

**Before the Oil Conservation Division
Examiner Hearing August 8, 2019**

Case No. 20662

*Thor 28 WXY Fee 1H, Thor 28 WA Fee 3H, Thor 28 WXY Fee 5H, Thor 28 WD
Fee 8H*



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

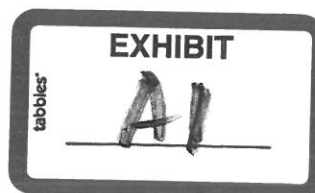
APPLICATION OF MARATHON
PERMIAN OIL LLC FOR COMPULSORY
POOLING, EDDY COUNTY,
NEW MEXICO

CASE NO. _____

APPLICATION

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

1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
2. Marathon seeks to dedicate the W/2 of Section 28, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico to form a 320-acre, more or less, spacing unit.
3. Marathon plans to drill the **Thor 28 WXY Fee 1H, Thor 28 WA Fee 3H, Thor 28 WXY Fee 5H, and Thor 28 WD Fee 8H** wells to a depth sufficient to test the Wolfcamp formation. These wells will be horizontally drilled.
4. These wells will be located within the Purple Sage, Wolfcamp (Gas) Pool (Pool ID: 98220) and will comply with the Division's special setback requirements in Order No. R-14262.
5. Marathon sought, but has been unable to obtain, a voluntary agreement from all interest owners in the Wolfcamp formation underlying the proposed spacing unit to participate in the drilling of the wells or to otherwise commit their interests to the wells.



6. The creation of a horizontal spacing unit and the pooling of all interests in the Wolfcamp formation underlying the proposed unit will prevent the drilling of unnecessary wells, prevent waste and protect correlative rights.

7. Marathon further requests that it be allowed one (1) year between when the wells are drilled and when the first well is completed under the order.

WHEREFORE, Marathon requests this application be set for hearing before an Examiner of the Oil Conservation Division on August 8, 2019, and after notice and hearing as required by law, the Division enter its order:

A. Pooling all mineral interests in a Wolfcamp formation underlying a horizontal spacing unit within W/2 of Section 28, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico;

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

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

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

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

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

Respectfully submitted,

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

By: Deana M. Bennett

Deana M. Bennett

Lance D. Hough

Post Office Box 2168

500 Fourth Street NW, Suite 1000

Albuquerque, New Mexico 87103-2168

Telephone: 505.848.1800

dmb@modrall.com

ldh@modrall.com

Attorneys for Applicant

CASE NO. _____: Application of Marathon Oil Permian LLC for compulsory pooling, Eddy County, New Mexico. Applicant seeks an order from the Division pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the W/2 of Section 28, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the **Thor 28 WXY Fee 1H, Thor 28 WA Fee 3H, Thor 28 WXY Fee 5H, and Thor 28 WD Fee 8H** wells, to be horizontally drilled. The producing area for the wells will be orthodox. Also to be considered will be the cost of drilling and completing the wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the wells, and a 200% charge for risk involved in drilling said wells, and allowing a one year period between when the wells are drilled and when the first well is completed. Said area is located immediately south of Loving, 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

¹ API Number		² Pool Code 98220		³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)	
⁴ Property Code		⁵ Property Name THOR 28 WA FEE			⁶ Well Number 3H
⁷ OGRID No. 372098		⁸ Operator Name MARATHON OIL PERMIAN LLC			⁹ Elevation 3083'
¹⁰ Surface Location					
U/L or lot no. M	Section 28	Township 23S	Range 28E	Lot Idn 612	Feet from the North/South line SOUTH 1222
				East/West line WEST	County EDDY
¹¹ Bottom Hole Location If Different From Surface					
U/L or lot no. C	Section 28	Township 23S	Range 28E	Lot Idn 612	Feet from the North/South line NORTH 1342
				East/West line WEST	County EDDY
¹² Dedicated Acres 320.0		¹³ Joint or Infill		¹⁴ Consolidation Code	
¹⁵ Order No.					

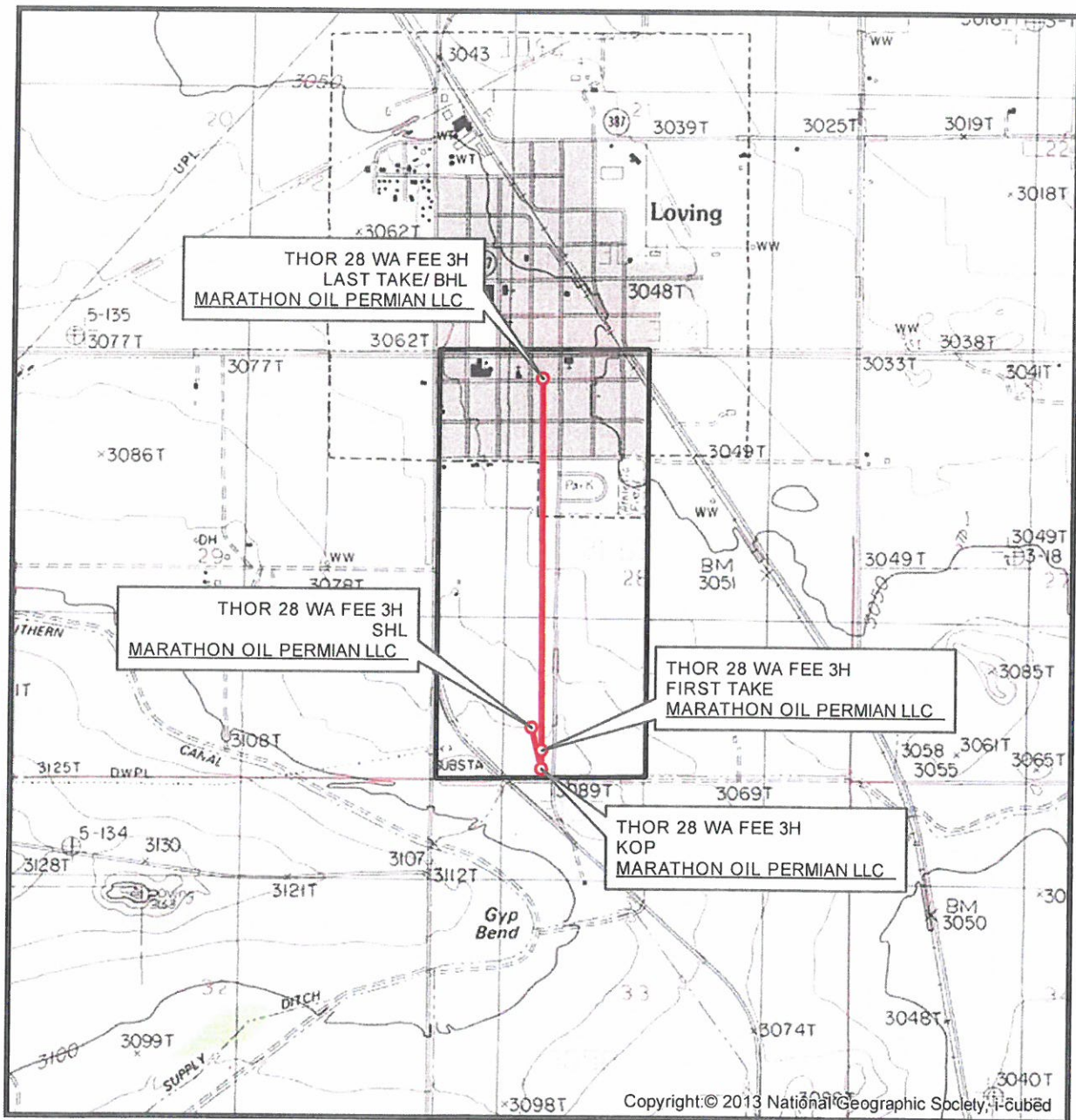
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 613142.91' / Y: 466881.58' B - X: 615806.46' / Y: 466898.63' C - X: 615845.55' / Y: 461605.64' D - X: 613170.76' / Y: 461584.95'		CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 571960.13' / Y: 466822.56' B - X: 574623.63' / Y: 466839.58' C - X: 574662.60' / Y: 461546.71' D - X: 571987.85' / Y: 461526.06'	
LAST TAKE/ BHL 330' 1342' 1322' SECTION 20 SECTION 21 SECTION 21 SECTION 22 SECTION 29 SECTION 28 SECTION 32 SECTION 33 SHL FIRST TAKE KOP 612' 100' 330' 1222' 1347' 1347' 1327' 1327'			
LAST TAKE POINT/BOTTOM HOLE LOCATION 330' FNL 1342' FWL, SECTION 28 NAD 83, SPCS NM EAST X: 614486.76' / Y: 466560.18' LAT: 32.28242625N / LON: 104.09663076W NAD 27, SPCS NM EAST X: 573303.95' / Y: 466501.15' LAT: 32.28230559N / LON: 104.09613561W			
FIRST TAKE POINT 330' FSL 1347' FWL, SECTION 28 NAD 83, SPCS NM EAST X: 614516.06' / Y: 461925.36' LAT: 32.26968562N / LON: 104.09656904W NAD 27, SPCS NM EAST X: 573333.13' / Y: 461866.45' LAT: 32.26956487N / LON: 104.09607434W			
KICK OFF POINT 100' FSL 1347' FWL, SECTION 28 NAD 83, SPCS NM EAST X: 614517.52' / Y: 461695.37' LAT: 32.26905338N / LON: 104.09656595W NAD 27, SPCS NM EAST X: 573334.59' / Y: 461636.46' LAT: 32.26893263N / LON: 104.09607127W			
SURFACE HOLE LOCATION 612' FSL 1222' FWL, SECTION 28 NAD 83, SPCS NM EAST X: 614389.65' / Y: 462206.53' LAT: 32.27045928N / LON: 104.09697602W NAD 27, SPCS NM EAST X: 573206.73' / Y: 462147.61' LAT: 32.27033854N / LON: 104.09648127W			
17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division Signature _____ Date _____ Printed Name _____ E-mail Address _____			
18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey _____ Signature and Seal of Professional Surveyor: _____ Certificate Number _____			

Distances/areas relative to NAD 83 Combined Scale Factor: 0.999915187 Convergence: 00°07'33.71903"



LOCATION VERIFICATION MAP



SEC. 28 TWP. 23-S RGE. 28-E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 OPERATOR: MARATHON OIL PERMIAN LLC
 DESCRIPTION: 612' FSL & 1222' FWL
 ELEVATION: 3083'
 LEASE: THOR 28 FEE
 U.S.G.S. TOPOGRAPHIC MAP: LOVING, NM.

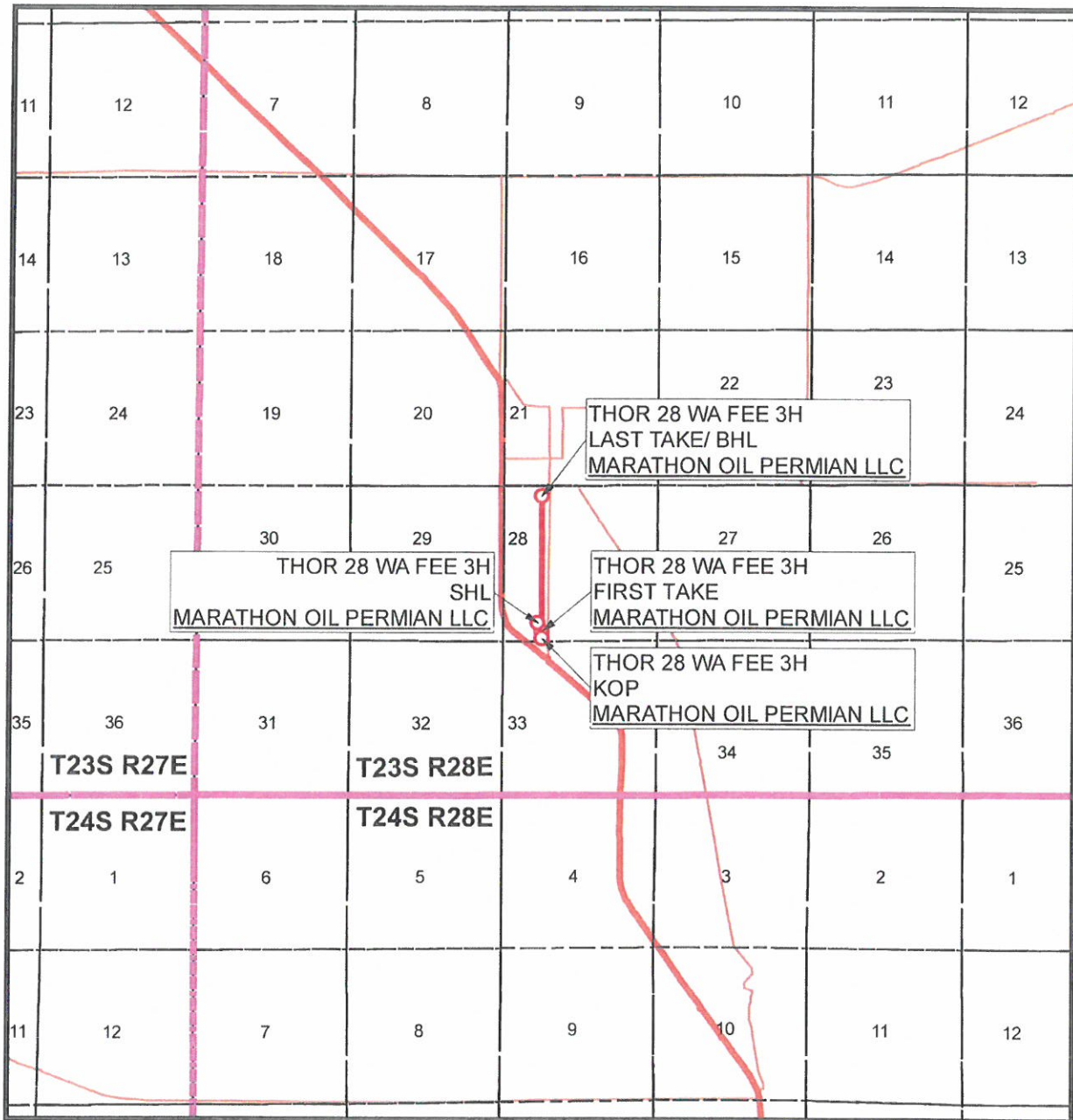
1" = 2,000'
 CONTOUR INTERVAL = 10'



SHEET 2 OF 3

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-6900 OFFICE
 JOB No. R3986_001_C

VICINITY MAP



SEC. 28 TWP. 23-S RGE. 28-E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 OPERATOR: MARATHON OIL PERMIAN LLC
 DESCRIPTION: 612' FSL & 1222' FWL
 ELEVATION: 3083'
 LEASE: THOR 28 FEE
 U.S.G.S. TOPOGRAPHIC MAP: LOVING, NM.

1" = 1 MILE



SHEET 3 OF 3

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-6900 OFFICE
 JOB No. R3986_001_C

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

¹ API Number	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code	⁵ Property Name THOR 28 WD FEE	⁶ Well Number 8H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 3082'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	28	23S	28E		612	SOUTH	1162	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	28	23S	28E		330	NORTH	330	WEST	EDDY
¹² Dedicated Acres 320.0	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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

CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 613142.91' / Y: 466881.58' B - X: 615806.46' / Y: 466898.63' C - X: 615845.55' / Y: 461605.64' D - X: 613170.76' / Y: 461584.95' CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 571960.13' / Y: 466822.56' B - X: 574623.63' / Y: 466839.58' C - X: 574662.60' / Y: 461546.71' D - X: 571987.85' / Y: 461526.06' LAST TAKE POINT/BOTTOM HOLE LOCATION 330' FNL 330' FWL, SECTION 28 NAD 83, SPCS NM EAST X: 613474.64' / Y: 466553.70' LAT: 32.28241453N / LON: 104.09990587W NAD 27, SPCS NM EAST X: 572291.85' / Y: 466494.68' LAT: 32.28229392N / LON: 104.09941060W FIRST TAKE POINT 330' FSL 330' FWL, SECTION 28 NAD 83, SPCS NM EAST X: 613499.02' / Y: 461917.50' LAT: 32.26967012N / LON: 104.09985964W NAD 27, SPCS NM EAST X: 572316.11' / Y: 461858.60' LAT: 32.26954942N / LON: 104.09936481W KICK OFF POINT 100' FSL 330' FWL, SECTION 28 NAD 83, SPCS NM EAST X: 613500.23' / Y: 461687.50' LAT: 32.26903788N / LON: 104.09985735W NAD 27, SPCS NM EAST X: 572317.31' / Y: 461628.61' LAT: 32.26891718N / LON: 104.09936253W SURFACE HOLE LOCATION 612' FSL 1162' FWL, SECTION 28 NAD 83, SPCS NM EAST X: 614329.58' / Y: 462206.46' LAT: 32.27045943N / LON: 104.09717036W NAD 27, SPCS NM EAST X: 573146.67' / Y: 462147.54' LAT: 32.27033870N / LON: 104.09667561W	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature _____ Date _____ Printed Name _____ E-mail Address _____
	¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey _____ Signature and Seal of Professional Surveyor: _____ Certificate Number _____
	PRELIMINARY THIS DOCUMENT IS NOT TO BE USED FOR CONVEYANCE, BIDDING, SALE OR THE RECORDATION OF A PERMIT.
	SHEET 1 OF 3 JOB No. R3986_001_A REV 0 JCS 7/24/2019
	Distances/areas relative to NAD 83 Combined Scale Factor: 0.999915187 Convergence: 00°07'33.71903"

THOR 28 WD FEE 8H
LAST TAKE/BHL
MARATHON OIL PERMIAN LLC

THOR 28 WD FEE 8H
FIRST TAKE
MARATHON OIL PERMIAN LLC

THOR 28 WD FEE 8H
KOP
MARATHON OIL PERMIAN LLC

THOR 28 WD FEE 8H
SHL
MARATHON OIL PERMIAN LLC

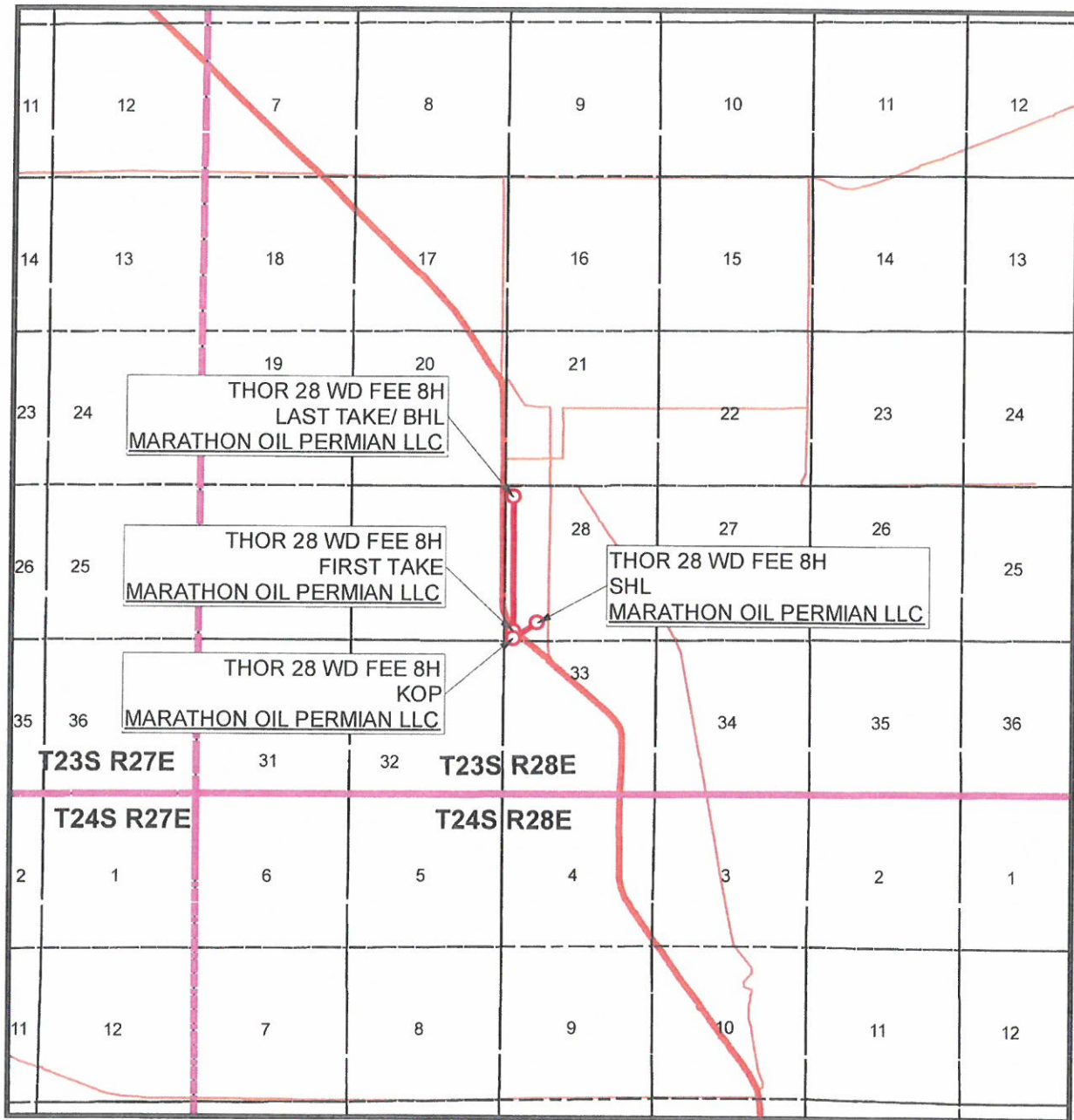
Copyright © 2013 National Geographic Society, Inc.

1" = 2,000'
CONTOUR INTERVAL = 10'



PREPARED BY:
R-SQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE, MONROE, LA 71201
318-323-6900 OFFICE
JOB No. R3986 001 A

VICINITY MAP



SEC. 28 TWP. 23-S RGE. 28-E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 OPERATOR: MARATHON OIL PERMIAN LLC
 DESCRIPTION: 612' FSL & 1162' FWL
 ELEVATION: 3082'
 LEASE: THOR 28 FEE
 U.S.G.S. TOPOGRAPHIC MAP: LOVING, NM.

1" = 1 MILE



SHEET 3 OF 3

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-6900 OFFICE
 JOB No. R3986_001_A

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

¹ API Number	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code	⁵ Property Name THOR 28 WXY FEE	⁶ Well Number 1H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 3083'

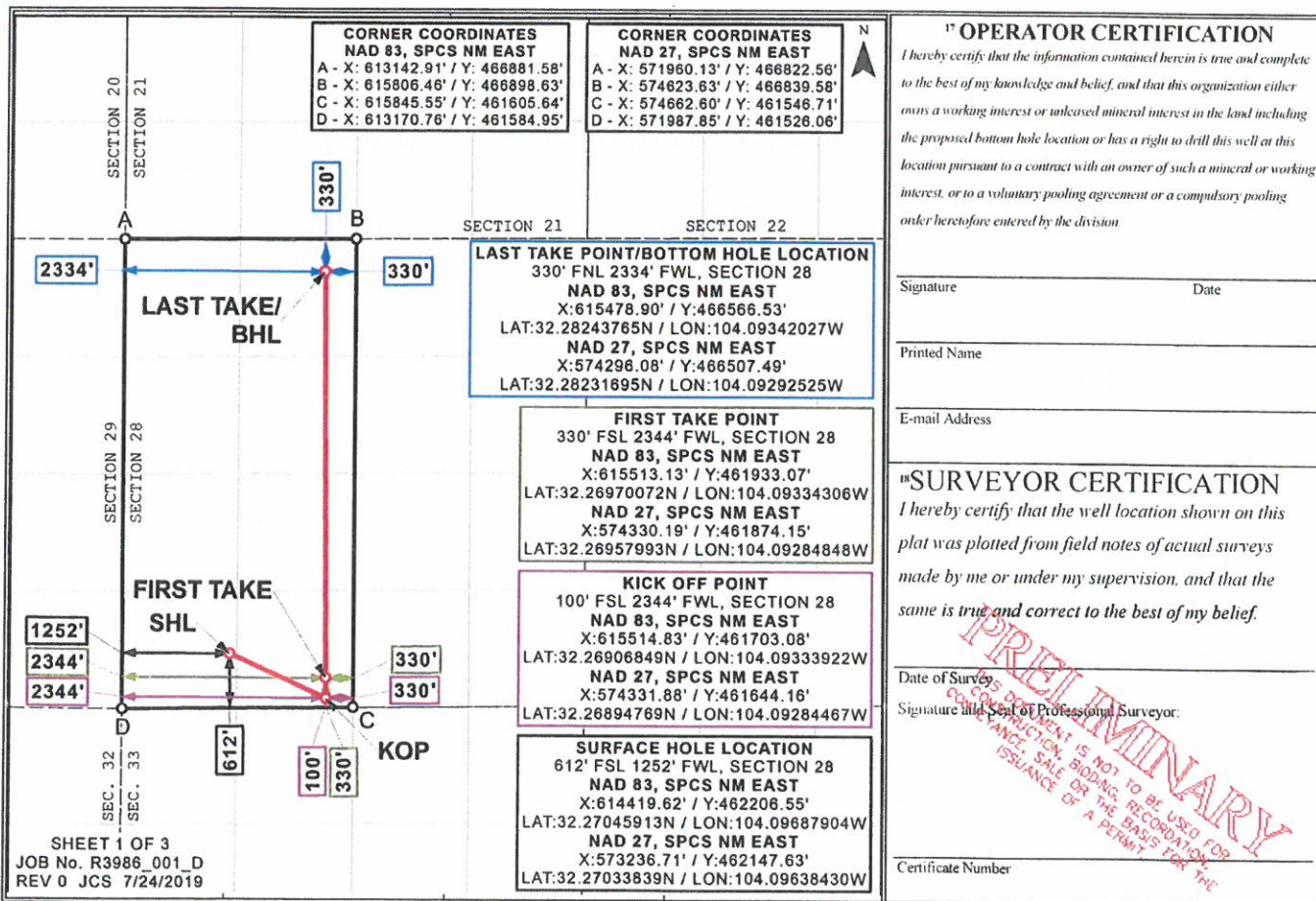
¹⁰ Surface Location

U/L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	28	23S	28E		612	SOUTH	1252	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

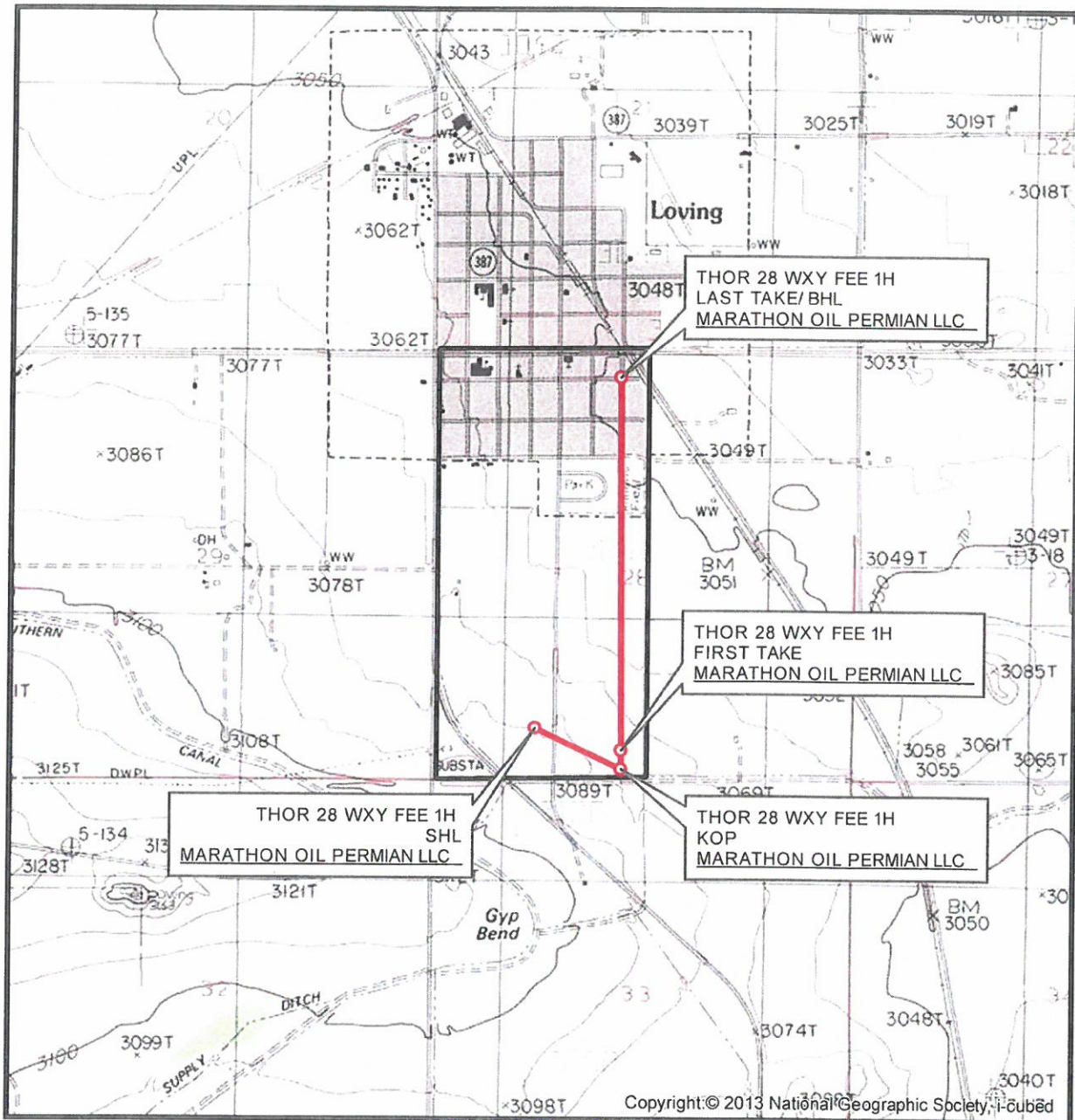
U/L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	28	23S	28E		330	NORTH	2334	WEST	EDDY
¹² Dedicated Acres 320.0	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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



Distances/areas relative to NAD 83 Combined Scale Factor: 0.999915187 Convergence: 00°07'33.71903"

LOCATION VERIFICATION MAP



SEC. 28 TWP. 23-S RGE. 28-E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 OPERATOR: MARATHON OIL PERMIAN LLC
 DESCRIPTION: 612' FSL & 1252' FWL
 ELEVATION: 3083'
 LEASE: THOR 28 FEE
 U.S.G.S. TOPOGRAPHIC MAP: LOVING, NM.

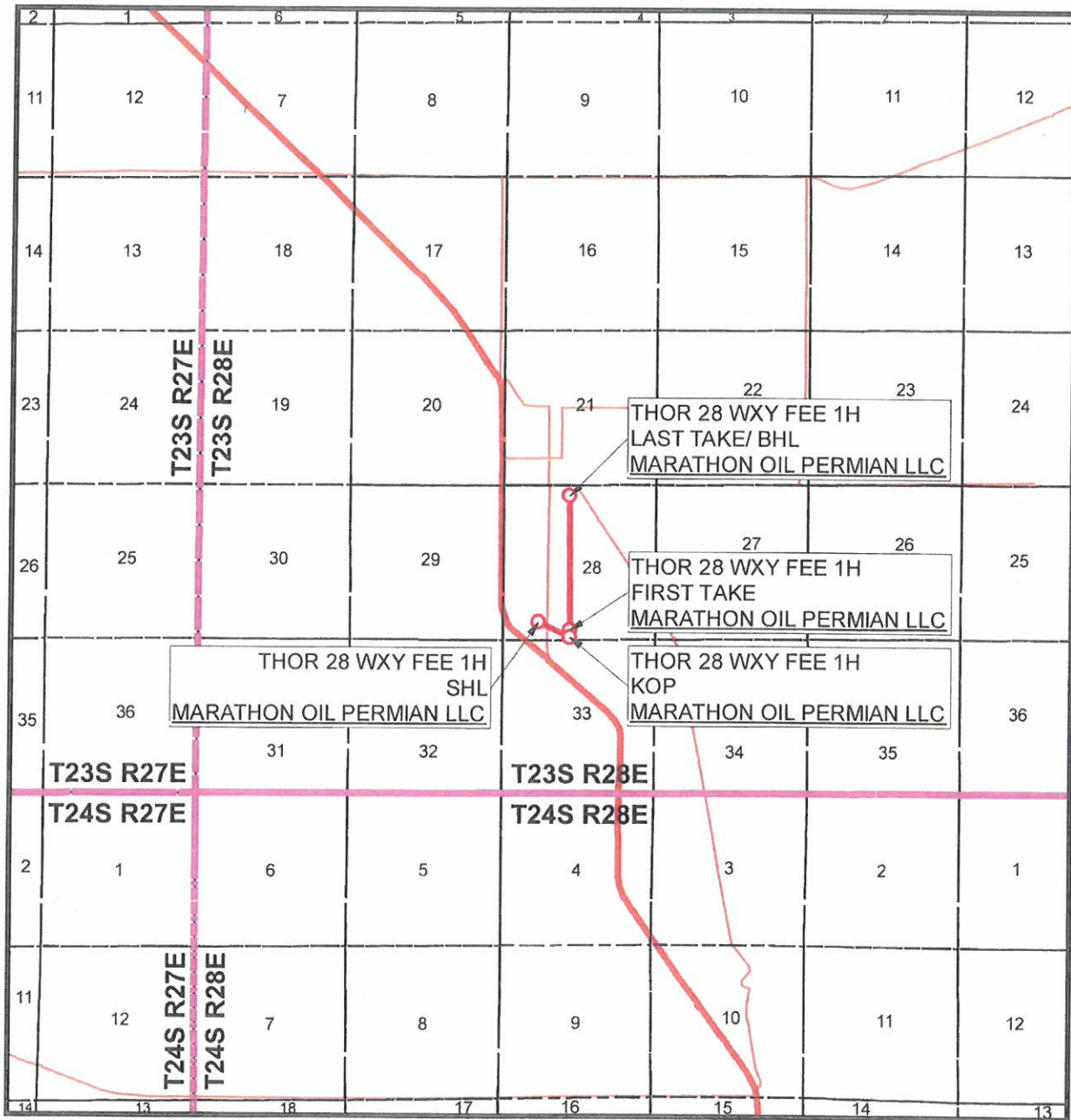
1" = 2,000'
 CONTOUR INTERVAL = 10'



SHEET 2 OF 3

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-6900 OFFICE
 JOB No. R3986_001_D

VICINITY MAP



SEC. 28 TWP. 23-S RGE. 28-E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 OPERATOR: MARATHON OIL PERMIAN LLC
 DESCRIPTION: 612' FSL & 1252' FWL
 ELEVATION: 3083'
 LEASE: THOR 28 FEE
 U.S.G.S. TOPOGRAPHIC MAP: LOVING, NM.

1" = 1 MILE



SHEET 3 OF 3

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-6900 OFFICE
 JOB No. R3986_001_D

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

¹ API Number	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code	⁵ Property Name THOR 28 WXY FEE	⁶ Well Number 5H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 3083'

¹⁰ Surface Location

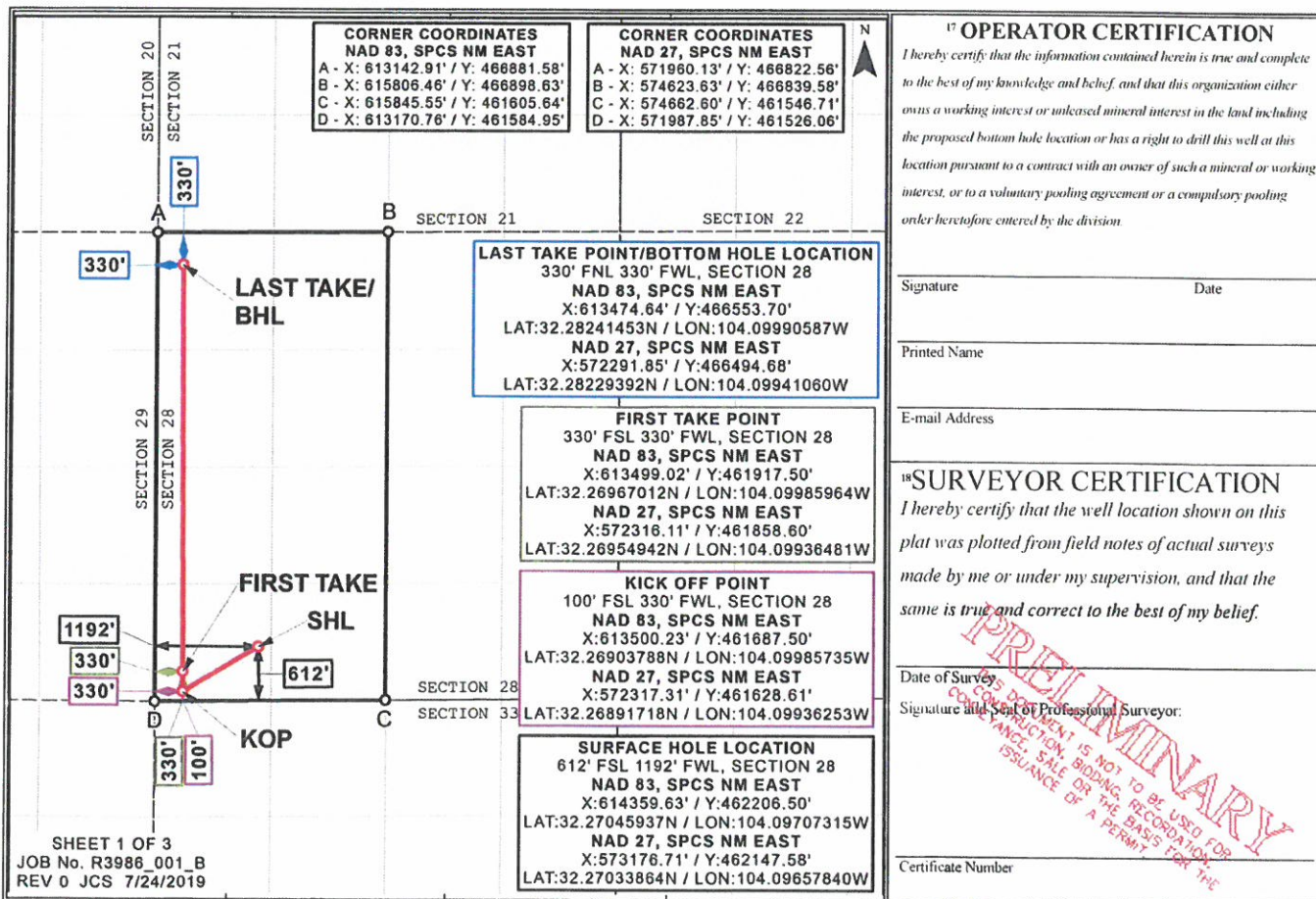
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	28	23S	28E		612	SOUTH	1192	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	28	23S	28E		330	NORTH	330	WEST	EDDY

¹² Dedicated Acres 320.0	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

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



Distances/areas relative to NAD 83 Combined Scale Factor: 0.999915187 Convergence: 00°07'33.71903"

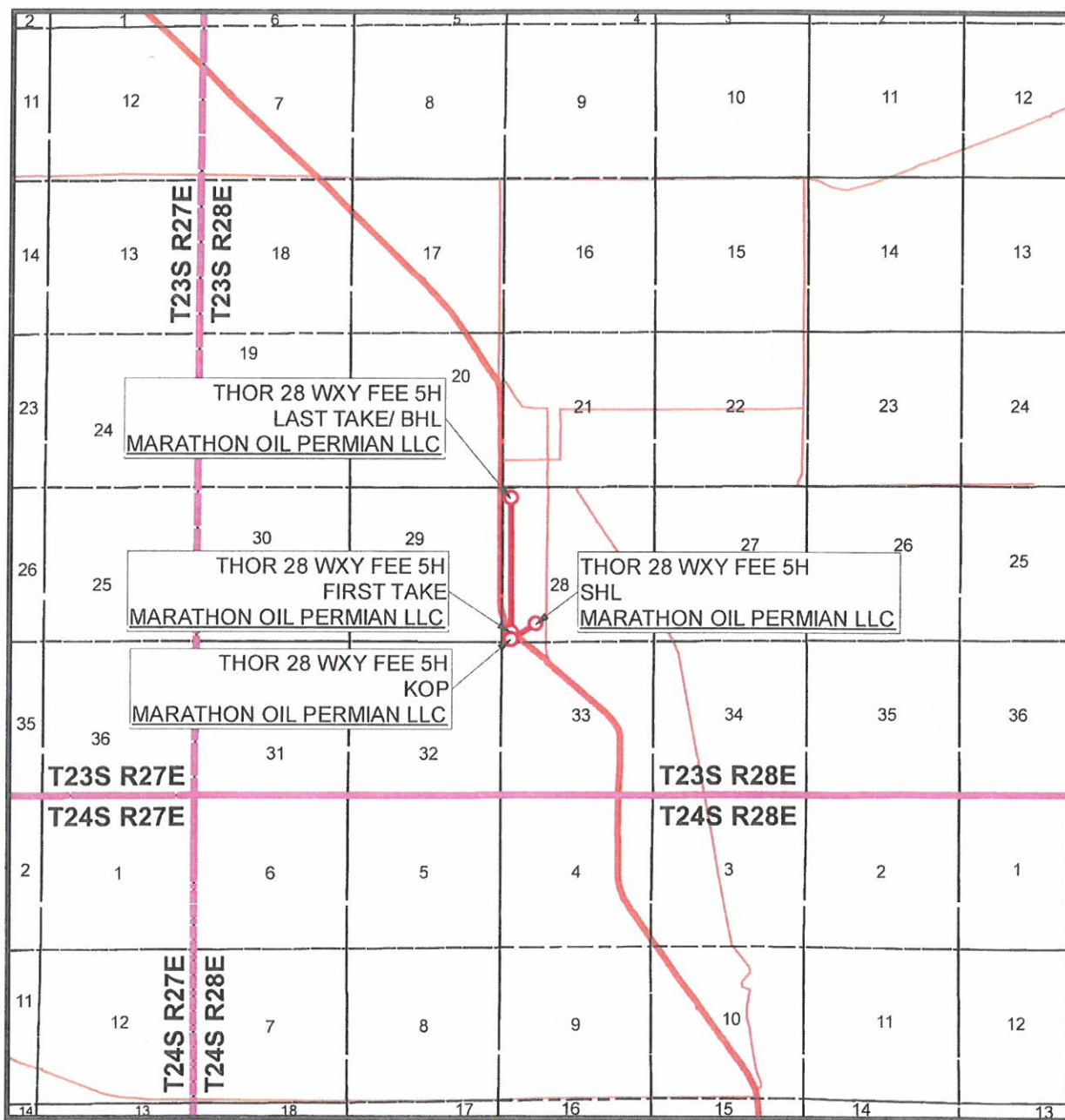
[illegible]

1" = 2,000'
CONTOUR INTERVAL = 10'



PREPARED BY:
R-SQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE, MONROE, LA 71201
318-323-6900 OFFICE
JOB No. R3986_001_B

VICINITY MAP



SEC. 28 TWP. 23-S RGE. 28-E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 OPERATOR: MARATHON OIL PERMIAN LLC
 DESCRIPTION: 612' FSL & 1192' FWL
 ELEVATION: 3083'
 LEASE: THOR 28 FEE
 U.S.G.S. TOPOGRAPHIC MAP: LOVING, NM.

1" = 1 MILE



SHEET 3 OF 3

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-6900 OFFICE
 JOB No. R3986_001_B

Exhibit "A.3" Lease Tract Map
Thor 28 WXY Fee 1H, Thor 28 WA Fee 3H, Thor 28 WXY Fee 5H, Thor 28 WD Fee 8H
W/2 of Section 28, T23S-R28E – 320 acres, more or less

- Tract 1: FEE (45.00 Acres)
- Tract 2: FEE (40.00 Acres)
- Tract 3: FEE (120.00 Acres)
- Tract 4: FEE (35.00 Acres)
- Tract 5: FEE (Exhibit A.4) (80.00 Acres)

20 T23S R28E T23S R28E	21 T23S R28E 5 (Exhibit A.4)	22 T23S R28E T23S R28E
29	28 1 2 3 4	27
32 T23S R28E T23S R28E	33	34 T23S R28E T23S R28E



[illegible]

Exhibit "A.4" Tract Map – 2nd Carter Subdivision of Loving, Eddy County, N.M.
 Case No. 20662 – W/2 Sec. 28 T23S-R28E Eddy County, NM.

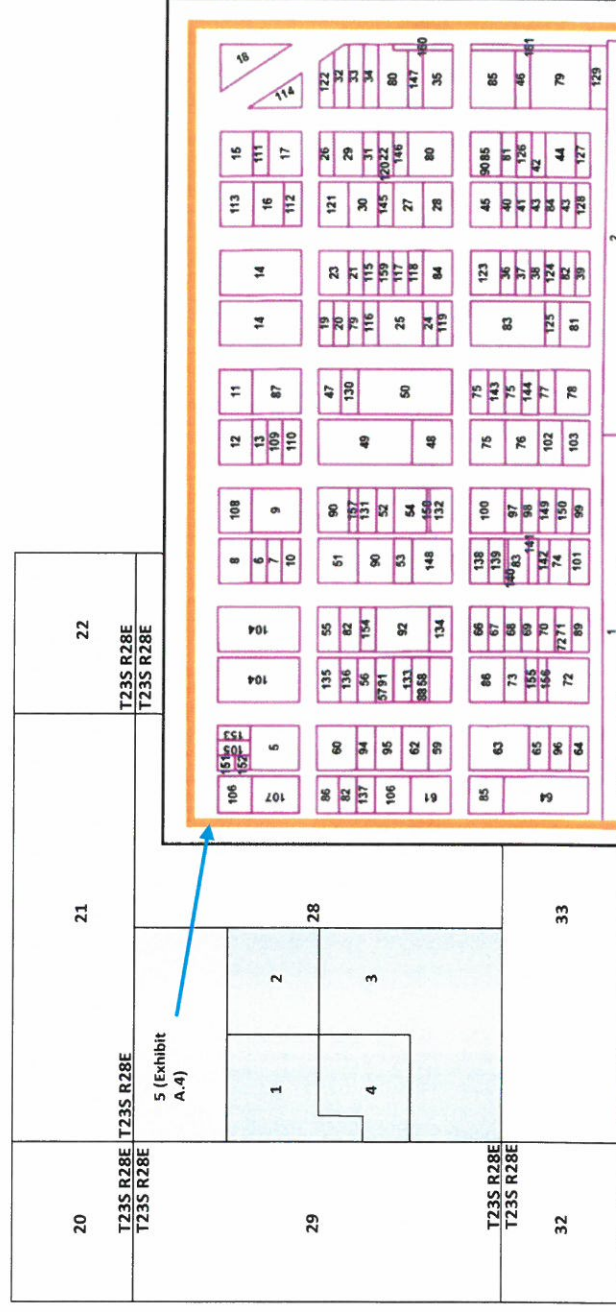


Exhibit "A.4" Tract Identification
Case No. 20662 – W/2 Sec. 28 T23S-R28E Eddy County, NM.

Tract #	Legal	Acreage	Status
Tract 5	LOTS 5, 7, 9, BLOCK 48	0.87240000	Leased
Tract 6	LOT 6, BLOCK 50	0.22960000	Leased
Tract 7	LOT 8, BLOCK 50	0.22960000	Leased
Tract 8	LOTS 2, 4, BLOCK 50	0.59690000	Leased
Tract 9	LOTS 5, 7, 9, BLOCK 50	0.82640000	Leased
Tract 10	LOT 10, BLOCK 50	0.4132314	Leased
Tract 11	LOTS 1, 3, BLOCK 51	0.64280000	Leased
Tract 12	LOTS 2, 4, BLOCK 51	0.64280000	Leased
Tract 13	LOT 6, BLOCK 51	0.22956841	Leased
Tract 14	ALL BLOCK 52	3.03000000	Leased
Tract 15	LOTS 1, 3, BLOCK 53	0.58970000	Leased
Tract 16	LOT 6, 8, BLOCK 53	0.45913682	Leased
Tract 17	LOTS 7, 9, BLOCK 53	0.64280000	Leased
Tract 18	LOT 1, BLOCK 54	1.48867300	Leased
Tract 19	LOT 2, BLOCK 58	0.41320000	Leased
Tract 20	LOT 4, BLOCK 58	0.22960000	Leased
Tract 21	LOT 5, BLOCK 58	0.22960000	Leased
Tract 22	LOT 9, BLOCK 59	0.22960000	Leased
Tract 23	LOTS 1, 3, BLOCK 58	0.59690000	Leased
Tract 24	LOT 16, BLOCK 58	0.22956841	Leased
Tract 25	LOTS 10, 12, 14, BLOCK 58	0.68870000	Leased
Tract 26	LOT 1, BLOCK 59	0.36730000	Leased
Tract 27	LOT 12, 14, BLOCK 59	0.45910000	Leased
Tract 28	LOTS 16, 18, BLOCK 59	0.59690000	Leased
Tract 29	LOT 3, 5, BLOCK 59	0.45910000	Leased

Exhibit "A.4" Tract Identification Cont.
Case No. 20662 – W/2 Sec. 28 T23S-R28E Eddy County, NM.

Tract #	Legal	Acreage	Status
Tract 30	LOTS 6, 8, BLOCK 59	0.45910000	Leased
Tract 31	LOT 7, BLOCK 59	0.22956841	Leased
Tract 32	LOT 4, BLOCK 60	0.32520000	Leased
Tract 33	LOT 6, BLOCK 60	0.29270000	Leased
Tract 34	LOT 8, BLOCK 60	0.29270000	Leased
Tract 35	WEST 194' OF LOTS 16, 18, BLOCK 60	0.69830000	Leased
Tract 36	LOTS 5, BLOCK 61	0.22960000	Leased
Tract 37	LOT 7, BLOCK 61	0.22960000	Leased
Tract 38	LOT 9, BLOCK 61	0.22960000	Leased
Tract 39	LOT 15, BLOCK 61	0.36730000	Leased
Tract 40	LOT 6, BLOCK 62	0.22960000	Leased
Tract 41	LOT 8, BLOCK 62	0.22960000	Leased
Tract 42	LOT 9, BLOCK 62	0.22960000	Leased
Tract 43	LOTS 10, 14, BLOCK 62	0.45920000	Leased
Tract 44	LOTS 11, 13, BLOCK 62	0.45910000	Leased
Tract 45	LOTS 2, 4, BLOCK 62	0.59690000	Leased
Tract 46	WEST 194' LOT 8, BLOCK 63	0.26860000	Leased
Tract 47	LOT 1, BLOCK 67	0.48210000	Leased
Tract 48	LOTS 12, 14, BLOCK 67	0.75670000	Leased
Tract 49	LOTS 2, 4, 6, 8, 10, BLOCK 67	1.58400000	Leased
Tract 50	5, 7, 9, 11, 13, BLOCK 67	1.58400000	Leased
Tract 51	LOTS 2, 4, BLOCK 68	0.75760000	Leased
Tract 52	LOT 7, BLOCK 68	0.27550000	Leased
Tract 53	LOT 10, BLOCK 68	0.27550000	Leased
Tract 54	LOTS 9, 11, S&E 5 10' OF LOT 11, BLOCK 68	0.50500000	Leased

Exhibit "A.4" Tract Identification Cont.
Case No. 20662 – W/2 Sec. 28 T23S-R28E Eddy County, NM.

Tract #	Legal	Acreage	Status
Tract 55	LOT 1, BLOCK 69	0.48210000	Leased
Tract 56	LOT 6, BLOCK 69	0.27540000	Leased
Tract 57	LOT 8, BLOCK 69	0.27540000	Leased
Tract 58	LOTS 10, 12, 14, BLOCK 69	1.03300000	Leased
Tract 59	LOT 13, BLOCK 70	0.48210000	Leased
Tract 60	LOTS 1, 3, BLOCK 70	0.75760000	Leased
Tract 61	LOTS 12, 14, BLOCK 70	0.68940000	Leased
Tract 62	S2 OF LOT 9, LOT 11, BLOCK 70	0.41320000	Leased
Tract 63	LOTS 1, 3, 5, NORTH 28' LOT 7, BLOCK 71	1.05600000	Leased
Tract 64	LOTS 6, 8, 10, 12, 13, 14, BLOCK 71	1.74100000	Leased
Tract 65	S 28' LOT 7, N 42' LOT 9, BLOCK 71	0.32140000	Leased
Tract 66	LOT 1, BLOCK 72	0.41320000	Leased
Tract 67	LOT 3, BLOCK 72	0.25710000	Leased
Tract 68	LOT 5, BLOCK 72	0.25710000	Leased
Tract 69	LOT 7, BLOCK 72	0.25710000	Leased
Tract 70	LOT 9, BLOCK 72	0.25710000	Leased
Tract 71	LOT 11, BLOCK 72	0.25710000	Leased
Tract 72	SOUTH 26' LOT 10, LOT 11, NORTH 45' OF LOT 12, SOUTH 11' OF LOT 12, LOT 14, BLOCK 72	0.25710000	Leased
Tract 73	LOT 6, N 15' LOT 8, BLOCK 72	0.95040000	Leased
Tract 74	NORTH 48' OF LOT 12, SOUTH 20' OF LOT 10, BLOCK 73	0.32600000	Leased
Tract 75	LOTS 1, 2, 4, 5, BLOCK 74	1.37600000	Leased
Tract 76	LOTS 6, 8, BLOCK 74	0.51420000	Leased
Tract 77	LOT 9, BLOCK 74	0.25711662	Leased
Tract 78	LOTS 11, 13, BLOCK 74	0.68870000	Leased
Tract 79	LOT 6, BLOCK 58; WEST 194' OF LOT 10, LOTS 12, 14, 16, BLOCK 63	1.30400000	Leased

Exhibit "A.4" Tract Identification Cont.
Case No. 20662 – W/2 Sec. 28 T23S-R28E Eddy County, NM.

Tract #	Legal	Acreage	Status
Tract 80	LOTS 13, 15, 17, BLOCK 59; LOT 10, WEST 1/4 LOT 12, BLOCK 60	1.38780000	Leased
Tract 81	LOTS 14, 16, BLOCK 61; LOT 5, BLOCK 62	0.82650000	Leased
Tract 82	LOT 13, BLOCK 61; LOT 3, N 1/2 LOT 5, BLOCK 69; LOT 4, BLOCK 70	0.80170000	Leased
Tract 83	LOTS 2, 4, 6, 8, 10, BLOCK 61; N 24 LOT 8, S 44 LOT 6, BLOCK 73	1.58900000	Leased
Tract 84	LOT 12, BLOCK 62; LOTS 15, 17, BLOCK 58	0.82650000	Leased
Tract 85	LOTS 1, 3, BLOCK 62; WEST 1/4 LOTS 2, 4, 6, BLOCK 63 LOTS 2, 4, BLOCK 71	2.17300000	Leased
Tract 86	LOTS 2, 4, BLOCK 72; LOT 2, BLOCK 70	1.10900000	Leased
Tract 87	LOTS 5, 7, 9, BLOCK 51	0.87235996	Leased
Tract 88	LOTS 10, 12, 14, BLOCK 69	0.67148760	Leased
Tract 89	LOT 13, BLOCK 72	0.41322314	Leased
Tract 90	LOT 1 & 3, BLOCK 62	0.59687787	Leased
Tract 91	LOT 1, LOT 3 N2, LOT 6, 8, BLOCK 68	0.79201102	Leased
Tract 92	LOT 8, BLOCK 69	0.27548209	Leased
Tract 93	LOT 7, 9, 11, BLOCK 69	0.82644628	Leased
Tract 94	LOT 5, BLOCK 70	0.27548209	Leased
Tract 95	LOT 7, NORTH 30' OF LOT 9, BLOCK 70	0.41322314	Leased
Tract 96	LOT 9 & S&E NORTH 42' & LOT 11, BLOCK 71	0.32139578	Leased
Tract 97	LOT 5, BLOCK 73	0.25711662	Leased
Tract 98	LOT 7, BLOCK 73	0.25711662	Leased
Tract 99	LOT 13, BLOCK 73	0.41322314	Leased
Tract 100	LOTS 1, 3, BLOCK 73	0.67033976	Leased
Tract 101	SOUTH 8' OF LOT 12, ALL OF LOT 14, BLOCK 73	0.44955409	Leased
Tract 102	NORTH 23' OF LOT 12, LOT 10, BLOCK 74	0.46487603	Leased
Tract 103	SOUTH 32' OF LOT 12, LOT 14, BLOCK 74	0.53259871	Leased
Tract 104	ALL BLOCK 49	3.02112029	Leased

Exhibit "A.4" Tract Identification Cont.
Case No. 20662 – W/2 Sec. 28 T23S-R28E Eddy County, NM.

Tract #	Legal	Acreage	Status
Tract 105	WEST 50' OF EAST 100', LOTS 1, 3, BLOCK 48	0.20661157	Unleased
Tract 106	LOTS 2, 4, N 6' LOT 6, BLOCK 48; LOTS 8, 10, BLOCK 70	1.04031221	Unleased
Tract 107	LOT 6 LESS NORTH 3', BLOCK 48 NORTH 25' LOT 8, BLOCK 48 SOUTH 25', LOT 8, BLOCK 48 LOT 10, BLOCK 48	0.75426768	Unleased
Tract 108	LOTS 1, 3, BLOCK 50	0.64279155	Unleased
Tract 109	LOT 8, BLOCK 51	0.22956841	Unleased
Tract 110	LOT 10, BLOCK 51	0.41322314	Unleased
Tract 111	LOT 5, BLOCK 53	0.22956841	Unleased
Tract 112	LOT 10, BLOCK 53	0.41322314	Unleased
Tract 113	LOT 2, 4, BLOCK 53	0.64279155	Unleased
Tract 114	LOT 2, BLOCK 54	1.31192482	Unleased
Tract 115	LOT 7, BLOCK 58	0.22956841	Unleased
Tract 116	LOT 8, BLOCK 58	0.22956841	Unleased
Tract 117	LOT 11, BLOCK 58	0.22956841	Unleased
Tract 118	LOT 13, BLOCK 58	0.22956841	Unleased
Tract 119	LOT 18, BLOCK 58	0.36730946	Unleased
Tract 120	LOT 9, BLOCK 59	0.22956841	Unleased
Tract 121	LOT 2, 4, BLOCK 59	0.59687787	Unleased
Tract 122	LOT 2, BLOCK 60	0.53835170	Unleased
Tract 123	LOTS 1, 3, BLOCK 61	0.59687787	Unleased
Tract 124	LOT 11, BLOCK 61	0.22956841	Unleased
Tract 125	LOT 12, BLOCK 61	0.22956841	Unleased
Tract 126	LOT 7, BLOCK 62	0.22956841	Unleased
Tract 127	LOT 15, BLOCK 62	0.22956841	Unleased
Tract 128	LOT 16, BLOCK 62	0.22956841	Unleased
Tract 129	LOT 18, BLOCK 63	0.50730028	Unleased
Tract 130	LOT 3, BLOCK 67	0.27548209	Unleased
Tract 131	LOT 5, BLOCK 68	0.27548209	Unleased
Tract 132	LOT 13, BLOCK 68	0.48209366	Unleased

Exhibit "A.4" Tract Identification Cont.
Case No. 20662 – W/2 Sec. 28 T23S-R28E Eddy County, NM.

Tract #	Legal	Acreage	Status
Tract 133	LOT 12, BLOCK 69	0.27548209	Unleased
Tract 134	LOT 13, BLOCK 69	0.48209366	Unleased
Tract 135	LOT 2, BLOCK 69	0.48209366	Unleased
Tract 136	LOT 4, BLOCK 69	0.34435262	Unleased
Tract 137	LOT 6, BLOCK 70	0.22956841	Unleased
Tract 138	LOT 2, BLOCK 73	0.41322314	Unleased
Tract 139	LOT 4, BLOCK 73	0.25711662	Unleased
Tract 140	N 12' LOT 6, BLOCK 73	0.05509642	Unleased
Tract 141	S 32' OF LOT 8, BLOCK 73	0.14692378	Unleased
Tract 142	N 36' LOT 10, BLOCK 73	0.16528926	Unleased
Tract 143	LOT 3, BLOCK 74	0.25711662	Unleased
Tract 144	LOT 7, BLOCK 74	0.25711662	Unleased
Tract 145	LOT 10, BLOCK 59	0.22956841	Unleased
Tract 146	LOT 11, BLOCK 59	0.22956841	Unleased
Tract 147	LOT 14, BLOCK 60	0.28007346	Unleased
Tract 148	LOT 12, 14, BLOCK 68	0.92975207	Unleased
Tract 149	LOT 9, BLOCK 73	0.25711662	Unleased
Tract 150	LOT 11, BLOCK 73	0.25711662	Unleased
Tract 151	LOT 1 LESS E 100', BLOCK 48	0.06900000	Unleased
Tract 152	LOT 3 LESS E 100', BLOCK 48	0.05760000	Unleased
Tract 153	EAST 50', LOTS 1, 3, BLOCK 48	0.12600000	Unleased
Tract 154	SOUTH 50' OF LOT 5 BLOCK 69	0.17540000	Unleased
Tract 155	SOUTH 41' OF LOT 8 BLOCK 72	0.14400000	Unleased
Tract 156	NORTH 30' OF LOT 10 BLOCK 72	0.10450000	Unleased
Tract 157	S2 OF LOT 3 BLOCK 68	0.10340000	Unleased
Tract 158	SOUTH 10' OF LOT 11 BLOCK 68	0.03540000	Unleased
Tract 159	LOT 9, BLOCK 58	0.17090000	Unleased
Tract 160	E 20' OF LOT 12, E 20' OF LOT 14, E 20' OF LOT 16, E 20' OF LOT 18 BLOCK 60	0.09160000	Unleased
Tract 161	E 20' OF LOT 2, E 20' OF LOT 4, E 20' OF LOT 6, E 20' OF LOT 8, E 20' OF LOT 10, E 20' OF LOT 12, E 20' OF LOT 14, E 20' OF LOT 16 BLOCK 63	0.18160000	Unleased

**Exhibit "A.5" List of Unleased Mineral Interest Owners
Case No. 20662 – W/2 Sec. 28 T23S-R28E Eddy County, NM.**

DAVID M. LOPEZ 432 HAMILTON STREET CARLSBAD NM 88220	DANIEL H. CARRASCO PO BOX 215 HURLEY, NM 88043-0215	ROSE ANN THOMAS PO BOX 14 LOVING, NM 88256	OWEN J. CAMPBELL PO BOX 1282 LOVING, NM 88256-1282
PRISCILLA M. LOPEZ 3514 JOSHUA STREET CARLSBAD NM 88220	HEIRS OF HAROLD JOE RUGGS ADDRESS UNKNOWN	VERNA JOY MCGINNIS EVANS 107 E. HERON DRIVE MARBLE FALLS, TX 78654	MARGIE GALVAN 2321 LIVINGSTON CARLSBAD, NM 88220
MARGARET NYMYER BAKER UNKNOWN ADDRESS	EUGENE DURAN RODRIGUEZ AND ROMELIA C. RODRIGUEZ P.O. BOX 127 LOVING, NM 88256	SOUTHWEST MORTGAGE COMPANY OR SUCCESSORS ADDRESS UNKNOWN merged and is now: BEAL BANK 6000 LEGACY DRIVE PLANO TX 75204	CLAUDE L. SAPIEN JR. AND ELIZABETH O. SAPIEN 4141 STRYKER RD LAS CRUCES, NM 88005
PAULINE & LEE S. WILLIAMS ADDRESS UNKNOWN	DAVID & JULIE B. ORNELAS 10908 DESERT DREAMER STREET NW ALBUQUERQUE NM 87114-1981	GEORGE H. & NANCY BRANTLEY 1304 W. RIVERSIDE DRIVE CARLSBAD NM 88220	JESUS H. ADAME AND & JUANA G. ADAME 605 TARPON AVE SE RIO RANCHO, NM 87124
W. C. HUNT ADDRESS UNKNOWN	LORINA L. BALDERRAMA PO BOX 147 LOVING NM 88256-0147	rita M. LARE 7110 86TH STREET, #234 LA VISTA NE 68128	RAFAEL M. MADRID 222 SMITH AVE SE ALBUQUERQUE NM 87102
MIGUEL GARCIA ARMENDAREZ 1028 N. HOWARD STREET CARLSBAD NM 88220	Heirs of EMILIO F. LUCERO (DECEASED) 1603 S. COCHRAN STREET HOBBS, NM 88240-7605	JOSE MANUEL HERNANDEZ PO BOX 54 LOVING NM 88256-0054	TIERRA OIL COMPANY LLC PO BOX 1948 SANTA FE, NM 87504
FLORINDO L. DURAN 2050 W. ROMA AVENUE PHOENIX AZ 85015-4130	Heirs of ESPERANZA LUCERO (DECEASED) PO BOX 1724 SOCORRO NM 87801-1724	L.C. BURKHAM LIFE ESTATE TRUSTEES - (HEIRS OF LEONARD W. BURKHAM) (HEIRS OF DEBRA BURKHAM) (HEIRS OF THOMAS W. BURKHAM) (HEIRS OF BEATRICE BURKHAM) 1040 N. MAIN ST CARLSBAD, NM 88220-5182	CHALCAM EXPLORATION LLC 403 TIERRA BERRENDA ROSWELL NM 88201



**Exhibit "A.5" List of Unleased Mineral Interest Owners
Case No. 20662 – W/2 Sec. 28 T23S-R28E Eddy County, NM.**

CARMEN & RICARDO ECHEVARRIA PO BOX 254 LOVING NM 88256-0254	CIPRIANO L MARTINEZ & FRANCISCA MARTINEZ PO Box 296 LOVING, NM 88256	LEWIS CHARLES BURKHAM, SR. P.O. BOX 504 KYLE, TX 78640	BENEFICIAL NEW MEXICO INC DBA BENEFICIAL MORTGAGE COMPANY 2240 E LOHMAN AVE LAS CRUCES NM 88001
RICARDO ONSUREZ 1827 HAYS DRIVE CARLSBAD NM 88220	Heirs of ESQUIO MEZA & CONRADA MEZA possibly ESEQUIRO MEZA 3336 N ORCHARD ST FRESNO, CA 93726-6743	LEWIS CHARLES BURKHAM, JR. 1416 W. ORCHARD LN. CARLSBAD, NM 88220	
AUTURO & ROSALINDA R MUNOZ PO BOX 471 LOVING NM 88256-0471	GLORIA M MINJARES PO BOX 68 LOVING, NM 88256	Heirs of RITA GREEN P.O. BOX 1014 LOVING, NM 88256	
BIG SKY ESTATES INC 4511 NATIONAL PARKS HWY CARLSBAD NM 88220	HERMAN M HERNANDEZ 704 ORTEGA STREET CARLSBAD, NM 88220	LEE CHARLES FREEMAN (incarcerated) P.O. BOX 553 LOVING, NM 88256	
JACKIE D. McDONALD P.O. BOX 477 LOVING, NM 88256	MARTIN ARMENDAREZ 12412 PRINCESS JEANNE AVE., NE ALBUQUEQUE, NM 87112	EVA Y. QUINONES 805 HUECO ST. #16 CARLSBAD, NM 88220	
PATSY R. BURCH 120 HAMILTON ST. CARLSBAD, NM 88220	FILIBERTO DELGADO RIOS & GRACIELA URBINA JARAMILLO PO BOX 1052 LOVING, NM 88256	PAUL BUSTILLOS 111 FARRIS ST., TRLR. 56 CARLSBAD, NM 88220	
M. JOYCE GRIFFIN 129 MEADOWS DR. RUIDOSO, NM 88345	VILLAGE OF LOVING PO BOX 56 LOVING, NM 88256-0056	REYNER D YBABEN & ELVA P YBABEN PO BOX 27 LOVING, NM 88256-0027	
JUANITA G. NAVARRETE 4411 E. DERRICK RD. CARLSBAD, NM 88220	JUSTIN DODSON AND JUANITA YOUNG 900 LAMONT ST, APT 11 CARLSBAD, NM 88220	PAUL DICAMILLO P.O. BOX 96 LOVING, NM 88256	

Exhibit "A.6" Summary of Interests

**Thor 28 WXY Fee 1H, Thor 28 WA Fee 3H, Thor 28 WXY Fee 5H, Thor 28 WD Fee 8H
W/2 of Section 28, T23S-R28E – 320 acres, more or less**

Committed Working Interest:
Marathon Oil Permian LLC

32.938454%
32.938454%

Uncommitted Working Interest:
COG Operating LLC
MRC Permian LKE Company LLC
LLANO Natural Resources
BC Operating Inc.

61.666200%
57.986111%
0.520833%
2.215156%
0.944100%

Unleased Mineral Interest:

5.574535%

* See List Exhibit A.5*



Chase Rice
Staff Land Professional



Marathon Oil Permian LLC
5555 San Felipe Street
Houston, Texas 77056
Telephone: 713-296-3055
Fax: 713-513-4006
cf Rice@marathonoil.com

June 11, 2019

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED
7019 0700 0000 6564 3945

COG Operating LLC
One Concho Center
600 W. Illinois Avenue
Midland, Texas 79701

Re: Thor 28 Fee 1H, 3H, 5H & 8H Well Proposals
W/2 of Section 28, Township 23 South, Range 28 East
Eddy County, New Mexico

Dear COG Operating LLC:

Marathon Oil Permian LLC ("Marathon") proposes the drilling of the following wells located in Section 28, 23S-28E, Eddy County, New Mexico, all to be drilled from one surface pad location.

Well Name	SHL	BHL	Proration Unit	Target TVD	Est. MD
Thor 28 WXY Fee 1H	1180' FWL & 650' FSL	2310' FWL & 330' FNL	W/2 of Sec. 28	9,548'	14,547'
Thor 28 WA Fee 3H	1150' FWL & 650' FSL	1330' FWL & 330' FNL	W/2 of Sec. 28	9,627'	14,564'
Thor 28 WXY Fee 5H	1120' FWL & 650' FSL	330' FWL & 330' FNL	W/2 of Sec. 28	9,548'	14,521'
Thor 28 WD Fee 8H	1090' FWL & 650' FSL	330' FWL & 330' FNL	W/2 of Sec. 28	10,300'	15,268'

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

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

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

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



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

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

This term assignment offer terminates on July 11, 2019 and is subject to due diligence and title verification satisfactory to Marathon.

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

Sincerely,

Chase Rice
Marathon Oil Permian LLC

Thor 28 Fee 1H, 3H, 5H & 8H

_____ COG Operating LLC elects to participate in the drilling, completing, and equipping of the Thor 28 WXY Fee 1H.

_____ COG Operating LLC elects NOT to participate in the drilling, completing, and equipping of the Thor 28 WXY Fee 1H.

_____ COG Operating LLC elects to participate in the drilling, completing, and equipping of the Thor 28 WA Fee 3H.

_____ COG Operating LLC elects NOT to participate in the drilling, completing, and equipping of the Thor 28 WA Fee 3H.

_____ COG Operating LLC elects to participate in the drilling, completing, and equipping of the Thor 28 WXY Fee 5H.

_____ COG Operating LLC elects NOT to participate in the drilling, completing, and equipping of the Thor 28 WXY Fee 5H.

_____ COG Operating LLC elects to participate in the drilling, completing, and equipping of the Thor 28 WD Fee 8H.

_____ COG Operating LLC elects NOT to participate in the drilling, completing, and equipping of the Thor 28 WD Fee 8H.

COG Operating LLC

By: _____

Print Name: _____

Title: _____

Date: _____

Chase Rice
Staff Land Professional



Marathon Oil Permian LLC

5555 San Felipe Street
Houston, Texas 77056
Telephone: 713-296-3055
Fax: 713-513-4006
cfrice@marathonoil.com

June 11, 2019

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED
7019 0700 0000 8791 1466

Jesus H. Adame and Juana G. Adame
605 Tarpon Ave. SE
Rio Rancho, NM 87124

Re: Thor 28 Fee 1H, 3H, 5H & 8H Well Proposals
W/2 of Section 28, Township 23 South, Range 28 East
Eddy County, New Mexico

Dear Jesus H. Adame and Juana G. Adame:

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

- 3-year lease term with a 2-year option to extend
- \$8,000 bonus consideration per net mineral acre
- 20% royalty rate

This offer to lease terminates July 11, 2019 and is subject to due diligence and title verification satisfactory to Marathon. Should you be agreeable to this offer to lease, please sign the lease form in the presence of a notary and complete the IRS Form W-9 included in this proposal and return them in the enclosed self-addressed, stamped envelope.

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

Well Name	SHL	BHL	Proration Unit	Target TVD	Est. MD
Thor 28 WXY Fee 1H	1180' FWL & 650' FSL	2310' FWL & 330' FNL	W/2 of Sec. 28	9,548'	14,547'
Thor 28 WA Fee 3H	1150' FWL & 650' FSL	1330' FWL & 330' FNL	W/2 of Sec. 28	9,627'	14,564'
Thor 28 WXY Fee 5H	1120' FWL & 650' FSL	330' FWL & 330' FNL	W/2 of Sec. 28	9,548'	14,521'
Thor 28 WD Fee 8H	1090' FWL & 650' FSL	330' FWL & 330' FNL	W/2 of Sec. 28	10,300'	15,268'

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

Marathon proposes drilling the wells under the terms of the 1989 AAPL JOA, and if you are interested in participating, please execute and return the enclosed JOA. The JOA has these general provisions:

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

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

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

Sincerely,

Chase Rice
Marathon Oil Permian LLC

Thor 28 Fee 1H, 3H, 5H & 8H

_____ Jesus H. Adame and Juana G. Adame elects to participate in the drilling, completing, and equipping of the Thor 28 WXY Fee 1H.

_____ Jesus H. Adame and Juana G. Adame elects NOT to participate in the drilling, completing, and equipping of the Thor 28 WXY Fee 1H.

_____ Jesus H. Adame and Juana G. Adame elects to participate in the drilling, completing, and equipping of the Thor 28 WA Fee 3H.

_____ Jesus H. Adame and Juana G. Adame elects NOT to participate in the drilling, completing, and equipping of the Thor 28 WA Fee 3H.

_____ Jesus H. Adame and Juana G. Adame elects to participate in the drilling, completing, and equipping of the Thor 28 WXY Fee 5H.

_____ Jesus H. Adame and Juana G. Adame elects NOT to participate in the drilling, completing, and equipping of the Thor 28 WXY Fee 5H.

_____ Jesus H. Adame and Juana G. Adame elects to participate in the drilling, completing, and equipping of the Thor 28 WD Fee 8H.

_____ Jesus H. Adame and Juana G. Adame elects NOT to participate in the drilling, completing, and equipping of the Thor 28 WD Fee 8H.

Jesus H. Adame and Juana G. Adame

By: _____

Print Name: _____

Title: _____

Date: _____

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

DATE 11/16/2018
DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD
COMPLETION PREPARED BY JOSH SHANNON
FACILITIES PREPARED BY MATT HENSCHEN
ARTIFICIAL LIFT PREPARED BY BILLY MOORE/MATT HE

Asset Team	PERMIAN			
Field	PURPLE SAGE:WOL	FORMATION: WOLFCAMP KY	WILDCAT	EXPLORATION
Lease/Facility	Thor 28 WXY Fee 1H		DEVELOPMENT	RECOMPLETION
Location	EDDY COUNTY		X EXPLOITATION	WORKOVER
Prospect	MALAGA			

Est Total Depth	14,547	Est Drilling Days		Est Completion Days	5.5
-----------------	--------	-------------------	--	---------------------	-----

LOCATION COST - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	37,500
7001250	Land Broker Fees and Services	33,750
TOTAL LOCATION COST - INTANGIBLE		71,250

DRILLING COST - TANGIBLE

7012050	Conductor Pipe	28,000
7012050	Surface Casing	16,000
7012050	Intermediate Casing 1	55,000
7012050	Intermediate Casing 2	231,000
7012050	Production Casing	73,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550	Drilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
TOTAL DRILLING - TANGIBLE		537,000

DRILLING COST - INTANGIBLE

7019200	Drilling Rig Mob/Demob	32,500
7019220	Drilling Rig - day work/footage	430,950
7019040	Directional Drilling Services	139,500
7019020	Cement and Cementing Service Surface	15,000
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	40,000
7019020	Cement and Cementing Service Production	55,000
7019140	Mud Fluids & Services	60,450
7012310	Solids Control equipment	30,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	51,000
7019140	Fuel (Mud)	18,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	-
7019150	Mud Logging/geosteering	12,000
7019250	Stabilizers, Hole Openers, Underreamers (OH rentals)	15,000
7019110	Casing inspection/cleaning	15,000
7019110	Drill pipe/collar inspection services	10,000
7016180	Freight - truck	25,000
7001460	Water hauling and disposal (includes soil farming)	60,000
7001160	Contract Services - Disposal/Non-Hazardous Waste	80,000
7001440	Vacuum Trucks	10,000
7000030	Contract Labor - general	30,000
7000030	Contract Labor - Operations	3,000
7001200	Contract Services - Facilities	10,000
7019300	Well Services - Well Control Services	18,288
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	66,300
7018150	Rig Equipment and Misc.	8,288
7001110	Telecommunications Services	5,000
7001120	Consulting Services	77,903
7001400	Safety and Environmental	26,520
7018120	Rental Buildings (trailers)	13,260
7019310	Coring (sidewalls & analysis)	-
7011010	7% Contingency & Taxes	144,197
TOTAL DRILLING - INTANGIBLE		\$1,667,155

TOTAL DRILLING COST

\$2,204,155

COMPLETION - TANGIBLE

7012580	Tubing	-
7012040	Tubing Accessories (nipple, wireline entry)	-
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	-
TOTAL COMPLETION - TANGIBLE		\$15,000



Asset Team PERMIAN
 Field PURPLE SAGE;WOL FORMATION: WOLFCAMP XY
 Lease/Facility Thor 28 WKY Fee 1H

COMPLETION - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	10,000
7019220	Drilling Rig During Completion	-
7019140	Mud Fluids & Services	-
7019030	Coiled Tubing Services (3 runs)	210,000
7019240	Snubbing Services	-
7019270	Pulling/Swab Units	-
7016350	Fuel (from drlg)	-
7019010	Casing Crew and Services	-
7019020	Cement and Cementing Services	-
7019080	Well Testing Services (flow hand & equip)	315,000
7019320	Fracturing Services	1,960,000
7019330	Perforating	175,000
7019360	Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids)	147,000
7016180	Freight - Truck (haul pipe; drlg & compl)	15,000
7018150	BOP Rental & Testing	-
7018150	Rental Tools and Equipment (incl drlg; lightplant,hydra-walk)	-
7018150	CT Downhole Rental Equipment (ie. BIT, BHA)	-
7000030	Contract Labor - general	35,000
7001110	Telecommunications Services	90,000
7001400	Safety and Environmental	-
7001120	Consulting Services	60,000
7018150	Zipper Manifold	150,000
7019300	Frack Stack Rentals	45,000
7016190	Freight (Transportation Services)	-
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	135,000
7018120	Rental Buildings (trailers)	15,000
7000030	Contract Labor - Pumping (pump-down pumps)	30,000
7011010	8% Contingency & Taxes	234,800
TOTAL COMPLETION - INTANGIBLE		\$3,641,800

TOTAL COMPLETION COST

\$3,656,800

SURFACE EQUIPMENT - TANGIBLE

7012350	Misc. Piping, Fittings & Valves	85,795
7006640	Company Labor & Burden	-
7000030	Contract Labor - General	74,150
7001110	Telecommunication equip (Telemetry)	-
7012410	Line Pipe & Accessories	27,950
7012270	Miscellaneous Materials (containment system)	43,230
7008060	SCADA	-
7016180	Freight - truck	-
7001190	Contract Engineering	29,115
7012290	Metering and Instrumentation	237,080
7012290	I&E Materials	-
7012200	Gas Treating	-
7012200	Dehydration	-
7012010	Compressor	-
7012350	Power	-
7012610	Vapor Recovery Unit	-
7012440	Separator & other pressure vessels	67,350
7012500	Tanks	193,450
7012100	Heater Treater	17,560
7012640	Flare & Accessories	11,645
7000010	Electrical Labor	29,115
7000010	Mechanical Labor	-
7012480	Rod Pumping unit & Pad	-
7012180	Pumping Unit Engine	-
7012350	Electrical Power (electrical cooperative construction costs)	23,290
TOTAL SURFACE EQUIPMENT - TANGIBLE		\$839,730

TOTAL SURFACE EQUIPMENT COST

\$ 839,730

ARTIFICIAL LIFT

7012580	Tubing	50,000
7012040	Tubing Accessories (nipple, wireline entry)	5,000
7012550	Wellhead Equip	5,000
7012560	Packers - Completion Equipment	5,000
7006640	Company Labor	6,000
7012180	Gas Lift Equipment	23,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	-
7012140	Elect Sub Pumps (ESP)	-
7019350	Well Services-Well/Wellhead Services	42,500
7012270	Materials & Supplies-Tangible	25,000
7012550	Surface Wellhead Equipment	3,000
7012390	Plg Launchers/Receivers & Rel Equip	-
7011010	Contingency & Taxes	5,000
TOTAL ARTIFICIAL LIFT		169,500

TOTAL ARTIFICIAL LIFT COST

\$ 169,500

SUMMARY OF ESTIMATED DRILLING WELL COSTS

TOTAL COST

TOTAL LOCATION COST	\$ 71,250
TOTAL DRILLING COST	\$ 2,204,155
TOTAL COMPLETIONS COST	\$ 3,656,800
TOTAL SURFACE EQUIPMENT COST	\$ 839,730
TOTAL ARTIFICIAL LIFT COST	\$ 169,500

GRAND TOTAL COST

\$6,941,435

Asset Team PERMIAN
 Field PURPLE SAGE;WOLI FORMATION: WOLFCAMP A
 Lease/Facility Thor 28 WA Fee 3H

COMPLETION - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	10,000
7019220	Drilling Rig During Completion	-
7019140	Mud Fluids & Services	-
7019030	Coiled Tubing Services (3 runs)	210,000
7019240	Snubbing Services	-
7019270	Pulling/Swab Units	-
7016350	Fuel (from drlg)	-
7019010	Casing Crew and Services	-
7019020	Cement and Cementing Services	-
7019080	Well Testing Services (flow hand & equip)	315,000
7019320	Fracturing Services	1,960,000
7019330	Perforating	175,000
7019360	Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids)	147,000
7016180	Freight - Truck (haul pipe; drlg & compl)	15,000
7018150	BOP Rental & Testing	-
7018150	Rental Tools and Equipment (Incl drlg; lightplant,hydra-walk)	-
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	-
7000030	Contract Labor - general	35,000
7001110	Telecommunications Services	90,000
7001400	Safety and Environmental	-
7001120	Consulting Services	60,000
7018150	Zipper Manifold	150,000
7019300	Frack Stack Rentals	45,000
7016190	Freight (Transportation Services)	-
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	135,000
7018120	Rental Buildings (trailers)	15,000
7000030	Contract Labor - Pumping (pump-down pumps)	30,000
7011010	8% Contingency & Taxes	234,800
TOTAL COMPLETION - INTANGIBLE		\$3,641,800

TOTAL COMPLETION COST

\$3,656,800

SURFACE EQUIPMENT - TANGIBLE

7012350	Misc. Piping, Fittings & Valves	85,795
7006640	Company Labor & Burden	-
7000030	Contract Labor - General	74,150
7001110	Telecommunication equip (Telemetry)	-
7012410	Line Pipe & Accessories	27,950
7012270	Miscellaneous Materials (containment system)	43,230
7008060	SCADA	-
7016180	Freight - truck	-
7001190	Contract Engineering	29,115
7012290	Metering and Instrumentation	237,080
7012290	I&E Materials	-
7012200	Gas Treating	-
7012200	Dehydration	-
7012010	Compressor	-
7012350	Power	-
7012610	Vapor Recovery Unit	-
7012440	Separator & other pressure vessels	67,350
7012500	Tanks	193,450
7012100	Heater Treater	17,560
7012640	Flare & Accessories	11,645
7000010	Electrical Labor	29,115
7000010	Mechanical Labor	-
7012480	Rod Pumping unit & Pad	-
7012180	Pumping Unit Engine	-
7012350	Electrical Power (electrical cooperative construction costs)	23,290
TOTAL SURFACE EQUIPMENT - TANGIBLE		\$839,730

TOTAL SURFACE EQUIPMENT COST

\$ 839,730

ARTIFICIAL LIFT

7012580	Tubing	50,000
7012040	Tubing Accessories (nipple, wireline entry)	5,000
7012550	Wellhead Equip	5,000
7012560	Packers - Completion Equipment	5,000
7006640	Company Labor	6,000
7012180	Gas Lift Equipment	23,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	-
7012140	Elect Sub Pumps (ESP)	-
7019350	Well Services-Well/Wellhead Services	42,500
7012270	Materials & Supplies-Tangible	25,000
7012550	Surface Wellhead Equipment	3,000
7012390	Pig Launchers/Receivers & Rel Equip	-
7011010	Contingency & Taxes	5,000
TOTAL ARTIFICIAL LIFT		169,500

TOTAL ARTIFICIAL LIFT COST

\$ 169,500

SUMMARY OF ESTIMATED DRILLING WELL COSTS

TOTAL LOCATION COST	\$ 71,250
TOTAL DRILLING COST	\$ 2,204,155
TOTAL COMPLETIONS COST	\$ 3,656,800
TOTAL SURFACE EQUIPMENT COST	\$ 839,730
TOTAL ARTIFICIAL LIFT COST	\$ 169,500

GRAND TOTAL COST

\$6,941,435

Asset Team PERMIAN
 Field PURPLE SAGE;WOLU FORMATION: WOLFCAMP XY
 Lease/Facility Thor 28 WXY Fee 5H

COMPLETION - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	10,000
7019220	Drilling Rig During Completion	-
7019140	Mud Fluids & Services	-
7019030	Coiled Tubing Services (3 runs)	210,000
7019240	Snubbing Services	-
7019270	Pulling/Swab Units	-
7016350	Fuel (from drlg)	-
7019010	Casing Crew and Services	-
7019020	Cement and Cementing Services	-
7019080	Well Testing Services (flow hand & equip)	315,000
7019320	Fracturing Services	1,960,000
7019330	Perforating	175,000
7019360	Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids)	147,000
7016180	Freight - Truck (haul pipe; drlg & compl)	15,000
7018150	BOP Rental & Testing	-
7018150	Rental Tools and Equipment (incl drlg; lightplant,hydra-walk)	-
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	-
7000030	Contract Labor - general	35,000
7001110	Telecommunications Services	90,000
7001400	Safety and Environmental	-
7001120	Consulting Services	60,000
7018150	Zipper Manifold	150,000
7019300	Frac Stack Rentals	45,000
7016190	Freight (Transportation Services)	-
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	135,000
7018120	Rental Buildings (trailers)	15,000
7000030	Contract Labor - Pumping (pump-down pumps)	30,000
7011010	8% Contingency & Taxes	234,800
TOTAL COMPLETION - INTANGIBLE		\$3,641,800

TOTAL COMPLETION COST \$3,656,800

SURFACE EQUIPMENT - TANGIBLE

7012350	Misc. Piping, Fittings & Valves	85,795
7006640	Company Labor & Burden	-
7000030	Contract Labor - General	74,150
7001110	Telecommunication equip (Telemetry)	-
7012410	Line Pipe & Accessories	27,950
7012270	Miscellaneous Materials (containment system)	43,230
7008060	SCADA	-
7016180	Freight - truck	-
7001190	Contract Engineering	29,115
7012290	Metering and Instrumentation	237,080
7012290	I&E Materials	-
7012200	Gas Treating	-
7012200	Dehydration	-
7012010	Compressor	-
7012350	Power	-
7012610	Vapor Recovery Unit	-
7012440	Separator & other pressure vessels	67,350
7012500	Tanks	193,450
7012100	Heater Treater	17,560
7012640	Flare & Accessories	11,645
7000010	Electrical Labor	29,115
7000010	Mechanical Labor	-
7012480	Rod Pumping unit & Pad	-
7012180	Pumping Unit Engine	-
7012350	Electrical Power (electrical cooperative construction costs)	23,290
TOTAL SURFACE EQUIPMENT - TANGIBLE		\$839,730

TOTAL SURFACE EQUIPMENT COST \$ 839,730

ARTIFICIAL LIFT

7012580	Tubing	50,000
7012040	Tubing Accessories (nipple, wireline entry)	5,000
7012550	Wellhead Equip	5,000
7012560	Packers - Completion Equipment	5,000
7006640	Company Labor	6,000
7012180	Gas Lift Equipment	23,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	-
7012140	Elect Sub Pumps (ESP)	-
7019350	Well Services-Well/Wellhead Services	42,500
7012270	Materials & Supplies-Tangible	25,000
7012550	Surface Wellhead Equipment	3,000
7012390	Pig Launchers/Receivers & Rel Equip	-
7011010	Contingency & Taxes	5,000
TOTAL ARTIFICIAL LIFT		169,500

TOTAL ARTIFICIAL LIFT COST \$ 169,500

SUMMARY OF ESTIMATED DRILLING WELL COSTS

	TOTAL COST
TOTAL LOCATION COST	\$ 71,250
TOTAL DRILLING COST	\$ 2,204,155
TOTAL COMPLETIONS COST	\$ 3,656,800
TOTAL SURFACE EQUIPMENT COST	\$ 839,730
TOTAL ARTIFICIAL LIFT COST	\$ 169,500
GRAND TOTAL COST	\$6,941,435

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

DATE 11/16/2018
DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD
COMPLETION PREPARED BY JOSH SHANNON
FACILITIES PREPARED BY MATT HENSCHEN
ARTIFICIAL LIFT PREPARED BY BILLY MOORE/MATT HE

Asset Team	PERMIAN		
Field	PURPLE SAGE;WOLI	FORMATION: WOLFCAMP D	WILDCAT
Lease/Facility	Thor 28 WD Fee 8H		EXPLORATION
Location	EDDY COUNTY		DEVELOPMENT
Prospect	MALAGA		X EXPLOITATION
			RECOMPLETION
			WORKOVER

Est Total Depth	15,268	Est Drilling Days		Est Completion Days	5.5
-----------------	--------	-------------------	--	---------------------	-----

LOCATION COST - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	50,000
7001250	Land Broker Fees and Services	45,000
TOTAL LOCATION COST - INTANGIBLE		95,000

DRILLING COST - TANGIBLE

7012050	Conductor Pipe	28,000
7012050	Surface Casing	16,000
7012050	Intermediate Casing 1	55,000
7012050	Intermediate Casing 2	231,000
7012050	Production Casing	73,000
7012050	Drfg Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550	Drilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
TOTAL DRILLING - TANGIBLE		537,000

DRILLING COST - INTANGIBLE

7019200	Drilling Rig Mob/Demob	43,333
7019220	Drilling Rig - day work/footage	502,667
7019040	Directional Drilling Services	165,000
7019020	Cement and Cementing Service Surface	15,000
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	40,000
7019020	Cement and Cementing Service Production	45,000
7019140	Mud Fluids & Services	63,000
7012310	Solids Control equipment	34,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	60,000
7019140	Fuel (Mud)	18,000
7001460	Water (non potable)	25,000
7012350	Water (potable)	5,000
7019000	Well Logging Services	-
7019150	Mud Logging+geosteering	15,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110	Casing inspection/cleaning	15,000
7019110	Drill pipe/collar inspection services	10,000
7016180	Freight - truck	25,000
7001460	Water hauling and disposal (includes soil farming)	60,000
7001160	Contract Services - Disposal/Non-Hazardous Waste	80,000
7001440	Vacuum Trucks	10,000
7000030	Contract Labor - general	30,000
7000030	Contract Labor - Operations	3,000
7001200	Contract Services - Facilities	10,000
7019300	Well Services - Well Control Services	19,667
7019350	Well Services - Well/Wellhead Services	10,000
7018150	Rental Tools and Equipment (surface rentals)	77,333
7018150	Rlg Equipment and Misc.	9,667
7001110	Telecommunications Services	5,000
7001120	Consulting Services	90,867
7001400	Safety and Environmental	30,933
7018120	Rental Buildings (trailers)	15,467
7019310	Coring (sidewalls & analysis)	-
7011010	7% Contingency & Taxes	154,695
TOTAL DRILLING - INTANGIBLE		\$1,827,629

TOTAL DRILLING COST	\$2,364,629
---------------------	-------------

COMPLETION - TANGIBLE

7012580	Tubing	-
7012040	Tubing Accessories (nipple, wireline entry)	-
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	-
TOTAL COMPLETION - TANGIBLE		\$15,000

Asset Team PERMIAN
 Field PURPLE SAGE;WOLI FORMATION: WOLFCAMP D
 Lease/Facility Thor 28 WD Fee 8H

COMPLETION - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	10,000
7019220	Drilling Rig During Completion	-
7019140	Mud Fluids & Services	-
7019030	Coiled Tubing Services (3 runs)	275,000
7019240	Snubbing Services	-
7019270	Pulling/Swab Units	-
7016350	Fuel (from drlg)	-
7019010	Casing Crew and Services	-
7019020	Cement and Cementing Services	-
7019080	Well Testing Services (flow hand & equip)	335,000
7019320	Fracturing Services	3,300,000
7019330	Perforating	235,000
7019360	Wireline Services	15,000
7001460	Water Hauling & Disposal (frac fluids)	215,000
7016180	Freight - Truck (haul pipe; drlg & compl)	15,000
7018150	BOP Rental & Testing	-
7018150	Rental Tools and Equipment (ind drlg; lightplant,hydra-walk)	-
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	-
7000030	Contract Labor - general	40,000
7001110	Telecommunications Services	100,000
7001400	Safety and Environmental	-
7001120	Consulting Services	80,000
7018150	Zipper Manifold	200,000
7019300	Frack Stack Rentals	65,000
7016190	Freight (Transportation Services)	-
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	120,000
7018120	Rental Buildings (trailers)	25,000
7000030	Contract Labor - Pumping (pump-down pumps)	45,000
7011010	8% Contingency & Taxes	364,400
TOTAL COMPLETION - INTANGIBLE		\$5,439,400

TOTAL COMPLETION COST

\$5,454,400

SURFACE EQUIPMENT - TANGIBLE

7011350	Misc. Piping, Fittings & Valves	85,795
7006640	Company Labor & Burden	-
7000030	Contract Labor - General	74,150
7001110	Telecommunication equip (Telemetry)	-
7012410	Line Pipe & Accessories	27,950
7012270	Miscellaneous Materials (containment system)	43,230
7008060	SCADA	-
7016180	Freight - truck	-
7001190	Contract Engineering	29,115
7012290	Metering and Instrumentation	237,080
7012290	I&E Materials	-
7012200	Gas Treating	-
7012200	Dehydration	-
7012010	Compressor	-
7012350	Power	-
7012610	Vapor Recovery Unit	-
7012440	Separator & other pressure vessels	67,350
7012500	Tanks	193,450
7012100	Heater Treater	17,560
7012640	Flare & Accessories	11,645
7000010	Electrical Labor	29,115
7000010	Mechanical Labor	-
7012480	Rod Pumping unit & Pad	-
7012180	Pumping Unit Engine	-
7012350	Electrical Power (electrical cooperative construction costs)	23,290
TOTAL SURFACE EQUIPMENT - TANGIBLE		\$839,730

TOTAL SURFACE EQUIPMENT COST

\$ 839,730

ARTIFICIAL LIFT

7012580	Tubing	50,000
7012040	Tubing Accessories (nipple, wireline entry)	5,000
7012550	Wellhead Equip	5,000
7012560	Packers - Completion Equipment	5,000
7006640	Company Labor	6,000
7012180	Gas Lift Equipment	23,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	-
7012140	Elect Sub Pumps (ESP)	-
7019350	Well Services-Well/Wellhead Services	42,500
7012270	Materials & Supplies-Tangible	25,000
7012550	Surface Wellhead Equipment	3,000
7012390	Pig Launchers/Receivers & Rel Equip	-
7011010	Contingency & Taxes	5,000
TOTAL ARTIFICIAL LIFT		169,500

TOTAL ARTIFICIAL LIFT COST

\$ 169,500

SUMMARY OF ESTIMATED DRILLING WELL COSTS

TOTAL LOCATION COST	\$ 95,000
TOTAL DRILLING COST	\$ 2,364,629
TOTAL COMPLETIONS COST	\$ 5,454,400
TOTAL SURFACE EQUIPMENT COST	\$ 839,730
TOTAL ARTIFICIAL LIFT COST	\$ 169,500

GRAND TOTAL COST

\$8,923,259

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

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

CASE NO. 20662

AFFIDAVIT OF THOMAS LOCKWOOD

STATE OF TEXAS)
) ss.
COUNTY OF HARRIS)

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 ("Marathon"), and have personal knowledge of the matters stated herein. I have been qualified by the Oil Conservation Division ("Division") as an expert in petroleum geology matters.

2. I conducted a geological study of the area that encompasses the horizontal spacing unit that is the subject of Marathon's application in this case and am familiar with the geological matters involved in this case. My study is reflected in the geological exhibits that are attached hereto.

3. **Exhibit B.1** is a TVD subsea Structure Map of the top of the Wolfcamp formation. It identifies the proposed unit with a black dotted line and the proposed wells with corresponding numbers 1-4. It shows that the structure is relatively consistent across the proposed unit and dips slightly to the east in the area.

4. I have prepared separate exhibits for the proposed Upper Wolfcamp wells and Lower Wolfcamp wells.



5. **Exhibit B.2** is a Reference Map for the Stratigraphic Cross Section used to show the Upper Wolfcamp wells, which are the WA and WXY wells. It identifies the cross-section vertical wells in proximity to the three proposed Upper Wolfcamp wells with a pink line running from A to A', and with the cross-section well names.

6. **Exhibit B.3** is a Stratigraphic Cross Section hung on the top of the Wolfcamp. The well logs in the cross-section show the Wolfcamp Y-Sand and Wolfcamp A in the area, which are the target zones for the proposed Upper Wolfcamp wells. The wells logs also show the formation thickness is relatively consistent from North to South in the Wolfcamp Y-Sand and varies slightly from North to South in the Wolfcamp A. The target zones are identified with green shading and the proposed well locations are identified with red arrows on the closest vertical typewell.

7. **Exhibit B.4** is a Gross Interval Isochore for the Wolfcamp to Wolfcamp B. It shows that the stratigraphy has consistent thickness across the proposed well unit. This map also identifies the proposed unit and well.

8. **Exhibit B.5** is a Reference Map for the Stratigraphic Cross Section used to show the Lower Wolfcamp well, which is the WD well. It identifies the cross-section vertical wells in proximity to the one proposed Lower Wolfcamp well with a pink line running from A to A', and with the cross-section well names.

9. **Exhibit B.6** is a Stratigraphic Cross Section hung on the top of the Wolfcamp D2 pick. The well logs on the cross-section show the Wolfcamp C2 and D2 in the area, which are the target zones for the proposed Lower Wolfcamp well. The wells logs also show the formation thickens from North to South in both the Wolfcamp C2 and D2. The target zones are identified with green shading and the proposed well location is identified with a red arrow.

10. **Exhibit B.7** is a Gross Interval Isochore for the Wolfcamp C2 to Wolfcamp D2a. It shows that the stratigraphy has consistent thickness across the proposed well unit. This map also identifies the proposed unit and well.

11. The preferred well orientation in this area is either North/South or East/West. This is because SH max is roughly 45 degrees from North within this unit.

12. **Exhibits B.1-B.7** were prepared by me or under my supervision or compiled from company business records.

13. Based upon my study as illustrated in these exhibits, knowledge of the geology in this area, and education and training, it is my expert opinion that:

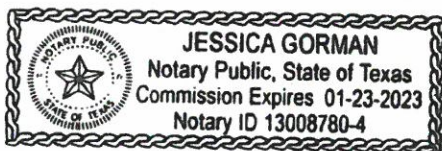
- a. The horizontal spacing unit is justified from a geologic standpoint.
- b. There are no structural impediments or faulting that will interfere with horizontal development.
- c. Each quarter section in the unit will contribute more or less equally to production.

Thomas Lockwood
Thomas Lockwood

SUBSCRIBED AND SWORN to before me this 7th day of August 2019 by Thomas Lockwood, on behalf of Marathon Energy Co.

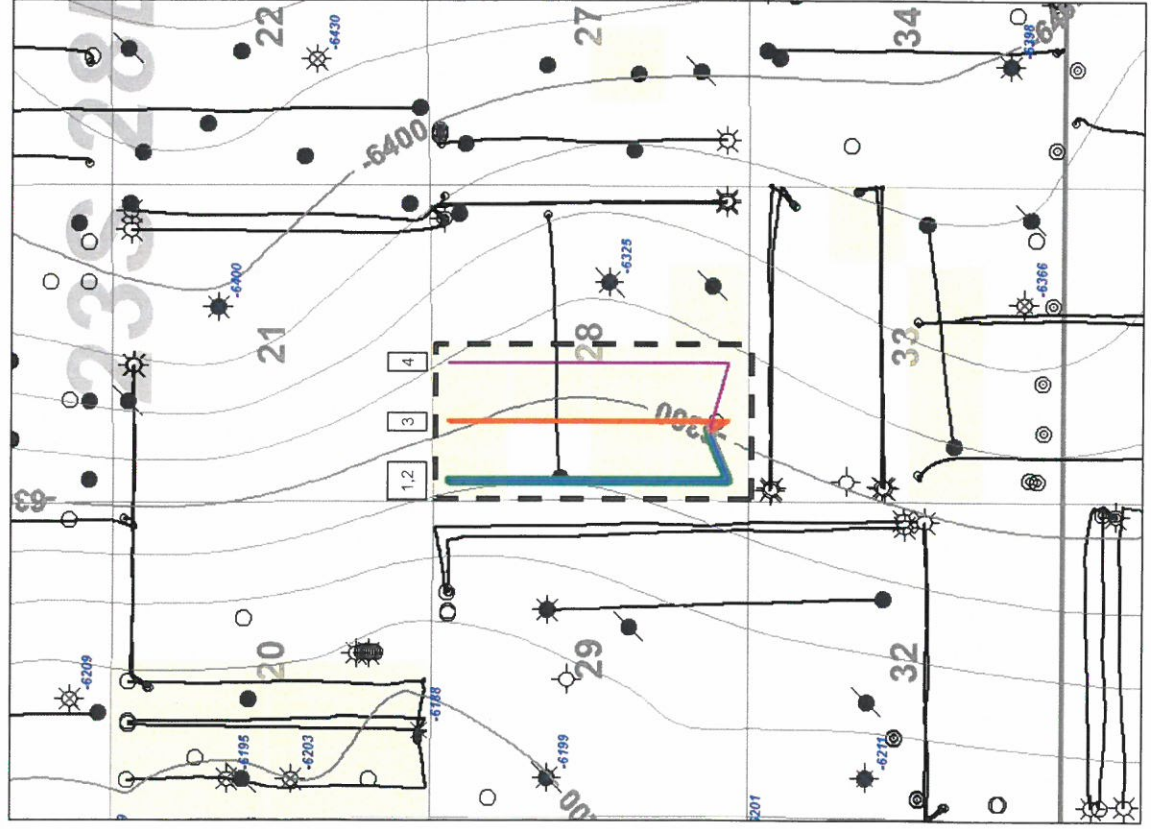
Jessica Gorman
Notary Public

My commission expires: 1/23/2023

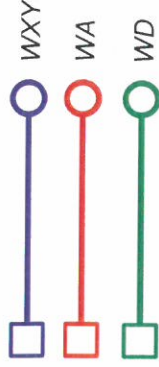


Thor 28 Fee Unit

Structure Map – Top of Wolfcamp (TVDSS)



Map Legend



MRO – Horizontal Location



MRO Acreage



Project Area

C.I. = 25'



1 mile

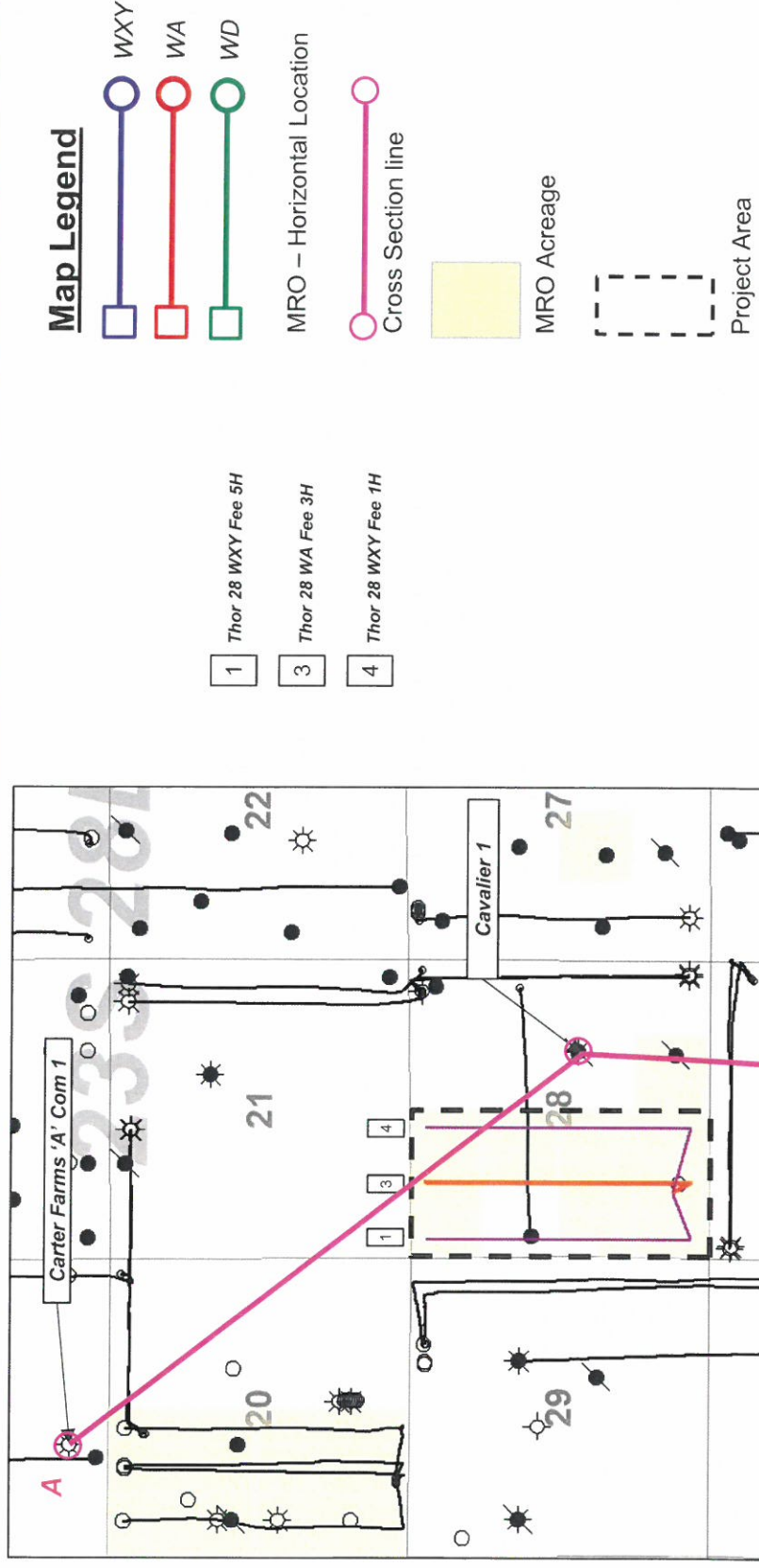
EXHIBIT

B.1

tabbles

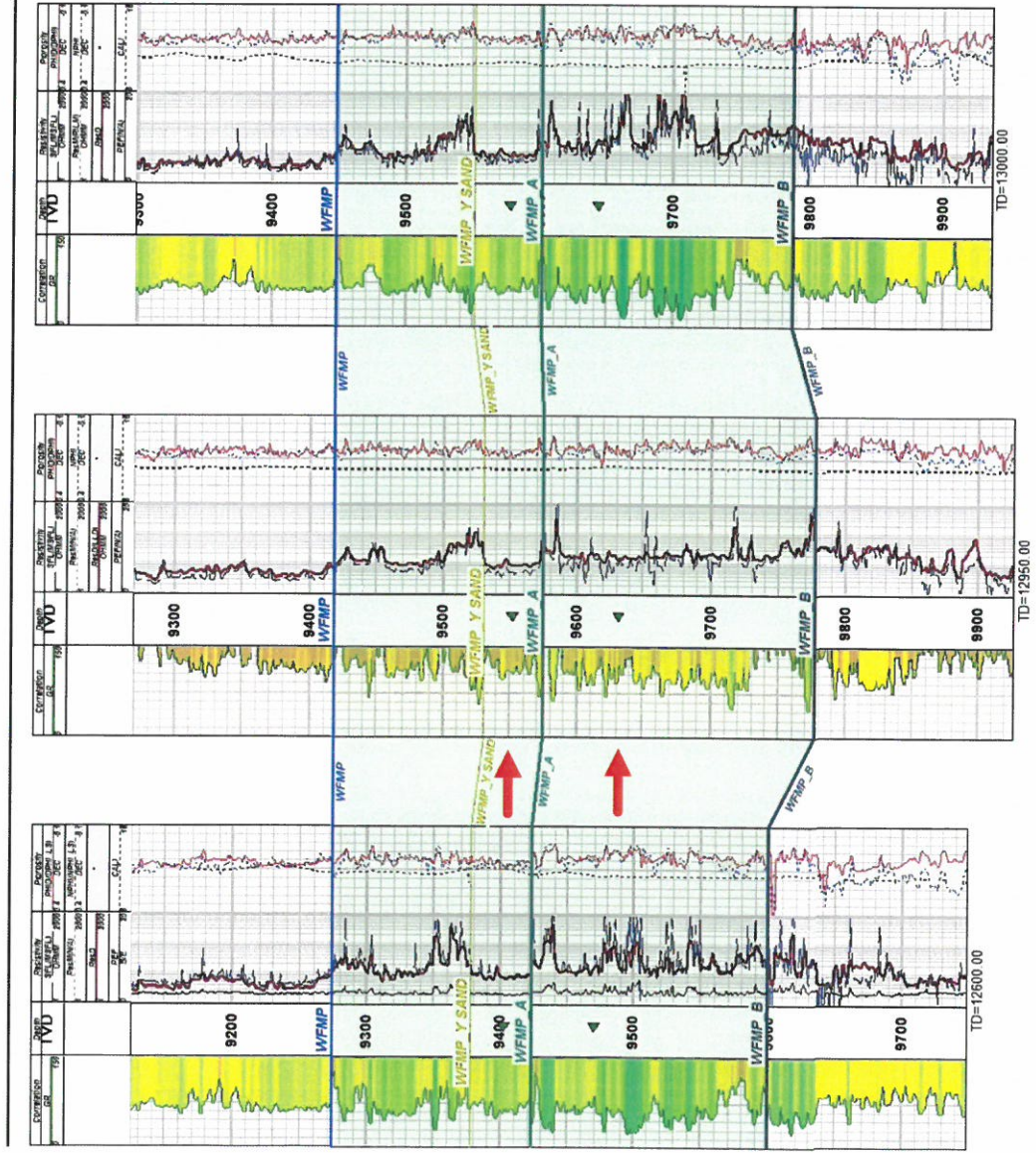
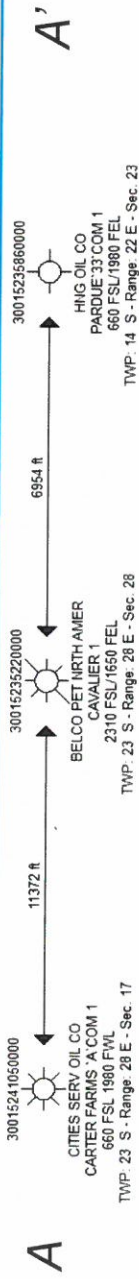
Thor 28 Fee Unit

Reference Map for Cross Section – Upper Wolfcamp Wells



Thor 28 Fee Unit

Stratigraphic Cross Section (Top Wolfcamp Datum)



Producing Zone

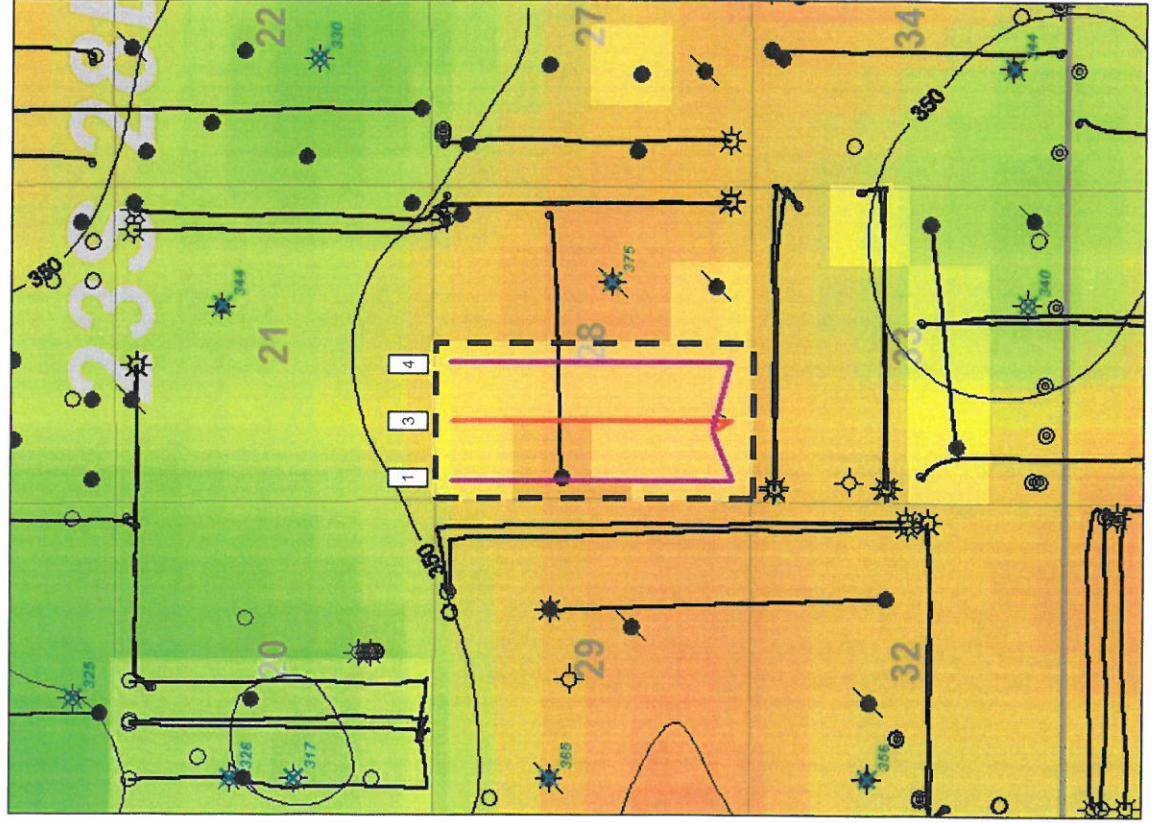
Wolfcamp Y-Sand thickness relatively consistent from North to South

Wolfcamp A thickness varies slightly from North to South

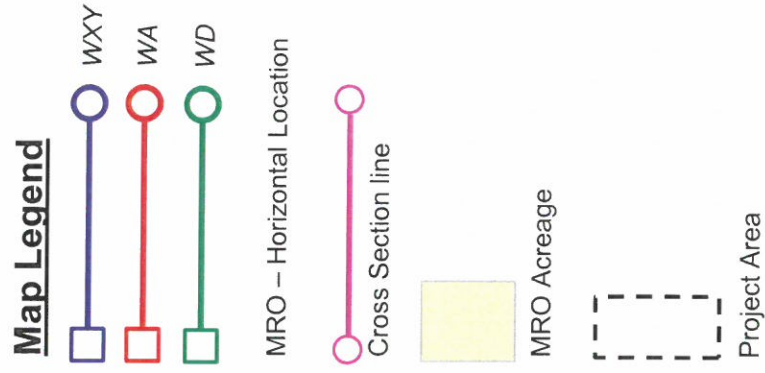


Thor 28 Fee Unit

Gross Interval Isochore – Wolfcamp to Wolfcamp B



- 1 Thor 28 WXY Fee 5H
- 3 Thor 28 WA Fee 3H
- 4 Thor 28 WXY Fee 1H



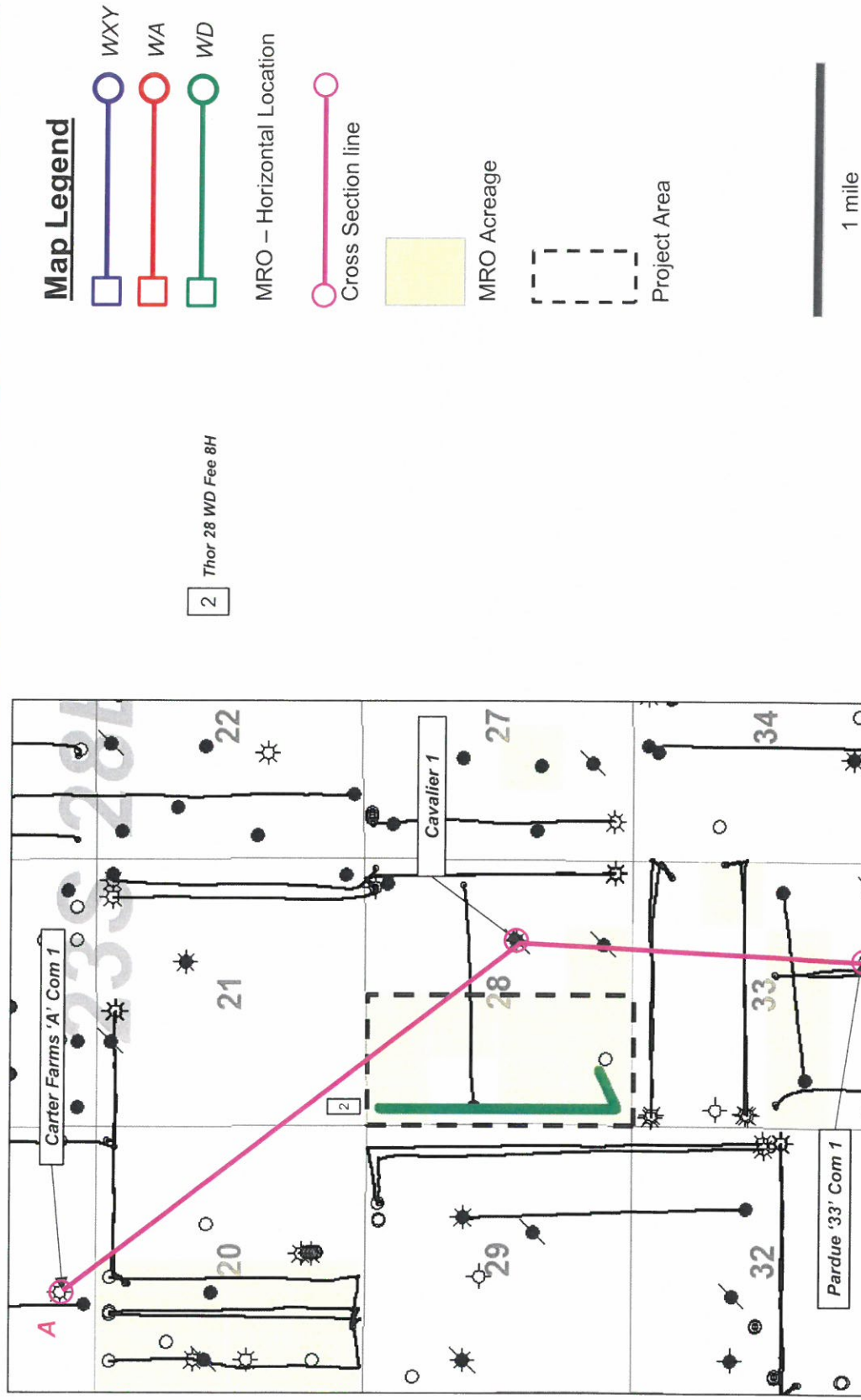
C.I. = 25'

1 mile



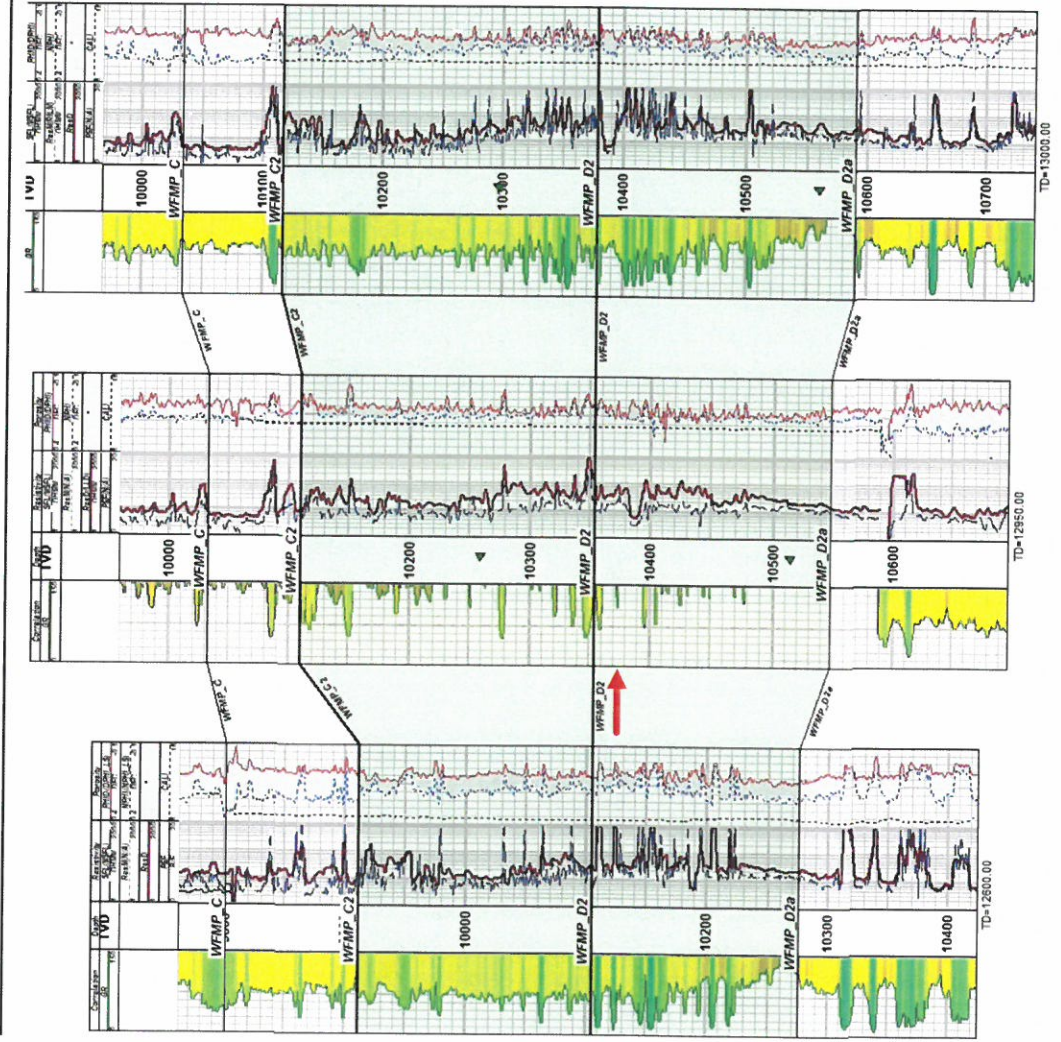
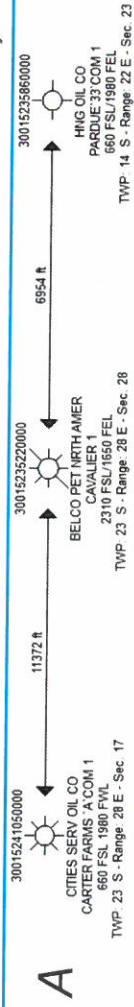
Thor 28 Fee Unit

Reference Map for Cross Section – Lower Wolfcamp Wells



Thor 28 Fee Unit

Stratigraphic Cross Section (Wolfcamp D2 Datum)



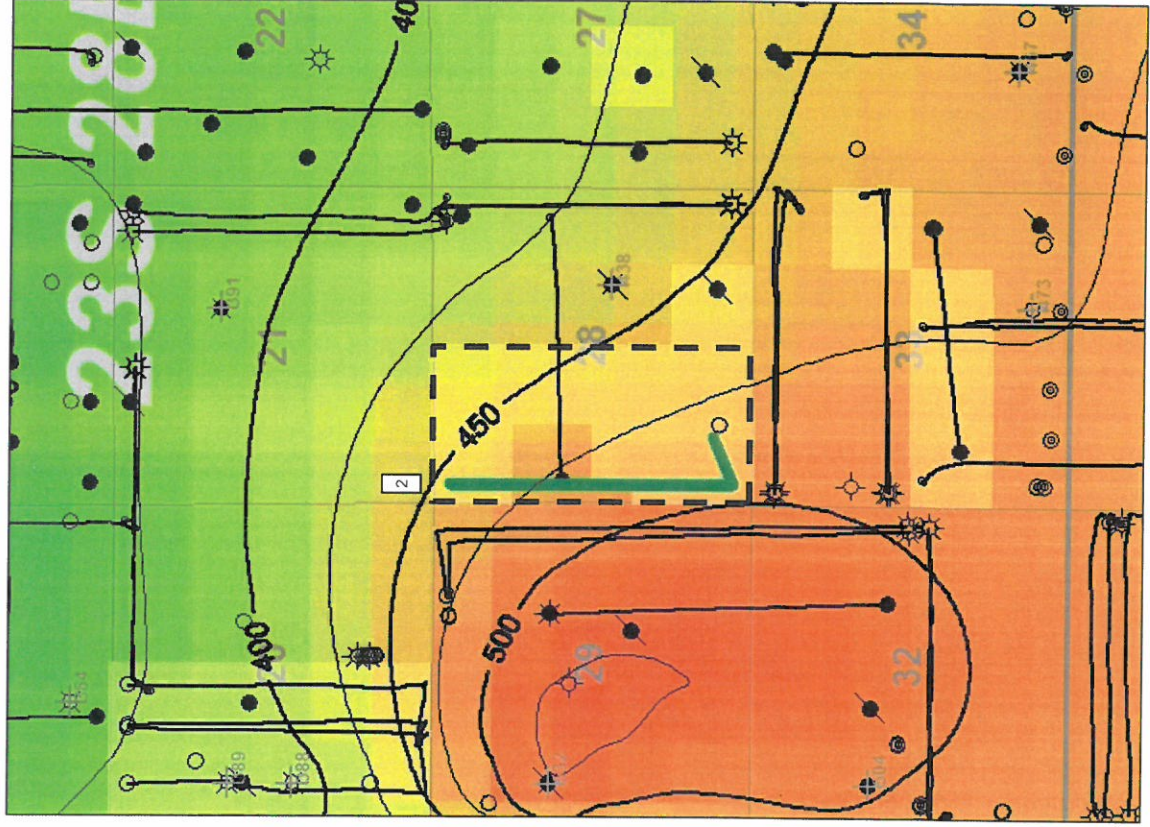
Producing
Zone

Wolfcamp C2 and D2
interval thickens from
North to South

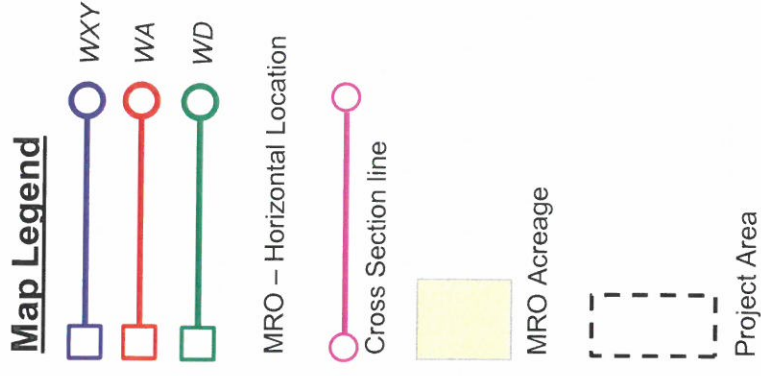


Thor 28 Fee Unit

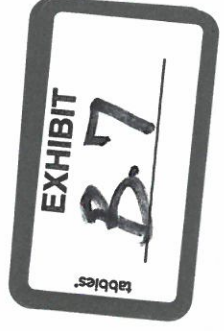
Gross Interval Isochore – Wolfcamp C2 to Wolfcamp D2a



2 Thor 28 WD Fee 8H



1 mile



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

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

CASE NO. 20662

AFFIDAVIT

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

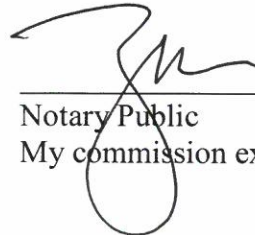
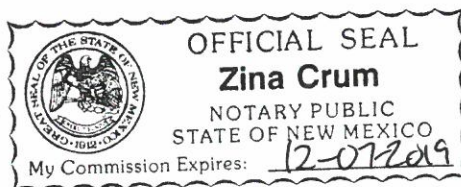
Lance D. Hough, attorney in fact and authorized representative of Marathon Oil Permian LLC, the Applicant herein, being first duly sworn, upon oath, states that the above-referenced Application was provided under the notice letters, and that proof of mailing, receipts of mailings, and publication are attached hereto. Marathon Oil Permian LLC has conducted a good faith, diligent effort to find the names and correct addresses for the interest owners entitled to receive notice of the application filed herein, and provide notice to each at their last known address.



Lance D. Hough

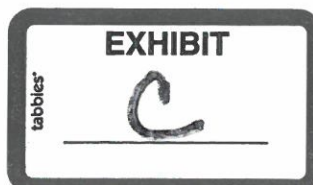
SUBSCRIBED AND SWORN to before me this 8th day of August 2019 by Lance D. Hough.

SEAL



Notary Public

My commission expires: 12-07-2019



Zina Crum
Modrall Sperling
500 4th Street NW
Suite 1000
Albuquerque NM 87102

PS Form 3877
Type of Mailing: CERTIFIED MAIL
07/18/2019



Firm Mailing Book ID: 171090

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0061 3129 48	Tierra Oil Company LLC P.O. Box 1948 Santa Fe NM 87504	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
2	9314 8699 0430 0061 3129 55	MRC Permian LKE Company LLC 5400 LBI Freeway, Suite 1500 Dallas TX 75240	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
3	9314 8699 0430 0061 3129 62	Mowbourne Oil Company P.O. Box 7698 Tyler TX 75701	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
4	9314 8699 0430 0061 3129 79	COG Operating LLC 550 W. Texas Ave., Suite 100 Midland TX 78701	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
5	9314 8699 0430 0061 3129 86	LLANO Natural Resources 4920 S. Loop 289, STE 206 Lubbock TX 79414	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
6	9314 8699 0430 0061 3129 93	BC Operating Inc. 4000 North Big Spring, Suite 310 Midland TX 79705	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
7	9314 8699 0430 0061 3130 06	David M. Lopez 432 Hamilton Street Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
8	9314 8699 0430 0061 3130 13	Priscilla M. Lopez 3514 Joshua Street Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
9	9314 8699 0430 0061 3130 20	Miguel Garacia Armendaraz 1028 N. Howard Street Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
10	9314 8699 0430 0061 3130 37	Florindo L. Duran 2050 W. Roma Avenue Phoenix AZ 85015	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
11	9314 8699 0430 0061 3130 44	Carmen & Ricardo Echevarria P.O. Box 254 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
12	9314 8699 0430 0061 3130 51	Ricardo Onsurez 1827 Hays Drive Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
13	9314 8699 0430 0061 3130 68	Auturo & Rosalinda R. Munoz P.O. Box 471 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
14	9314 8699 0430 0061 3130 75	Big Sky Estates Inc. 4511 National Parks Hwy Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
15	9314 8699 0430 0061 3130 82	Jackie D. McDonald P.O. Box 477 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice



Zina Crum
Modrall Sperling
500 4th Street NW
Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED MAIL
07/18/2019



Firm Mailing Book ID: 171090

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
16	9314 8699 0430 0061 3130 99	Patsy R. Burch 120 Hamilton St. Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
17	9314 8699 0430 0061 3131 05	M. Joyce Griffin 129 Meadows Dr. Ruidoso NM 88345	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
18	9314 8699 0430 0061 3131 12	Juanita G. Navarrete 4411 E. Derrick Rd. Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
19	9314 8699 0430 0061 3131 29	Daniel H. Carrasco P.O. Box 215 Hurley NM 88043	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
20	9314 8699 0430 0061 3131 36	Eugene Duran Rodriguez Romelia C. Rodriguez P.O. Box 127 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
21	9314 8699 0430 0061 3131 43	David & Julie B. Omelas 10908 Desert Dreamer Street NW Albuquerque NM 87114	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
22	9314 8699 0430 0061 3131 50	Lorina L. Balderrama P.O. Box 147 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
23	9314 8699 0430 0061 3131 67	Heirs of Emilio F. Lucero (Deceased) 1603 S. Cochran Street Hobbs NM 88240	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
24	9314 8699 0430 0061 3131 74	Heirs of Esperanza Lucero (deceased) P.O. Box 1724 Socorro NM 87801	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
25	9314 8699 0430 0061 3131 81	Cipriano L. Martinez and Francisca Martinez P.O. Box 296 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
26	9314 8699 0430 0061 3131 98	Heirs of Esiquio Meza & Conrada Meza Esquiro Meza 3336 N. Orchard St. Fresno CA 93726	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
27	9314 8699 0430 0061 3132 04	Gloria M. Minjares P.O. Box 68 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
28	9314 8699 0430 0061 3132 11	Herman M. Hernandez 704 Ortega Street Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
29	9314 8699 0430 0061 3132 28	Martin Armendariz 12412 Princess Jeanne Ave., NE Albuquerque NM 87112	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
30	9314 8699 0430 0061 3132 35	Filiberto Delgado Rios & Gracela Urbina Jaramillo P.O. Box 1052 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice



Zina Crum
Modrall Sperling
500 4th Street NW
Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED MAIL
07/18/2019



Firm Mailing Book ID: 171090

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
31	9314 8699 0430 0061 3132 42	Village of Loving P.O. Box 56 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
32	9314 8699 0430 0061 3132 59	Justin Dodson and Juanita Young 900 Lamont St., Apt 11 Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
33	9314 8699 0430 0061 3132 66	Rose Ann Thomas P.O. Box 147 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
34	9314 8699 0430 0061 3132 73	Verna Joy McGinnis Evans 107 E. Heron Drive Marble Falls TX 78654	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
35	9314 8699 0430 0061 3132 80	Southwest Mortgage Company or Successors c/o Beal Bank 6000 Legacy Drive Plano TX 75204	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
36	9314 8699 0430 0061 3132 97	George H. & Nancy Brantley 1304 W. Riverside Drive Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
37	9314 8699 0430 0061 3133 03	Rita M. Lare 7110 86th Street, #234 La Vista NE 68128	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
38	9314 8699 0430 0061 3133 10	Jose Manuel Hernandez P.O. Box 54 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
39	9314 8699 0430 0061 3133 27	L.C. Burkham Life Estate Trustees 1040 N. Main St. Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
40	9314 8699 0430 0061 3133 34	Lewis Charles Burkham, Sr. P.O. Box 504 Kyle TX 78640	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
41	9314 8699 0430 0061 3133 41	Heirs of Rita Green P.O. Box 1014 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
42	9314 8699 0430 0061 3133 58	Lee Charles Freeman P.O. Box 553 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
43	9314 8699 0430 0061 3133 65	Eva Y. Quinones 805 Hueco St. #16 Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
44	9314 8699 0430 0061 3133 72	Paul Bustillos 111 Farris St., Trlr 56 Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
45	9314 8699 0430 0061 3133 89	Reyner D. Ybaben & Elva P. Ybaben P.O. Box 27 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice



Zina Crum
Modrall Sperling
500 4th Street NW
Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED MAIL
07/18/2019



Firm Mailing Book ID: 171090

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
46	9314 8699 0430 0061 3133 96	Paul Dicomilo P.O. Box 96 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
47	9314 8699 0430 0061 3134 02	Owen J. Campbell P.O. Box 1282 Loving NM 88256	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
48	9314 8699 0430 0061 3134 19	Margie Galvan 2321 Livingston Carlsbad NM 88220	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
49	9314 8699 0430 0061 3134 26	Claude L. Sapien Jr. and Elizabeth O. Sapien 4141 Stryker Rd Las Cruces NM 88005	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
50	9314 8699 0430 0061 3134 33	Jesus H. Adame and Juana G. Adame 605 Tarpon Ave. SE Rio Rancho NM 87124	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
51	9314 8699 0430 0061 3134 40	Rufina Ann Hernandez-Prewitt 4154 Quince St. Denver CO 80237	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
52	9314 8699 0430 0061 3134 57	Chalcam Exploration LLC 403 Tierra Berrenda Roswell NM 88201	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
53	9314 8699 0430 0061 3134 64	Beneficial New Mexico Inc. DBA Beneficial Mortgage Co. 2240 E. Lohman Ave. Las Cruces NM 88001	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
54	9314 8699 0430 0061 3134 71	Rafael M. Madrid 222 Smith Ave SE Albuquerque NM 87102	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
55	9314 8699 0430 0061 3134 88	Chalcam Exploration LLC 403 Tierra Berrenda Roswell NM 88201	\$1.15	\$3.50	\$1.60	\$0.00	81363.124 Thor Notice
Totals:			\$63.25	\$192.50	\$88.00	\$0.00	\$343.75

List Number of Pieces
Listed by Sender

Total Number of Pieces
Received at Post Office

Postmaster:

Name of receiving employee

Dated:

55



Transaction Report Details - CertifiedPro.net
Firm Mail Book ID= 171090
Generated: 8/6/2019 3:30:42 PM

USPS Article Number	Date Created	Name 1	Name 2	Address	City	State	Zip	Mailing Status	Service Options	Mail Delivery Date
9314869904300061313488	2019-07-18 7:42 AM	Chalcam Exploration LLC		403 Tierra Berrenda	Roswell	NM	88201	Delivered	Return Receipt - Electronic, Certified Mail	07-23-2019
9314869904300061313471	2019-07-18 7:42 AM	Rafael M. Madrid		222 Smith Ave SE	Albuquerque	NM	87102	Delivered	Return Receipt - Electronic, Certified Mail	07-19-2019
9314869904300061313464	2019-07-18 7:42 AM	Beneficial New Mexico Inc.	DBA Beneficial Mortgage Co	2240 E. Lohman Ave.	Las Cruces	NM	88001	Returned to Sender	Return Receipt - Electronic, Certified Mail	08-05-2019
9314869904300061313457	2019-07-18 7:42 AM	Chalcam Exploration LLC		403 Tierra Berrenda	Roswell	NM	88201	Delivered	Return Receipt - Electronic, Certified Mail	07-23-2019
9314869904300061313440	2019-07-18 7:42 AM	Rufina Ann Hernandez-Prewitt		4154 Quince St.	Denver	CO	80237	Delivered	Return Receipt - Electronic, Certified Mail	07-22-2019
9314869904300061313433	2019-07-18 7:42 AM	Jesus H. Adame and Juana G. Adame		605 Tarpon Ave. SE	Rio Rancho	NM	87124	Delivered	Return Receipt - Electronic, Certified Mail	07-20-2019
9314869904300061313426	2019-07-18 7:42 AM	Claude L. Sapien Jr. and Elizabeth O. Sapien		4141 Stryker Rd	Las Cruces	NM	88005	Undelivered	Return Receipt - Electronic, Certified Mail	
9314869904300061313419	2019-07-18 7:42 AM	Margie Galvan		2321 Livingston	Carlsbad	NM	88220	To be Returned	Return Receipt - Electronic, Certified Mail	
9314869904300061313402	2019-07-18 7:42 AM	Owen J. Campbell		P.O. Box 1282	Loving	NM	88256	Delivered	Return Receipt - Electronic, Certified Mail	07-23-2019
9314869904300061313396	2019-07-18 7:42 AM	Paul Dicamillo		P.O. Box 96	Loving	NM	88256	Delivered	Return Receipt - Electronic, Certified Mail	07-23-2019
9314869904300061313389	2019-07-18 7:42 AM	Reyner D. Ybaben & Elva P. Ybaben		P.O. Box 27	Loving	NM	88256	Delivered	Return Receipt - Electronic, Certified Mail	07-26-2019
9314869904300061313372	2019-07-18 7:42 AM	Paul Bustillos		111 Farris St., Trlr 56	Carlsbad	NM	88220	To be Returned	Return Receipt - Electronic, Certified Mail	
9314869904300061313365	2019-07-18 7:42 AM	Eva Y. Quinones		805 Hueco St. #16	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	07-29-2019
9314869904300061313358	2019-07-18 7:42 AM	Lee Charles Freeman		P.O. Box 553	Loving	NM	88256	To be Returned	Return Receipt - Electronic, Certified Mail	
9314869904300061313341	2019-07-18 7:42 AM	Heirs of Rita Green		P.O. Box 1014	Loving	NM	88256	Delivered	Return Receipt - Electronic, Certified Mail	08-01-2019
9314869904300061313334	2019-07-18 7:42 AM	Lewis Charles Burkham, Sr.		P.O. Box 504	Kyle	TX	78640	Delivered	Return Receipt - Electronic, Certified Mail	08-06-2019
9314869904300061313327	2019-07-18 7:42 AM	L.C. Burkham Life Estate Trustees		1040 N. Main St.	Carlsbad	NM	88220	To be Returned	Return Receipt - Electronic, Certified Mail	
9314869904300061313310	2019-07-18 7:42 AM	Jose Manuel Hernandez		P.O. Box 54	Loving	NM	88256	To be Returned	Return Receipt - Electronic, Certified Mail	
9314869904300061313303	2019-07-18 7:42 AM	Rita M. Lare		7110 86th Street, #234	La Vista	NE	68128	To be Returned	Return Receipt - Electronic, Certified Mail	
9314869904300061313297	2019-07-18 7:42 AM	George H. & Nancy Brantley		1304 W. Riverside Drive	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	07-22-2019
9314869904300061313280	2019-07-18 7:42 AM	Southwest Mortgage Company or Successors	c/o Beal Bank	6000 Legacy Drive	Plano	TX	75204	Delivered	Return Receipt - Electronic, Certified Mail	07-22-2019
9314869904300061313273	2019-07-18 7:42 AM	Verna Joy McGinnis Evans		107 E. Heron Drive	Marble Falls	TX	78654	Delivered	Return Receipt - Electronic, Certified Mail	08-01-2019
9314869904300061313266	2019-07-18 7:42 AM	Rose Ann Thomas		P.O. Box 147	Loving	NM	88256	To be Returned	Return Receipt - Electronic, Certified Mail	
9314869904300061313259	2019-07-18 7:42 AM	Justin Dodson and Juanita Young		900 Lamont St., Apt 11	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	07-22-2019
9314869904300061313242	2019-07-18 7:42 AM	Village of Loving		P.O. Box 56	Loving	NM	88256	Delivered	Return Receipt - Electronic, Certified Mail	07-22-2019
9314869904300061313235	2019-07-18 7:42 AM	Filiberto Delgado Rios & Gracrela Urbina Jaramillo		P.O. Box 1052	Loving	NM	88256	Delivered	Return Receipt - Electronic, Certified Mail	07-30-2019
9314869904300061313228	2019-07-18 7:42 AM	Martin Armendarez		12412 Princess Jeanne Ave., NE	Albuquerque	NM	87112	To be Returned	Return Receipt - Electronic, Certified Mail	
9314869904300061313211	2019-07-18 7:42 AM	Herman M. Hernandez		704 Ortega Street	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	07-22-2019
9314869904300061313204	2019-07-18 7:42 AM	Gloria M. Minjares		P.O. Box 68	Loving	NM	88256	Delivered	Return Receipt - Electronic, Certified Mail	07-23-2019
9314869904300061313198	2019-07-18 7:42 AM	Heirs of Esiquio Meza & Conrada Meza	Esequiro Meza	3336 N. Orchard St.	Fresno	CA	93726	Delivered	Return Receipt - Electronic, Certified Mail	07-24-2019
9314869904300061313181	2019-07-18 7:42 AM	Cipriano L. Martinez and Francisca Martinez		P.O. Box 296	Loving	NM	88256	Delivered	Return Receipt - Electronic, Certified Mail	07-22-2019
9314869904300061313174	2019-07-18 7:42 AM	Heirs of Esperanza Lucero (deceased		P.O. Box 1724	Socorro	NM	87801	Delivered	Return Receipt - Electronic, Certified Mail	07-23-2019
9314869904300061313167	2019-07-18 7:42 AM	Heirs of Emilio F. Lucero (Deceased)		1603 S. Cochran Street	Hobbs	NM	88240	Delivered	Return Receipt - Electronic, Certified Mail	07-22-2019
9314869904300061313150	2019-07-18 7:42 AM	Lorina L. Balderrama		P.O. Box 147	Loving	NM	88256	Delivered	Return Receipt - Electronic, Certified Mail	07-26-2019
9314869904300061313143	2019-07-18 7:42 AM	David & Julie B. Ornelas		10908 Desert Dreamer Street NW	Albuquerque	NM	87114	Delivered	Return Receipt - Electronic, Certified Mail	07-20-2019
9314869904300061313136	2019-07-18 7:42 AM	Eugene Duran Rodriguez	Romelia C. Rodriguez	P.O. Box 127	Loving	NM	88256	Delivered	Return Receipt - Electronic, Certified Mail	07-26-2019
9314869904300061313129	2019-07-18 7:42 AM	Daniel H. Carrasco		P.O. Box 215	Hurley	NM	88043	To be Returned	Return Receipt - Electronic, Certified Mail	
9314869904300061313112	2019-07-18 7:42 AM	Juanita G. Navarrrrete		4411 E. Derrick Rd.	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	07-22-2019
9314869904300061313105	2019-07-18 7:42 AM	M. Joyce Griffin		129 Meadows Dr.	Ruidoso	NM	88345	Delivered	Return Receipt - Electronic, Certified Mail	08-01-2019
9314869904300061313099	2019-07-18 7:42 AM	Patsy R. Burch		120 Hamilton St.	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	07-22-2019
9314869904300061313082	2019-07-18 7:42 AM	Jackie D. McDonald		P.O. Box 477	Loving	NM	88256	Delivered	Return Receipt - Electronic, Certified Mail	07-24-2019

9314869904300061313075	2019-07-18 7:42 AM Big Sky Estates Inc.	4511 National Parks Hwy	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	07-29-2019
9314869904300061313068	2019-07-18 7:42 AM Auturo & Rosalinda R. Munoz	P.O. Box 471	Loving	NM	88256	Delivered	Return Receipt - Electronic, Certified Mail	07-24-2019
9314869904300061313051	2019-07-18 7:42 AM Ricardo Onsurez	1827 Hays Drive	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	07-22-2019
9314869904300061313044	2019-07-18 7:42 AM Carmen & Ricardo Echevarria	P.O. Box 254	Loving	NM	88256	Delivered	Return Receipt - Electronic, Certified Mail	07-24-2019
9314869904300061313037	2019-07-18 7:42 AM Florindo L. Duran	2050 W. Roma Avenue	Phoenix	AZ	85015	Delivered	Return Receipt - Electronic, Certified Mail	07-20-2019
9314869904300061313020	2019-07-18 7:42 AM Miguel Garacia Armendarez	1028 N. Howard Street	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	07-23-2019
9314869904300061313013	2019-07-18 7:42 AM Priscilla M. Lopez	3514 Joshua Street	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	07-22-2019
9314869904300061313006	2019-07-18 7:42 AM David M. Lopez	432 Hamilton Street	Carslbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	08-01-2019
9314869904300061312993	2019-07-18 7:42 AM BC Operating Inc.	4000 North Big Spring, Suite 310	Midland	TX	79705	Undelivered	Return Receipt - Electronic, Certified Mail	
9314869904300061312986	2019-07-18 7:42 AM LLANO Natural Resources	4920 S. Loop 289, STE 206	Lubbock	TX	79414	Delivered	Return Receipt - Electronic, Certified Mail	07-22-2019
9314869904300061312979	2019-07-18 7:42 AM COG Operating LLC	550 W. Texas Ave., Suite 100	Midland	TX	78701	Delivered	Return Receipt - Electronic, Certified Mail	07-23-2019
9314869904300061312962	2019-07-18 7:42 AM Mewbourne Oil Company	P.O. Box 7698	Tyler	TX	75701	Delivered	Return Receipt - Electronic, Certified Mail	07-24-2019
9314869904300061312955	2019-07-18 7:42 AM MRC Permian LKE Company LLC	5400 LBJ Freeway, Suite 1500	Dallas	TX	75240	Delivered	Return Receipt - Electronic, Certified Mail	07-22-2019
9314869904300061312948	2019-07-18 7:42 AM Tierra Oil Company LLC	P.O. Box 1948	Santa Fe	NM	87504	Delivered	Return Receipt - Electronic, Certified Mail	07-23-2019

CARLSBAD
CURRENT-ARGUS

AFFIDAVIT OF PUBLICATION

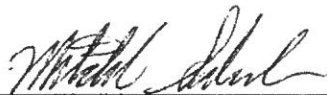
Ad No.
0001292215

MODRALL SPERLING ROEHL HARRIS & SISK
500 4TH ST NW STE 1000

ALBUQUERQUE NM 87102

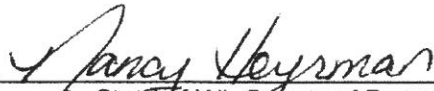
I, a legal clerk of the **Carlsbad Current-Argus**, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements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

07/25/19



Legal Clerk

Subscribed and sworn before me this
25th of July 2019.


State of WI, County of Brown
NOTARY PUBLIC

5 15.23

My Commission Expires

CASE NO. 20662: Notice to all affected parties, and devisees of, TIERRA OIL COMPANY LLC, MRC PANY LLC, MEWBOURNE OIL COMPANY, COGOPE NATURAL RESOURCES BC OPERATING INC., DAVID LA M. LOPEZ, MARGARET NYMYER BAKER, PAUL LIAMS, W C HUNT, MIGUEL GARCIA ARMEND, DURAN, CARMEN & RICARDO ECHEVARRIA, R AUTURO & ROSALINDA R. MUNOZ, BIG SKY EST/ MCDONALD, PATSY R. BURCH, M. JOYCE GF NAVARRRETE DANIEL H. CARRASCO HEIRS OF H EUGENEDURAN RODRIGUEZ & ROMELIAC. RODRI B. ORNELAS, LORINA L. BALDERRAMA, HEIRS OF (DECEASED) HEIRS OF ESPERANZA LUCERO (DECI MARTINEZ AND FRANCISCA MARTINEZ, HEIRS (CONRADAMEZA, GLORIA M. MINJARES, HERMANI TIN ARMENDAREZ, FILIBERTO DELGADORIOS & JARAMILLO, VILLAGE OF LOVING, JUSTIN DOD YOUNG, ROSEANN THOMAS, VERNA JOY MCGINI WEST MORTGAGE COMPANY OR SUCCESSOR GEORGE H. & NANCY BRANTLEY, RITA M. LA HERNANDEZ, L.C. BURKHAM LIFE ESTATE TR LOENARD W. BURKHAM, HEIRS OF DEBRA BURKH MAS W. BURKHAM, HEIRS OF BEATRICE BURKH/ BURKHAM, SR., HEIRS OF RITA GREEN, LEE CHARL QUINONES, PAUL BUSTILLOS, REYNER D. YBABA PAUL DICAMILO, OWEN J. CAMPBELL, MARGIE C SAPIEN JR. AND ELIZABETH O. SAPIEN, JESUSH. AD ADAME, RUFINA ANN HERNANDEZ-PREWITT CHAI LLC, and BENEFICIAL NEW MEXICO INC., RA CHALCAMEXPLORATION LLC, of Marathon Oil Per tion for compulsory pooling, Eddy County, New Mexico, through its Oil Conservation Division, that the Division will conduct a public hearing at 8: 2019. Marathon seeks an order from the Division p ted mineral interests within a Wolfcamp horizontal s ing the W/2 of Section 28, Township 23 South, Ra Eddy County, New Mexico. This spacing unit will Thor 28 WXY Fee 1H, Thor 28 WA Fee 3H, Thor 2 Thor 28 WD Fee 8H wells, to be horizontally drilled. for the wells will be orthodox. Also to be considere drilling and completing the wells, the allocation of th the actual operating costs and charges for supervi Marathon as operator of the wells, and a 200% cha in drilling said wells, and allowing a one year perioe wells are drilled and when the first well is complete ed immediately south of Loving, New Mexico. Pub: July 25, 2019 #1292215

Ad#: 0001292215
P O: 0001292215
of Affidavits: 0.00

NANCY HEYRMAN
Notary Public
State of Wisconsin

