Before the Oil Conservation Division Examiner Hearing December 12, 2019

Case Nos. 20946, 20948, 20949, and 20950

- (1) Mead West 32 SB State 1H
- (2) Mead West 32 SB State 2H
- (3) Mead West 32 WFB State 5H
- (4) Mead West 32 WFB State 6H



Marathon Mead Cases: Nos. 20946, 20948, 20949, & 20950

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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. 20946, 20948, 20949, 20950

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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 land supervisor for Marathon Oil Permian LLC and have personal knowledge of the matters stated herein. I have previously testified before the Oil Conservation Division ("Division") and my credentials as an expert petroleum landman were accepted by the Division as a matter of record.
- 2. My area of responsibility at Marathon includes the area of Lea County in New Mexico.
 - 3. I am familiar with the 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. No opposition is expected because the interest owner being pooled has been contacted regarding the proposed wells, but has failed or refused to voluntarily commit its interests in the wells.



- 7. Marathon filed four applications for Mead wells located in the W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. In each of those four applications, Marathon seeks to force pool a single working interest owner, ConocoPhillips Company, into the horizontal spacing units described in each application, and in the wells to be drilled in the unit.
- 8. Attached as Exhibit 1 is the application for Case No. 29646. In Case No. 20946, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the W/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Mead West 32 SB State 1H well, to be horizontally drilled.
 - 9. The producing area for the well will be orthodox.
- 10. Attached as **Exhibit 2** is the application for Case No. 20949. In Case No. 20949, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the **Mead West 32 SB State 2H** well, to be horizontally drilled.
 - 11. The producing area for the well will be orthodox.
- 12. The pool for the 1H and 2H wells is the Pearl, Bone Spring, Pool Code 49680, which is an oil pool.
- 13. Attached as **Exhibit 3** is the application for Case No. 20948. In Case No. 20948, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfbone horizontal spacing unit underlying the W/2 W/2 of Section 32, Township 19 South,

Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the **Mead**West 32 WFB State 5H well, to be horizontally drilled.

- 14. The producing area for the well will be orthodox.
- 15. Attached as **Exhibit 4** is the application for Case No. 20950. In Case No. 20950, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfbone horizontal spacing unit underlying the E/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the **Mead West 32 WFB State 6H** well, to be horizontally drilled.
 - 16. The producing area for the well will be orthodox.
- 17. Based on discussions with Paul Kautz, these wells are within what would be considered the Wolfbone Pool.
- 18. Mr. Kautz suggested using the following terminology to describe the pool: "From the top of the Third Bone Spring Carbonate to a point 500 feet below the top of the Wolfcamp". Marathon requests that the order reflect this terminology for the 5H and 6H wells.
 - 19. There are no depth severances in the Bone Spring or Wolfbone formations.
 - 20. Attached as **Exhibit 5** are the proposed C-102s for the wells.
- 21. Lease tract maps outlining the units being pooled are attached hereto as **Exhibit 6.**The parties being pooled and the percent of their interests is also included as part of Exhibit 6.
 Ownership within the proposed units is the same within the Bone Spring and Wolfbone formation.
 - 22. There are no overriding royalty interest owners that Marathon seeks to pool.
- 23. Marathon has 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.

- 24. There is only one uncommitted working interest owner—ConocoPhillips Company.
- 25. Marathon has been diligently discussing voluntary joinder with ConocoPhillips Company, and will continue to do so. Marathon will alert the Division if Marathon and ConocoPhillips reach a voluntary agreement.
- 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. **Exhibit 7** is the proposal letters sent to ConocoPhillips, which was sent on October 9, 2019.
- 28. The proposal letter identifies the proposed first take point, last take point, and approximate TVD. It also contains separate elections for each well.
- 29. **Exhibit 8** 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.
- 30. Marathon requests overhead and administrative rates of \$7000.00/month for drilling a well and \$700.00/month for a producing well. These rates are fair, and comparable to the rates charged by other operators for wells of this type in this area of Southeastern, New Mexico. Marathon requests that these rates be adjusted periodically as provided in the COPAS Accounting Procedure.
- 31. Marathon requests the maximum cost plus 200% risk charge be assessed against non-consenting working interest owners.

- 32. Marathon requests that it be designated operator of the wells.
- 33. 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.
- 34. **Exhibit 9** is an affidavit of notice prepared by counsel for Marathon that shows the parties who were notified of this hearing, the status of whether they received notice, and an affidavit of publication from the Hobbs-News Sun newspaper, showing that notice of this hearing was published on November 30, 2019.
- 35. The attachments to this affidavit were prepared by me, or compiled from company business records, or were prepared at my direction.
- 36. I attest that the information provided herein is correct and complete to the best of my knowledge and belief.
- 37. The granting of this application is in the interests of conservation and the prevention of waste.

[Signature page follows]

Travis Prewett

SUBSCRIBED AND SWORN to before me this 4th day of December, 2019 by Travis Prewett on behalf of Marathon Oil Permian LLC.

Notary Public

My commission expires: 1/23/2023

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

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

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

CASE NO. 20946

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 W/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. In support of this application, Marathon states as follows:

- 1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
- 2. Marathon seeks to dedicate the W/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico to form a 160-acre, more or less, spacing unit.
- 3. Marathon plans to drill the **Mead West 32 SB State 1H** well to a depth sufficient to test the Bone Spring formation. This well will be horizontally drilled and will be drilled at orthodox locations under the Division's rules.



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

WHEREFORE, Marathon requests this application be set for hearing before an Examiner of the Oil Conservation Division on December 12, 2019, and after notice and hearing as required by law, the Division enter its order:

- A. Pooling all mineral interests in the Bone Spring formation underlying a horizontal spacing unit within the W/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico;
- B. Designating Marathon as operator of this unit and the well to be drilled thereon;
- C. Authorizing Marathon to recover its costs of drilling, equipping and completing the well;
- D. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure;
- E. Setting a 200% charge for the risk involved in drilling and completing the well in the event a working interest owner elects not to participate in the well.
- F. Allowing a time period of one (1) year between when the well is drilled and when it is completed under the order.

Respectfully submitted,

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

Deana M. Bennett

Nicole T. Russell

Post Office Box 2168

500 Fourth Street NW, Suite 1000

Albuquerque, New Mexico 87103-2168

Telephone: 505.848.1800 Attorneys for Applicant

case No. _______: Application of Marathon Oil Permian LLC for compulsory pooling, Lea County, New Mexico. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the W/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Mead West 32 SB State 1H well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 20 miles West-Southwest of Hobbs, New Mexico.

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. 20949

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 E/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. In support of this application, Marathon states as follows:

- 1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
- 2. Marathon seeks to dedicate the E/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico to form a 160-acre, more or less, spacing unit.
- 3. Marathon plans to drill the **Mead West 32 SB State 2H** well to a depth sufficient to test the Bone Spring formation. This well will be horizontally drilled and will be drilled at orthodox locations under the Division's rules.

EXHIBIT 2

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

WHEREFORE, Marathon requests this application be set for hearing before an Examiner of the Oil Conservation Division on December 12, 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 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico;
- B. Designating Marathon as operator of this unit and the well to be drilled thereon;
- C. Authorizing Marathon to recover its costs of drilling, equipping and completing the well;
- D. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure;
- E. Setting a 200% charge for the risk involved in drilling and completing the well in the event a working interest owner elects not to participate in the well.
- F. Allowing a time period of one (1) year between when the well is drilled and when it is completed under the order.

Respectfully submitted,

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

Deana M. Bennett

Nicole T. Russell

Post Office Box 2168

500 Fourth Street NW, Suite 1000

Albuquerque, New Mexico 87103-2168

Telephone: 505.848.1800 Attorneys for Applicant

case No. ______: Application of Marathon Oil Permian LLC for compulsory pooling, Lea County, New Mexico. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Mead West 32 SB State 2H well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 20 miles West-Southwest of Hobbs, New Mexico.

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. 20948

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 Wolfbone horizontal spacing unit underlying W/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. In support of this application, Marathon states as follows:

- 1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
- 2. Marathon seeks to dedicate the W/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico to form a 160-acre, more or less, spacing unit.
- 3. Marathon plans to drill the **Mead West 32 WFB State 5H** well to a depth sufficient to test the Wolfbone formation. This well will be horizontally drilled and will be drilled at orthodox locations under the Division's rules.

EXHIBIT

3

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

WHEREFORE, Marathon requests this application be set for hearing before an Examiner of the Oil Conservation Division on December 12, 2019, and after notice and hearing as required by law, the Division enter its order:

- A. Pooling all mineral interests in the Wolfbone formation underlying a horizontal spacing unit within the W/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico;
- B. Designating Marathon as operator of this unit and the well to be drilled thereon;
- C. Authorizing Marathon to recover its costs of drilling, equipping and completing the well;
- D. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure;
- E. Setting a 200% charge for the risk involved in drilling and completing the well in the event a working interest owner elects not to participate in the well.
- F. Allowing a time period of one (1) year between when the well is drilled and when it is completed under the order.

Respectfully submitted,

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

By: Doone M. Pannett

Deana M. Bennett Nicole T. Russell Post Office Box 2168

500 Fourth Street NW, Suite 1000

Albuquerque, New Mexico 87103-2168

Telephone: 505.848.1800 Attorneys for Applicant

CASE NO. _______: Application of Marathon Oil Permian LLC for compulsory pooling, Lea County, New Mexico. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Wolfbone horizontal spacing unit underlying the W/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Mead West 32 WFB State 5H well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 20 miles West-Southwest of Hobbs, New Mexico.

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. 20950

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 Wolfbone horizontal spacing unit underlying E/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. In support of this application, Marathon states as follows:

- 1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
- 2. Marathon seeks to dedicate the E/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico to form a 160-acre, more or less, spacing unit.
- 3. Marathon plans to drill the **Mead West 32 WFB State 6H** well to a depth sufficient to test the Wolfbone formation. This well will be horizontally drilled and will be drilled at orthodox locations under the Division's rules.



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

WHEREFORE, Marathon requests this application be set for hearing before an Examiner of the Oil Conservation Division on December 12, 2019, and after notice and hearing as required by law, the Division enter its order:

- A. Pooling all mineral interests in the Wolfbone formation underlying a horizontal spacing unit within the E/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico;
- B. Designating Marathon as operator of this unit and the well to be drilled thereon;
- C. Authorizing Marathon to recover its costs of drilling, equipping and completing the well;
- D. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure;
- E. Setting a 200% charge for the risk involved in drilling and completing the well in the event a working interest owner elects not to participate in the well.
- F. Allowing a time period of one (1) year between when the well is drilled and when it is completed under the order.

Respectfully submitted,

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case No. ______: Application of Marathon Oil Permian LLC for compulsory pooling, Lea County, New Mexico. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Wolfbone horizontal spacing unit underlying the E/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Mead West 32 WFB State 6H well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 20 miles West-Southwest of Hobbs, New Mexico.

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 Fe, NM 87505

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

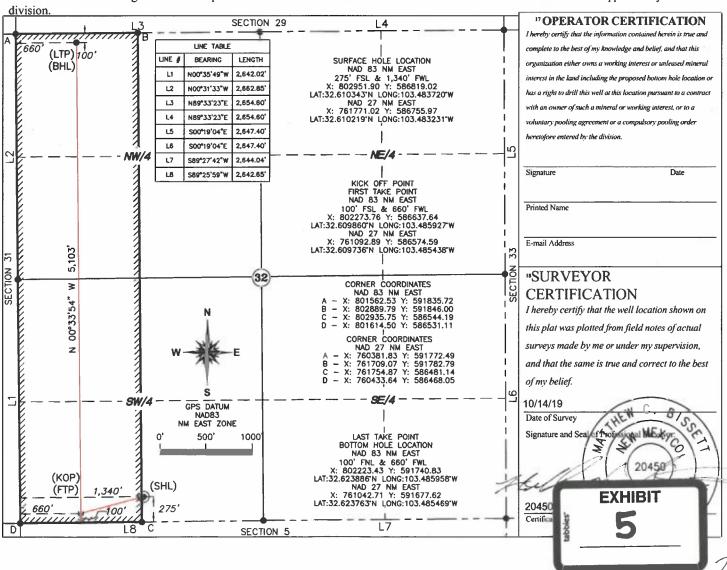
State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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

■ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

'	API Numbe	1 Pool Code 3 Pool Name 49690 PEARL; BONE SPRING (EAST)							
⁴ Property			⁵ Property Name MEAD WEST 32 SB STATE					'ell Number 1H	
⁷ OGRID No. 372098				⁸ Operator Name MARATHON OIL PERMIAN, LLC					Elevation 3,694'
	. ,				" Surface I	Location			
UL or lot no.	Section 32	Township 19-S	Range 35-E	Lot Idn	Feet from the 275'	North/South line SOUTH	Feet from the 1,340'	East/West line WEST	County LEA
	<u> </u>	1	" Bo	ttom Hol	e Location If	Different From	Surface		
UL or lot no. D	Section 32	Township 19-S	Range 35-E	Lot Idn	Feet from the 100'	North/South line NORTH	Feet from the 660'	East/West line WEST	County LEA
12 Dedicated Acre	s ¹³ Joint o	r Infill	Consolidation (Code 15 Or	der No.	<u> </u>	'		



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

API Number

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

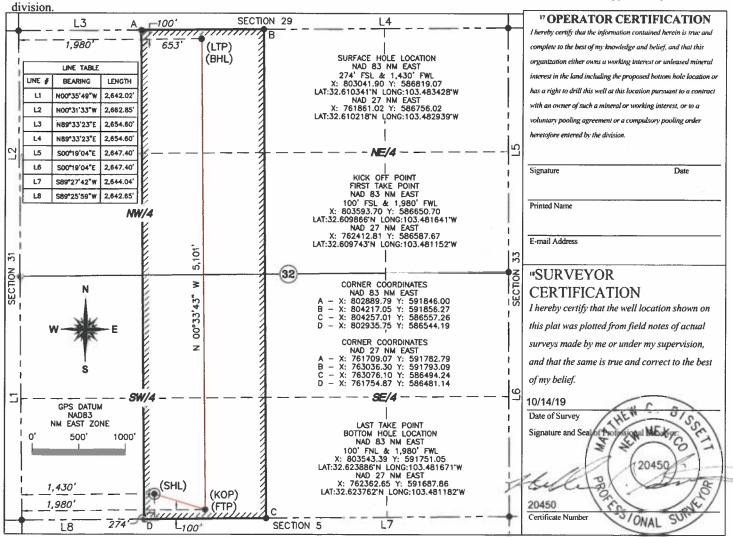
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	API Numbe	•		49690		Pi	EARL; BONE SPI		
⁴ Property		•	³ Property Name MEAD WEST 32 SB STATE					Well Number 2H	
⁷ OGRID No. 372098				⁸ Operator Name MARATHON OIL PERMIAN, LLC					Selevation 3,695'
					" Surface L	ocation			*
UL or lot no.	Section 32	Township 19-S	Range 35-E	Lot Idn	Feet from the 274'	North/South line SOUTH	Feet from the 1,430'	East/West line WEST	County LEA
			" Bott	tom Hole	Location If	Different From	Surface		

UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County C 32 19-S 35-E 100' 1,980' NORTH WEST LEA 12 Dedicated Acres ³ Joint or Infill 14 Consolidation Code ¹⁵ Order No. 160



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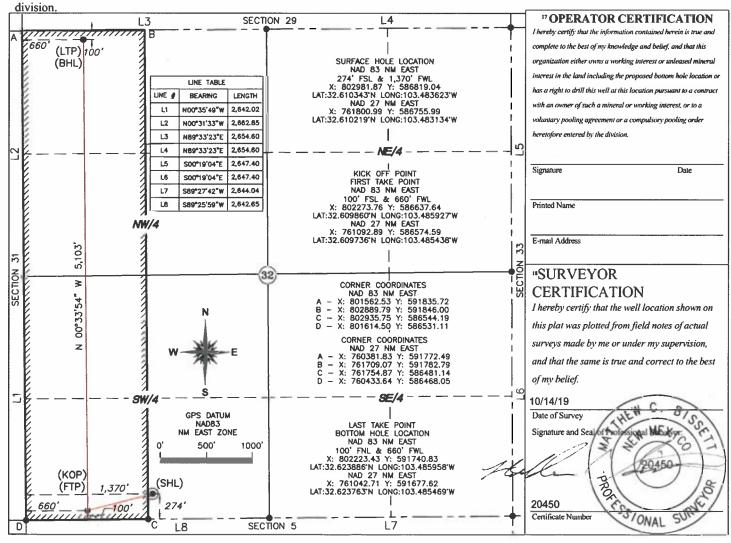
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Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

,	API Numbe	ī		² Pool Code		³ Pool Name				
4 Property	Code			MEA	5 Property N ND WEST 32 W		• v	° Well Number 5H		
⁷ OGRID 37209				MARA	8 Operator Name MARATHON OIL PERMIAN, LLC				Elevation 3,695'	
					" Surface L	ocation		•		
UL or lot no.	Section 32	Township 19-S	Range 35-E	Lot Idn	Feet from the 274'	North/South line SOUTH	Feet from the 1,370'	East/West line WEST	County LEA	
			" Bot	tom Hole	Location If	Different From	Surface			
UL or lot no. D	Section 32	Township 19-S	Range 35-E	Lot Idn	Feet from the 100'	North/South line NORTH	Feet from the 660'	East/West line WEST	County LEA	
12 Dedicated Acres	s ¹³ Joint o	r Infill 14 (Consolidation C	Code 15 Order	No.	•		<u> </u>		



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160

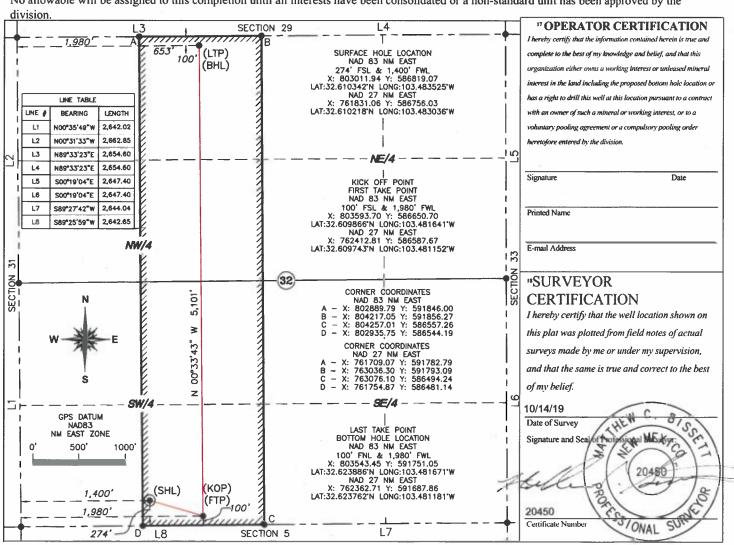
State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number			² Pool Code			³ Pool Name			
⁴ Property	Code			ME	Property N AD WEST 32 W			· v	Vell Number
⁷ OGRID No. 372098			N.	MAR	⁸ Operator N ATHON OIL PE			9	Elevation 3,695'
	•				" Surface L	ocation		·	
UL or lot no. N	Section 32	Township 19-S	Range 35-E	Lot Idn	Feet from the 274'	North/South line SOUTH	Feet from the 1,400'	East/West line WEST	County LEA
		•	" Bot	tom Hole	Location If	Different From	Surface	•	
UL or lot no.	Section 32	Township 19-S	Range 35-E	Lot Idn	Feet from the	North/South line NORTH	Feet from the 1,980'	East/West line WEST	County LEA
12 Dedicated Acre	s 13 Joint o	r Infill 14 C	onsolidation C	Code 15 Order	r No.				



Lease Tract Map: Mead West 32 SB State 1H - W2W2 of Section 32, T19S-R35E

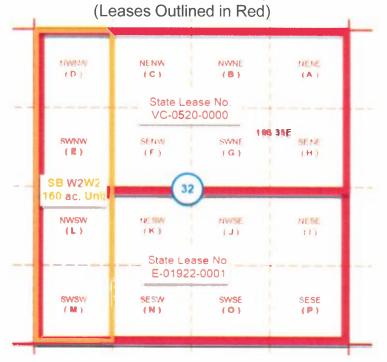
Well Name: Mead West 32 SB State 1H

Pool Name: Second Bone Spring

Unit: W2W2, 160 ac.

Comprised of Two (2) State Leases, as follows;

- State Lease VC-0520-0000
 - N/2 of Sec. 32, T19S-R35E
- State Lease E-01922-0001
 - S/2 of Sec. 32, T19S-R35E



Sec. 32 Lease Tract Map





Lease Tract Map: Mead West 32 SB State 2H - E2W2 of Section 32, T19S-R35E

Well Name: Mead West 32 SB State 2H

Pool Name: Second Bone Spring

Unit: E2W2, 160 ac.

Comprised of Two (2) State Leases, as follows;

- State Lease VC-0520-0000
 - N/2 of Sec. 32, T19S-R35E
- State Lease E-01922-0001
 - S/2 of Sec. 32, T19S-R35E





Lease Tract Map: Mead West 32 WFB State 5H – W2W2 of Section 32, T19S-R35E "From the top of the Third Bone Spring Carbonate to a point 500 feet below the top of the Wolfcamp."

Well Name: Mead West 32 WFB State 5H

Pool Name: Wolfbone

Unit: W2W2, 160 ac.

Comprised of Two (2) State Leases, as follows;

- State Lease VC-0520-0000
 - N/2 of Sec. 32, T19S-R35E
- State Lease E-01922-0001
 - S/2 of Sec. 32, T19S-R35E

NWNM NEWW NWNE. NENE (D) (C) (B) State Lease No VC-0520-0000 SWNW SENW SWNF SE NE (E) (F) (G) WFB W2W2 160 ac Unit NWSW 10 50 NWSE NEBE (L) (K) (1) (1) State Lease No. E-01922-0001 SWSW SESM SWSE SESE (MI) IN (0) IP!

Sec. 32 Lease Tract Map

(Leases Outlined in Red)



Lease Tract Map: Mead West 32 WFB State 6H – E2W2 of Section 32, T19S-R35E "From the top of the Third Bone Spring Carbonate to a point 500 feet below the top of the Wolfcamp."

Well Name: Mead West 32 WFB State 6H

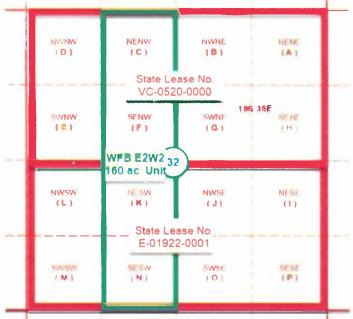
Pool Name: Wolfbone

Unit: E2W2, 160 ac.

Comprised of Two (2) State Leases, as follows;

- State Lease VC-0520-0000
 - N/2 of Sec. 32, T19S-R35E
- State Lease E-01922-0001
 - S/2 of Sec. 32, T19S-R35E

Sec. 32 Lease Tract Map (Leases Outlined in Red)







Summary of Interests

٠	Committed Working Interest: – Marathon Oil Permian LLC	50%	50%
٠	Uncommitted Working Interest: - ConocoPhillips Company	50%	50%
•	<u>Unleased Mineral Interest</u> :		0%





Travis Prewett
Land Professional



Marathon Oil Permian LLC 5555 San Felipe Street Houston, TX 77056 Telephone: 713.296.3696 Mobile: 713.305.0604 THPrewett@marathonoil.com

October 9, 2019

VIA CERTIFIED RETURN RECEIPT MAIL

ConocoPhillips P.O. Box 2197 Houston, TX 77252

Re:

Mead West Well Proposals Section 32, T19S-R35E Lea County, New Mexico

Dear ConocoPhillips:

Marathon Oil Permian LLC ("MRO") proposes the drilling of the following wells located in the west half of Section 32, 19S-35E, Lea County, New Mexico, to develop minerals in the Bone Spring and Wolfbone formations.

- Mead West 32 SB State 1H with a proposed first take point located 100' FSL and 660' FWL of Section 32, 19S-35E, and a proposed last take point located 100' FNL and 660' FWL of Section 32, 19S-35E. The well will have a targeted interval located in the Bone Spring Formation (~10,584' TVD) with a treated lateral length of approximately 5,080'. The total estimated drilling and completion cost is \$7,227,191 as shown in the attached AFE.
- Mead West 32 SB State 2H with a proposed first take point located 100' FSL and 1,980' FWL of Section 32, 19S-35E, and a proposed last take point located 100' FNL and 1,980' FWL of Section 32, 19S-35E. The well will have a targeted interval located in the Bone Spring Formation (~10,590' TVD) with a treated lateral length of approximately 5,080'. The total estimated drilling and completion cost is \$7,227,191 as shown in the attached AFE.
- Mead West 32 WFB State 5H with a proposed first take point located 100' FSL and 660' FWL of Section 32, 19S-35E, and a proposed last take point located 100' FNL and 660' FWL Section 32, 19S-35E. The well will have a targeted interval located in the Wolfbone Formation (~11,154' TVD) with a treated lateral length of approximately 5,080'. The total estimated drilling and completion cost is \$7,227,191 as shown in the attached AFE.
- Mead West 32 WFB State 6H with a proposed first take point located 100' FSL and 1,980' FWL of Section 32, 19S-35E, and a proposed last take point located 100' FNL and 1,980' FWL of Section 32, 19S-35E. The well will have a targeted interval located in the Wolfbone Formation (~11,173' TVD) with a treated lateral length of approximately 5,080'. The total estimated drilling and completion cost is \$7,227,191 as shown in the attached AFE.

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

MRO proposes drilling the well under the terms of the 1989 AAPL JOA and a form of this JOA will be sent to you following this proposal. The JOA will have these general provisions:

100%/300%/300% non-consent penalty

EXHIBIT 7

- \$7,000/\$700 drilling and producing rates
- Contract area of W/2 of Section 32, 19S-35E, covering all depths

Our title records show that you own 50% WI in the proposed unit.

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

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

This term assignment offer terminates November 15, 2018 and is subject to due diligence and title verification satisfactory to Marathon.

Should you have any questions regarding this or other matters, please don't hesitate to contact me at the above listed numbers.

Sincerely,

Travis Prewett

Mead West Well Elections

	elects to participate in the drilling, completing, and equipping of the Mead West 32 SB State 1H well.
	elects NOT to participate in the drilling, completing, and equipping of the Mead West 32 SB State 1H well.
	elects to participate in the drilling, completing, and equipping of the Mead West 32 SB
	State 2H well.
	elects NOT to participate in the drilling, completing, and equipping of Mead West 32 SB State 2H well.
	elects to participate in the drilling, completing, and equipping of Mead West 32 WFB State 5H well.
	elects NOT to participate in the drilling, completing, and equipping of the Mead West 32 WFB State 5H well.
	elects to participate in the drilling, completing, and equipping of the Mead West 32 WFB State 6H well.
	elects NOT to participate in the drilling, completing, and equipping of the Mead West 32 WFB State 6H well.
	ConocoPhillips
By:	
Print Name:	
Title:	
Date:	

7012580

7012040

Tubing

Tubing Accessories (nipple, wireline entry)

DATE 10/1/2019

DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY BRIAN LIPSCOMB

ARTIFICIAL LIFT PREPARED BY BRIAN LIPSCOMB

Asset Team	PERMIAN	
Field	Pearl; Bone Spring FORMATION: 2ND BONE SPRINGS WILDCAT	EXPLORATION
Lease/Facility	Mead West 32 SB State 1H DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY X EXPLOITATION	WORKOVER
Prospect	Ranger	
Est Total Depth		ys 5.5
LOCATION COST - I	NTANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	50,250
7001250	Land Broker Fees and Services	33,750
	TOTAL LOCATION COST - INTANGIBLE	84,000
DRILLING COST - T	ANGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	44,000
7012050	Intermediate Casing 1	133,000
7012050	Intermediate Casing 2	
7012050	Production Casing	223,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	10,000
7012550	Drilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	517,000
	TOTAL DIRECTION TANGEL	
DRILLING COST - IN	TANGIBLE	
7019200	Drilling Rig Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	570,375
7019040	Directional Drilling Services	185,000
7019020	Cement and Cementing Service Surface	15,000
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	
		110,000
7019020		65,000
7019140	Mud Fluids & Services	
7012310	Solids Control equipment	38,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel {Rig}	65,000
7019140	Fuel (Mud)	18,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	17,000
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
	Well Services - Well Control Services	20,563
7019300		10,000
7019350	Well Services - Well/Wellhead Services	84,500
7018150	Rental Tools and Equipment (surface rentals)	•
7018150	Rig Equipment and Misc.	10,563
7001110	Telecommunications Services	5,000
7001120	Consulting Services	99,288
7001400	Safety and Environmental	33,800
7018120	Rental Buildings (trailers)	16,900
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	162,854
	TOTAL DRILLING - INTANGIBLE	\$1,972,34
	TOTAL DRILLING COST	\$2,489,342
COMPLETION - TAI	NGIBLE	The same of the sa

EXHIBIT 8

7012550	Wellhead Equip	
7012560	Packers - Completion Equipment	
	TOTAL COMPLETION - TANGIBLE	\$15,000

DATE 10/1/2019

Asset Team

PERMIAN

Field Lease/Facility Pearl; Bone Spring | FORMATION: 2ND BONE SPRINGS

Mead West 32 SB State 1H

COMPLETION - IF	ITANGIBLE	
CI COOF	OCCCOUNT ON	FCT!!! 4 4 TED COCT
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	10,000
7019220	Drilling Rig During Completion	
7019140	Mud Fluids & Services	
7019030	Coiled Tubing Services (3 runs)	210,000
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)	425,000
7019320	Fracturing Services	1,955,300
7019330	Perforating	175,000
7019360	Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids)	199,000
7016180	Freight · Truck (haul pipe; drlg & compl)	15,000
7018150		
	BOP Rental & Testing	
7018150	Rental Tools and Equipment (incl drig; lightplant, hydra-walk)	
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	
7000030	Contract Labor - general	35,000
7001110	Telecommunications Services	70,000
7001400	Safety and Environmental	
7001120	Consulting Services	60,00
7018150	Zipper Manifold	120,00
7019300	Frack Stack Rentals	45,00
7016190	Freight (Transportation Services)	
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	75,000
7018120	Rental Buildings (trailers)	15,000
7000030	Contract Labor - Pumping (pump-down pumps)	30,000
7011010	8% Contingency & Taxes	234,400
	are commented as some	
	TOTAL COMPLETION - INTANGIBLE	\$3,688,70
	TOTAL COMPLETION COST	\$3,703,70
	TENT - TANGIBLE	
7012350 7006640	Misc. Piping, Fittings & Valves Company Labor & Burden	17,126
7012350	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General	17,126
7012350 7006640 7000030 7001110	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry)	17,126
7012350 7006640 7000030	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip {Telemetry} Line Pipe & Accessories	17,12(
7012350 7006640 7000030 7001110	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip {Telemetry} Line Pipe & Accessories Miscellaneous Materials {containment system}	17,12(
7012350 7006640 7000030 7001110 7012410 7012270 7008060	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip {Telemetry} Line Pipe & Accessories	17,12(62,87) 35,84
7012350 7006640 7000030 7001110 7012410 7012270	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip {Telemetry} Line Pipe & Accessories Miscellaneous Materials {containment system}	17,12(62,87) 35,84
7012350 7006640 7000030 7001110 7012410 7012270 7008060	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor · General Telecommunication equip {Telemetry} Line Pipe & Accessories Miscellaneous Materials {containment system} SCADA	17,120 62,878 35,847
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck	17,12(62,87) 35,84;
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001190	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering	17,12(62,878 35,84) 7,26(5,82)
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001190 7012290	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials	17,12(62,878 35,84) 7,26(5,82)
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001190 7012290	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating	17,12(62,87) 35,84; 7,26(5,82)
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001190 7012290 7012290	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip {Telemetry} Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration	17,12(62,878 35,84) 7,26(5,82)
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001290 7012290 7012200 7012200 7012200	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor	17,12(62,878 35,84) 7,26(5,82)
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001190 7012290 7012200 7012200 7012200 7012350	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power	17,12 62,87 35,84 7,26 5,82
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 701190 7012290 7012200 701200 7012010 7012350 7012610	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip {Telemetry} Line Pipe & Accessories Miscellaneous Materials {containment system} SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit	17,12(62,87) 35,84; 7,26; 5,82; 105,32(
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001190 7012290 7012200 7012200 7012010 7012350 7012610 7012440	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels	17,12(62,878 35,842 7,264 5,822 105,326
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001190 7012290 7012200 7012200 701200 7012010 7012350 7012610 7012440 7012500	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks	17,12(62,878 35,842 7,264 5,822 105,326
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001290 7012290 7012200 7012200 7012200 701240 701240 7012500 7012500 7012500 7012100	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater	17,126 62,878 35,847 7,266 5,823 105,326
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001290 7012290 7012200 7012200 7012200 7012500 7012500 7012500 7012500 7012500 7012500 7012500 7012500 7012500 7012500 7012500 7012500 7012500 7012500	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories	17,126 62,878 35,847 7,266 5,822 105,326 336,771 235,346
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001190 7012290 7012200 7012200 7012200 7012210 701240 701240 701250 7012610 7012640 7002640	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip {Telemetry} Line Pipe & Accessories Miscellaneous Materials {containment system} SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor	17,126 62,878 35,847 7,266 5,822 105,326 336,771 235,346
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 701190 7012290 7012200 7012200 7012010 7012350 7012610 701240 7012500 7012640 7000010	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor	17,12(62,87) 35,84) 7,26(5,82) 105,32(336,77) 235,34(23,29)
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001290 7012290 7012200 7012200 7012200 701240 7012500 7012610 7012500 7012640 7012640 7000010 7012480	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad	17,126 62,878 35,847 7,266 5,822 105,326 336,771 235,346
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001290 7012200 7012200 7012200 7012200 7012200 7012200 7012200 7012400 7012500 7012500 7012400 7012500 7012400 7012500 7012100 7012640 7000010 7000010 7012480 7012180	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Engine	17,12(62,87) 35,84) 7,26(5,82) 105,32(336,77) 235,34(23,29)
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001290 7012290 7012200 7012200 7012200 701240 7012500 7012610 7012500 7012640 7012640 7000010 7012480	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad	17,126 62,878 35,847 7,266 5,822 105,326 336,771 235,346
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001290 7012200 7012200 7012200 7012200 7012200 7012200 7012200 7012400 7012500 7012500 7012400 7012500 7012400 7012500 7012100 7012640 7000010 7000010 7012480 7012180	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Engine	17,126 62,879 35,849 7,266 5,829 105,326 336,777 235,346 23,299 10,487
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001190 7012290 7012200 7012200 7012200 7012200 7012200 7012200 7012400 7012500 7012500 7012640 7000010 7000010 7012480 7012180	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Engine Electrical Power (electrical cooperative construction costs)	17,120 62,879 35,840 7,260 5,820 105,320 336,770 235,340 23,290 10,480
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001290 7012200 7012200 7012200 7012200 7012200 7012100 701240 7012500 7012400 7012480 7012480 7012180	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE	17,120 62,878 35,847 7,266 5,823 105,326 23,293 10,482
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 701190 7012290 7012200 7012200 7012010 7012350 7012610 7012440 7012500 7012100	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE	17,12 62,87 35,84 7,26 5,82 105,32 105,32 23,29 10,48 \$840,149
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001290 7012290 7012200 7012200 7012200 7012200 701240 7012500 7012640 7012640 7000010 7012480 7012180 7012350 RTIFICIAL LIFT	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Mechanical Labor Rod Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE	17,12 62,87 35,84 7,26 5,82 105,32 105,32 23,29 10,48 \$840,149
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001290 7012200 7012200 7012200 7012200 7012200 7012200 7012200 7012480 7000010 7000010 7002480 7012480 7012350 RTIFICIAL LIFT	Misc. Pipling, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST	17,120 62,878 35,847 7,266 5,823 105,326 23,293 10,482 \$840,149 \$\$840,149
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7011290 7012200 7012200 7012200 7012200 70122100 7012500 7012500 7012480 7012180 7012180 7012180 7012180 7012180	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump	17,126 62,878 35,847 7,266 5,823 105,326 23,293 10,482 \$840,149 \$\$45,000 15,000 6,250
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001190 7012290 7012200 7012200 7012200 70122100 7012440 7012500 7012100 7012480 7012180 7012180 7012180 7012180 7012180 7012180 7012140	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESF)	17,12 62,87 35,84 7,26 5,82 105,32 105,32 10,48 23,29 10,48 \$840,149 \$\$840,149
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001290 7012200 7012200 7012200 7012010 701240 701240 701240 7012440 701250 7012100 701240 7012100 701240 7012100 701240 7012100 701240 7012100 701240 7012100 701240 7012100 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012180 7012140 7019350	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscelianeous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Well Services-Well/Wellhead Services Well Services-Well/Wellhead Services Well Services-Well/Wellhead Services	17,12(62,87(35,84) 7,26(5,82) 105,32(336,77(235,34(23,29) 10,48(\$840,149 \$\$45,000 15,000 6,250 17,500 6,000
7012350 7006640 7000030 7001110 7012410 7012270 7008060 7016180 7001290 7012200 7012200 7012200 7012200 7012200 701240 7012500 701240 7012500 701240 7012500 7012100 7012500 7012100 7012480 7012180	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscellaneous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible	17,120 62,878 35,843 7,266 5,823 105,326 23,293 10,482 \$840,149 \$\$45,000 15,000 6,250 17,5000 6,000 6,000
7012350 7006640 700030 7001110 7012410 7012270 7008060 7016180 7001290 7012290 7012200 7012200 7012010 7012350 7012610 701240 701240 7012350 7012180 7012180 7012180 7012180 7012180 7012180 7012140 7012350	Misc. Piping, Fittings & Valves Company Labor & Burden Contract Labor - General Telecommunication equip (Telemetry) Line Pipe & Accessories Miscelianeous Materials (containment system) SCADA Freight - truck Contract Engineering Metering and Instrumentation I&E Materials Gas Treating Dehydration Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Well Services-Well/Wellhead Services Well Services-Well/Wellhead Services Well Services-Well/Wellhead Services	17,120 62,878 35,847 7,264 5,823 105,326 23,293 10,482 \$840,149

701101	0 8% 0	ontingency & Taxes	3,0	00_
	TOTAL ARTI	ICIAL LIFT	110,0	00_
	TOTAL A	RTIFICIAL LIFT COST	\$ 110,00	0
		SUMMARY OF ESTIMATED DRILLING WELL COSTS	TOTAL COST	
		TOTAL LOCATION COST	\$ 84,00	0
		TOTAL DRILLING COST	\$ 2,489,34	2
		TOTAL COMPLETIONS COST	\$ 3,703,70	0
		TOTAL SURFACE EQUIPMENT COST	\$ 840,14	9
		TOTAL ARTIFICIAL LIFT COST	\$ 110,00	0
		GRAND TOTAL COST	\$7,227,19	91
		Participant's Approval		
	Name of			
	Company:			
	Signature:			
	Title	Date:		

DATE 10/1/2019

DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY BRIAN LIPSCOMB

ARTIFICIAL LIFT PREPARED BY BRIAN LIPSCOMB

Asset Team	PERMIAN	
Field	Pearl; Bone Spring FORMATION: 2ND BONE SPRINGS WILDCAT	EXPLORATION
Lease/Facility	Mead West 32 SB State 2H DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY X EXPLOITATION	WORKOVER
Prospect	Ranger	
Est Total Depth	15,936 Est Drilling Days 17 Est Completion Day	vs 5.5
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 - T	ANGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	44,000
7012050	Intermediate Casing 1	133,000
7012050	Intermediate Casing 2	
7012050	Production Casing	223,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	10,000
7012550	Drilling Wellhead Equipment	50,000
7012040 7012270	Casing & Tubing Access Miscellaneous MRO Materials	24,000 5,000
7012270	MINERAL MARKET HERE	3,000
	TOTAL DRILLING - TANGIBLE	517,000
DRILLING COST - II	ITANGIBLE	
	••••	
7019200	Drilling Rig Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	570,375
7019040	Directional Drilling Services	185,000
7019020	Cement and Cementing Service Surface	15,000
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2 Cement and Cementing Service Production	110,000
7019020 7019140	Mud Fluids & Services	65,000
7012310	Solids Control equipment	38,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	65,000
7019140	Fuel (Mud)	18,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	17,000
7019150	Mud Logging+geosteering Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019250 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 7019300	Contract Services - Facilities Well Services - Well Control Services	20,563
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	84,500
7018150	Rig Equipment and Misc.	10,563
7001110	Telecommunications Services	5,000
7001120	Consulting Services	99,288
7001400	Safety and Environmental	33,800
7018120	Rental Buildings (trailers)	16,900
7019310	Coring (sidewalls & analysis)	162,854
/011010	7% Contingency & Taxes	102,034
	TOTAL DRILLING - INTANGIBLE	\$1,972,342
		7.77
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	TOTAL BRILLING COCT	62 400 242
	TOTAL DRILLING COST	\$2,489,342
COMPLETION - TA	NGIBLE	
7012580	Tubing	
7012040	Tubing Accessories (nippte, wireline entry)	15,000
7012550 7012560	Wellhead Equip Packers - Completion Equipment	13,000
7022300	rachet a Comprehent Equipment	
	TOTAL COMPLETION - TANGIBLE	\$15,000
525-0		
MARATHON OIL PERI	MIAN LLC DAY	TE 10/1/2019
AUTHORITY FOR EXP	INDITURE	
DETAIL OF ESTIMATE	WELL COSTS	
Asset Team	PERMIAN	
Field	Pearl; Bone Spring FORMATION: 2ND BONE SPRINGS	
Lease/Facility	Mead West 32 SB State 2H	
COMPLETION - INT	ANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	10,000

7019220	Drilling Rig During Completion	
7019140 7019030	Mud Fluids & Services Colled Tubing Services (3 runs)	210,000
7019240	Snubbing Services	
7019270	Pulling/Swab Units	
7016350	Fuel (from drig)	
7019010	Casing Crew and Services	-
7019020 7019080	Cement and Cementing Services Well Testing Services (flow hand & equip)	425,000
7019320	Fracturing Services	1,955,300
7019330	Perforating	175,000
7019360	Wireline Services	15,000
7001460 7016180	Water Hauling & Disposal (frac fluids) Freight - Truck (haul pipe; drig & compl)	199,000 15,000
7018150	BOP Rental & Testing	20/000
7018150	Rental Tools and Equipment (incl drig; lightplant, hydra-walk)	
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	
7000030	Contract Labor - general	35,000
7001110	Telecommunications Services Safety and Environmental	70,000
7001120	Consulting Services	60,000
7018150	Zipper Manifold	120,000
7019300	Frack Stack Rentals	45,000
7016190 7018150	Freight (Transportation Services) Equipment Rental (w/o operator, frac tanks, lightplants)	75,000
7018120	Rental Buildings (trailers)	15,000
7000030	Contract Labor - Pumping (pump-down pumps)	30,000
7011010	8% Contingency & Taxes	234,400
	TOTAL COMPLETION - INTANGIBLE	\$3,688,700
	CONTROL OF A STANDOLL	73,000,100
	TOTAL COMPLETION COST	\$3,703,700
SURFACE EQUIPM	ENT - TANGIBLE	
7012350	Misc. Piping, Fittings & Valves	17,120
7006640	Company Labor & Burden	
7000030	Contract Labor - General	62,878
7001110 7012410	Telecommunication equip (Telemetry) Line Pipe & Accessories	
7012270	Miscellaneous Materials (containment system)	35,847
7008060	SCADA	
7016180	Freight - truck	023
7001190 7012290	Contract Engineering	7,264
7012290	Metering and Instrumentation I&E Materials	5,823
7012200	Gas Treating	((a)
7012200	Dehydration	
7012010	Compressor	0.20
7012350	Power	
	Manage Bassians, Maik	
7012610	Vapor Recovery Unit Separator & other pressure vessels	336,771
	Vapor Recovery Unit Separator & other pressure vessels Tanks	336,771 235,346
7012610 7012440	Separator & other pressure vessels	
7012610 7012440 7012500 7012100 7012640	Separator & other pressure vessels Yanks Heater Treater Flare & Accessories	235,346
7812610 7012440 7012500 7012100 7012640 7000010	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor	235,346
7012610 7012440 7012500 7012100 7012640	Separator & other pressure vessels Yanks Heater Treater Flare & Accessories	235,346
7012610 7012440 7012500 7012100 7012640 7000010	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor	235,346
7012610 7012440 7012500 7012100 7012640 7000010 7000010 7012480	Separator & other pressure vessels Yanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad	235,346 23,293 10,482
7012610 7012440 7012500 7012100 7012640 7000010 7000010 7012480 7012180	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine	235,346 23,293 10,482
7012610 7012440 7012500 7012100 7012640 7000010 7000010 7012480 7012180	Separator & other pressure vessels Yanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs)	235,346 23,293 10,482
7012610 7012440 7012500 7012100 7012640 7000010 7000010 7012480 7012180	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Bectrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Bectrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE	235,346 23,293 10,482 5840,149
7012610 7012440 7012500 7012500 7012200 7012640 7000010 7000010 7012480 7012180 7012350	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Bectrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Bectrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE	235,346 23,293 10,482 5840,149
7012610 7012440 7012500 7012100 7012100 7012640 7000010 7000010 7012480 7012180 7012350 ARTIFICIAL LIFT 7006640 7012180	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Bectrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit Engine Bectrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment	\$840,149 \$45,000 15,000
7012610 7012440 7012500 7012500 7012100 7012640 7000010 7000010 7012480 7012180 7012350 ARTIFICIAL LIFT 7006640 7012180 7012180 7012480	Separator & other pressure vessels Yanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump	\$840,149 \$45,000 15,000 6,250
7012610 7012400 7012500 7012100 7012540 7000010 7012480 7012180 7012350 ARTIFICIAL LIFT 7006640 7012180 7012180 7012180 7012180	Separator & other pressure vessels Yanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP)	\$ 840,149 \$ 840,149
7012610 7012440 7012500 7012500 7012100 7012640 7000010 7000010 7012480 7012180 7012350 ARTIFICIAL LIFT 7006640 7012180 7012180 7012480	Separator & other pressure vessels Yanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump	\$840,149 \$45,000 15,000 6,250
7012610 7012440 7012500 7012100 7012100 7012640 7000010 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Bectrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Bectrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services	\$840,149 \$ \$45,000 15,000 6,250 17,500 6,000
7012610 7012440 7012500 7012100 7012640 701200 701200 701200 7012180 7012180 7012180 7012180 7012180 7012180 7012250 7012250	Separator & other pressure vessels Yanks Heater Treater Flare & Accessories Electrical Labor Rechanical Labor Red Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Red Pumping, Sucker Rods & Red Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip	\$840,149 \$840,149 \$45,000 15,000 6,250 5,000 6,250
7012610 7012440 7012500 7012500 7012100 7012640 7000010 7000010 7012480 7012350 ARTIFICIAL LIFT 7006640 7012180 7012380 701240 7012350	Separator & other pressure vessels Yanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment	235,346 23,293 10,482
7012610 7012440 7012500 7012100 7012640 701200 701200 701200 7012180 7012180 7012180 7012180 7012180 7012180 7012250 7012250	Separator & other pressure vessels Yanks Heater Treater Flare & Accessories Electrical Labor Rechanical Labor Red Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Red Pumping, Sucker Rods & Red Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip	\$840,149 \$840,149 \$45,000 15,000 6,250 5,000 6,250
7012610 7012440 7012500 7012100 7012640 701200 701200 701200 7012180 7012180 7012180 7012180 7012180 7012180 7012250 7012250	Separator & other pressure vessels Yanks Heater Treater Flare & Accessories Electrical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes	235,346 23,293 10,482
7012610 7012440 7012500 7012100 7012640 701200 701200 701200 7012180 7012180 7012180 7012180 7012180 7012180 7012250 7012250	Separator & other pressure vessels Yanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT	235,346 23,293 10,482 \$840,149 \$ 840,149 \$ 840,149 45,000 15,000 6,250 17,500 6,000 5,000 6,250 3,000 110,000 \$ 110,000
7012610 7012440 7012500 7012100 7012640 701200 701200 701200 7012180 7012180 7012180 7012180 7012180 7012180 7012250 7012250	Separator & other pressure vessels Tanks Hester Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS	235,346 23,293 10,482 \$840,149 \$ 840,149 \$ 840,149 45,000 6,250 17,500 6,000 5,000 6,250 3,000 110,000 \$ 110,000 TOTAL COST
7012610 7012440 7012500 7012100 7012640 701200 701200 701200 7012180 7012180 7012180 7012180 7012180 7012180 7012250 7012250	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Weilhead Services Materials & Supplies-Tangible Surface Weilhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST	235,346 23,293 10,482 \$840,149 \$ 840,149 \$ 840,149 45,000 15,000 6,250 17,500 6,000 5,000 110,000 \$ 110,000 TOTAL COST \$ 84,000
7012610 7012440 7012500 7012100 7012640 701200 701200 701200 7012180 7012180 7012180 7012180 7012180 7012180 7012250 7012250	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST	235,346 23,293 10,482
7012610 7012440 7012500 7012100 7012640 701200 701200 701200 7012180 7012180 7012180 7012180 7012180 7012180 7012250 7012250	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Bectrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Bectrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellihead Services Materials & Supplies-Tangible Surface Wellihead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL DRILLING COST TOTAL DRILLING COST TOTAL OMPLETIONS COST	235,346 23,293 10,482 \$840,149 \$ 840,149 \$ 840,149 45,000 15,000 6,250 27,7500 6,000 5,000 110,000 \$ 110,000 TOTAL COST \$ 84,000 \$ 2,489,342 \$ 3,703,700
7012610 7012440 7012500 7012100 7012640 701200 701200 701200 7012180 7012180 7012180 7012180 7012180 7012180 7012250 7012250	Separator & other pressure vessels Tanks Hester Treater Flare & Accessories Bectrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Pad Pumping unit & Edition Bectrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST TOTAL SURFACE EQUIPMENT COST	\$840,149 \$840,149 \$840,149 \$840,149 \$15,000 5,250 17,500 6,000 5,000 6,250 3,000 110,000 \$110,000 \$110,000 \$3,489,342 \$3,703,700 \$840,149
7012610 7012440 7012500 7012100 7012640 701200 701200 701200 7012180 7012180 7012180 7012180 7012180 7012180 7012250 7012250	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Bectrical Labor Mechanical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Bectrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL ARTIFICIAL LIFT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST	\$840,149 \$840,149 \$840,149 \$840,149 \$15,000 5,250 17,500 6,000 5,000 6,250 3,000 110,000 \$110,000 \$110,000 \$3,489,342 \$3,703,700 \$840,149 \$110,000
7012610 7012440 7012500 7012100 7012640 701200 701200 701200 7012180 7012180 7012180 7012180 7012180 7012180 7012250 7012250	Separator & other pressure vessels Tanks Hester Treater Flare & Accessories Bectrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Pad Pumping unit & Edition Bectrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST TOTAL SURFACE EQUIPMENT COST	\$840,149 \$840,149 \$840,149 \$840,149 \$15,000 5,250 17,500 6,000 5,000 6,250 3,000 110,000 \$110,000 \$110,000 \$3,489,342 \$3,703,700 \$840,149
7012610 7012440 7012500 7012100 7012640 701200 701200 701200 7012180 7012180 7012180 7012180 7012180 7012180 7012250 7012250	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Bectrical Labor Mechanical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Bectrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL ARTIFICIAL LIFT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST	\$840,149 \$840,149 \$840,149 \$840,149 \$15,000 5,250 17,500 6,000 5,000 6,250 3,000 110,000 \$110,000 \$110,000 \$3,489,342 \$3,703,700 \$840,149 \$110,000
7012610 7012440 7012500 7012100 7012500 7012100 7012640 7000010 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellihead Services Materials & Supplies-Tangible Surface Wellihead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL DRILLING COST TOTAL DRILLING COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval ame of	\$840,149 \$840,149 \$840,149 \$840,149 \$15,000 5,250 17,500 6,000 5,000 6,250 3,000 110,000 \$110,000 \$110,000 \$3,489,342 \$3,703,700 \$840,149 \$110,000
7012610 7012440 7012500 7012100 7012500 7012100 7012640 7000010 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Bectrical Labor Mechanical Labor Mechanical Labor Rod Pumping unk & Pad Pumping unk Engine Bectrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST GRAND TOTAL COST TOTAL SURFACE EQUIPMENT COST FOTAL SURFACE EQUIPMENT COST GRAND TOTAL COST Participant's Approval	\$840,149 \$840,149 \$840,149 \$840,149 \$15,000 5,250 17,500 6,000 5,000 6,250 3,000 110,000 \$110,000 \$110,000 \$3,489,342 \$3,703,700 \$840,149 \$110,000
7012610 7012440 7012500 7012100 7012640 701200 701200 701200 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 701210 701210 701250	Separator & other pressure vessels Tanks Tanks Heater Treater Plare & Accessories Electrical Labor Mechanical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 3% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval ame of mpany;	\$840,149 \$840,149 \$840,149 \$840,149 \$15,000 5,250 17,500 6,000 5,000 6,250 3,000 110,000 \$110,000 \$110,000 \$3,489,342 \$3,703,700 \$840,149 \$110,000
7012610 7012440 7012500 7012100 7012640 701200 701200 701200 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 701210 701210 701250	Separator & other pressure vessels Tanks Heater Treater Flare & Accessories Bectrical Labor Mechanical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Bectrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellihead Services Materials & Supplies-Tangible Surface Wellihead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL DRILLING COST TOTAL DRILLING COST TOTAL SURFACE EQUIPMENT COST GRAND TOTAL COST TOTAL ARTIFICIAL LIFT COST Participant's Approval ame of	\$840,149 \$840,149 \$840,149 \$840,149 \$15,000 5,250 17,500 6,000 5,000 6,250 3,000 110,000 \$110,000 \$110,000 \$3,489,342 \$3,703,700 \$840,149 \$110,000

DATE 10/1/2019

DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY BRIAN LIPSCOMB

ARTIFICIAL LIFT PREPARED BY BRIAN LIPSCOMB

Asset Team	PERMIAN				
Field	New Wolfbone Poc FORMATIO	N: 0	WILDCAT		EXPLORATION
Lease/Facility	Mead West 32 WFB State 5H		DEVELOPMENT		RECOMPLETION
Location	LEA COUNTY		X EXPLOITATION		WORKOVER
Prospect	Ranger				
Est Total Depth	16,508 Est	Drilling Days _	17 Est Comp	letion Days	5.5
LOCATION COST - I	TANGIBLE				
GL CODE	D	ESCRIPTION			ESTIMATED COST
7001270	Location and Access				50,250
7001250	Land Broker Fees and Services				33,750
1002230	DESTRUCTORS I AGO WIND OCTORS			_	
	TOTAL LOCATION COST - INTANGIBLE				84,000
					, , , , , , , , , , , , , , , , , , , ,
DRILLING COST - TA	NGIBLE				
7012050	Conductor Pipe				28,000
7012050	Surface Casing				44,000
7012050	Intermediate Casing 1				133,000
7012050	Intermediate Casing 2			_	
7012050	Production Casing				223,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	1			10,000
7012550	Drilling Wellhead Equipment				50,000
7012040	Casing & Tubing Access				24,000
7012270	Miscellaneous MRO Materials				\$,000
	TOTAL DRILLING - TANGIBLE				517,000
DRILLING COST. IN	TANGIDIE				
DRILLING COST - IN					
7019200	Drilling Rig Mob/Demob				32,500 570 375
7019220	Drilling Rig - day work/footage Directional Drilling Services				570,375 185,000
7019040 7019020	Cement and Cementing Service	ė.	urface	_	15,000
7019020	Cement and Cementing Service		ntermediate 1		25,000
7019020	Cement and Cementing Service		ntermediate 2	_	
7019020	Cement and Cementing Service		roduction		110,000
7019140	Mud Fluids & Services	•			65,000
7012310	Solids Control equipment		· · · · · · · · · · · · · · · · · · ·		38,000
7012020	Bits				70,000
7019010	Casing Crew and Services			254=1	30,000
7016350	Fuel (Rig)				65,000
7019140	Fuel (Mud)				18,000
7001460	Water (non potable)				25,000
7012350	Water (potable)				5,000
7019000	Well Logging Services				
7019150	Mud Logging+geosteering				17,000
7019250	Stabilizers, Hole Openers, Underreamers (DH re	ntals}		- 0	15,000
7019110	Casing Inspection/cleaning				15,000
7019110	Drill pipe/collar inspection services			_	10,000
7016180 7001460	Freight - truck Water hauling and disposal (includes soil farming)				25,000 60,000
7001160	Contract Services - Disposal/Non-Hazardous Wa			7-2-3	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				20,563
7019350	Well Services - Well/Wellhead Services				10,000
7018150	Rental Tools and Equipment (surface rentals)				84,500
7018150	Rig Equipment and Misc.				10,563
7001110	Telecommunications Services				5,000
7001120	Consulting Services				99,288
7001400	Safety and Environmental				33,800
7018120	Rental Buildings (trailers)				16,900
7019310 7011010	Coring (sidewalls & analysis) 7% Contingency & Taxes				162,854
7011010				_	
	TOTAL DRILLING - INTANGIBLE				\$1,972,342
	TOTAL DRILLING COST				\$2,489,342
COMPLETION - TAN	GIBLE		\$1		
7012580	Tubing				-
7012040	Tubing Accessories (nipple, wireline entry)			-0	C#
7012550	Welfhead Equip				15,000
7012560	Packers - Completion Equipment				-
	TOTAL COMPLETION - TANGIBLE				\$15,000
MARATHON OIL PERM	AN LLC			DATE	10/1/2019
AUTHORITY FOR EXPE	DITURE				
DETAIL OF ESTIMATED	WELL COSTS				
Asset Team	PERMIAN				
Asset Team Field	Pearl; Bone Spring FORMATION	N: 0			
	Mead West 32 WFB State 5H				
Lease/Facility	WASH ALCOHOL AND ALL IN SCHOOL ALL				
COMPLETION - INT.	NGIBLE				
GI CODE		ESCRIPTION			ESTIMATED COST
GL CODE 7001270	Location and Access (dress location after rig mo				10,000
7901270	rosesses and theresa foresa toreston aires, LE 100	of any any charge			10,000

7019220	Drilling Rig During Completion	
7019140	Mud Fulds & Services	44
7019030	Coiled Tubing Services (3 runs)	210,000
7019240	Snubbing Services	
7019270	Pulling/Swab Units	125
7016350	Fuel (from drig)	
7019010	Casing Crew and Services	
7019020	Cement and Cementing Services	
7019080		
	Well Testing Services (flow hand & equip)	425,000
7019320	Fracturing Services	1,955,300
7019330	Perforating	175,000
7019360	Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids)	199,000
7016180	Freight - Truck (haul pipe; drig & compl)	15,000
7018150	80P Rental & Testing	
7018150	Rental Tools and Equipment (incl drig; lightplant, hydra-walk)	
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	
	Contract Labor - general	25 000
7000030		35,000
7001110	Telecommunications Services	70,000
7001400	Safety and Environmental	
7001120	Consulting Services	60,000
7018150	Zipper Manifold	120,000
7019300	Frack Stack Rentals	45,000
7016190	Freight (Transportation Services)	-
7018150		75 000
	Equipment Rental (w/o operator, frac tanks, lightplants)	75,000
7018120	Rental Buildings (trailers)	15,000
7000030	Contract Labor - Pumping (pump-down pumps)	30,000
7011010	8% Contingency & Taxes	234,400
	TOTAL COMPLETION - INTANGIBLE	\$3,688,700
	TOTAL COMPLETION COST	62 702 700
	I VINE CONFESSION COST	\$3,703,700
SURFACE EQUIPMI	ENT - TANGIBLE	
	AND AND THE POLICE OF THE POLI	
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)	25 947
7008060	SCADA	35,847
		<u>·</u>
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	F-
7012350	Power	-
7012610	Vapor Recovery Unit	
7012440	Separator & other pressure vessels	336,771
7012500	Tanks	235.346
7012500	Tanks Heater Treater	235,346
7012100	Heater Treater	
7012100 7012640	Heater Treater Flare & Accessories	23,293
7012100 7012640 7000010	Heater Treater Flare & Accessories Electrical Labor	
7012100 7012640 7000010 7000010	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor	23,293
7012100 7012640 7000010 7000010 7012480	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad	23,293
7012100 7012640 7000010 7000010 7012480 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor	23,293
7012100 7012640 7000010 7000010 7012480	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad	23,293
7012100 7012640 7000010 7000010 7012480 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs)	23,293 10,482
7012100 7012640 7000010 7000010 7012480 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine	23,293
7012100 7012640 7000010 7000010 7012480 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE	23,293 10,482
7012100 7012640 7000010 7000010 7012480 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs)	23,253 10,482 \$840,149
7012100 7012640 7000010 7000010 7012480 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE	23,293 10,482
7012100 7012640 7000010 7000010 7000010 7012480 7012180 7012350	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE	23,293 10,482 \$840,149
7012100 7012640 7000010 7000010 7012480 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE	23,253 10,482 \$840,149
7012100 7012640 7012640 7000010 7000010 7012480 7012180 7012350	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST	\$840,149
7012100 7012640 7002010 7002010 7002010 7012480 7012180 7012350 ARTIFICIAL LIFT 7006640	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumpling unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor	\$840,149 \$ 45,000
7012100 7012640 7012640 7000010 7000010 7012480 7012180 7012350 ARTIFICIAL LIFT 7006640 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumpling unit & Pad Pumping Unit Engline Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment	\$840,149 \$ 45,000 15,000
7012100 7012640 7012640 7000010 7000010 7012480 7012180 7012350 ARTIFICIAL LIFT 7006640 7012180 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump	\$ 840,149 45,000 15,000 6,250
7012100 7012640 7012640 7000010 7000010 7012480 7012180 7012350 ARTIFICIAL LIFT 7006640 7012180 7012140	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Rajine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP)	\$ 840,149 \$ 840,149 \$ 15,000 \$ 15,000 \$ 17,500
7012100 7012640 70100010 7000010 7000010 7012480 7012180 7012350 ARTIFICIAL LIFT 7006640 7012180 7012480 7012140 7013350	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumpling unit & Pad Pumpling Unit Engline Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumpling, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services	\$ 840,149 45,000 15,000 6,250
7012100 7012640 7012640 7000010 7000010 7012480 7012180 7012350 ARTIFICIAL LIFT 7006640 7012180 7012140	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Rajine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP)	\$ 840,149 \$ 840,149 \$ 15,000 \$ 15,000 \$ 17,500
7012100 7012640 70100010 7000010 7000010 7012480 7012180 7012350 ARTIFICIAL LIFT 7006640 7012180 7012480 7012140 7013350	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumpling unit & Pad Pumpling Unit Engline Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumpling, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services	\$ 840,149 \$ 840,149 \$ 6,250 17,500 6,000 6,000
7012100 7012640 7012640 7000010 7000010 7012480 7012180 7012350 ARTIFICIAL LIFT 7006640 7012180 7012480 7012140 701350 7012270 7012550	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment	\$840,149 \$ 840,149 \$ 15,000 \$2,250 \$5,000 \$5,000 \$5,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumpling unit & Pad Pumping Unit Engline Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip	\$840,149 \$ 840,149 \$ 000 15,000 5,250 17,500 5,000 5,000 5,000 5,000 5,000 5,000
7012100 7012640 7012640 7000010 7000010 7012480 7012180 7012350 ARTIFICIAL LIFT 7006640 7012180 7012480 7012140 701350 7012270 7012550	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment	\$840,149 \$ 840,149 \$ 15,000 \$2,250 \$5,000 \$5,000 \$5,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumpling unit & Pad Pumping Unit Engline Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip	\$840,149 \$ 840,149 \$ 000 15,000 5,250 17,500 5,000 5,000 5,000 5,000 5,000 5,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engline Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes	\$840,149 \$ 840,149 \$ 000 15,000 5,250 17,500 5,000 5,000 5,000 5,000 5,000 5,000 5,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Regine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT	\$ 840,149 \$ 840,149 \$ 840,149 \$ 0,000 \$,250 \$,000 \$,000 \$,000 \$,250 3,000 \$,250 3,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engline Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes	\$840,149 \$840,149 \$ 840,149 \$ 15,000 6,250 17,500 6,000 6,000 5,000 6,250 3,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Regine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT	\$ 840,149 \$ 840,149 \$ 840,149 \$ 0,000 \$,250 17,500 6,000 5,000 6,250 3,000 110,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip & Scontingery & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST	\$ 840,149 \$ 840,149 \$ 0.000 \$ 0.250 \$ 0.000 \$
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Regine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT	\$ 840,149 \$ 840,149 \$ 840,149 \$ 0,000 \$,250 17,500 6,000 5,000 6,250 3,000 110,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit & Pad Pumping Unit Ringine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumping (SPP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rei Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS	\$840,149 \$ 840,149 \$ 840,149 \$ 15,000 6,250 17,500 6,000 5,000 5,000 110,000 \$ 110,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST	\$ 840,149 \$ 840,149 \$ 840,149 45,000 15,000 6,250 17,500 6,000 6,000 6,000 110,000 \$ 110,000 \$ 110,000 \$ 140,000 \$ 140
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST	\$840,149 \$ 840,149 \$ 840,149 \$ 15,000 6,250 17,500 6,000 5,000 6,000 110,000 \$ 110,000 \$ 110,000 \$ 2,489,342
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST	\$840,149 \$ 840,149 \$ 840,149 \$ 15,000 6,250 17,500 6,000 5,000 6,000 110,000 \$ 110,000 \$ 110,000 \$ 2,489,342
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engline Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL DRILLING COST TOTAL OMPLETIONS COST	\$840,149 \$ 840,149 \$ 840,149 \$ 15,000 6,250 17,500 6,000 5,000 6,000 110,000 \$ 110,000 \$ 110,000 \$ 2,489,342 \$ 3,703,700
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT TOTAL COMPLETION COST TOTAL ORILLING COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST	\$840,149 \$ 840,149 \$ 840,149 \$ 15,000 6,250 17,500 6,000 5,000 5,000 10,000 \$ 110,000 \$ 110,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engline Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL DRILLING COST TOTAL OMPLETIONS COST	\$840,149 \$840,149 \$840,149 \$840,149 \$15,000 5,000 5,000 5,000 5,000 110,000 \$110,000 \$110,000 \$110,000 \$3,000 \$110,000 \$3,000 \$110,000 \$3,000 \$3,000 \$3,000 \$4,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Engline Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST	\$840,149 \$ 840,149 \$ 840,149 \$ 15,000 6,250 17,500 6,000 5,000 5,000 10,000 \$ 110,000 \$ 110,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149 \$ 110,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT TOTAL COMPLETION COST TOTAL ORILLING COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST	\$840,149 \$ 840,149 \$ 840,149 \$ 15,000 6,250 17,500 6,000 5,000 6,250 3,000 110,000 \$ 110,000 \$ 110,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 701250 7012550 7012390	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Engline Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST	\$840,149 \$ 840,149 \$ 840,149 \$ 15,000 6,250 17,500 6,000 5,000 5,000 10,000 \$ 110,000 \$ 110,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149 \$ 110,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012140 7012550 7012250	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rei Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST GRAND TOTAL COST TOTAL ARTIFICIAL LIFT COST GRAND TOTAL COST	\$840,149 \$ 840,149 \$ 840,149 \$ 15,000 6,250 17,500 6,000 5,000 5,000 10,000 \$ 110,000 \$ 110,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149 \$ 110,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012140 7012350 7012140 7012550 7012550 7012550 7012010	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval	\$840,149 \$ 840,149 \$ 840,149 \$ 15,000 6,250 17,500 6,000 5,000 5,000 10,000 \$ 110,000 \$ 110,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149 \$ 110,000
7012100 7012640 70100010 7012480 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012140 7012350 701270 701250 7012390 7011010	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Engline Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval ame of	\$840,149 \$ 840,149 \$ 840,149 \$ 15,000 6,250 17,500 6,000 5,000 5,000 10,000 \$ 110,000 \$ 110,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149 \$ 110,000
7012100 7012640 70100010 7012480 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012140 7012350 701270 701250 7012390 7011010	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval	\$840,149 \$ 840,149 \$ 840,149 \$ 15,000 6,250 17,500 6,000 5,000 5,000 10,000 \$ 110,000 \$ 110,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149 \$ 110,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012180 7012140 7012150 7012250 7012550 701270 7011550 70121010	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL ARTIFICIAL LIFT COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval GRAND TOTAL COST Participant's Approval	\$840,149 \$ 840,149 \$ 840,149 \$ 15,000 6,250 17,500 6,000 5,000 5,000 10,000 \$ 110,000 \$ 110,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149 \$ 110,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012180 7012140 7012150 7012250 7012550 701270 7011550 70121010	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Engline Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval ame of	\$840,149 \$ \$40,149 \$ \$40,149 \$ \$40,149 \$ \$15,000 \$5,000 \$5,000 \$5,000 \$6,250 3,000 \$10,000 \$110,000 \$ \$110,000 \$ \$2,489,342 \$3,703,700 \$840,149 \$110,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012180 7012140 7012150 7012250 7012550 701270 7011550 70121010	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Red Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Red Pumping, Sucker Rods & Red Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval ame of epany: Lature:	\$840,149 \$ 840,149 \$ 840,149 \$ 110,000 \$ 15,000 \$ 6,250 \$ 6,000 \$ 6,000 \$ 5,000 \$ 110,000 \$ 110,000 TOTAL COST \$ 84,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149 \$ 110,000
7012100 7012640 7012640 7000010 7012480 7012180 7012180 7012180 7012180 7012180 7012180 7012140 7012150 7012250 7012550 701270 7011550 70121010	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL ARTIFICIAL LIFT COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval GRAND TOTAL COST Participant's Approval	\$840,149 \$ 840,149 \$ 840,149 \$ 110,000 \$ 15,000 \$ 6,250 \$ 6,000 \$ 6,000 \$ 5,000 \$ 110,000 \$ 110,000 TOTAL COST \$ 84,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149 \$ 110,000

DATE 10/1/2019

DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD

COMPLETION PREPARED BY JOSH SHANNON
FACILITIES PREPARED BY BRIAN LIPSCOMB

ARTIFICIAL LIFT PREPARED BY BRIAN LIPSCOMB

	FACILITIES PREPARED B	Y BRIAN LIPSCOMB
	ARTIFICIAL LIFT PREPARED B	Y BRIAN LIPSCOMB
Asset Team	PERMIAN	
Field	New Wolfbone Poc FORMATION: 0 WILDCAT	EXPLORATION
Lease/Facility	Meed West 32 WFB State 6H DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY X EXPLOITATION	WORKOVER
Prospect	Ranger	_
Est Total Depth	16,519 Est Orilling Days 17 Est Completion Day	s 5.5
LOCATION COST -		
LOCATION COST -	MIANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270 7001250	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	29,000
7012050	Surface Casing	28,000 44,000
7012050	Intermediate Casing 1	133,000
7012050	Intermediate Casing 2	
7012050	Production Casing	223,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	10,000
7012550	Drilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	517,000
DRILLING COST - II	VTANGIBLE	
7019200	Drilling Rig Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	570,375
7019040 7019020	Directional Drilling Services Cement and Cementing Service Surface	185,000
7019020	Cement and Cementing Service Surface Cement and Cementing Service Intermediate 1	15,000 25,000
7019020	Cement and Cementing Service Intermediate 2	23,000
7019020	Cement and Cementing Service Production	110,000
7019140	Mud Fluids & Services	65,000
7012310	Solids Control equipment	38,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	65,000
7019140 7001460	Fuel (Mud)	18,000
7012350	Water (non potable) Water (potable)	25,000 5,000
7019000	Well Logging Services	3,000
7019150	Mud Logging+geosteering	17,000
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 7001160	Water hauling and disposal (includes soil farming) Contract Services - Disposal/Non-Hazardous Waste	60,000 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	20,563
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	84,500
7018150 7001110	Rig Equipment and Misc. Telecommunications Services	10,563
7001110	Consulting Services	5,000 99,288
7001400	Safety and Environmental	33,800
7018120	Rental Buildings (trailers)	16,900
7019310	Coring (sidewalls & analysis)	
7011010	7% Contingency & Taxes	162,854
	TOTAL DRILLING - INTANGIBLE	\$1,972,342
	TOTAL DRILLING COST	\$2,489,342
COMPLETION - TAI	NGIBLE	
7012580	Tubing	
7012040	Tubing Accessories (nipple, wireline entry)	-
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	24
	TOTAL COMPLETION - TANGIBLE	\$15,000
		722,230
MARATHON OIL PERM	AIAN LLC DATE	10/1/2010
AUTHORITY FOR EXPE		10/1/2019
DETAIL OF ESTIMATED		
Asset Team	PERMIAN Pandi Bono Suring CORMATION	
Field Lease/Facility	Pearl; Bone Spring FORMATION: 0 Mead West 32 WFB State 6H	
COMPLETION - INT		
GL CODE 2001220	DESCRIPTION	ESTIMATED COST

7019220	Drilling Rig During Completion	-
7019140 7019030	Mud Fluids & Services	210,000
7019240	Colled Tubing Services (3 runs) Snubbing Services	210,000
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)	425,000
7019320	Fracturing Services	1,955,300
7019330	Perforating	175,000
7019360	Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids)	199,000
7016180	Freight - Truck (haul pipe; drlg & compl)	15,000
7018150	BOP Rental & Testing	
7018150	Rental Tools and Equipment (incl drig; lightplant, hydra-walk)	1.0
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	1.00
7000030	Contract Labor - general	35,000
7001110	Telecommunications Services	70,000
7001400	Safety and Environmental	-
7001120	Consulting Services	60,000
7018150	Zipper Manifold	120,000
7019300	Frack Stack Rentals	45,000
7016190	Freight (Transportation Services)	
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	75,000
7018120	Rental Buildings (trailers)	15,000
7000030	Contract Labor - Pumping (pump-down pumps)	30,000
7011010	8% Contingency & Taxes	234,400
	TOTAL COMPLETION - INTANGIBLE	\$3,688,700
	TOTAL COMPLETION COST	\$3,703,700
FACE EQUIPMEN	IT - 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		
7012010	Compressor	
	Power Name Date of the Control of th	
7012610	Vapor Recovery Unit	336,771
7012440	Separator & other pressure vessels	
7012440	War also	
7012500	Tanks	235,346
7012500 7012100	Heater Treater	235,346
7012500 7012100 7012640	Heater Treater Flare & Accessories	235,346
7012500 7012100 7012640 7000010	Heater Treater Flare & Accessories Electrical Labor	235,346
7012500 7012100 7012640 7000010	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor	235,346
7012500 7012100 7012640 7000010 7000010 7012480	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad	235,346
7012500 7012100 7012640 7000010 7000010 7012480 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine	235,346 23,293 10,482
7012500 7012100 7012640 7000010 7000010 7012480 7012180 7012350	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs)	235,346 23,293 10,482
7012500 7012100 7012640 7000010 7000010 7012480 7012180 7012350	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine	235,346 23,293 10,482
7012500 7012100 7012640 7000010 7000010 7012480 7012180 7012350	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs)	235,346 23,293 10,482
7012500 7012100 7012640 7000010 7000010 700010 7012480 7012180 7012350	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE	235,346
7012500 7012100 7012640 7000010 7000010 7012480 7012480 7012350	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit & Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor	\$ 840,149
7012500 7012100 7012640 7000010 7000010 7012480 7012480 7012350	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment	\$ 840,149
7012500 7012100 7012640 7000010 7000010 7012480 7012350 FICIAL LIFT 7006640 7012480 7012480 7012480	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas tift Equipment Rod Pumping, Sucker Rods & Rod Pump	\$840,149 \$45,000 25,000 6,250
7012500 7012100 7012640 7000010 7000010 7012480 7012480 7012350 FICIAL LIFT 7006640 7012180 7012180 7012180 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Uff Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP)	\$ 840,149 \$ 45,000 15,000 6,250 17,500
7012500 7012100 7012640 7000010 7000010 7012480 7012180 7012350 IFICIAL LIFT 7006640 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services	\$840,149 \$ 840,149 \$ 15,000 6,250 6,000
7012500 7012100 7012640 7002010 7000010 7000010 7012480 7012180 7012350 FFICIAL LIFT 7006640 7012180 7012480 7012140 7012140 7012270	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Uff Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible	235,346 23,293 10,482 \$840,149 \$ 840,149 45,000 15,000 6,250 17,500 6,000 6,000
7012500 7012100 7012640 7000010 7000010 7012480 7012480 7012350 FICIAL LIFT 7006640 7012180 7012480 7012180 7012180 7012180 7012180 7012180 701250	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible Surface Weilhead Equipment	\$ 840,149 \$ 840,149 45,000 15,000 6,250 17,500 6,000 5,000
7012500 7012100 7012640 7002010 7000010 7000010 7012480 7012180 7012350 FFICIAL LIFT 7006640 7012180 7012480 7012140 7012140 7012270	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Uff Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible	235,346
7012500 7012100 7012640 7000010 7000010 7012480 7012480 7012350 FICIAL LIFT 7006640 7012180 7012480 7012180 7012180 7012180 7012180 7012180 701250	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible Surface Weilhead Equipment	\$ 840,149 \$ 840,149 45,000 15,000 6,250 17,500 6,000 5,000
7012500 7012100 7012100 7012640 7000010 7000010 7000010 701280 7012180 7012350 IFICIAL LIFT 7006640 7012180 7012480 7012180 701240 7019350 7012270 7012550 7012390 7011010	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Rod Pump Elect Sud Pumping unit & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead & Equipment Pig Launchers/Receivers & Rel Equip	\$ 840,149 \$ 840,149 \$ 6,000 6,250 6,000 6,250
7012500 7012100 7012100 7012640 7000010 7000010 7000010 7012180 7012180 7012350 IFICIAL LIFT 7006640 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012190 7012190 7012550 7012590 7011010	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Uff Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes	\$840,149 \$840,149 \$\$40,149 \$\$0,000 \$15,000 \$6,250 \$17,500 \$6,000 \$5,000 \$6,250 \$17,500 \$1,000 \$1,000
7012500 7012100 7012100 7012640 7000010 7000010 7000010 7012180 7012180 7012350 IFICIAL LIFT 7006640 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012190 7012190 7012550 7012590 7011010	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Rod Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible Surface Weilhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes	235,346
7012500 7012100 7012100 7012640 7000010 7000010 7000010 7012180 7012180 7012350 IFICIAL LIFT 7006640 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012190 7012190 7012550 7012590 7011010	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Uff Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes	235,346
7012500 7012100 7012100 7012640 7000010 7000010 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS	235,346
7012500 7012100 7012100 7012640 7000010 7000010 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Uft Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip & Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST	235,346
7012500 7012100 7012100 7012640 7000010 7000010 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible Surface Weilhead Equipment Pig Launchers/Receivers & Rel Equip & Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST	235,346
7012500 7012100 7012100 7012640 7000010 7000010 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Uft Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip & Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST	235,346 223,293 10,482 10,482 \$840,149 \$840,149 \$\$840,149 45,000 15,000 6,250 17,500 6,000 5,000 6,250 3,000 110,000 \$ 110,000 TOTAL COST \$ 84,000 \$ 2,489,342 \$ 3,703,700
7012500 7012100 7012100 7012640 7000010 7000010 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Pad Pumping unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible Surface Weilhead Equipment Pig Launchers/Receivers & Rel Equip & Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST	235,346 223,293 10,482 10,482 \$ 10,482 \$ \$840,149 \$ \$840,149 \$ \$840,149 45,000 6,250 17,500 6,000 5,000 6,250 3,000 110,000 \$ 110,000 TOTAL COST \$ 84,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149
7012500 7012100 7012100 7012640 7000010 7000010 7012480 7012180 7012350 FICIAL LIFT 7005640 7012180 7012180 7012180 7012180 7012180 7012180 7012190 701250 701250 701250 701250 701250 701250	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible Surface Weilhead Equipment Pig Baunchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL DRILLING COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST	235,346 223,293 10,482 10,482 \$840,149 \$840,149 45,000 15,000 6,250 17,500 6,000 5,000 6,250 3,000 110,000 \$110,000 TOTAL COST \$840,000 \$2,489,342 \$3,703,700 \$840,149
7012500 7012100 7012100 7012640 7000010 7000010 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190 7012190	Heater Treater Flare & Accessories Electrical Labor Mechankal Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible Surface Weilhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST	235,346 23,293 10,482 \$340,149 \$ 840,149 \$ 840,149 45,000 15,000 6,250 17,500 6,000 5,000 5,000 10,000 \$ 110,000 TOTAL COST \$ 840,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149 \$ 110,000
7012500 7012100 7012100 7012640 7000010 7000010 7000010 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012140 7012180 7012140 7012180 7012140 7012190 701250 701250 701250	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible Surface Weilhead Equipment Pig Baunchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL DRILLING COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST	235,346 23,293 10,482 \$10,482 \$840,149 \$ 840,149 \$ 840,149 45,000 15,000 6,250 17,500 6,000 5,000 6,000 5,000 110,000 \$ 110,000 TOTAL COST \$ 84,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149
7012500 7012100 7012640 7002010 7000010 7000010 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Rod Pumping Sucker Rods & Rod Pump Electrical Power (electrical cooperative construction costs) Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible Surface Weilhead Guipment Pig Launchers/Receivers & Rel Equip 8% 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 SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval	235,346 223,293 10,482 10,482 \$840,149 \$840,149 \$\$840,149 45,000 15,000 6,250 17,500 6,000 5,000 6,250 3,000 110,000 \$110,000 TOTAL COST \$840,000 \$2,489,342 \$3,703,700 \$840,149 \$110,000
7012500 7012100 7012640 7000010 7000010 7012480 7012180 7012350 FFICIAL LIFT 7006640 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Heater Treater Flare & Accessories Electrical Labor Mechankal Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL ARTIFICIAL LIFT COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval me of	235,346 223,293 10,482 10,482 \$840,149 \$840,149 \$\$840,149 45,000 15,000 6,250 17,500 6,000 5,000 6,250 3,000 110,000 \$110,000 TOTAL COST \$840,000 \$2,489,342 \$3,703,700 \$840,149 \$110,000
7012500 7012100 7012640 7000010 7000010 7012480 7012180 7012350 FICIAL LIFT 7006640 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Rod Pumping Sucker Rods & Rod Pump Electrical Power (electrical cooperative construction costs) Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible Surface Weilhead Guipment Pig Launchers/Receivers & Rel Equip 8% 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 SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval	235,346 223,293 10,482 10,482 \$840,149 \$840,149 \$\$840,149 45,000 15,000 6,250 17,500 6,000 5,000 6,250 3,000 110,000 \$110,000 TOTAL COST \$840,000 \$2,489,342 \$3,703,700 \$840,149 \$110,000
7012500 7012100 7012640 7002010 7000010 7000010 7012480 7012180	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Rod Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible Surface Weilhead Equipment Pig Launchers/Receivers & Rel Equip & Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval me of pany:	235,346 23,293 10,482 \$840,149 \$ 840,149 \$ 840,149 45,000 15,000 6,250 17,500 6,000 5,000 5,000 110,000 \$ 110,000 TOTAL COST \$ 84,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149 \$ 110,000
7012500 7012100 7012640 7002010 7000010 7000010 7012180	Heater Treater Flare & Accessories Electrical Labor Mechankal Labor Rod Pumping unit & Pad Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT - TANGIBLE TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL ARTIFICIAL LIFT COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval me of	235,346 23,293 10,482 \$840,149 \$ 840,149 \$ 840,149 45,000 15,000 6,250 17,500 6,000 5,000 5,000 110,000 \$ 110,000 TOTAL COST \$ 84,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149 \$ 110,000
7012500 7012100 7012640 7002010 7000010 7000010 7000010 701280 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012250 7012290 7011010	Heater Treater Flare & Accessories Electrical Labor Mechanical Labor Rod Pumping unit & Pad Pumping unit & Pad Pumping unit & Rod Pumping Unit Engine Electrical Power (electrical cooperative construction costs) TOTAL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services Materials & Supplies-Tangible Surface Weilhead Equipment Pig Launchers/Receivers & Rel Equip & Contingency & Taxes TOTAL ARTIFICIAL LIFT TOTAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST Participant's Approval me of pany:	235,346 23,293 10,482 \$840,149 \$ 840,149 \$ 840,149 45,000 15,000 6,250 17,500 6,000 5,000 10,000 \$ 110,000 TOTAL COST \$ 84,000 \$ 2,489,342 \$ 3,703,700 \$ 840,149 \$ 110,000

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. 20946, 20948, 20949, 20950

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, provided herewith, and that proof of receipt is attached hereto.

Deana M. Bennett

SUBSCRIBED AND SWORN to before me this 5th day of December, 2019 by Deana M. Bennett.

My commission expires: 02-27-21

Autione Schuman

NOTARY PUBLIC
STATE OF NEW MEXICO

My Commission Expires: 02-27-21

EXHIBIT 9



November 20, 2019

Deana M. Bennett 505.848.1834 dmb@modrall.com

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

CASE NO. 20946

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

CASE NO. 20948

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

CASE NO. 20949

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

CASE NO. 20950

TO: AFFECTED PARTIES

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

In Case No. 20946, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the W/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the **Mead West 32 SB State 1H** well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed.

Modrall Sperling Roehl Harris & Sisk P.A.

500 Fourth Street NW Sulte 1000 Albuquerque, New Mexico 87102

PO Box 2168 Albuquerque, New Mexico 87103-2168

Tel: 505.848.1800 www.modrall.com In Case No. 20948, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfbone horizontal spacing unit underlying the W/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the **Mead West 32 WFB State 5H** well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed.

In Case No. 20949, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the **Mead West 32 SB State 2H** well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 20 miles West-Southwest of Hobbs, New Mexico.

In Case No. 20950, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Wolfbone horizontal spacing unit underlying the E/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the **Mead West 32 WFB State 6H** well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 20 miles West-Southwest of Hobbs, New Mexico.

These cases have been set for hearing before a Division Examiner on December 12, 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

Page 3

the hearing and participate in the cases, including the right to present evidence either in support of or in opposition to the applications. Failure to appear at the hearing may preclude you from any involvement in the cases at a later date.

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

Sincerely,

When H Bennett

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 11/20/2019



Firm Mailing Book ID: 179502

Line	USPS Article Number	Name, Street, City, State, Zip		Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0065 9642 80	State of New Mexico, State Land Office 310 Old Santa Fe Trail Santa Fe NM 87501		\$1.30	\$3.50	\$1.60	\$0.00	81363-0201 Notice
2	9314 8699 0430 0065 9642 97	ConocoPhillips PO Box 2197 Houston TX 77252		\$1.30	\$3.50	\$1.60	\$0.00	81363-0201 Notice
			Totals:	\$2.60	\$7.00	\$3.20	\$0.00	
					Grand	Total:	\$12.80	

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

- 2





December 2, 2019

Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: 9314 8699 0430 0065 9642 97.

Item Details

Status: Delivered, To Agent

Status Date / Time: November 26, 2019, 08:18 a.m.

Location: HOUSTON, TX 77210

Postal Product: First-Class Mail®
Extra Services: Certified Mail™

Return Receipt Electronic

Recipient Name: ConocoPhillips

Shipment Details

Weight: 3.0oz

Recipient Signature

Signature of Recipient:

Address of Recipient:



Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Walz Group, LLC.

Reference Number: 81363-0201



December 2, 2019

Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: 9314 8699 0430 0065 9642 80.

Item Details

Status:

Delivered, Individual Picked Up at Postal Facility

Status Date / Time:

November 25, 2019, 07:01 a.m.

Location:

SANTA FE, NM 87504

Postal Product:

First-Class Mail®

Extra Services:

Certified Mail™ Return Receipt Electronic

Recipient Name:

State of New Mexico State Land Office

Shipment Details

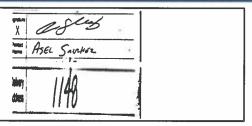
Weight:

3.0oz

Recipient Signature

Signature of Recipient:

Address of Recipient:



Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Walz Group, LLC.

Reference Number: 81363-0201

Affidavit of Publication

STATE OF NEW MEXICO COUNTY OF LEA

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

> Beginning with the issue dated November 30, 2019 and ending with the issue dated November 30, 2019.

Publisher

Sworn and subscribed to before me this 30th day of November 2019.

Business Manager

My commission expires

January 29, 2023 (Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of New Moxico
My Commission Expires

This newspapening the distribution of publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL NOTICE NOVEMBER 30, 2019

CASE NO. 20946: Notice to all affected parties, as well as the heirs and devisees of New Mexico State Land Office, ConocoPhillips, 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 December 12, 2019, to consider this application. Applicant soeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the W/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Mead West 32 SB State 1H well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, dosignation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 20 miles West-Southwest of Hobbs, New Mexico.

CASE NO. 20948: Notice to all affected parties, as well as the heirs and devisees of New Mexico State Land Office, ConocoPhillips, of Marathon Oil Permian LLC's application for computsory pooling, Lea County, New Mexico. The State of New Mexico, through its Oil Consorvation Division, hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on December 12, 2019, to consider this application. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Wolfbone horizontal spacing unit underlying the W/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Mead West 32 WFB State 5H well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and comploting said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year portod between whon the well is drilled and when the well is completed. Said area is located approximately 20 miles West-Southwest of Hobbs, New Mexico.

CASE NO. 20949: Notice to all affected parties, as well as the heirs and devisees of New Mexico State Land Office ConocoPhillips, 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 December 12, 2019, to consider this application. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 W/2 of Section 32, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Mead West 32 SB State 2H well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and comploting said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is comploted. Said area is located approximately 20 miles West-Southwest of Hobbs, New Mexico.

CASE NO. 20950: Notice to all affected parties, as well as the heirs and devisees of New Mexico State Land Office ConocoPhillips, 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 December 12, 2019, to consider this application. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Wolfbone horizontal spacing unit underlying the E/2 W/2 of Section 32, Township 19 South. Range 35 East, NMPM, Lea County, Now Mexico. This spacing unit will be dedicated to the Mead West 32 WFB State 6H well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing sald well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and whon the well is completed. Said area is located approximately 20 miles West-Southwest of Hobbs, New Mexico.

01104570

00236627

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

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. 20946, 20948, 20949, 20950

AFFID	A	V	I	T
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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 10** is a locator map showing the approximate location of the proposed units in relation to the Capitan Reef.
 - 3. **Exhibit 11** is a wellbore schematic showing the proposed laterals within the units.
 - 4. The slides behind **Tab 12** are the geology study I prepared for the Wolfbone wells.
- 5. **Exhibit 12-A** is structure map of the top of the Wolfcamp. The proposed project area is identified by a black-dashed box, and the proposed wells are identified by red and purple lines. Red indicates Second Bone Spring wells and purple indicates the Wolfbone wells.
 - 6. The contour interval used for Exhibit 12-A is 25 feet.
 - 7. Exhibit 12-A shows that the structure dips towards the south/southeast.
- 8. Exhibit 12-B identifies three wells in the vicinity of the proposed Wolfbone wells, shown by a line of cross-section running from A to A'.



- 9. **Exhibit 12-C** is a stratigraphic cross section hung on the top of the Wolfcamp. The well logs on the cross-section give a representative sample of the Third Bone Spring sand and Wolfcamp XY and A formations in the area. The target zone is identified by the words "Producing Zone" and the shaded area across the cross section, along with a red arrow.
- 10. In my opinion, the Third Bone Spring sand and Wolfcamp Y sand thin significantly from west to east.
 - 11. The Wolfcamp A also thins from west to east, but not as significantly.
- 12. The wellbores in the upper Wolfcamp are expected to drain the Third Bone Spring sand and the upper Wolfcamp sands equally at the proposed units.
- 13. In my opinion, these wells are justified from a geologic perspective. This reservoir has also been delineated by the Eagleclaw Federal Com 1H & Eagleclaw Federal 2H wells in the section to the south, which targeted the same depth and zone.
- 14. I discussed this particular reservoir with Paul Kautz in regards to using the Wolfbone pool designation for these wells, which he did not oppose. He suggested using the following terminology to describe the Wolfbone pool for purposes of these wells: "From the top of the Third Bone Spring Carbonate to a point 500 feet below the top of the Wolfcamp".
- 15. **Exhibit 12-D** is a Gross Interval Isochore Third Bone Spring Sand to Wolfcamp A. This zone represents the reservoir that would be drained by the proposed Wolfbone wells. From west to east, the Third Bone Spring Sand and the upper Wolfcamp sands thin significantly. This reservoir is approximately 140' thick at the proposed Mead Wolfbone units.
- 16. The slides behind **Tab 13** are the geology study I prepared for the Second Bone Spring wells.

- 17. **Exhibit 13-A** is structure map of the base of the Second Bone Spring Sand/Top of Third Bone Spring Carbonate. The proposed project area is identified by a black-dashed box, and the proposed wells are identified by red and purple lines. Red indicates Second Bone Spring wells and purple indicates the Wolfbone wells
 - 18. The contour interval used for Exhibit 13-A is 25 feet.
 - 19. Exhibit 13-A shows that the structure dips to the south/southwest.
- 20. **Exhibit 13-B** identifies three wells in the vicinity of the proposed Second Bone Spring sand wells, shown by a line of cross-section running from A to A'.
- 21. Exhibit 13-C is a stratigraphic cross section hung on the base of the Second Bone Spring sand. The well logs on the cross-section give a representative sample of the Second Bone Spring sand 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.
- 22. In my opinion, the Second Bone Spring sand has consistent thickness across the proposed units.
- 23. **Exhibit 13-D** is a Gross Interval Isochore Second Bone Spring Sand. The formation is relatively uniform across the proposed well unit.
 - 24. I conclude from the maps that:
 - a. All four 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 the units will contribute more or less equally to production.

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

[Signature page follows]

Thomas Lockwood

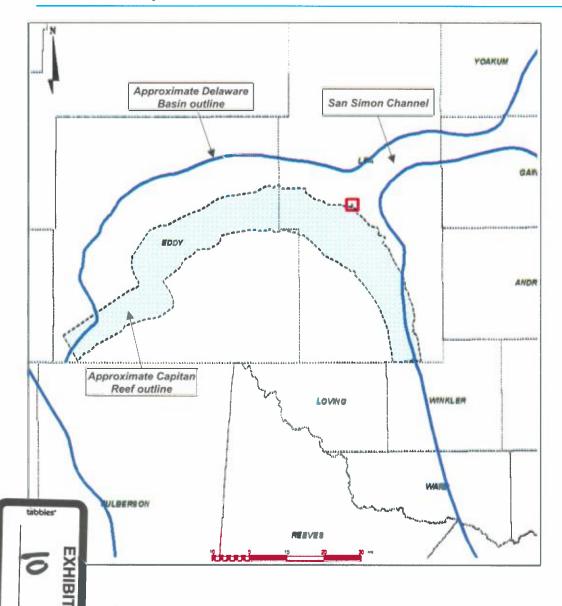
SUBSCRIBED AND SWORN to before me this 6th day of December, 2019 by Thomas Lockwood, on behalf of Marathon Oil Permian LLC.

Notary Public

My commission expires: 1/23/2023

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

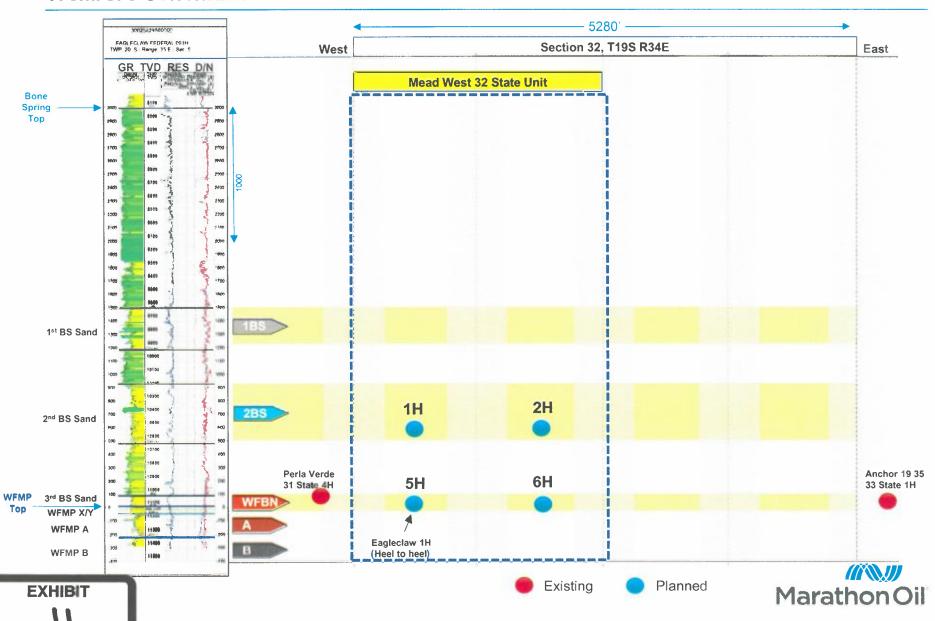
Locator Map



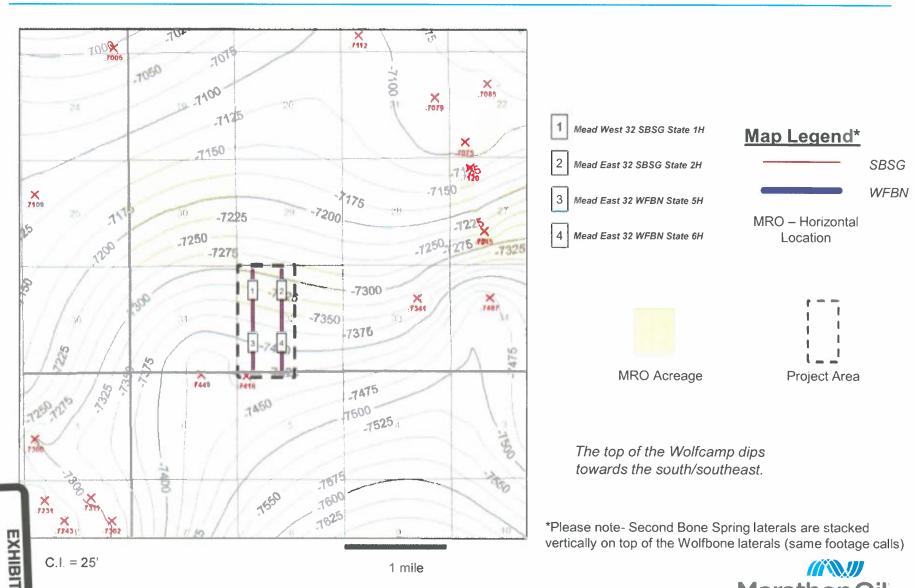
- Approximate location of proposed Mead West 32 State well locations shown with red box
- Located on the northern margin of the Capitan Reef, and in front of the San Simon channel
- Mid Lea county



Wellbore Schematic



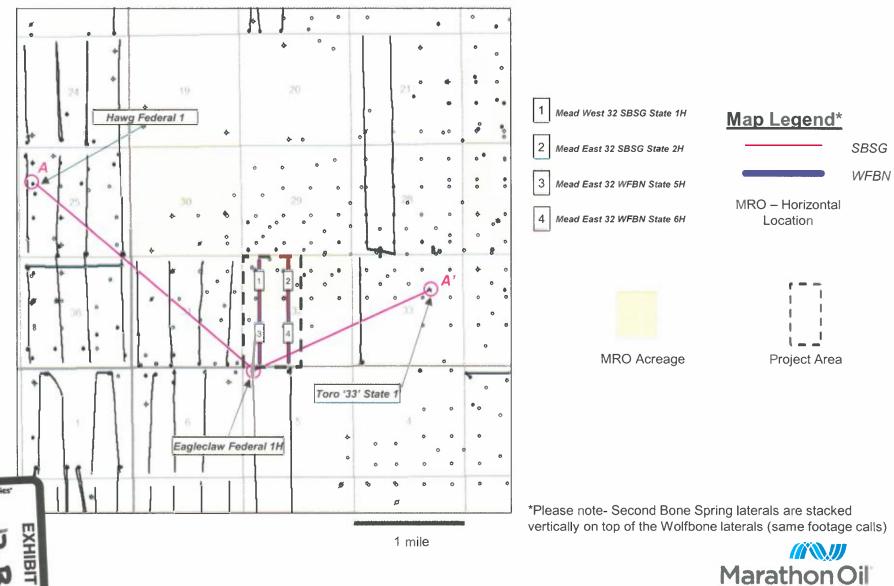
Structure Map - Top of Wolfcamp (TVDSS)



1 mile

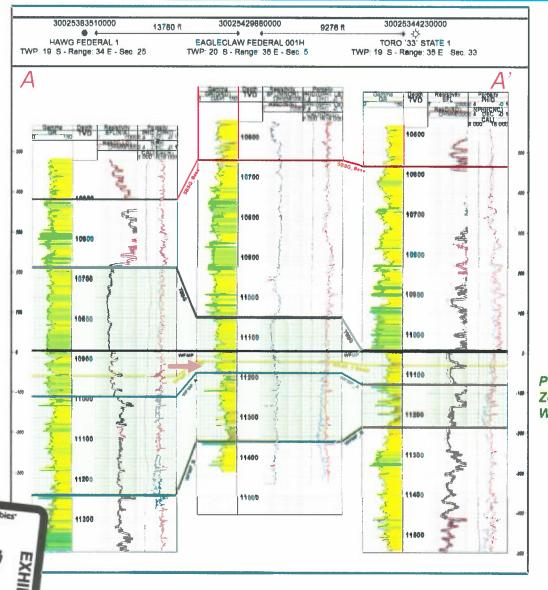
Marathon Oil

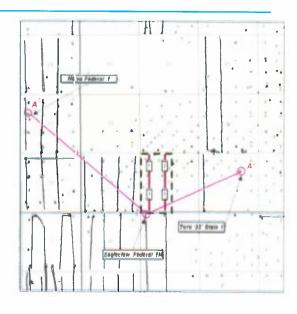
Reference Map for Cross Section - Wolfbone Wells





Stratigraphic Cross Section (Top Wolfcamp Datum)





Third Bone Spring Sand and Wolfcamp Y Sand thin significantly from west to east. Approximately 140' thick at proposed unit.

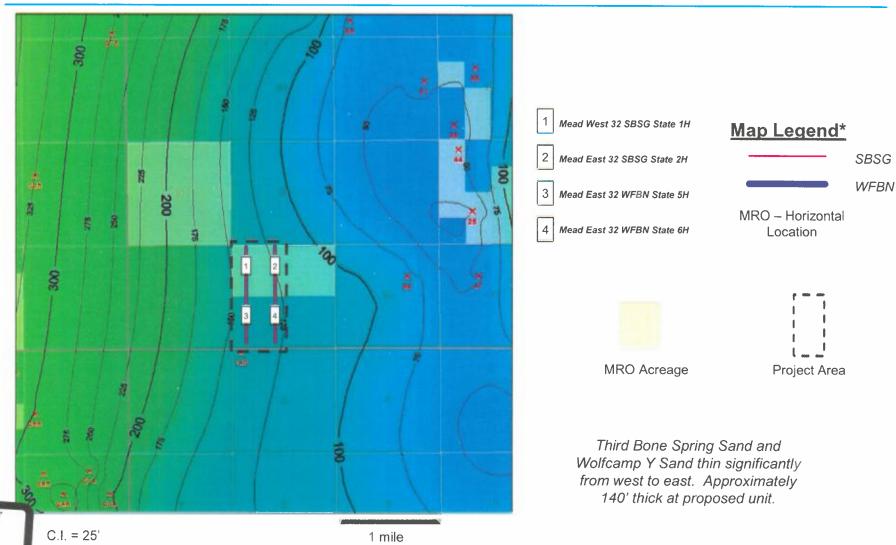
Producing Zone -Wolfbone

Wolfcamp A also thins from west to east, but not as significantly.

Wellbore in upper Wolfcamp expected to drain Third Bone Spring sand and upper Wolfcamp sands equally at proposed unit.



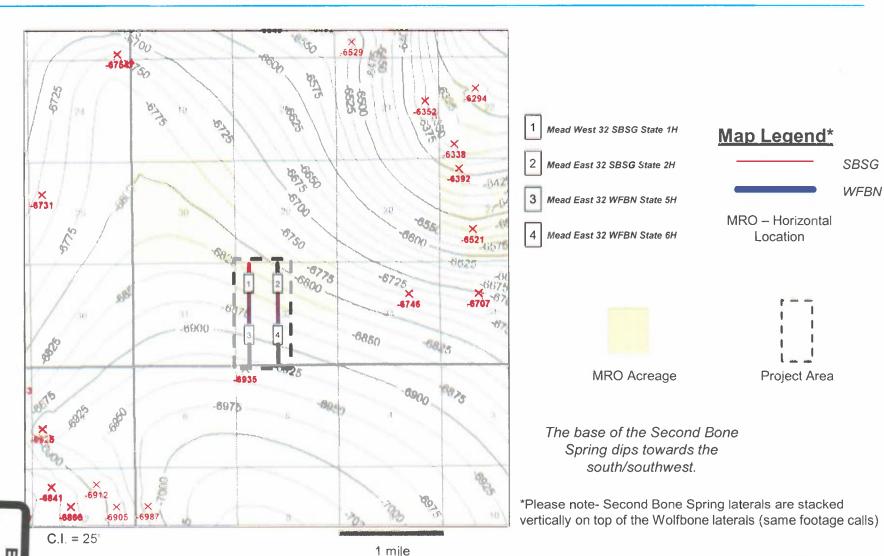
Gross Interval Isochore - Third Bone Spring Sand to Wolfcamp A



*Please note- Second Bone Spring laterals are stacked vertically on top of the Wolfbone laterals (same footage calls)

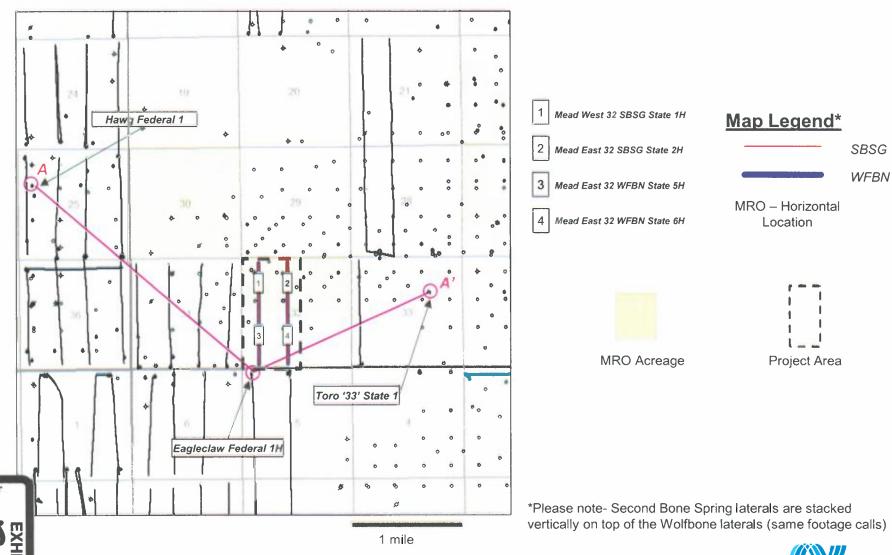


Structure Map – Base of Second Bone Spring Sand/Top of Third Bone Spring Carbonate (TVDSS)



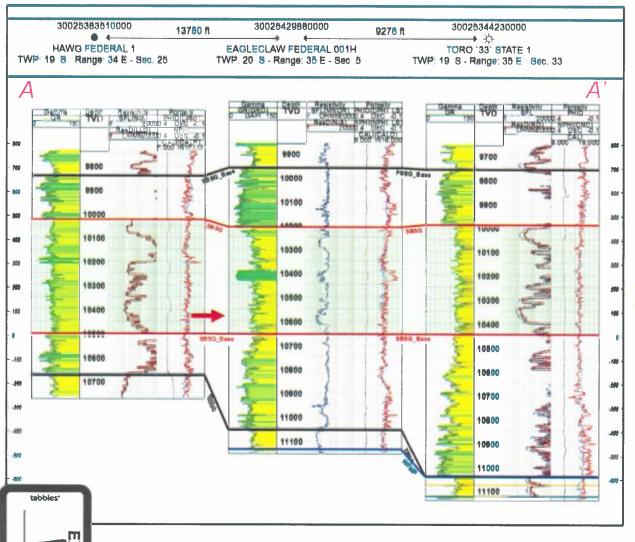


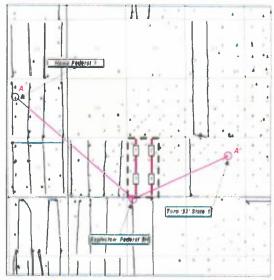
Reference Map for Cross Section – Second Bone Spring Wells





Stratigraphic Cross Section (Base Second Bone Spring Datum)





Producing Zone – Second Bone Spring Sand

Second Bone Spring sand has consistent thickness across the unit, varying by only 20'.



Gross Interval Isochore - Second Bone Spring Sand



*Please note- Second Bone Spring laterals are stacked vertically on top of the Wolfbone laterals (same footage calls)



Preferred Well Orientation - SHmax

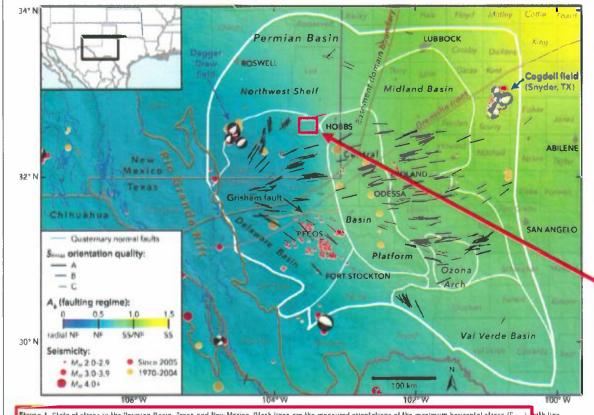


Figure 1. State of stress in the Permian Basin, Texas and New Mexico. Black lines are the measured orientations of the maximum horizontal stress (S_{ami}) with line tength scaled by data quality. The colored background is an interpolation or measured fermive principal stress magnitudes training regime) expressed using the A_a parameter (see text for details) of Simpson (1997). Blue lines are fault traces known to have experienced normal-sense offset within the past 1.6 Ma. from the USGS Quaternary Faults and Folds Detabase (Crone and Wheeler, 2000). The boundary between the Shawnee and Mazatzal basement domains is from Lund et al. (2015), and the Procambrian Grenylle Front is from Thomas (2006). The Permian Basin boundary is from the U.S. Energy information Administration, and the subhasin boundaries are from the Texas Bureau of Economic Geology Permian Basin Geological Synthesis Project. Earthquakes are from the USGS Maltonal Earthquake Information Center, the TexNet Seismic Monitoring Program, and Can 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 70-80 degrees in mid Lea county. It is preferable to have N/S oriented wellbores at the Mead West 32 State proposed location (outlined with red box) since hydraulic fractures will prefer to propagate outwards at 70-80 degrees.

