL DRILLING - INTANGIBLE			\$2,644,245
	TOTAL DRILLING COST			\$3,404,245
	, STAL DIRECTIO (US)			43,707,243
COMPLETION - T	INGIBLE			
7012580	Tubing			
7012040	Tubing Accessories (nipple, wirel	ine entry)		
7012550	Wellhead Equip			15,000
7012560	Packers - Completion Equipment			
	TOTAL COMPLETION - TANGIBLE			515,000

	TOTAL LOCATION COST		
	TOTAL DRILLING COST		
	TOTAL COMPLETIONS CO	OST	
	TOTAL SURFACE EQUIPM	MENT COST	
	TOTAL ARTIFICIAL LIFT C	OST	
		GRAND TOTAL CO	OST
	Participant's Appre	oval	
Name of	· articipant o r tpp:		
Company:			
0:			
Signature:			
Title:			Date:

\$10,650,394

DATE	7/30/2019
DRILLING & LOCATION PREPARED BY	MATTHEW RUGAARD
COMPLETION PREPARED BY	MONNAHZ HZOL
FACILITIES PREPARED BY	RICK LINDSAY
ARTIFICIAL LIFT PREPARED BY	RICK LINDSAY

	FACILITIES PREPARED	
	ARTIFICIAL LIFT PREPARED	BY RICK LINDSAY
Asset Team	PERMIAN	
Field	WC-025 G-09 S2332 FORMATION: WOLFCAMP XY WILDCAT	EXPLORATION
Lease/Facility	Frizzle Fry 15 WXY FC 18H DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY X EXPLOITATION	WORKOVER
Prospect	RANGER	
•		
Est Total Depth	22.795 Est Drilling Days Est Completion Days	ys II
est roter separ		
LOCATION COST -	NY ANGENIE	
LOCATION COST -	INTANGIBLE	
	D. C. C. D. C.	ESTIMATED COST
GL CODE	DESCRIPTION	
7001270	Location and Access	50,250
7001250	Land Broker Fees and Services	33,750
	TOTAL LOCATION COST - INTANGIBLE	84,000
	TOTAL LOCATION COST VINTANGIBLE	
DRILLING COST - T	ANGIBLE	
		38.000
7012050	Conductor Pipe	28,000
7012050	Surface Casing	41,000
7012050	Intermediate Casing 1	133,000
7012050	Intermediate Casing 2	280,000
7012050	Production Casing	144,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550	Drilling Wellhead Equipment	50,000
		24,000
7012040	Casing & Tubing Access	
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	760,000
		•
DRILLING COST - II	NTANGIBLE	
7019200	Drilling Rig Mob/Demob	32,500
7019220		853,875
	Drilling Rig - day work/footage	
7019040	Directional Drilling Services	290,000
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
		80,000
7019020		
7019140	Mud Fluids & Services	75,500
7012310	Solids Control equipment	57,000
7012020	Bits	72,000
		30,000
7019010	Casing Crew and Services	
7016350	Fuel (Rig)	97,000
7019140	Fuel (Mud)	30,000
7001460	Water (non potable)	25,000
7012350		5,000
	Water (potable)	2,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	28,000
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	25,813
7019350	Wall Services · Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	126,500
7018150	Rig Equipment and Misc.	15,813
7001110	Telecommunications Services	5,000
7001120	Consulting Services	148,638
7001400	Safety and Environmental	50,600
7018120	Rental Buildings (trailers)	25,300
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	222,708
		** *** ***
	TOTAL DRILLING - INTANGIBLE	\$2,644,245
	TOTAL DRILLING COST	\$3,404,245
COMPLETION - TA	NGIBLE	
7012580	Tubing	17
7012040	Tubing Accessories (nipple, wireline entry)	
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	
	TOTAL COMPLETION - TANGIBLE	\$15,000

Asset Team Field

PERMIAN WC-025 G-09 \$2332

	Frizzie Fry 15 WXY FC 18H	
OMPLETION -	INTANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	10,000
7019220	Drilling Rig During Completion	
7019140	Mud Fluids & Services	350,000
7019030 7019240	Colled Tubing Services (3 runs) Snubbing Services	350,000
7019270	Pulling/Swab Units	19
7016350	Fuel (from drig)	
7019010	Casing Crew and Services	
7019020 7019080	Cement and Cementing Services Well Testing Services (flow hand & equip)	470,000
7019080	Fracturing Services	3,452,600
7019330	Perforating	300,000
7019360	Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids)	412,000
7016180 7018150	Freight - Truck (haut pipe; drig & compl) BOP Rental & Testing	20,000
7018150	Rental Tools and Equipment (incl drig; lightplant, hydra-walk)	
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	19
7000030	Contract Labor - general	60,000
7001110	Telecommunications Services	100,000
7001400 7001120	Safety and Environmental Consulting Services	100,000
7018150	Zipper Manifold	220,000
7019300	Frack Stack Rentals	85,000
7016190	Freight (Transportation Services)	·
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	100,000 35,000
7018120 7000030	Rental Bulldings (trailers) Contract Labor - Pumping (pump-down pumps)	60,000
7011010	8% Contingency & Taxes	407,400
	TOTAL COMPLETION - INTANGIBLE	\$6,197,000
	TOTAL COMPLETION COST	\$6,212,000
UREACE FOUL	PMENT - TANGIBLE	
OKFACE EQUI		
7012350	Misc. Piping, Fittings & Valves Company Labor & Burden	17,120
7006640	Contract Labor - General	62,878
7001110	Telecommunication equip (Telemetry)	
7012410	Line Pipe & Accessories	19
7012270	Miscellaneous Materials (containment system)	35,847
7008060 7016180	SCADA Facilità south	
7001190	Freight - truck Contract Engineering	7,264
7012290	Metering and Instrumentation	5,823
7012290	I&E Materials	105,326
7012200	Gas Treating	
7012200	Dehydration	
7012010 7012350	Compressor	
7012610	Vapor Recovery Unit	(4
7012440	Separator & other pressure vessels	336,771
7012500	Tanks	235,346
7012100	Heater Treater	23,293
7012640 7000010	Flare & Accessories Electrical Labor	10,482
7000010	Mechanical Labor	
7012480	Rod Pumping unit & Pad	
7012180	Pumping Unit Engine	
7012350	Electrical Power (electrical cooperative construction costs)	
	TOTAL SURFACE EQUIPMENT - TANGIBLE	\$840,149
	TOTAL SURFACE EQUIPMENT COST	\$ 840,149
RTIFICIAL LIF	T	
7006640	Company Labor	45,000
7012180	Gas Lift Equipment	15,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	6,250
7012140	Elect Sub Pumps (ESP)	17,500
7019350	Well Services-Well/Wellhead Services	17,500 6,000
7019350 7012270	Well Services-Well/Wellhead Services Materials & Supplies-Tangible	17,500
7019350	Well Services-Well/Wellhead Services	17,500 6,000 6,000
7019350 7012270 7012550	Well Services-WellPwellbead Services Materials & Supplies-Tangible Surface Wellbead Equipment	17,500 6,000 6,000 5,000
7019350 7012270 7012550 7012390	Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Regisment Pig Launchers/Receivers & Rel Equip	17,500 6,000 6,000 5,000 6,250
7019350 7012270 7012550 7012390	Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Regishment Pig Launchers/Raceivers & Rel Equip 8% Contingency & Taxes	17,500 6,000 5,000 5,000 6,250 3,000
7019350 7012270 7012550 7012390	Well Services-WellPwellhead Services Materials & Supplies-Tangible Surface Wellhead Roujament Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST	17,500 6,000 5,000 5,000 6,250 3,000 110,000
7019350 7012270 7012550 7012390	Well Services-WellPwellhead Services Materials & Supplies-Tangible Surface Wellhead Replayment Pig Launchers/Receivers & Rel Equip BX Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS	\$ 110,000 TOTAL COST
7019350 7012270 7012550 7012390	Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Replayment Pig Launchers/Receivers & Rel Equip BX Contingency & Taxes 10TAL ARTIFICIAL LIFY TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST	\$ 110,000 \$ 110,000 TOTAL COST \$ 84,000
7019350 7012270 7012550 7012390	Well Services-WellPwellbead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes 10TAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST	\$ 110,000 TOTAL COST \$ 84,000 \$ 3,404,245
7019350 7012270 7012550 7012390	Well Services-WellPwellbead Services Materials & Supplies-Tangible Surface Wellbead Equipment Pig Launchers/Receivers & Rel Equip BX Contingency & Taxes 10TAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST TOTAL COMPLETIONS COST	17,500 6,000 6,000 5,000 3,000 110,000 TOTAL COST \$ 84,000 \$ 3,404,245 \$ 6,212,000
7019350 7012270 7012550 7012390	Well Services-WellPwellhead Services Materials & Supplies-Tangible Surface Wellhead Replayment Pig Launchers/Receivers & Rel Equip BX Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL LOCATION COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST	\$ 110,000 TOTAL COST \$ 84,000 \$ 3,404,245 \$ 6,212,000 \$ 840,149
7019350 7012270 7012550 7012390	Well Services-Well-Wellhead Services Materials & Supplies-Tangible Surface Wellhead Replayment Pig Launchery/Receivers & Rel Equip BX Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL LOCATION COST TOTAL ORILLING COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST	\$ 110,000 TOTAL COST \$ 84,000 \$ 3,404,245 \$ 6,212,000 \$ 840,149 \$ 110,000
7019350 7012270 7012550 7012390	Well Services-WellPwellhead Services Materials & Supplies-Tangible Surface Wellhead Replayment Pig Launchers/Receivers & Rel Equip BX Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL LOCATION COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST	\$ 110,000 TOTAL COST \$ 84,000 \$ 3,404,245 \$ 6,212,000 \$ 840,149
7019350 7012270 7012550 7012390	Well Services-WellPuelDead Services Materials & Supplies-Tangible Surface WellPael Equipment Pig Launchers/Receivers & Rel Equip BX Contingency & Taxes 10TAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST TOTAL DRILLING COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST GRAND TOTAL COST	\$ 110,000 TOTAL COST \$ 84,000 \$ 3,404,245 \$ 6,212,000 \$ 840,149 \$ 110,000
7019350 7012270 7012550 7012390	Well Services-Well-Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes 10TAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST TOTAL DRILLING COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST GRAND TOTAL COST Participant's Approval	\$ 110,000 TOTAL COST \$ 84,000 \$ 3,404,245 \$ 6,212,000 \$ 840,149 \$ 110,000
7019350 7012250 7012250 7012390 7011010	Well Services-Wellined Services Materials & Supplies-Tangible Surface Wellined Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes 10TAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST GRAND TOTAL COST Participant's Approval Name of	\$ 110,000 TOTAL COST \$ 84,000 \$ 3,404,245 \$ 6,212,000 \$ 840,149 \$ 110,000
7019350 7012250 7012250 7012390 7011010	Well Services-Well-Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes 10TAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST TOTAL DRILLING COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST GRAND TOTAL COST Participant's Approval	\$ 110,000 TOTAL COST \$ 84,000 \$ 3,404,245 \$ 6,212,000 \$ 840,149 \$ 110,000
7019350 7012270 7012250 7012390 7011010	Well Services-Wellined Services Materials & Supplies-Tangible Surface Wellined Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes 10TAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST GRAND TOTAL COST Participant's Approval Name of	\$ 110,000 TOTAL COST \$ 84,000 \$ 3,404,245 \$ 6,212,000 \$ 840,149 \$ 110,000

FORMATION: WOLFCAMP XY

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

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

CASE NOS. 20822 & 20823 (FRIZZLE FRY)

AFFIDAVIT

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

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

Deana M. Bennett

SUBSCRIBED AND SWORN to before me this 28th day of October, 2019 by Deana M. Bennett.

Notary Public

My commission expires: 02 - 27 - 21





September 12, 2019

LAWYERS

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

CASE NO. 20822

Deana M. Bennett 505-848-1834 Deana.Bennett@modrall.com

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

CASE NO. 20823

TO: AFFECTED PARTIES

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

In Case No. 20822, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the underlying the E/2 of Sections 15 and 22, Township 22 South, Range 32 East, N.M.P.M., Lea County, New Mexico. This proposed spacing unit will be dedicated to Frizzle Fry 15 TB FC 14H; Frizzle Fry 15 TB FC 17H; Frizzle Fry 15 FB FC 30H; Frizzle Fry 15 SB FC 15H; Frizzle Fry 15 FB FC 31H; 15 Frizzle Fry SB FC 22H; Frizzle Fry 15 AV FC 26H; Frizzle Fry AV FC 27H wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the wells, and a 200% charge for risk involved in drilling said wells, and allowing a one year period between when the wells are drilled and when the wells are completed.

In Case No. 20823, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the underlying the E/2 of Sections 15 and 22, Township 22 South, Range 32 East, N.M.P.M., Lea County, New Mexico. This proposed spacing unit will be dedicated to the Frizzle Fry 15 WA FC 11H and the Frizzle Fry 15 WXY FC 18H 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

Modrall Sperling Roehl Harris & Sisk P.A.

500 Fourth Street NW Suite 1000 Albuquerque, New Mexico 87102

PO Box 2168 Albuquerque, New Mexico 87103-2168

Tel: 505.848.1800 www.modrall.com operator of the wells, and a 200% charge for risk involved in drilling said wells, and allowing a one year period between when the wells are drilled and when the wells are completed.

These cases have been set for hearing before a Division Examiner on October 3, 2019 starting at 8:15 a.m. The hearing will be held in Porter Hall in the Oil Conservation Division's Santa Fe Office located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505. As a party who may be affected by these applications, we are notifying you of your right to appear at the hearing and participate in the cases, including the right to present evidence either in support of or in opposition to the applications. Failure to appear at the hearing may preclude you from any involvement in the cases at a later date.

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

Sincerely,

Deana M. Bennett

Attorney for Applicant

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

PS Form 3877

Type of Mailing: CERTIFIED MAIL 09/12/2019





Firm Mailing Book ID: 174476

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0063 2266 70	Michael S. Richardson P.O. Box 819 Roswell NM 88202	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
2	9314 8699 0430 0063 2266 87	Dennis Susaeta 9378 S. Sneddon Dr. Salt Lake City UT 84070	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
3	9314 8699 0430 0063 2266 94	Wendy Susaeta 9378 S. Sneddon Dr. Salt Lake City UT 84070	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
4	9314 8699 0430 0063 2267 00	Howard L. Mathie 877 S. Main Street Salt Lake City UT 84111	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
5	9314 8699 0430 0063 2267 17	States Royalty Limited Partnership P.O. Box 911 Breckenridge TX 76424	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
6	9314 8699 0430 0063 2267 24	Alan Jochimsen 4209 Cardinal Lane Midland TX 79707	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
7	9314 8699 0430 0063 2267 31	Monty D. McLane P. O. Box 9451 Midland TX 79708	\$1.15	\$3,50	\$1.60	\$0.00	81363-0162 Notice
8	9314 8699 0430 0063 2267 48	Trustee of the Susan S. Murphy Marital Trust u/t/a dated 11/15/2012 P.O. Box 2484 Roswell NM 88202	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
9	9314 8699 0430 0063 2267 55	Mark B. Murphy, Trustee of the Mark B. Murphy Irrevocable Trust u/t/a of 12/11/2012 P.O. Box 2484 Roswell NM 88202	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
10	9314 8699 0430 0063 2267 62	Frank S. Morgan and wife, Robin L. Morgan 135 W. Cottonwood Road Artesia NM 88210	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
11	9314 8699 0430 0063 2267 79	Hutchings Oil Company P.O. Box 1216 Albuquerque NM 87103	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
12	9314 8699 0430 0063 2267 86	Colony Resources, Inc. 12406 Seahaven Dr. Richmond VA 23233	\$1,15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
13	9314 8699 0430 0063 2267 93	Strata Production Company 700 Petroleum Bldg. Roswell NM 88201	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
14	9314 8699 0430 0063 2268 09	Peter Balog, Trustee of the Balog Family Trust u/t/a dated 8/15/2002 P.O. Box 111890 Anchorage AK 99511	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice

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

PS Form 3877

Type of Mailing: CERTIFIED MAIL 09/12/2019





Firm Mailing Book ID: 174476

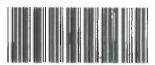
							Reference
Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Contents
15	9314 8699 0430 0063 2268 16	Bane Bigbie and wife, Melania Bigbie P.O. Box 998 Ardmore OK 73402	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
16	9314 8699 0430 0063 2268 23	Duane Brown and wife, Pilar Vaile 1110 El Alhambra Circle NW Albuquerque NM 87107	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
17	9314 8699 0430 0063 2268 30	Wade P. Carrigan and wife, Beth Carrigan P.O. Box 1908 Gilbert AZ 85299	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
18	9314 8699 0430 0063 2268 47	James K. Lusk & Martha L. Lusk Trust u/t/a dated April 29, 1992 2020 Osceola St. Denver CO 80212	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
19	9314 8699 0430 0063 2268 54	Scott-Winn LLC P.O. Box 1834 Roswell NM 88202	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
20	9314 8699 0430 0063 2268 61	Winn Investments, Inc. 706 West Brazos Roswell NM 88201	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
21	9314 8699 0430 0063 2268 7 8	Drusilla Cieszinski-Trustee J.E. Cieszinski Trust 22 Riverside Dr. Roswell NM 88201	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
22	9314 8699 0430 0063 2268 85	Sealy Hutchings Cavin, Inc. P.O. Box 1125 Roswell NM 88202	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
23	9314 8699 0430 0063 2268 92	Nortex Corporation Nortex Corporation Houston TX 77056	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
24	9314 8699 0430 0063 2269 08	Westway Petro, a Texas Joint Venture 6440 N. Central Expwy, #615, LB76 Dallas TX 75206	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
25	9314 8699 0430 0063 2269 15	Roden Participants, Ltd. 2603 Augusta Dr., Suite 430 Houston TX 77057	\$1,15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
26	9314 8699 0430 0063 2269 22	Roden Associates, Ltd. 2603 Augusta Dr., Suite 430 Houston TX 77057	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
27	9314 8699 0430 0063 2269 39	MCM Energy Partners, LLC 223 W. Wall Street, Ste. 400 Midland TX 79701	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
28	9314 8699 0430 0063 2269 46	Andes Energy LLC 209 West 2nd St., Ste 143 Fort Worth TX 76102	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
29	9314 8699 0430 0063 2269 53	Javelina Partners 616 Texas Street Fort Worth TX 76102	\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice

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

PS Form 3877

Type of Mailing: CERTIFIED MAIL 09/12/2019





Firm Mailing Book ID: 174476

Line	USPS Article Number	Name, Street, City, State, Zip		Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
30	9314 8699 0430 0063 2269 60	Zorro Partners, Ltd. 616 Texas Street Fort Worth TX 76102		\$1,15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
31	9314 8699 0430 0063 2269 77	HighPoint Operating Corporation 1099 18th Street, Suite 2300 Denver CO 80202		\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
32	9314 8699 0430 0063 2269 84	Nortex Corporation 3009 Post Oak Blvd., Ste 1212 Houston TX 77056		\$1 .15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
33	9314 8699 0430 0063 2269 91	Francis Hill Hudson, Trustee of Lindy's Living Trust u/t/a dated July 8, 1994 616 Texas Street Fort Worth TX 76102		\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
34	9314 8699 0430 0063 2270 04	WPX Energy 3500 One Williams Center Tulsa OK 74172		\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
35	9314 8699 0430 0063 2270 11	EOG Resources, Inc. P.O. Box 4362 Houston TX 77270		\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
36	9314 8699 0430 0063 2270 28	Read & Stevens, Inc. P.O. Box 1518 Roswell NM 88202		\$1_15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
37	9314 8699 0430 0063 2270 35	OXY USA Inc 10899 Wilshire Boulevard Los Angeles CA 90024		\$1.15	\$3.50	\$1.60	\$0.00	81363-0162 Notice
38	9314 8699 0430 0063 2270 42	XTO Holdings, LLC 810 Houston Street Fort Worth TX 76102		\$1.15	\$3,50	\$1.60	\$0.00	81363-0162 Notice
			Totals:	\$43.70	\$133.00	\$60.80	\$0.00	
					Grand	Total:	\$237.50	

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

Transaction Report Details - CertifiedPro.net Firm Mail Book ID= 174476 Generated: 10/29/2019 9:11:53 AM

USPS Article Number	Date Created Name 1	Name 2	City	State	Zip	Mailing Status		Batch ID	Mall Delivery Date
9314869904300063227042	2019-09-12 8:05 AM XTO Holdings, LLC		Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-16-2019
9314869904300063227035	2019-09-12 8:05 AM OXY USA Inc		Los Angeles	CA	90024	Lost	Return Receipt - Electronic, Certified Mail	171938	
9314869904300063227028	2019-09-12 8:05 AM Read & Stevens, Inc.		Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-16-2019
9314869904300063227011	2019-09-12 8:05 AM EOG Resources, Inc.		Houston	TX	77270	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-17-2019
9314869904300063227004	2019-09-12 8:05 AM WPX Energy		Tulsa	OK	74172	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-16-2019
9314869904300063226991	2019-09-12 8:05 AM Francis Hill Hudson, Trustee of Lindy's Living	Trust u/t/a dated July 8, 1994	Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-16-2019
9314869904300063226984	2019-09-12 8:05 AM Nortex Corporation		Houston	TX	77056	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-17-2019
9314869904300063226977	2019-09-12 8:05 AM HighPoint Operating Corporation		Denver	CO	80202	Delivered	Return Receipt - Electronic, Certified Mail	171938	10-07-2019
9314869904300063226960	2019-09-12 8:05 AM Zorro Partners, Ltd.		Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-16-2019
9314869904300063226953	2019-09-12 8:05 AM Javelina Partners		Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-16-2019
9314869904300063226946	2019-09-12 8:05 AM Andes Energy LLC		Fort Worth	TX	76102	Lost	Return Receipt - Electronic, Certified Mail	171938	
9314869904300063226939	2019-09-12 8:05 AM MCM Energy Partners, LLC		Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-16-2019
9314869904300063226922	2019-09-12 8:05 AM Roden Associates, Ltd.		Houston	TX	77057	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-16-2019
9314869904300063226915	2019-09-12 8:05 AM Roden Participants, Ltd.		Houston	TX	77057	Lost	Return Receipt - Electronic, Certified Mail	171938	
9314869904300063226908	2019-09-12 8:05 AM Westway Petro, a Texas Joint Venture		Dallas	TX	75206	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-17-2019
9314869904300063226892	2019-09-12 8:05 AM Nortex Corporation		Houston	TX	77056	Undelivered	Return Receipt - Electronic, Certified Mail	171938	
9314869904300063226885	2019-09-12 8:05 AM Sealy Hutchings Cavin, Inc.		Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-17-2019
9314869904300063226878	2019-09-12 8:05 AM Drusilla Cleszinski-Trustee J.E. Cleszinski Trust		Roswell	NM	88201	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-23-2019
9314869904300063226861	2019-09-12 8:05 AM Winn Investments, Inc.		Roswell	NM	88201	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-20-2019
9314869904300063226854	2019-09-12 8:05 AM Scott-Winn LLC		Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-17-2019
9314869904300063226847	2019-09-12 8:05 AM James K. Lusk & Martha L. Lusk Trust	u/t/a dated April 29, 1992	Denver	CO	80212	Lost	Return Receipt - Electronic, Certified Mail	171938	
9314869904300063226830	2019-09-12 8:05 AM Wade P. Carrigan and wife, Beth Carrigan		Gilbert	AZ	85299	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-25-2019
9314869904300063226823	2019-09-12 8:05 AM Duane Brown and wife, Pilar Vaile		Albuquerque	NM	87107	Delivered	Return Receipt - Electronic, Certified Mail	171938	10-15-2019
9314869904300063226816	2019-09-12 8:05 AM Bane Bigbie and wife, Melania Bigbie		Ardmore	OK	73402	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-19-2019
9314869904300063226809	2019-09-12 8:05 AM Peter Balog, Trustee of the Balog Family Trust	u/t/a dated 8/15/2002	Anchorage	AK	99511	Lost	Return Receipt - Electronic, Certified Mail	171938	
9314869904300063226793	2019-09-12 8:05 AM Strata Production Company		Roswell	NM	88201	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-23-2019
9314869904300063226786	2019-09-12 8:05 AM Colony Resources, Inc.		Richmond	VA	23233	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-18-2019
9314869904300063226779	2019-09-12 8:05 AM Hutchings Oil Company		Albuquerque	NM	87103	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-17-2019
9314869904300063226762	2019-09-12 8:05 AM Frank S. Morgan and wife, Robin L. Morgan		Artesia	NM	88210	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-16-2019
9314869904300063226755	2019-09-12 8:05 AM Mark B. Murphy, Trustee of the Mark B. Murphy	Irrevocable Trust u/t/a of 12/11/2012	Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-17-2019
9314869904300063226748	2019-09-12 8:05 AM Trustee of the Susan S Murphy	Marital Trust u/t/a dated 11/15/2012	Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-17-2019
9314869904300063226731	2019-09-12 8:05 AM Monty D. McLane		Midland	TX	79708	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-16-2019
9314869904300063226724	2019-09-12 8:05 AM Alan Jochimsen		Midland	TX	79707	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-16-2019
9314869904300063226717	2019-09-12 8:05 AM States Royalty Limited Partnership		Breckenridge	TX	76424	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-16-2019
9314869904300063226700	2019-09-12 8:05 AM Howard L. Mathie		Salt Lake City	UT	84111	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-23-2019
9314869904300063226694	2019-09-12 8:05 AM Wendy Susaeta		Salt Lake City	UT	84070	To be Returned	Return Receipt - Electronic, Certified Mail	171938	
9314869904300063226687	2019-09-12 8:05 AM Dennis Susaeta		Salt Lake City	UT	84070	To be Returned	Return Receipt - Electronic, Certified Mail	171938	
9314869904300063226670	2019-09-12 8:05 AM Michael S. Richardson		Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	171938	09-23-2019

Affidavit of Publication

STATE OF NEW MEXICO COUNTY OF LEA

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

> Beginning with the issue dated September 19, 2019 and ending with the issue dated September 19, 2019.

Publisher

Sworn and subscribed to before me this 19th day of September 2019.

Business Manager

My commission expires CARL CAMPAGE AND AND ASSESSED FOR THE PARTY OF THE PARTY January 29, 2023



OFFICIAL SEAL **GUSSIE BLACK** Notary Public

State of New Mexico

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

SEPTEMBER 19, 2019

CASE NO. 20822: Notice to all affected parties, as well as the heirs and devisees of Michael S. Richardson, Dennis Susaeta, Wendy Susaeta, Howard L. Mathle, States Royalty Limited Partnership, Alan Jochimsen, Monty D. McLane, Susan S. Murphy Trustee of the Susan S. Murphy Marital Trust ut/la/ dated 11-15-12, Mark B. Murphy Trustee of the Mark B. Murphy Irrevocable Trust ut/la/ dated 12-11-12, Frank S. Morgan and wife Robin L. Morgan, Hutchings Oil Company, Colony Resources Inc., Unknown Successors of B&B Oil Ventures Inc.3, Strata Production Company, Peter Balog Trusteee of the Balog Family Trust ut/la/ dated 8-15-02, Bane Bigble and wife Melania Bigble, Duane Brown and wife Pilar Valle, Wade P. Carrigan and wife Bellia Carrigan, James K. Lusk and Martha L. Lusk Trust ut/la/ dated 49-9-92, Sooth-Winn LLC, Winn Investments Inc., Drusilla Cleszinski Trustee of the J.E. Cleszinski-Trust, Sealy Hutchings Cavin Inc. Nortex Corporation, Westway Petro a Tarkit Joint Venture, Roden Participants Ltd., Roden Associates Ltd., MCM Energy Partners Ltd., Andes Energy LLC, Javelina Partners, Zorro Partners Ltd., HighPoint Operating Corporation, Nortex Corporation, Francis Hill Hudson Trustee of Lindy's Living Trust ut/la/ dated 7-8-94, WPX Energy, EOG Resources Inc., Read & Stevens inc., OXY USA Inc., XTO Holdings LLC of Marathon Oil Permian LLC's application for compulsory pooling, Lea County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on October, 3, 2019, to consider this application. Applicant seks an order from the Division pooling all uncommitted mineral interests within a Bone, Spring horizontal spacing unit underlying the underlying the E/2 of Sections 15 and 22, Township 22 South, Range 32 East, N.M.P.M., Lea County, New Mexico. This proposed spacing unit will be decicated to Frizzle Fry 15 TB FC 14H; Frizzle Fry 15 TB FC 17H; Frizzle Fry 15 FB FC 30H; Frizzle Fry 15 B FC 18H; Frizzle Fry 15 TB FC 17H; Fri

CASE NO. 20823: Notice to all affected parties, as well as the heirs and devisees of Michael S. Richardson, Dennis Susaeta, Wendy Susaeta, Howard L. Mathle, States Royalty Limited Partnership, Alan Jochimsen, Monty D. McLane, Susan S., Murphy Trustee of the Susan S. Murphy Marital Trust wt/a/ dated 11-15-12, Mark B. Murphy Irrustee of the Mark B. Murphy Irrevocable Trust wt/a/ dated 12-11-12, Frank S. Morgan and wife Robin L. Morgan, Hutchings Oil Company, Colony Resources Inc., Unknown Successors of B&B Oil Ventures Inc.3, Strata Production Company, Peter Balog Trusteee of the Balog Family Trust wt/a dated 8-15-02, Bane Bigble-ard-wife Melania Bigble, Duane Brown and wife Pilar Valle, Wade P. Carrigan and wife Beth Carrigan, James K. Lusk and Martha L. Lusk Trust wt/a/ dated 4-29-92, Scott-Winn LLC, Winn Investments Inc., Drusilia Cleszinski Trustee of the J.E. Cleszinski Trust, Sealy Hutchings Cavin Inc. Nortex Corporation, Westway Petro a Texas-Joint Venture, Roden Participants Ltd., Roden Associates Ltd., MCM Energy Partners LtC, Andes Energy LLC, Javelina Partners, Zorro Partners Ltd., HighPoint Operating Corporation, Nortex Corporation, Francis Hill Hudson Trustee of Lindy's Living Trust wt/a/ dated 7-8-94, WPX Energy, EOG Resources Inc., Read & Stevens Inc., OXY USA Inc., XTO Holdings LLC of Marathon Oil Permian LLC's application Torcompulsory pooling, Lea County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on October, 3, 2019, to consider this application. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the underlying the Ez of Sections 15 and 22, Township 22 South, Range 32 East, N.M.P.M., Lea County, New Mexico. This proposed spacing unit will be dedicated to the Frizzie Fry 15 WA FC 11H and the Frizzie Fry 15 WAY FC 18H wells, to be horizontally drilled. The producing area for these wells will be onth

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

Frizzle Fry E/2

ORRI Owner in Section 15				
Michael S. Richardson	P.O. Box 819	Roswell	NM	88202
Dennis Susaeta	9378 S. Sneddon Dr.	Salt Lake City	UT	84070
Wendy Susaeta	9378 S. Sneddon Dr.	Salt Lake City	UT	84070
Howard L. Mathie	877 S. Main Street	Salt Lake City	UT	84111
States Royalty Limited Partnership	P.O. Box 911	Breckenridge	TX	76424
Alan Jochimsen	4209 Cardinal Lane	Midland	TX	79707
Monty D. McLane	P. O. Box 9451	Midland	TX	79708
Susan S. Murphy, Trustee of the Susan S. Murphy Marital Trust u/t/a dated 11/15/2012	P.O. Box 2484	Roswell	NM	88202
Mark B. Murphy, Trustee of the Mark B. Murphy Irrevocable Trust u/t/a dated 12/11/2012	P.O. Box 2484	Roswell	NM	88202
Frank S. Morgan and wife, Robin L. Morgan	135 W. Cottonwood Road	Artesia	NM	88210
Hutchings Oil Company	P.O. Box 1216	Albuquerque	NM	87103
Colony Resources, Inc.	12406 Seahaven Dr.	Richmond	VA	23233
Unknown Successors of B&B Oil Ventures, Inc.3				
Strata Production Company	700 Petroleum Bldg.	Roswell	NM	88201
Peter Balog, Trustee of the Balog Family Trust u/t/a dated 8/15/2002	P.O. Box 111890	Anchorage	AK	99511
Bane Bigbie and wife, Melania Bigbie	P.O. Box 998	Ardmore	ОК	73402
Duane Brown and wife, Pilar Vaile	1110 El Alhambra Circle NW	Albuquerque	NM	87107
Wade P. Carrigan and wife, Beth Carrigan	P.O. Box 1908	Gilbert	AZ	85299
James K. Lusk & Martha L. Lusk Trust u/t/a dated April 29, 1992	2020 Osceola St.	Denver	со	80212
Scott-Winn LLC	P.O. Box 1834	Roswell	NM	88202
Winn Investments, Inc.	706 West Brazos	Roswell	NM	88201
Drusilla Cieszinski, Trustee of the J.E. Cieszinski Trust	22 Riverside Dr.	Roswell	NM	88201
Sealy Hutchings Cavin, Inc.	P.O. Box 1125	Roswell	NM	88202

Nortex Corporation	Nortex Corporation	Houston	TX	77056
Westway Petro, a Texas Joint Venture	6440 N. Central Expwy, #615, LB76	Dallas	TX	75206
Contractual Interest Owners in Section 15				
Marathon				
Roden Participants, Ltd.	2603 Augusta Dr., Suite 430	Houston	TX	77057
Roden Associates, Ltd.	2603 Augusta Dr., Suite 430	Houston	TX	77057
MCM Energy Partners, LLC	223 W. Wall Street, Ste. 400	Midland	TX	79701
Andes Energy LLC	209 West 2nd St., Ste 143	Fort Worth	TX	76102
Javelina Partners	616 Texas Street	Fort Worth	TX	76102
Zorro Partners, Ltd.	616 Texas Street	Fort Worth	TX	76102
HighPoint Operating Corporation	1099 18th Street, Suite 2300	Denver	СО	80202
Nortex Corporation	3009 Post Oak Blvd., Ste 1212	Houston	TX	77056
Francis Hill Hudson, Trustee of Lindy's Living Trust u/t/a	616 Texas Street	Fort Worth	TX	76102
dated July 8, 1994	OTO TEXAS STICES	TOTE WOTEH	1'^	70102
WPX Energy	3500 One Williams Center	Tulsa	OK	74172
EOG Resources, Inc.	P.O. Box 4362	Houston	TX	77270
Read & Stevens, Inc.	P.O. Box 1518	Roswell	NM	88202
Record Title for Section 22				
Marathon				
OXY USA Inc	10899 Wilshire Boulevard	Los Angeles	CA	90024
ORRI for Section 22				
XTO Holdings, LLC	810 Houston Street	Fort Worth	TX	76102

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

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

CASE NOS. 20822 & 20823 (FRIZZLE FRY)

AFFIDAVIT

STATE OF TEXAS)
) ss.
COUNTY OF MIDLAND)

Thomas Lockwood, 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 8** is a locator maps showing the approximate location of the proposed units in relation to the Capitan Reef.
- 3. Exhibit 9 is a wellbore schematic showing the proposed wells laterals within the unit.
- 4. The exhibits behind **Tab 10** are the geology study I prepared for the Avalon and Bone Spring wells.
- 5. **Exhibit 10-A** is structure map of the top of the Bone Spring. The proposed project area is identified by a black-dashed box, and the proposed Avalon wells are identified by purple lines. The contour interval used this exhibit is 25 feet. This exhibit shows that the structure is fairly flat.



- 6. **Exhibit 10-B** is structure map of the top of the First Bone Spring Sand. The proposed project area is identified by a black-dashed box, and the proposed First Bone Spring wells are identified by green lines. The contour interval used this exhibit is 25 feet. This exhibit shows that the structure dips to the northeast.
- 7. **Exhibit 10-C** is structure map of the base on the Second Bone Spring Sand. The proposed project area is identified by a black-dashed box, and the proposed Second Bone Spring wells are identified by blue lines. The contour interval used this exhibit is 25 feet. This exhibit shows that the structure dips to the northeast.
- 8. Exhibit 10-D is structure map of the top of the Wolfcamp. The proposed project area is identified by a black-dashed box, and the proposed Third Bone Spring wells are identified by orange lines. The contour interval used this exhibit is 25 feet. This exhibit shows that the structure dips to the northeast.
- 9. **Exhibit 10-E** identifies three wells in the vicinity of the proposed Avalon and Bone Spring wells, shown by a line of cross-section running from A to A'.
- 10. **Exhibit 10-F** is a stratigraphic cross section for the Bone Spring wells hung on the top of the Wolfcamp. The well logs on the cross-section provide a representative cross section of the Bone Spring Formation in the area. The target zone for the various producing areas is identified by the words "Producing Zone" and the shaded area across the cross section, along with a red arrow. I conclude that the production zones appear to be consistent across the unit, the Avalon shale thickening slightly to the south.
- 11. **Exhibit 10-G** is a Gross Interval Isochore of the Avalon Shale. The Avalon ranges in thickness from 450' in the north to 525' towards the south.

- 12. **Exhibit 10-H** is a Gross Interval Isochore of the First Bone Spring Sand. The First Bone Spring sand is consistently ~275' thick across the Frizzle Fry unit.
- 13. Exhibit 10-I is a Gross Interval Isochore of Second Bone Spring Sand. The Second Bone Spring sand is about 425' thick across the Frizzle Fry unit, thinning in the middle to ~400' thick.
- 14. **Exhibit 10-J** is a Gross Interval Isochore of Third Bone Spring Sand. The Third Bone Spring sand thins from 375' in the north to 350' thick in the south.
- 15. The exhibits behind **Tab 11** are the geology study I prepared for the Wolfcamp wells.
- 16. Exhibit 11-A is structure map of the top of the Wolfcamp A. The proposed project area is identified by a black-dashed box, and the proposed wells are identified by a blue and a red line. The contour interval used for this exhibit is 25 feet. This exhibit shows that the structure dips to the northeast.
- 17. Exhibit 11-B identifies three wells in the vicinity of the proposed Wolfcamp wells, shown by a line of cross-section running from A to A'.
- 18. **Exhibit 11-C** is a stratigraphic cross section hung on the top of the Wolfcamp. The well logs on the cross-section provide a representative cross section of the Wolfcamp Formation in the area. The target zone is identified by the words "Producing Zone" and the shaded area across the cross section, along with a red arrow.
- 19. In my opinion, the Wolfcamp XY and Wolfcamp A appear to have consistent thickness across the proposed unit.
- 20. Exhibit 11-D is a Gross Interval Isochore of the Wolfcamp X and Y Sands. The X& Y sands thin from ~160' thick in the north to 125' in the south.

- 21. **Exhibit 11-E** is a Gross Interval Isochore of the Wolfcamp A. The Wolfcamp A remains at about 200' thick across the Frizzle Fry unit, thickening slightly to 230' in the middle of the unit.
 - 22. I conclude from the maps that:
 - a. The horizontal spacing units are 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 each of the proposed units will contribute more or less equally to production.
- 23. **Exhibit 12** provides an overview of the stress orientation in the area based on the 2018 Snee-Zoback paper.
- 24. The preferred well orientation in this area is North/South. This is because the S_{Hmax} is at approximately 60-80 degrees in mid-Lea County.
- 25. Exhibits 8-12 were prepared by my or under my supervision or compiled from company business records.
- 26. In my opinion, the granting of Marathon's applications is in the interests of conservation and the prevention of waste.

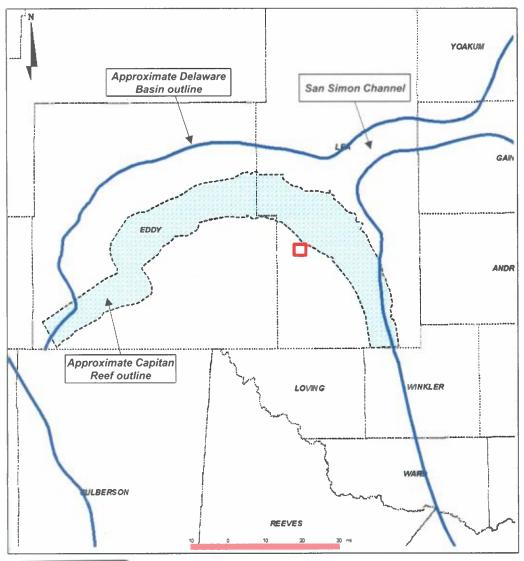
SUBSCRIBED AND SWORN to before me this 30 day of Orthon, 2019 by Thomas Lockwood, on behalf of Marathon Oil Permian LLC.

Nótary Public

My commission expires: 1/83/2023

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

Locator Map

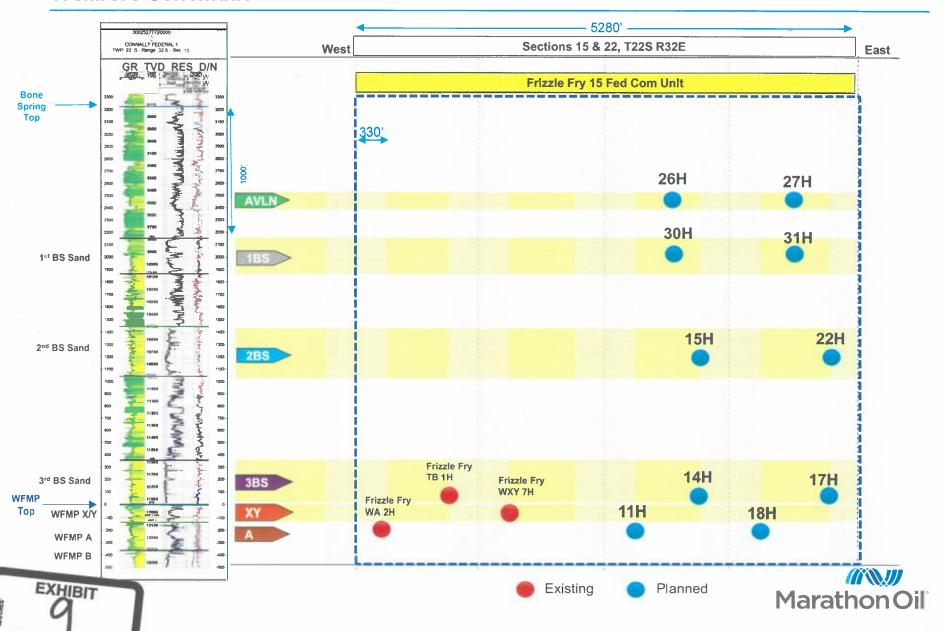


- Approximate location of proposed Frizzle Fry 15 Fed Com well locations shown with red box
- Located just basinward of the Capitan Reef
- Mid Lea county

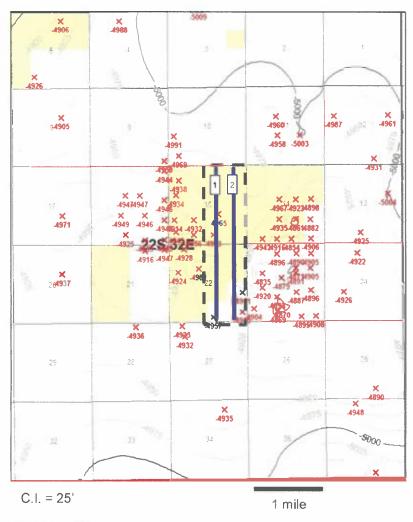




Wellbore Schematic



Structure Map – Top of Bone Spring (TVDSS)



Map Legend

MRO – Horizontal Location

- 1 Frizzle Fry 15 AV FC 26H
- 2 Frizzle Fry 15 AV FC 27H



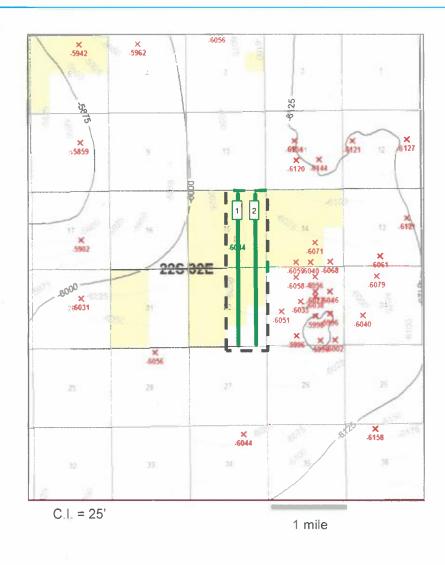


MRO Acreage





Structure Map – Top of First Bone Spring Sand (TVDSS)



Map Legend FBSG

MRO – Horizontal Location

- 1 Frizzle Fry 15 FB FC 30H
- 2 Frizzle Fry 15 FB FC 31H



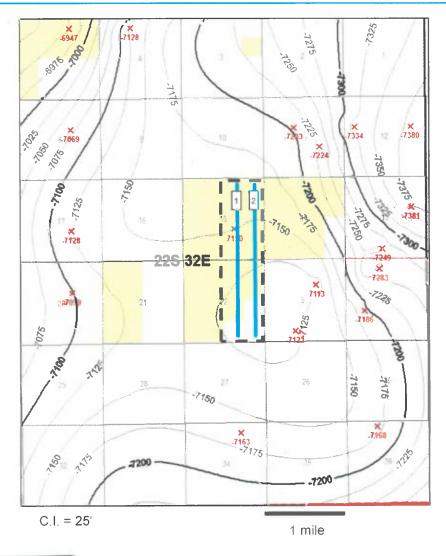
MRO Acreage







Structure Map – Base of Second Bone Spring Sand (TVDSS)



Map Legend

SBSG

MRO – Horizontal Location

- 1 Frizzle Fry 15 SB FC 15H
- 2 Frizzle Fry 15 SB FC 22H



MRO Acreage

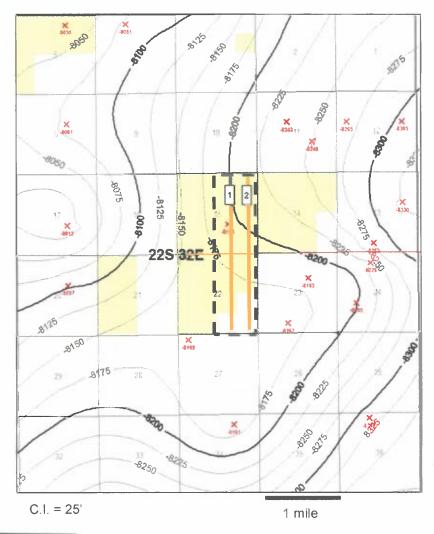


Project Area





Structure Map – Top of Wolfcamp (TVDSS)



Map Legend

TBSG

MRO – Horizontal Location

- 1 Frizzle Fry 15 TB FC 14H
- 2 Frizzle Fry 15 TB FC 17H

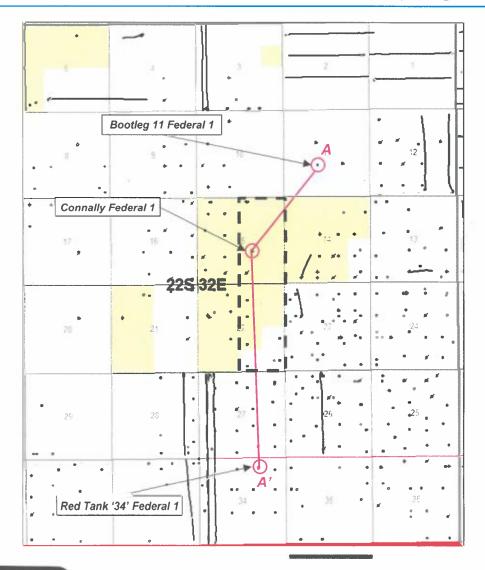








Reference Map for Cross Section -Bone Spring Wells







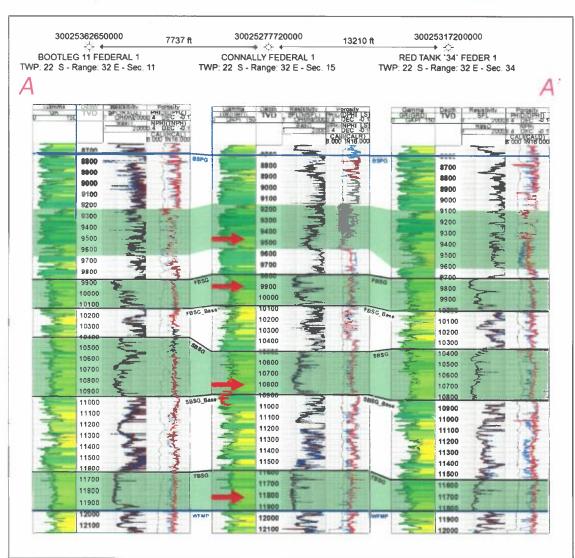
Project Area

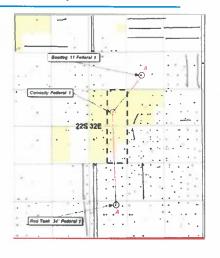




EXHIBIT

Stratigraphic Cross Section for Bone Spring Wells (Top of Wolfcamp Datum)





Producing Zone – Avalon Shale

Producing Zone – First Bone Spring Sand

Producing Zone – Second Bone Spring Sand Each zone
appears to have
consistent
thickness across
the unit.

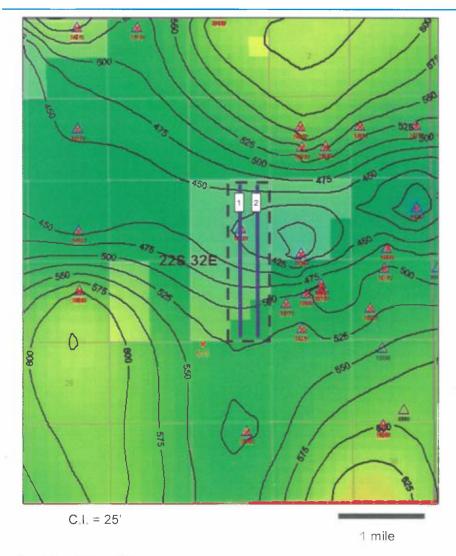
The Avalon shale thickens slightly to the south.

Producing Zone – Third Bone Spring Sand





Gross Interval Isochore - Avalon Shale



Map Legend

MRO – Horizontal Location

- 1 Frizzle Fry 15 AV FC 26H
- 2 Frizzle Fry 15 AV FC 27H



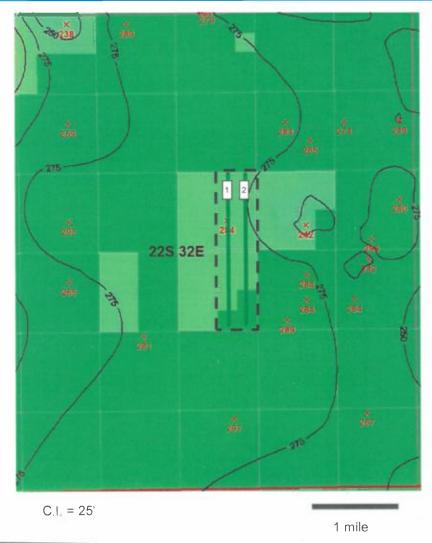
Project Area







Gross Interval Isochore - First Bone Spring Sand



Map Legend

FBSG
MRO – Horizontal
Location

- 1 Frizzle Fry 15 FB FC 30H
- 2 Frizzle Fry 15 FB FC 31H



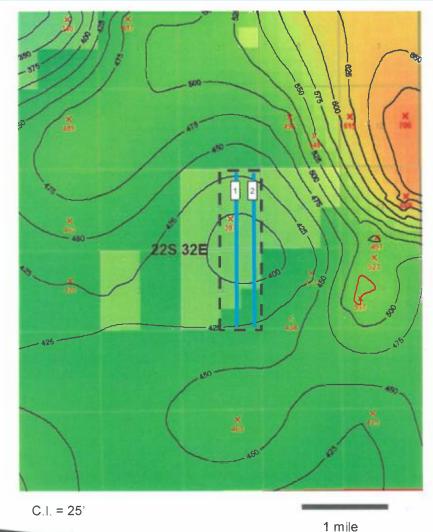


Project Area





Gross Interval Isochore - Second Bone Spring Sand



Map Legend

SBSG
MRO – Horizontal
Location

- 1 Frizzle Fry 15 SB FC 15H
- 2 Frizzle Fry 15 SB FC 22H



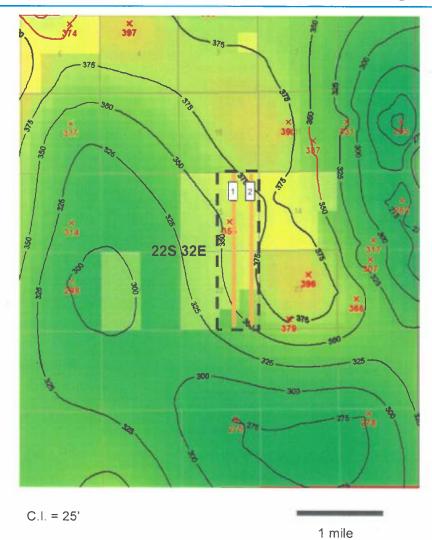


Project Area





Gross Interval Isochore - Third Bone Spring Sand



Map Legend

TBSG

MRO – Horizontal Location

- 1 Frizzle Fry 15 TB FC 14H
- 2 Frizzle Fry 15 TB FC 17H



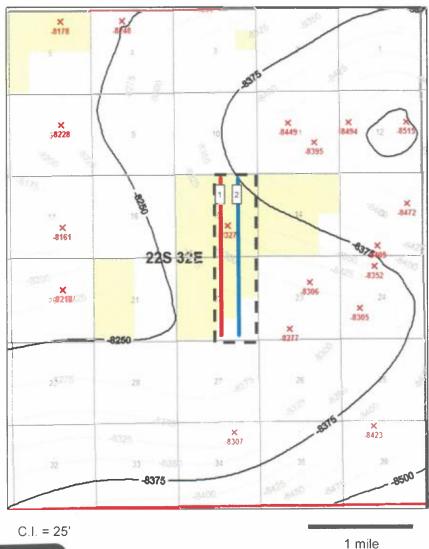


Project Area





Structure Map - Top of Wolfcamp A (TVDSS)



Map Legend



MRO – Horizontal Location

- 1 Frizzle Fry 15 WA FC 11H
- 2 Frizzle Fry 15 WXY FC 18H

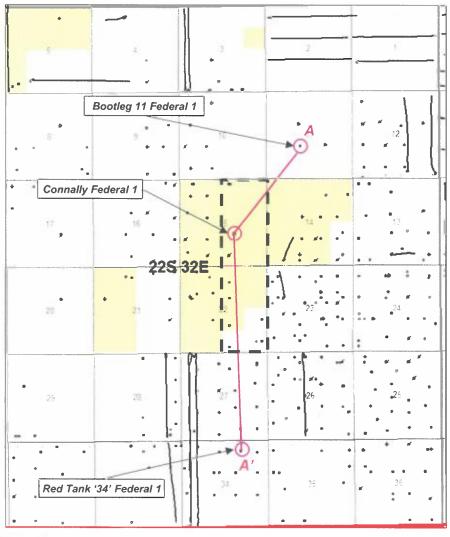








Reference Map for Cross Section - Wolfcamp Wells







MRO Acreage



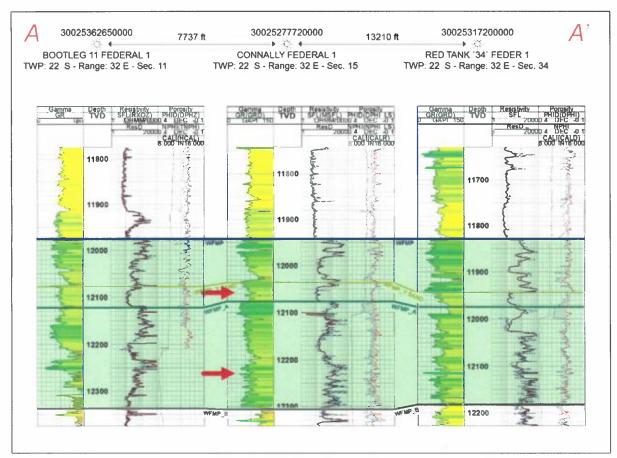
Project Area

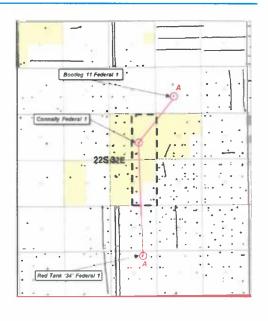


1 mile



Stratigraphic Cross Section (Top Wolfcamp Datum)





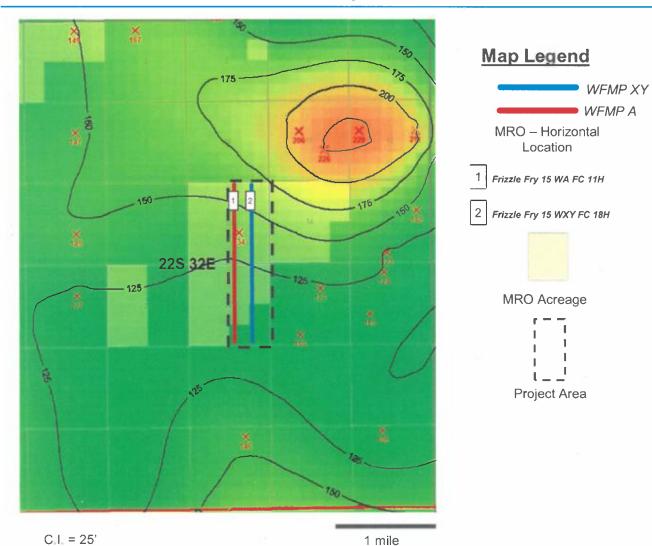
Producing Zone – Wolfcamp XY & WFMP A

The Wolfcamp XY
Sands and WFMP A
appear to have
consistent thickness
across the unit.





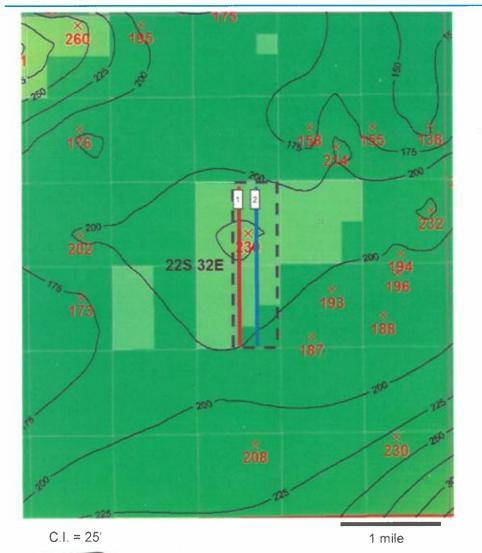
Gross Interval Isochore – Wolfcamp X & Y Sands







Gross Interval Isochore – Wolfcamp A



Map Legend



- 1 Frizzle Fry 15 WA FC 11H
- 2 Frizzle Fry 15 WXY FC 18H



Project Area





Preferred Well Orientation - SHmax

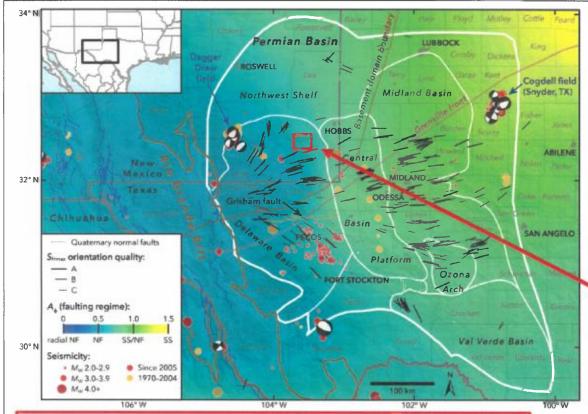


Figure 1. State of stress in the Permian Basin, Texas and New Mexico. Black lines are the measured orientations of the maximum horizontal stress (S_{beau}), with line tengin scaled by data quality. The colored background is an interpolation or measured relative principal stress magnitudes (radicing measured colored background is an interpolation or measured relative principal stress magnitudes (radicing measured colored background is an interpolation or measured relative principal stress magnitudes (radicing measured colored background). The past 1.6 Ma. from the USGS Quaternary Faults and Folds Database (Crone and Wheeler, 2000). The boundary between the Shawnee and Mazatzal basement domains is from Lund et al. (2015), and the Precambrian Grenville Front is from Thomas (2006). The Permian Basin boundary is from the U.S. Energy Information Administration, and the subbasin boundaries are from the Texas Bureau of Economic Geology Permian Basin Geological Synthesis Project. Earthquakes are from the USGS National Earthquake Information Center, the TexNet Seismic Monitoring Program, and Gan and Frohlich (2013). Focal mechanisms are from Saint Louis University (Herrmann et al., 2011).

Source:

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

Preferred well orientation is N/S.

Channelized Bone Spring sands are predominately oriented N/S in mid Lea County (NE Delaware basin), as a result of sediment input from the San Simon channel to the north/northeast.

Additionally, as outlined in Snee & Zoback (2018), SHmax is at approximately 60-80 degrees in mid Lea county. It is preferable to have N/S oriented wellbores at the Frizzle Fry 15 Fed Com proposed location (outlined with red box) since hydraulic fractures will prefer to propagate outwards at 60-80 degrees.

