Examiner Hearing September 20, 2018 Before the Oil Conservation Division

Case No. 16418

Ramathorn Fed 22-32-14 TB 1H and Ramathorn Fed 22-32-14 FB 22H

And

Case No. 16419

Ramathorn Fed 22-32-14 SB 8H



MarathonOil

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

AMENDED APPLICATION OF MARATHON OIL PERMIAN LLC FOR A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 16418

AMENDED 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: (1) to the extent necessary, approving the creation of a 160-acre, more or less, spacing and proration unit covering the W/2 W/2 of Section 14, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico; and, (2) pooling all uncommitted mineral interests in the Bone Spring formation underlying this spacing and proration unit. In support of this application, Marathon states as follows:

- 1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
- 2. Marathon seeks to dedicate the W/2 W/2 of Section 14, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico to form a 160-acre, more or less, spacing unit.
- 3. Marathon plans to drill the Ramathorn Federal Com 22 32 14 FB 22H wells to a depth sufficient to test the Bone Spring formation. Concurrently or at a later date, Marathon plans on drilling the Ramathorn Federal Com 22 32 14 TB 1H within the spacing unit. These wells will be horizontally drilled.

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

WHEREFORE, Marathon requests this application be set for hearing before an Examiner of the Oil Conservation Division on September 20, 2018, and after notice and hearing as required by law, the Division enter its order:

- A. To the extent necessary, approving the creation of a non-standard spacing and proration unit in the Bone Spring formation comprised of the W/2 W/2 of Section 14, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico;
- B. Pooling all mineral interests in the Bone Spring formation underlying this spacing and proration unit;
- C. Designating Marathon as operator of this unit and the wells to be drilled thereon;
- D. Authorizing Marathon to recover its costs of drilling, equipping and completing these wells;
- E. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure;

- F. 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.
- G. Allowing a 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:

Jennifer Bradfute Deana M. Bennett Post Office Box 2168

500 Fourth Street NW, Suite 1000

Albuquerque, New Mexico 87103-2168

Telephone: 505.848.1800 Attorneys for Applicant CASE NO. 16418: Amended Application of Marathon Oil Permian LLC for a non-standard spacing and proration unit and compulsory pooling, Lea County, New Mexico. Applicant seeks an order from the Division: (1) to the extent necessary, approving the creation of a non-standard 160-acre, more or less, spacing and proration unit covering the W/2 W/2 of Section 14, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico; and (2) pooling all uncommitted mineral interests in the Bone Spring formation underlying this proposed spacing an proration unit. This proposed spacing unit will be dedicated to the Ramathorn Federal Com 22 32 14 TB 1H and Ramathorn Federal Com 22 32 14 FB 22H wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the wells, and a 200% charge for risk involved in drilling said wells, and allowing a one year period between when the wells are drilled and when the first well is completed. Said area is located approximately 26 miles northwest of Loving, New Mexico.

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

WHEREFORE, Marathon requests this application be set for hearing before an Examiner of the Oil Conservation Division on September 20, 2018, and after notice and hearing as required by law, the Division enter its order:

- A. To the extent necessary, approving the creation of a non-standard spacing and proration unit in the in the Bone Spring formation comprised of the E/2 W/2 of Section 14, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico;
- B. Pooling all mineral interests in the Bone Spring formation underlying this spacing and proration unit;
- C. Designating Marathon as operator of this unit and the wells to be drilled thereon;
- D. Authorizing Marathon to recover its costs of drilling, equipping and completing these wells;
- E. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure;

- F. 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.
- G. Allowing a period of one (1) year between when the well is drilled and when the well is completed under the order.

Respectfully submitted,

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

Jennifer Bradfute

Deana M. Bennett

Post Office Box 2168

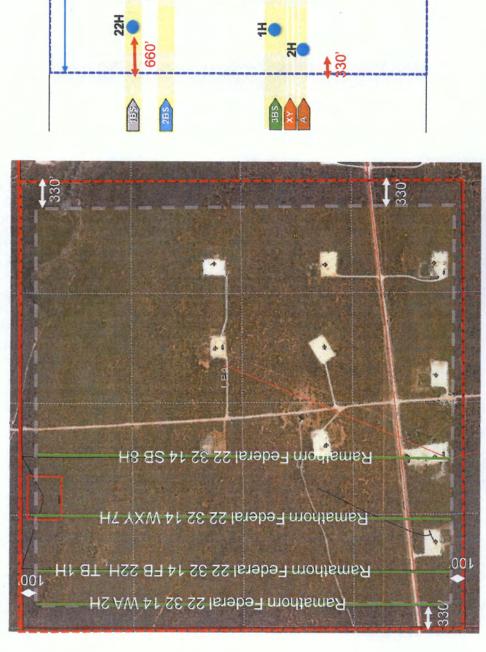
500 Fourth Street NW, Suite 1000

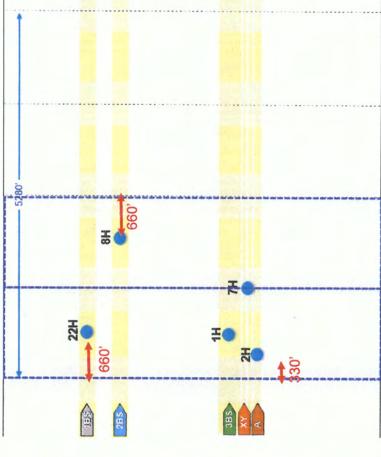
Albuquerque, New Mexico 87103-2168

Telephone: 505.848.1800 Attorneys for Applicant

CASE NO. 16419: Amended Application of Marathon Oil Permian LLC for a non-standard spacing and proration unit and compulsory pooling, Lea County, New Mexico. Applicant seeks an order from the Division: (1) to the extent necessary, approving the creation of a non-standard 160-acre, more or less, spacing and proration unit covering the E/2 W/2 of Section 14, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico; and, (2) pooling all uncommitted mineral interests within the Bone Spring formation underlying this proposed spacing and proration unit. This proposed spacing unit will be dedicated to the Ramathorn Federal Com 22 32 14 SB 8H well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 26 miles northwest of Loving, New Mexico.

Ramathorn Federal 22 32 14 Unit Development









1320'

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

AMENDED APPLICATION OF MARATHON OIL PERMIAN LLC FOR A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 16418

AMENDED APPLICATION OF MARATHON OIL PERMIAN LLC FOR A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 16419

	<u>AFFIDAVIT</u>
STATE OF TEXAS)
) ss.
COUNTY OF HARRIS)

Ryan Gyllenband, being duly sworn, deposes and states:

- 1. I am over the age of 18, I am a landman for Marathon Oil Permian LLC and have personal knowledge of the matters stated herein. I have been qualified by the Oil Conservation Division ("Division") as an expert petroleum landman.
- 2. I submit the following information pursuant to NMAC 19.15.4.12.A(1) in support of the above referenced compulsory pooling applications.
- 3. The purpose of these applications is to force pool interest owners into the horizontal spacing unit described below, and in the wells to be drilled in the unit.
- 4. No opposition is expected because the interest owners being pooled have been contacted regarding the proposed well, but have failed or refused to voluntarily commit their interests in the well.

5. Case No. 16418:

- a. Marathon seeks an order pooling of all mineral interests in the Bone Spring formation underlying the W/2 W/2 of Section 14, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the Ramathorn Federal Com 22 32 14 TB 1H and Ramathorn Federal Com 22 32 14 FB 22H wells, to be horizontally drilled.
- b. A plat outlining the unit being pooled in Case No. 16418 is attached hereto as **Exhibit A**, which shows the proposed wells' locations within the unit. The parties being pooled, the nature and percent of their interests, and their last known addresses are also included as part of **Exhibit A**.
 - c. There are no depth severances within the Bone Spring formation.
- d. I have conducted a diligent search of the public records in the county where the well is located, and conducted phone directory and computer searches to locate contact information for parties entitled to notification, and mailed all parties well proposals, including an Authorization for Expenditure and a form of Operating Agreement.
- e. Marathon has made a good faith effort to obtain voluntary joinder of the working interest owners in the proposed well.
- f. Attached as **Exhibit B** are proposed C-102s for the wells. The wells will develop the Red Tank (Bone Spring) pool, pool code 51683, which is an oil pool.
- g. The producing interval for the wells will be orthodox and will comply with the Division's set back requirements.
- h. Exhibits C and D are a sample proposal letter and the Authorization for Expenditure for the proposed wells. The estimated cost of the wells set forth therein is fair and

reasonable, and is comparable to the costs of other wells of similar depths and length drilled in this area of New Mexico.

6. Case No. 16419:

- a. Marathon seeks an order pooling of all mineral interests in the Bone Spring formation underlying the E/2 W/2 of Section 14, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico. This spacing unit will be dedicated to the **Ramathorn Federal Com 22 32**14 SB 8H well, to be horizontally drilled.
- b. A plat outlining the unit being pooled in Case No. 16419 is attached hereto as **Exhibit A**, which shows the proposed well's location within the unit. The parties being pooled, the nature and percent of their interests, and their last known addresses are also included as part of **Exhibit A**. Exhibit A includes information for the working interest owners, the overriding interest owners, and offsets.
 - c. There are no depth severances within the Bone Spring formation.
- d. I have conducted a diligent search of the public records in the county where the well is located, and conducted phone directory and computer searches to locate contact information for parties entitled to notification, and mailed all parties well proposals, including an Authorization for Expenditure and a form of Operating Agreement.
- e. Marathon has made a good faith effort to obtain voluntary joinder of the working interest owners in the proposed well.
- i. Attached as **Exhibit B** is a proposed C-102 for the well. The wells will develop the Red Tank (Bone Spring) pool, pool code 51683, which is an oil pool.
- f. The producing interval for the well will be orthodox and will comply with the Division's set back requirements.

- g. **Exhibits C and D** are a sample proposal letter and the Authorization for Expenditure for the proposed wells. The estimated cost of the wells set forth therein is fair and reasonable, and is comparable to the costs of other wells of similar depths and length drilled in this area of New Mexico.
- 6. Marathon requests overhead and administrative rates of \$7000.00/month for drilling a well and \$700.00/month for a producing well. These rates are fair, and comparable to the rates charged by other operators for wells of this type in this area of Southeastern, New Mexico. Marathon requests that these rates be adjusted periodically as provided in the COPAS Accounting Procedure.
- 7. Marathon requests the maximum cost plus 200% risk charge be assessed against non-consenting working interest owners.
 - 8. Marathon requests that it be designated operator of the wells.
- 9. The attachments to this affidavit were prepared by me, or compiled from company business records.
- 10. I attest that the information provided herein is correct and complete to the best of my knowledge and belief.
- 11. The granting of this application is in the interests of conservation and the prevention of waste.

Ryan Gyllenband

SUBSCRIBED AND SWORN to before me this 18 day of September, 2018 by Ryan Gyllenband on behalf of Marathon Oil Permian LLC.

Notary Public

My commission expires: 1/29/2019



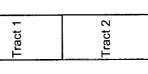
Case No. 16418

Ramathorn Federal Com 22 32 14 TB 1H Ramathorn Federal Com 22 32 14 FB 22H

Lease Tract Map
Ramathorn Fed 22-32-14 TB 1H and Ramathorn Fed 22-32-14 FB 22H
W/2 W/2 of Section 14, 22S-32E -- 160 acres

Tract 1: Federal Acreage

Tract 2: Federal Acreage





Summary of Interests

Ramathorn Fed 22-32-14 TB 1H, Ramathorn Fed 22-32-14 WA 2H, F 8H and Ramathorn Fed 22-32-14 FB 22H	ırn Fed 22-32-14 WA 2H, Ramathorn Fed 22-32-14 WXY 7H, Ramathorn Fed 22-32-14 SB	Ramathorn Fed 22-32-14 SB
Committed Working Interest: Marathon Oil Permian LLC	64.375%	64.375%
Uncommitted Working Interest: COG Operating LLC RKI Exploration and Production	21.250% 14.375%	35.625%
Unleased Mineral Interest:		00.0

Ramathorn

	Force Pooled Owners		
Owner Name	Address 1	Address 2	Type
Marathon Oil Permian LLC			M
COG Operating LLC	600 West Illinois Ave.	Midland, TX 79701	M
RKI Exploration and Production	210 Park Avenue, Suite 700	Oklahoma City, OK 73102	W
	ORRIS		
Owner Name	Address 1	Address 2	Туре
Curtis A. Anderson	600 W. Illinois, Ste. 701	Midland, TX 79701	ORRI
Allan C. Anderson	3807 South County Rd. 1135	Midland, TX 79706	ORRI
Wade S. Anderson	3807 South County Rd. 1135	Midland, TX 79706	ORRI
Kimbell Art Foundation	301 Commerce Street, Suite 2240	Fort Worth, Texas 76102	ORRI
MAP00-NET, a Texas general partnership	100 Park Avenue, Suite 1007	Oklahoma City, OK 73102	ORRI
Bill Burton	301 Commerce Street, Suite 3301	Fort Worth, Texas 76102	ORRI
Ben J. Fortson III Children's Trust, Ben J. Fortson III, Trustee	301 Commerce Street, Suite 3301	Fort Worth, Texas 76102	ORRI
Robert C. Grable	201 Main Street, Suite 2500	Fort Worth, Texas 76102	ORRI
MWB 1998 Trust, Ben J. Fortson, Jr., Trustee	301 Commerce Street, Suite 3301	Fort Worth, Texas 76102	ORRI
CCB 1998 Trust, Ben J. Fortson, Jr., Trustee	301 Commerce Street, Suite 3301	Fort Worth, Texas 76102	ORRI
DCB 1998 Trust, Ben J. Fortson, Jr., Trustee	301 Commerce Street, Suite 3301	Fort Worth, Texas 76102	ORRI
The Roach Foundation	100 Throckmorton Street, Suite 480	Fort Worth, Texas 76102	ORRI
Sundance Minerals I	P.O. Box 17224	Fort Worth, Texas 76102	ORRI
Crownrock Minerals, LP	P.O. Box 51933	Midland, TX 79710	ORRI
XTO Holdings, LLC	810 Houston Street	Fort Worth, TX 76102	ORRI

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Owner Name	Address 1	Address 2	Туре
XTO HOLDINGS LLC	22777 SPRINGWOODS VILLAGE PKWY	SPRING TX 77389	Offset
CONOCO PHILLIPS CO	PO BOX 7500	BARTLESVILLE OK 74005	Offset
ECHO PROD INC	PO BOX 1210	GRAHAM TX 76450	Offset
DEVON ENERGY PROD CO LP	333 W SHERIDAN AVE	OKLAHOMA CITY OK 73102	Offset
EOG RESOURCES INC	5509 Champions Drive	Midland, TX 79706	Offset
RANSOME-LOSEE ANNE	3505 CALLE CUERVO #218	ALBUQUERQUE NM 87048	Offset
PRINCE F IV	2 WISCONSIN CIR	CHEVY CHASE MD 20815	Offset
BURLINGTON RES OIL & GAS CO LP	PO BOX 51810	MIDLAND TX 79710	Offset
LOSEE ELIZABETH	328 SIERRA PL	ALBUQUERQUE NM 87108	Offset
TRAINER PARTNERS LTD	PO BOX 3788	MIDLAND TX 79702	Offset

Summary of Attempted Contacts

- Marathon sent well proposal letters.
- Marathon then contacted parties to see if they would participate in the well and/or execute a joint operating agreement.
- Marathon conducted updated record searches and internet searches for contact information for parties it seeks to pool.
- Marathon continued to attempt to contact the parties who had not executed an agreement.
- Marathon filed an application to force pool parties who had not entered in to an agreement.
- Marathon sent notices of the force pooling application to the addresses of record.
- Marathon then also published notice in a newspaper of general circulation in the county where the wells will be located.

Datticl 1 1625 N. French Dr., Hobbs, NM 88240 1605 N. French Dr., Hobbs, NM 88240 1605 N. Frist St., Artesia, NM 88210 1811 S. Frist St., Artesia, NM 88210 1811 No. 1811 N

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

12 Dedicated Acres

160.0

¹³ Joint or Infill

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

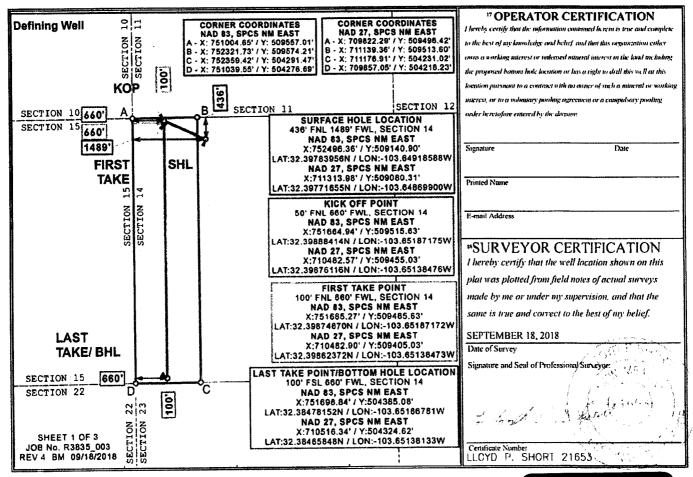
WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Number			² Pool Code 51683		RED TANK (BONE SPRING)				
¹ Property	Code		R	AMATH		operty Name 2-32-14 TB FED COM 1H				
'ogrid 3720				MARA	- •	OIL PERMIAN LLC 3740'				
					" Surface I	ocation				
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County	
С	14	228	32E		436	NORTH	1489 WEST		LEA	
" 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	
M	14	228	32E		100	SOUTH	660	WEST	LEA	

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

Order No.

⁴ Consolidation Code



EXHIBIT

B

B

District.1
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District.11
811 S. Firm St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

<u>District III</u> 1000 Rio Brazos Road, Aziec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 <u>District IV</u>

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

160

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

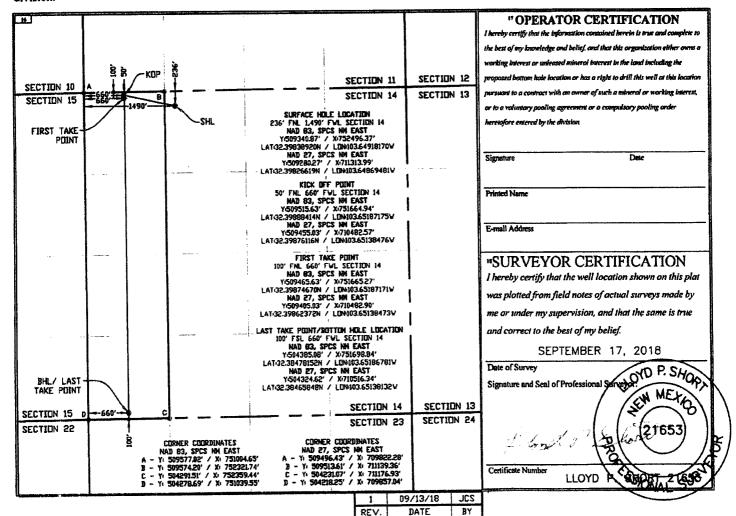
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

■ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	API Numbe	7		² Pool Code 51683		RED TANK (BONE SPRING)				
⁴ Property	Code				⁵ Property No) THE		61	Well Number	
			RA	MATHOR	N 22 32 1	32 14 FB FED COM 22H				
⁷ OGRID	1				•	Operator Name Selevation 3.730'				
3720	98	MARATHON			THON OIL I	OIL PERMIAN LLC 3,730'			3,730	
					 Surface L 	ocation				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
С	14	22S	32E		236	NORTH	1490	WEST	LEA	
		<u> </u>	" Bot	tom Hole	e Location If	Different From	Surface			
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County	
М	14	228	32E		100	SOUTH	660	WEST	LEA	
12 Dedicated Acr	es 13 Joint o	r Infill 14 C	Consolidation C	ode 15 Ore	ier 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.



Ryan Gyllenband Land Professional



Marathon Oil Permian LLC

5555 San Felipe Street Houston, TX 77056

Telephone: 713.296.2453 Mobile: 281.684.7389

Fax: 713.513.4006

mrgyllenband@marathonoil.com

September 13, 2018

VIA CERTIFIED RETURN RECEIPT MAIL

COG Operating LLC 600 West Illinois Ave. Midland, TX 79701

Re:

Ramathorn Federal 1H, 2H, & 7H Well Proposals

Section 14, T22S-R32E Lea County, New Mexico

Dear COG Operating LLC:

Marathon Oil Permian LLC ("MRO") proposes the drilling of the following wells located in Section 14, 22S-32E, Lea County, New Mexico to be drilled from the same pad location.

- Ramathorn Federal 22 32 14 TB 1H with a proposed first take point located 330' FNL and 330' FWL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 330' FWL of Section 14, 22S-32E. The well will have a targeted interval located in the Bone Spring Formation (~11,889' TVD) with a productive lateral length of approximately 4,620'. The total estimated drilling and completion cost is \$7,308,537 as shown in the attached AFE.
- Ramathorn Federal 22 32 14 WA 2H with a proposed first take point located 330' FNL and 330' FWL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 330' FWL of Section 14, 22S-32E. The well will have a targeted interval located in the Wolfcamp Formation (~12,151' TVD) with a productive lateral length of approximately 4,620'. The total estimated drilling and completion cost is \$7,377,279 as shown in the attached AFE.
- Ramathorn Federal 22 32 14 WXY 7H with a proposed first take point located 330' FNL and 330' FWL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 330' FWL of Section 14, 22S-32E. The well will have a targeted interval located in the Wolfcamp Formation (~12,045' TVD) with a productive lateral length of approximately 4,620'. The total estimated drilling and completion cost is \$7,393,179 as shown in the attached AFE.

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

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

- 100%/300%/300% non-consent penalty
- \$7,000/\$700 drilling and producing rates
- Contract area of Section 14, 22S-32E, covering all depths

Our title records show that you own 21.25% WI in the proposed unit.



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

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

- 3 year lease term
- \$2000 bonus consideration per net mineral acre
- Delivering a 75% NRI, proportionately reduced

Date:

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

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

Sincerely,

Ryan Gyllenband

Ramathorn Federal 1H, 2H, & 7H

`	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 TB 1H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 TB 1H well.
	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WA 2H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WA 2H well.
	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WXY 7H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WXY 7H well.
	COG Operating LLC
Ву:	
Print Name: _	

Ryan Gyllenband Land Professional



Marathon Oil Permian LLC

5555 San Felipe Street Houston, TX 77056 Telephone: 713.296.2453 Mobile: 281.684.7389 Fax: 713.513.4006

mrgyllenband@marathonoil.com

May 30, 2018

VIA CERTIFIED RETURN RECEIPT MAIL

COG Operating LLC 600 West Illinois Ave. Midland, TX 79701

Re: Ramathorn Federal 8H, 14H, 15H, 17H, 18H, 21H & 22H Well Proposals

Section 14, T22S-R32E Lea County, New Mexico

Dear COG Operating LLC:

Marathon Oil Permian LLC ("MRO") proposes the drilling of the following wells located in Section 14, 22S-32E, Lea County, New Mexico to be drilled from 2 different surface pad locations.

- Ramathorn Federal 22 32 14 SB 8H with a proposed first take point located 330' FNL and 1,980' FWL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 1,980' FWL of Section 14, 22S-32E. The well will have a targeted interval located in the Bone Spring Formation (~10,754' TVD) with a productive lateral length of approximately 4,620'. The total estimated drilling and completion cost is \$7,115,784 as shown in the attached AFE.
- Ramathorn Federal 22 32 14 WXY 14H with a proposed first take point located 330' FNL and 2,310' FEL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 2,310' FEL of Section 14, 22S-32E. The well will have a targeted interval located in the Wolfcamp Formation (~12,040' TVD) with a productive lateral length of approximately 4,750'. The total estimated drilling and completion cost is \$7,273,549 as shown in the attached AFE.
- Ramathorn Federal 22 32 14 SB 15H with a proposed first take point located 330' FNL and 1,980' FEL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 1,980' FEL of Section 14, 22S-32E. The well will have a targeted interval located in the Bone Spring Formation (~10,754' TVD) with a productive lateral length of approximately 4,750'. The total estimated drilling and completion cost is \$7,061,714 as shown in the attached AFE.
- Ramathorn Federal 22 32 14 TB 17H with a proposed first take point located 330' FNL and 1,650' FEL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 1,650' FEL of Section 14, 22S-32E. The well will have a targeted interval located in the Bone Spring Formation (~11,896' TVD) with a productive lateral length of approximately 4,750'. The total estimated drilling and completion cost is \$7,225,849 as shown in the attached AFE.
- Ramathorn Federal 22 32 14 WA 18H with a proposed first take point located 330' FNL and 990' FEL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 990' FEL of Section 14, 22S-32E. The well will have a targeted interval located in the Wolfcamp Formation (~12,147' TVD) with a productive lateral length of approximately 4,632'. The total estimated drilling and completion cost is \$7,272,489 as shown in the attached AFE.
- Ramathorn Federal 22 32 14 WXY 21H with a proposed first take point located 330' FNL and 330' FEL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 330' FEL of Section 14, 22S-32E. The well will have a targeted interval located in the Wolfcamp Formation (~12,040' TVD) with a productive lateral length of approximately 4,632'. The total estimated drilling and completion cost is \$7,272,489 as shown in the attached AFE.

• Ramathorn Federal 22 32 14 FB 22H with a proposed first take point located 330' FNL and 660' FWL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 660' FWL of Section 14, 22S-32E. The well will have a targeted interval located in the Bone Spring Formation (~9,843' TVD) with a productive lateral length of approximately 4,624'. The total estimated drilling and completion cost is \$7,101,744 as shown in the attached AFE.

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

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

- 100%/300%/300% non-consent penalty
- \$7,000/\$700 drilling and producing rates
- Contract area of Section 14, 22S-32E, covering all depths

Our title records show that you own 21.25% WI in the proposed unit.

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

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

- 3 year lease term
- \$2000 bonus consideration per net mineral acre
- Delivering a 75% NRI, proportionately reduced

This term assignment offer terminates June 25, 2018 and is subject to due diligence and title verification satisfactory to Marathon.

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

Sincerely,

Ryan Gyllenband

Ramathorn Federal 8H, 14H, 15H, 17H, 18H, 21H & 22H

	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 SB 8H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 SB 8H well.
	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WXY 14H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WXY 14H well.
	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 SB 15H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 SB 15H well.
	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 TB 17H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 TB 17H well.
	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WA 18H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WA 18H well.
	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WXY 21H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WXY 21H well.
	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 FB 22H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 FB 22H well.
	COG Operating LLC
By:	
Print Name:	
Title:	

MARATHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS DATE 5/22/2018

DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD

COMPLETION PREPARED BY JOSH SHANMON

FACILITIES PREPARED BY MATTHEMSCHEN

ARTIFICIAL LIFT PREPARED BY BILLY MOORE

Asset Team	PERMIAN	
Field Lease/Facility	Red Tank (Bone Spring) - 51683 FORMATION: 3RD BONE SPRINGS WILDCAT	EXPLORATION
Location	Ramathorn Federal 22-32-14 TB 1H DEVELOPMENT	_ RECOMPLETION WORKOVER
Prospect	RANGER	_*********
Est Total Depth	16,816	5.5
LOCATION COST -	MYANGOLE	
LUCATION COST -	INTANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	50,000
7001250	Land Broker Fees and Services	50,000
	TOTAL LOCATION COST - INTANGIBLE	100,000
DRILLING COST - T	ANGIRIF	
	,	
7012050	Conductor Pipe	** ***
7012050	Surface Casing	40,000 36,000
7012050	intermediate Casing 1	123,000
7012050	Intermediate Casing 2	237,000
7012050	Production Casing	73,000
7012050	Drig Liner Hanger, Tleback Eq & Csg Accessories	10,000
7012550	Drilling Wellhead Equipment	50,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	5,000
	TOTAL DRILLING - TANGIBLE	598,000
DRILLING COST - H	VTANGIBLE	
7019200	Drilling Rig Mob/Demob	50,000
7019220	Drilling Rig - day work/footage	610,833
7019040	Directional Drilling Services	205,950
7019020	Cement and Cementing Service Surface	20,000
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020 7019020	Cement and Cementing Service Intermediate 2	45,000
7019020	Cement and Cementing Service Production Mud Fiulds & Services	50,000
7012310	Soilds Control equipment	58,100 43,000
7012020	Bits	
7019010	Casing Crew and Services	70,000
7016350	Fuel (Rig)	75,000
7019140	Fuel (Mud)	18,000
7001460	Water (non potable)	25,000
7019000	Well Logging Services	
7019150	Mud Logging+geosteering	20,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110	Casing inspection/deaning	15,000
7019110	Drill pipe/collar inspection services	10,000
7016180	Freight - truck	25,000
7001460	Water hauling and disposal (includes soli farming)	60,000
7001440	Vacuum Trucks	10,000
7000030	Contract Labor - general	30,000
7018150	Remtal Tools and Equipment (surface rentals)	97,733
7018150	Rig Equipment and Misc.	12,217
7001110	Telecommunications Services	5,000
7001120	Consulting Services	114,837
7001400	Safety and Environmental	39,093
7018120 7019310	Rental Buildings (trailers) Coring (sidewalis & analysis)	19,547
7011010	8% Contingency & Taxes	151,652
		101,001
	TOTAL DRILLING - INTANGIBLE	\$1,950,962
	TOTAL DRILLING COST	\$2,548,962
	A THE INSTRUMENT OF THE PARTY O	
COMPLETION - TA	NGIBLE	
3013750	Tuhing	
7012580 7012040	Tubing Accessories (ninnie wireline entry)	50,000
7012550	Tubing Accessories (nipple, wireline entry) Wellhead Equip	5,000
7012560	Packers - Completion Equipment	40,000
	TOTAL COMPLETION - TANGIBLE	\$100,000



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

Asset Team Field

PERMIAN Red Tank (Bone Spring) - 51683 FORMATION: 3RD BONE SPRINGS

Lease/Facility	Ramathorn Federal 22-32-14 TB 1H	
COMPLETION - INT	ANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	5,000
7019220	Drilling Rig During Completion	60,000
7019140 7019030	Mud Fluids & Services Coiled Tubing Services (3 runs)	120,000
7019240	Snubbing Services	120,000
7019270	Pulling/Swab Units	
7016350	Fuel (from drig)	
7019010 7019020	Casing Crew and Services	<u>·</u>
7019080	Cement and Cementing Services Well Testing Services (flow hand & equip)	105,000
7019320	Fracturing Services	2,250,000
7019330	Perforating	175,000
7019360 7001460	Wireline Services Water Hauling & Disposal (frac fluids)	10,000 250,000
7016180	Freight - Truck (haul pipe; drig & compl)	10,000
7018150	BOP Rental & Testing	
7018150	Rental Tools and Equipment (Incl drig; lightplant,hydra-walk)	<u>.</u>
7018150 7000030	CT Downhole Rental Equipment (ie. Bit, BHA) Contract Labor - general	25,000
7001110	Telecommunications Services	90,000
7001400	Safety and Environmental	
7001120	Consulting Services	40,000
7018150 70193 0 0	Zipper Manifold Frack Stack Rentals	110,000
7016190	Freight (Transportation Services)	40,000
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	65,000
7018120	Rental Bulldings (trailers)	15,000
7000030 7011010	Contract Labor - Pumping (pump-down pumps) 8% Contingency & Taxes	250,000
	TOTAL COMPLETION - INTANGIBLE	\$3,680,000
	TOTAL COMPLETION COST	\$3,780,000
SURFACE EQUIPME	AT - TANGINE	
SURFACE EQUIPME	AT - TANGIBLE	
7012350	Misc. Piping, Fittings & Valves	85,794
7006640	Company Labor & Burden Contract Labor - General	
7001110	Telecommunication equip (Telemetry)	67,540
7012410	Line Pipe & Accessories	26,786
7012270	Miscellaneous Materials (containment system)	43,227
7008050	SCADA	<u>-</u>
7016180 7001190	Freight - truck Contract Engineering	29,116
7012290	Metering and Instrumentation	235,914
7012290	IBE Materials	
7012200	Gas Treating	<u>-</u>
7012200 7012010	Dehydration Compressor	- :
7012350	Power	
7012610	Vapor Recovery Unit	
7012440	Separator & other pressure vessels	85,919
7012500 7012100	Tanks Heater Treater	144,894 17,330
7012640	Flare & Accessories	11,646
7000010	Electrical Labor	29,116
7000010 7012480	Mechanical Labor	
7012180	Rod Pumping unit & Pad Pumping Unit Engine	
7012350	Electrical Power (electrical cooperative construction costs)	23,293
	TOTAL SURFACE EQUIPMENT - TANGIBLE	\$800,575
	TOTAL SURFACE EQUIPMENT COST	\$ 800,575
ARTIFICIAL LIFT		
7006640	Company Labor	2,500
7012180	Gas Lift Equipment	38,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	
7012140	Elect Sub Pumps (ESP) Weil Services-Weil/Weilhead Services	20.00
7019350 7012270	Materials & Supplies-Tangible	20,000
7012550	Surface Wellhead Equipment	5,500
7012390	Pig Launchers/Receivers & Rei Equip	
7011010	8% Contingency & Taxes	·
	TOTAL ARTIFICIAL LIFT	79,000
	PARTA ARTIFICIAL LIFT COAT	
	TOTAL ARTIFICIAL LIFT COST	\$ 79,000
	SUMMARY OF ESTIMATED DRILLING WELL COSTS	TOTAL COST
	TOTAL LOCATION COST	
	TOTAL DOCATION COST	\$ 100,000 \$ 2,548,962
	TOTAL DRILLING COST	\$ 2,548,962
	TOTAL COMPLETIONS COST	\$ 3,780,000
	TOTAL SORPACE EQUIPMENT COST	\$ 79,000
	GRAND TOTAL COST	\$7,308,537
	Participant's Approval	
Name of		
Company:		
Signature:		
Title	. Date:	

MARATHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS DATE 1/8/2018

DRILLING & LOCATION PREPARED BY KYLE SCHRINER

COMPLETION PREPARED BY JOSH SHANNON

FAGILITIES PREPARED BY MATT HENSCHEN

ARTIFICIAL LIFT PREPARED BY TOMMY MAZAL/BILLY N

Asset Team Field	PERMIAN FORMATION: 1ST BONE SPRINGS WILDCAT	EXPLORATION
	RAMATHORN FEDERAL 22 32 14 FB 72H DEVELOPMENT	RECOMPLETION
	LEA COUNTY X EXPLOITATION	WORKOVER
Prospect	RANGER	
Est Total Depth	14,735 Est Drilling Days 23.8 Est Completion Days	5.5
LOCATION COST - IN	TANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	67,500
7001250	Land Broker Fees and Services	45,000
	TOTAL LOCATION COST - INTANGIBLE	112,500
DRILLING COST - TAI	NGIBLE	
	- 4 · •	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	34,000
7012050	Intermediate Cesing 1	129,000
7012050	Intermediate Cesing 2	
7012050	Production Cesing	222,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	
7012550	Drilling Wellhead Equipment	70,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	•
	TOTAL DRILLING - TANGIBLE	507,000
	<u> </u>	
DRILLING COST - INT	ANGIBLE	
7019200	Drilling Rig Mob/Demob	65,000
7019220	Drilling Rig - day work/footage	475,000
7019040	Directional Drilling Services	186,000
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	66,000
7012310	Solids Control equipment	40,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	73,000
7019140	Fuel (Mud)	
7001460		18,000
	Water (non potable)	25,000
7019000	Well Logging Services	<u>·</u>
7019150	Mud Logging+geosteering	18,000
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 soli farming)	135,000
7001440	Vacuum Trucks	20,000
7000030		
	Contract Labor - general	30,000
7018150	Rental Tools and Equipment (surface rentals)	95,000
7018150	Rig Equipment and Misc.	7,125
7001110	Telecommunications Services	10,000
7001120	Consulting Services	111,625
7001400	Safety and Environmental	10,000
7018120	Rental Buildings (trailers)	
7019310	Coring (sidewalls & analysis)	•
7011010	8% Contingency & Taxes	174,540
	TOTAL DRILLING - INTANGIBLE	\$1,849,290
•	TOTAL DRILLING COST	\$2,356,290
COMPLETION - TANK		
7012580	Tubing	75,000
7012040	Tubing Accessories (nipple, wirefine entry)	15,000
7012550	Wellhead Equip	20,000
7012560	Packers - Completion Equipment	38,850
	TOTAL COMPLETION - TANGIBLE	\$148,850

AUTHORITY FOR EXPENDITURE		
DETAIL OF ESTIMATED WELL CO Asset Team PERMI		
Field	FORMATION: 1ST BONE SPRINGS	
Lease/Facility RAMA1	THORN FEDERAL 22 32 14 FB 22H	
COMPLETION - INTANGIBL		
GL CODE	DESCRIPTION	ESTIMATED COST
7001270 7019220	Location and Access (dress location after rig move, set anchors) Drilling Rig During Completion	20,000
7019140	Mud Fluids & Services	
7019030	Colled Tubing Services (3 runs)	140,000
	Snubbing Services	25,000
7019270 7016350	Pulling/Swab Units Fuel (from drig)	10,000
7019010	Casing Crew and Services	
7019020	Cement and Cementing Services	
7019080 7019320	Well Testing Services (flow hand & equip)	1,860,000
	Fracturing Services Perforating	124,000
7019360	Wireline Services	
7001460	Water Hauling & Disposal (frac fluids)	550,000
7016180 7018150	Freight - Truck (haul pipe; drig & compl) BOP Rental & Testing	40,000
7018150	Rental Tools and Equipment (incl drig; lightplant, hydra-walk)	
7018150	CT Downhole Rental Equipment (le. Bit, BHA)	45,000
7000030 7001110	Contract Labor - general Telecommunications Services	
7001110	Safety and Environmental	
7001120	Consulting Services	30,000
7018150	Zipper Manifold	57,600
7019300 7016190	Frack Stack Rentals Freight (Transportation Services)	39,000
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	100,000
7018120	Rental Buildings (traffers)	55,000
7000030 7011010	Contract Labor - Pumping (pump-down pumps) 8% Contingency & Taxes	42,000 264,928
TOTAL	COMPLETION - INTANGIBLE	\$3,593,528
		40.740.070
TOTA	AL COMPLETION COST	\$3,742,378
SURFACE EQUIPMENT - TA	ANGIBLE	
7012350	Misc. Piping, Fittings & Valves	103,535
7006640	Company Labor & Burden	·
7000030	Contract Labor - General	64,625
7001110 7012410	Telecommunication equip (Telemetry) Line Pipe & Accessories	33,891
7012270	Miscellaneous Materials (containment system)	52,263
7008060	SCADA	3,494
7016180	Freight - truck	
7001190 7012290	Contract Engineering Metering and Instrumentation	29,116 211,962
7012290	Metering and instrumentation	***************************************
	Gas Treating	
7012200		
7012200	Dehydration	
7012200 7012010	Compressor	
7012200		
7012200 7012010 7012350 7012610 7012440	Compressor Power Yapor Recovery Unit Separator & other pressure vessels	77,572
701200 7012010 7012350 7012610 7012440 7012500	Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks	77,572 149,333
7012200 7012010 7012350 7012610 7012440	Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater	77,572 149,333 12,997
7012200 7012010 7012350 7012610 7012440 7012500 7012100	Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Rane & Accessories Electrical Labor	77,572 149,333
7012200 7012010 7012010 7012350 7012610 7012400 7012500 7012100 7012640 7000010	Compressor Power Yapor Recovery Unit Separator & other pressure vessels Tanks Tanks Heaster Treater Flare & Accessories Electrical Labor Mechanical Labor	77,572 149,333 12,997 17,469
7012200 7012010 7012350 7012410 7012440 7012500 7012100 7012440 7000010 7000010 7012480	Compressor Power Yapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Hare & Accessories Electrical Labor Rechanical Labor Rod Pumping unit & Pad	77,572 149,333 12,997 17,469
7012200 7012010 7012350 7012610 7012400 7012500 7012100 7012640 7000010 7000010	Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Ranc & Accessories Electrical Labor Mechanical Labor Mechanical Labor Pomping Unit & Pad Pumping Unit & Pad Pumping Unit Engine	77,572 149,333 12,997 17,469 32,027
7012200 7012010 7012010 7012350 7012610 7012640 7012500 7012100 7012640 7000010 7000010 7012480 7012180 7012350	Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flane & Accessories Electrical Labor Mechanical Labor Mechanical Labor Med Pumping unit & Pad Pumping Unit Righe Electrical Separator Righe Electrical Power (electrical cooperative construction costs)	77,572 149,333 12,997 17,469 32,027
7012200 7012010 7012350 7012350 7012410 7012440 7012500 7012100 7012640 7000010 7000010 7012480 7012180 7012350	Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Ranc & Accessories Electrical Labor Mechanical Labor Mechanical Labor Pomping Unit & Pad Pumping Unit & Pad Pumping Unit Engine	77,572 149,333 12,999 17,469 32,027
7012200 7012010 7012010 7012350 7012610 7012440 7012500 7012100 7012640 7000010 7000010 7012850 7012180 7012350	Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flane & Accessories Electrical Labor Mechanical Labor Mechanical Labor Med Pumping unit & Pad Pumping Unit Righe Electrical Separator Righe Electrical Power (electrical cooperative construction costs)	77,572 149,333 12,997 17,469 32,027
7012200 7012010 7012350 7012510 7012510 7012500 7012500 7012100 7012640 7000010 7000010 7012880 7012180 7012350 TOTAL	Compressor Power Yapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flane & Accessories Electrical Labor Mechanical Labor Rod Pumping Unit & Pad Pumping Unit Engine Electrical Power Electrical Cooperative construction costs) SURFACE EQUIPMENT - TANGIBLE	77,572 149,333 112,997 17,469 33,027 23,293 \$811,576
7012200 7012010 7012350 7012350 7012440 7012500 7012100 7012640 7000010 7000010 7000010 7012180 7012180 7012350 TOTAL	Compressor Power Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Rane & Accessories Electrical Labor Mechanical Labor Mechanical Labor Mechanical Labor Mechanical Labor Sumping unit & Pad Pumping unit Rignie Electrical Power (electrical cooperative construction costs) SURFACE EQUIPMENT - TANGIBLE AL SURFACE EQUIPMENT COST	77,572 149,333 12,997 17,469 32,027 23,293 \$811,576
7012200 7012010 7012010 7012350 7012410 7012440 7012500 7012100 7012440 7000010 7012480 7012180 7012350 TOTAL TOTAL ARTIFICIAL LIFT 7006640	Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flane & Accessories Electrical Labor Mechanical Labor Mechanical Labor Mechanical Labor Burping unit & Pad Pumping Unit Englie Electrical Power (electrical cooperative construction costs) SURFACE EQUIPMENT - TANGIBLE AL SURFACE EQUIPMENT COST	77,572 149,333 112,997 17,489 33,027 23,293 \$811,576 \$ 811,576
7012200 7012010 7012010 7012350 7012510 7012440 7012500 7012140 7012540 7000010 7000010 7000010 701280 7012180 7012350 TOTAL TOTAL ARTIFICIAL LIFT 700640 7012180	Compressor Power Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Rare & Accessories Electrical Labor Mechanical Labor Mechanical Labor Mechanical Labor Electrical Power (electrical cooperative construction costs) SURFACE EQUIPMENT - TANGIBLE AL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment	77,572 149,333 12,997 17,469 32,027 23,293 \$811,576
7012200 7012010 7012010 7012010 7012010 7012440 7012500 7012100 7012440 7000010 7012480 7012180 7012350 TOTAL TOTAL ARTIFICIAL LIFT 7005640	Compressor Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flane & Accessories Electrical Labor Mechanical Labor Mechanical Labor Mechanical Labor Burping unit & Pad Pumping Unit Englie Electrical Power (electrical cooperative construction costs) SURFACE EQUIPMENT - TANGIBLE AL SURFACE EQUIPMENT COST	77,572 149,333 112,997 17,489 33,027 23,293 \$811,576 \$ 811,576
7012200 7012010 7012010 7012350 701250 701240 7012500 7012160 7012640 7000010 7000010 7000010 7012180 7012350 TOTAL TOTAL ARTIFICIAL LIFT 700640 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180 7012180	Compressor Power Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Hare & Accessories Electrical Labor Mechanical Labor Mechanical Labor Mechanical Labor Mechanical Labor Surface EQUIPMENT - TANGIBLE AL SURFACE EQUIPMENT COST Company Labor Gas Uff Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumping Labor Gas Uff Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumping (Separation) Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumpin (Separation) Well Services-Well/Wellhead Services	77,572 149,333 12,997 17,489 32,027 23,293 \$811,576 \$ 811,576
7013200 7012010 7012010 7012010 7012350 701240 701240 7012500 701240 7000010 701280 701280 7012350 TOTAL TOTAL ARTIFICIAL LIFT 7005640 7012180 7012180 7012180 7012180 7012170 7012180 7012170	Compressor Power Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Flane & Accessories Electrical Labor Mechanical Labor Company Labor Gas LIT Equipment Company Labor Gas LIT Equipment Rob Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Matarials & Supplitz-Tangible	\$ 11,576 \$ 811,576 \$ 22,500 \$ 25,500 \$ 25,500
7012200 7012010 7012010 7012350 7012400 7012440 7012500 7012440 7012500 7012440 7000010 7000010 7000010 701280 7012350 TOTAL TOTAL ARTIFICIAL LIFT 7005640 7012180 7012480 7012180 7012480 7012180 7012490 7012490 7012490 7012490 7012490 7012490 7012490	Compressor Power Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Hare & Accessories Electrical Labor Mechanical Labor Mechanical Labor Mechanical Labor Mechanical Labor Surface EQUIPMENT - TANGIBLE AL SURFACE EQUIPMENT COST Company Labor Gas Uff Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumping Labor Gas Uff Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumping (Separation) Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumpin (Separation) Well Services-Well/Wellhead Services	\$ 11,576 \$ 811,576 \$ 22,500 \$ 25,500 \$ 25,500
7012200 7012010 7012010 7012350 701250 7012400 7012500 7012400 7012500 7012400 701280 7012180 7012350 TOTAL TOTAL ARTIFICIAL LIFT 7005640 7012480 7012480 7012480 7012480 7012550	Compressor Power Power Vapor Recovery Unit Separator & other pressure vessels Tanks Heater Treater Rare & Accessories Electrical Labor Mechanical Labor Mechanical Labor Mechanical Labor Mechanical Labor Surface Equipment - TANGIBLE SURFACE EQUIPMENT - TANGIBLE AL SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Electsical Power (electrical cooperative construction costs) SURFACE EQUIPMENT COST Company Labor Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumping (ESP) Well Services-Well/Welthead Services Matartals & Supplies-Tangible Surface Welled Equipment	\$ 11,576 3,000 22,500 25,000 3,000
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Case No. 16419

Ramathorn Federal Com 22 32 14 SB 8H

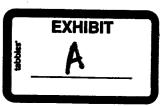
Marathon Oil

Tract 1

Tract 2

Lease Tract Map Ramathorn Fed 22-32-14 SB 8H E/2 W/2 of Section 14, 22S-32E – 160 acres

Tract 1: Federal Acreage Tract 2: Federal Acreage



Marathon Oil

Summary of Interests Ramathorn Fed 22-32-14 TB 1H, Ramathorn Fed 22-32-14 WA 2H, Ramathorn Fed 22-32-14 WXY 7H, Ramathorn Fed 22-32-14 SB 8H and Ramathorn Fed 22-32-14 FB 22H

64.375%	35.625%	0.00%
64.375%	21.250% 14.375%	
Committed Working Interest: Marathon Oil Permian LLC	Uncommitted Working Interest: COG Operating LLC RKI Exploration and Production	Unleased Mineral Interest:

Ramathorn

	Force Pooled Owners		
Owner Name	Address 1	Address 2	Type
Marathon Oil Permian LLC			M
COG Operating LLC	600 West Illinois Ave.	Midland, TX 79701	M
RKI Exploration and Production	210 Park Avenue, Suite 700	Oklahoma City, OK 73102	Wi
	ORRIS		
Owner Name	Address 1	Address 2	Туре
Curtis A. Anderson	600 W. Illinois, Ste. 701	Midland, TX 79701	ORRI
Allan C. Anderson	3807 South County Rd. 1135	Midland, TX 79706	ORRI
Wade S. Anderson	3807 South County Rd. 1135	Midland, TX 79706	ORRI
Kimbell Art Foundation	301 Commerce Street, Suite 2240	Fort Worth, Texas 76102	ORRI
MAP00-NET, a Texas general partnership	100 Park Avenue, Suite 1007	Oklahoma City, OK 73102	ORRI
Bill Burton	301 Commerce Street, Suite 3301	Fort Worth, Texas 76102	ORRI
Ben J. Fortson III Children's Trust, Ben J. Fortson III, Trustee	301 Commerce Street, Suite 3301	Fort Worth, Texas 76102	ORRI
Robert C. Grable	201 Main Street, Suite 2500	Fort Worth, Texas 76102	ORRI
MWB 1998 Trust, Ben J. Fortson, Jr., Trustee	301 Commerce Street, Suite 3301	Fort Worth, Texas 76102	ORRI
CCB 1998 Trust, Ben J. Fortson, Jr., Trustee	301 Commerce Street, Suite 3301	Fort Worth, Texas 76102	ORRI
DCB 1998 Trust, Ben J. Fortson, Jr., Trustee	301 Commerce Street, Suite 3301	Fort Worth, Texas 76102	ORRI
The Roach Foundation	100 Throckmorton Street, Suite 480	Fort Worth, Texas 76102	ORRI
Sundance Minerals I	P.O. Box 17224	Fort Worth, Texas 76102	ORRI
Crownrock Minerals, LP	P.O. Box 51933	Midland, TX 79710	ORRI
XTO Holdings, 11 C	810 Houston Street	Fort Worth, TX 76102	ORRI

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Owner Name	Address 1	Address 2	Туре
XTO HOLDINGS LLC	22777 SPRINGWOODS VILLAGE PKWY	SPRING TX 77389	Offset
CONOCO PHILLIPS CO	PO BOX 7500	BARTLESVILLE OK 74005	Offset
ECHO PROD INC	PO BOX 1210	GRAHAM TX 76450	Offset
DEVON ENERGY PROD CO LP	333 W SHERIDAN AVE	OKLAHOMA CITY OK 73102	Offset
EOG RESOURCES INC	5509 Champions Drive	Midland, TX 79706	Offset
RANSOME-LOSEE ANNE	3505 CALLE CUERVO #218	ALBUQUERQUE NM 87048	Offset
PRINCE F IV	2 WISCONSIN CIR	CHEVY CHASE MD 20815	Offset
BURLINGTON RES OIL & GAS CO LP	PO BOX 51810	MIDLAND TX 79710	Offset
LOSEE ELIZABETH	328 SIERRA PL	ALBUQUERQUE NM 87108	Offset
TRAINER PARTNERS LTD	PO BOX 3788	MIDLAND TX 79702	Offset

Summary of Attempted Contacts

- Marathon sent well proposal letters.
- Marathon then contacted parties to see if they would participate in the well and/or execute a joint operating agreement.
- Marathon conducted updated record searches and internet searches for contact information for parties it seeks to pool.
- Marathon continued to attempt to contact the parties who had not executed an agreement.
- Marathon filed an application to force pool parties who had not entered in to an agreement.
- Marathon sent notices of the force pooling application to the addresses of record.
- Marathon then also published notice in a newspaper of general circulation in the county where the wells will be located.

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

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

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

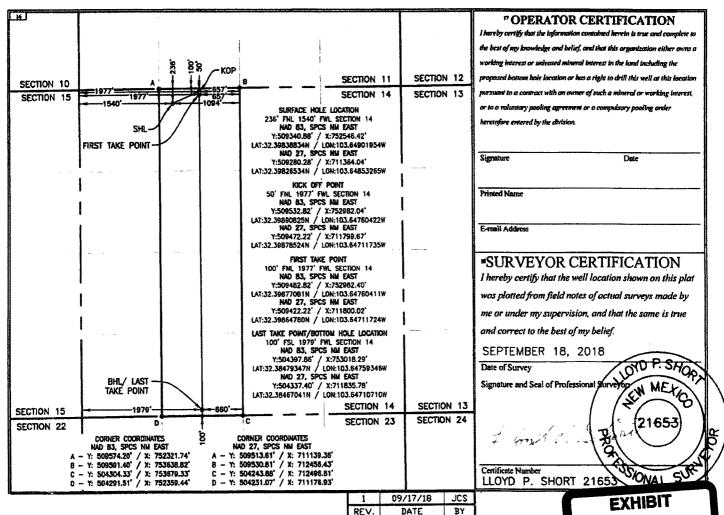
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number				² Pool Cod		J Pool Name						
				51683	3	RED TANK (BONE SPRING)						
⁴ Property C	ode	⁵ Property Name						*1	Well Number			
		RAMATHORN 22 32 14 SB FED COM							8H			
OGRID N	io.							⁹ Elevation				
37209	8	MARATHON OIL PERMIAN LLC 3729'						3729'				
* Surface Location												
UL or lot no.	Section	Township	Range	Lot Idn	Lat Idn Feet from the North/South line Feet from the E				East	/West line	County	
C	14	22S	32E		236 NORTH 154				WES			
" Bottom Hole Location If Different From Surface												
UL or lot no.	Section	Township	Range	Lot ldn	Feet from t	he Nort	h/South line	Feet from the	East	/West line	County	
N	14	22\$	32E		100'	SC	UTH	1979	WEST		LEA	
12 Dedicated Acres	13 Joint of	r Infill	14 Consolidation	Code 15 Or	rder No.							
160												

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.



Ryan Gyllenband Land Professional



Marathon Oil Permian LLC 5555 San Felipe Street Houston, TX 77056 Telephone: 713.296.2453 Mobile: 281.684.7389 Fax: 713.513.4006 mrgyllenband@marathonoil.com

May 30, 2018

VIA CERTIFIED RETURN RECEIPT MAIL

COG Operating LLC 600 West Illinois Ave. Midland, TX 79701

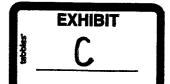
Re: Ramathorn Federal 8H, 14H, 15H, 17H, 18H, 21H & 22H Well Proposals

Section 14, T22S-R32E Lea County, New Mexico

Dear COG Operating LLC:

Marathon Oil Permian LLC ("MRO") proposes the drilling of the following wells located in Section 14, 22S-32E, Lea County, New Mexico to be drilled from 2 different surface pad locations.

- Ramathorn Federal 22 32 14 SB 8H with a proposed first take point located 330' FNL and 1,980' FWL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 1,980' FWL of Section 14, 22S-32E. The well will have a targeted interval located in the Bone Spring Formation (~10,754' TVD) with a productive lateral length of approximately 4,620'. The total estimated drilling and completion cost is \$7,115,784 as shown in the attached AFE.
- Ramathorn Federal 22 32 14 WXY 14H with a proposed first take point located 330' FNL and 2,310' FEL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 2,310' FEL of Section 14, 22S-32E. The well will have a targeted interval located in the Wolfcamp Formation (~12,040' TVD) with a productive lateral length of approximately 4,750'. The total estimated drilling and completion cost is \$7,273,549 as shown in the attached AFE.
- Ramathorn Federal 22 32 14 SB 15H with a proposed first take point located 330' FNL and 1,980' FEL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 1,980' FEL of Section 14, 22S-32E. The well will have a targeted interval located in the Bone Spring Formation (~10,754' TVD) with a productive lateral length of approximately 4,750'. The total estimated drilling and completion cost is \$7,061,714 as shown in the attached AFE.
- Ramathorn Federal 22 32 14 TB 17H with a proposed first take point located 330' FNL and 1,650' FEL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 1,650' FEL of Section 14, 22S-32E. The well will have a targeted interval located in the Bone Spring Formation (~11,896' TVD) with a productive lateral length of approximately 4,750'. The total estimated drilling and completion cost is \$7,225,849 as shown in the attached AFE.
- Ramathorn Federal 22 32 14 WA 18H with a proposed first take point located 330' FNL and 990' FEL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 990' FEL of Section 14, 22S-32E. The well will have a targeted interval located in the Wolfcamp Formation (~12,147' TVD) with a productive lateral length of approximately 4,632'. The total estimated drilling and completion cost is \$7,272,489 as shown in the attached AFE.
- Ramathorn Federal 22 32 14 WXY 21H with a proposed first take point located 330' FNL and 330' FEL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 330' FEL of Section 14, 22S-32E. The well will have a targeted interval located in the Wolfcamp Formation (~12,040' TVD) with a productive lateral length of approximately 4,632'. The total estimated drilling and completion cost is \$7,272,489 as shown in the attached AFE.



• Ramathorn Federal 22 32 14 FB 22H with a proposed first take point located 330' FNL and 660' FWL of Section 14, 22S-32E, and a proposed last take point located 330' FSL and 660' FWL of Section 14, 22S-32E. The well will have a targeted interval located in the Bone Spring Formation (~9,843' TVD) with a productive lateral length of approximately 4,624'. The total estimated drilling and completion cost is \$7,101,744 as shown in the attached AFE.

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

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

- 100%/300%/300% non-consent penalty
- \$7,000/\$700 drilling and producing rates
- Contract area of Section 14, 22S-32E, covering all depths

Our title records show that you own 21.25% WI in the proposed unit.

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

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

- 3 year lease term
- \$2000 bonus consideration per net mineral acre
- Delivering a 75% NRI, proportionately reduced

This term assignment offer terminates June 25, 2018 and is subject to due diligence and title verification satisfactory to Marathon.

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

Sincerely,

Ryan Gyllenband

Ramathorn Federal 8H, 14H, 15H, 17H, 18H, 21H & 22H

	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 SB 8H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 SB 8H well.
	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WXY 14H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WXY 14H well.
	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 SB 15H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 SB 15H well.
	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 TB 17H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 TB 17H well.
	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WA 18H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WA 18H well.
	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WXY 21H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 WXY 21H well.
	elects to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 FB 22H well.
	elects NOT to participate in the drilling, completing, and equipping of the Ramathorn Federal 22 32 14 FB 22H well.
	COG Operating LLC
Ву:	
Print Name:	
Title:	

MARATHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS DATE 1/8/2018

DRILLING & LOCATION PREPARED BY KYLE SCHRINER

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY MATT HENSCHEN

ARTIFICIAL LIFT PREPARED BY TOMMY MAZAL/BILLY N

Asset Team	PERMIAN	
Fleid		EXPLORATION
Lease/Facility		RECOMPLETION
Location	LEA COUNTY X EXPLOITATION	WORKOVER
Prospect	RANGÉR	
Est Total Depth	15,645 Est Drilling Days 23.8 Est Completion Days	5.5
LOCATION COST - IN	ITANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	67,500
7001250	Land Broker Fees and Services	45,000
	TOTAL LOCATION COST - INTANGIBLE	112,500
DRILLING COST - TA	NGIBLE	
7012050	Conductor Pipe	28,000
7012050	Surface Casing	34,000
7012050	Intermediate Casing 1	129,000
7012050	Intermediate Casing 2	
7012050	Production Casing	235,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	
7012550	Drilling Wellhead Equipment	70,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	24,000
/012270	MISCEIBREOUS MAD MaterialS	-
	TOTAL PRIVING TANGET	
	TOTAL DRILLING - TANGIBLE	520,000
DRILLING COST - IN	FANGIBLE	
7019200	Drilling Rig Mob/Demob	65,000
7019220	Drilling Rig - day work/footage	475,000
7019040	Directional Drilling Services	186,000
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	66,000
7012310	Solids Control equipment	40,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	73,000
7019140	Fuel (Mud)	18,000
7001460	Water (non potable)	25,000
7019000	Well Logging Services	-
7019150	Mud Logging+geosteering	18,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110		
7019110	Casing inspection/cleaning	15,000
	Drill pipe/collar inspection services	10,000
7016180	Freight - truck	25,000
7001460	Water hauling and disposal (includes soil farming)	135,000
7001440	Vacuum Trucks	20,000
7000030	Contract Labor - general	30,000
7018150	Rental Tools and Equipment (surface rentals)	95,000
7018150	Rig Equipment and Misc.	7,125
7001110	Telecommunications Services	10,000
7001120	Consulting Services	111,625
7001400	Safety and Environmental	10,000
7018120	Rental Buildings (trailers)	
7019310	Coring (sidewalls & analysis)	
7011010	8% Contingency & Taxes	175,580
	TOTAL DRILLING - INTANGIBLE	£1 9EA 93A
	IOTAL PAILLING - INTANGIBLE	\$1,850,330
	TOTAL DRILLING COST	\$2,370,330
COMPLETION - TAN	GIBLE	
CONTRELION - IAN		
7012580	Tubing	75,000
7012040	Tubing Accessories (nipple, wireline entry)	15,000
7012550	Wellhead Equip	20,000
7012560	Packers - Completion Equipment	38,850
7012300	- senera compensor equipment	30,030
	TOTAL COMPLETION - TANGIBLE	\$148.850



ETAIL OF ESTIMATED	NDITURE WELL COSTS	
sset Team leid	PERMIAN 0 FORMATION: 2ND BONE SPRINGS	
ease/Facility	0 FORMATION: 2ND BONE SPRINGS RAMATHORN FEDERAL 22 32 14 SB BH	
OMPLETION - INT	ANGIBLE	
GL CODE	DESCRIPTION	ESTIMATED COST
7001270 7019220	Location and Access (dress location after rig move, set anchors)	20,000
7019140	Driffing Rig During Completion Mud Fluids & Services	20,000
7019030	Coiled Tubing Services (3 runs)	140,000
7019240 7019270	Snubbing Services Pulling/Swab Units	25,000
7016350	Fuel (from drig)	10,000
7019010 7019020	Casing Crew and Services Cement and Cementing Services	
7019080	Well Testing Services (flow hand & equip)	71,000
7019320	Fracturing Services	1,860,000
7019330 7019360	Perforating Wireline Services	124,000
7001460	Water Hauling & Disposal (frac fluids)	550,000
7015180 7018150	Freight - Truck (haul pipe; drig & compi)	40,000
7018150	BOP Rental & Testing Rental Tools and Equipment (Incl drig; lightpiant,hydra-walk)	
7018150	CT Downhole Rental Equipment (le. Bit, BHA)	45,000
7000030 7001110	Contract Labor - general Telecommunications Services	75,000
7001400	Safety and Environmental	25,000
7001120	Consulting Services	30,000
7018150 7019300	Zipper Manifold Frack Stack Rentals	57,600
7016190	Freight (Transportation Services)	39,000
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	100,000
7018120 7000030	Rental Buildings (trailers) Contract Labor - Pumping (pump-down pumps)	55,00 42,00
7011010	8% Contingency & Taxes	264,921
	TOTAL COMPLETION - INTANGIBLE	\$3,593,52
		73,333,32
	TOTAL COMPLETION COST	\$3,742,37
IRFACE EQUIPME	NT - TANGIBLE	
7012350		103 531
7006640	Misc. Piping, Fittings & Valves Company Labor & Burden	103,535
7000030	Contract Labor - General	64,62
7001110 7012410	Telecommunication equip (Telemetry) Line Pipe & Accessories	22.00
7012270	Miscellaneous Matarials (containment system)	
7008060	SCADA	3,494
7016180 7001190	Freight - truck Contract Engineering	29,11
7012290	Metering and instrumentation	211,96
7012290	I&E Muterials	
7012200 7012200	Gas Treating Dehydration	
7012010	Compressor	
7012350 7012610	Power	
7012440	Vapor Recovery Unit Separator & other pressure vessels	77,572
7012500	Tanks	149,33
7012100 7012640	Heater Treater Flare & Accessories	12,997
7000010	Electrical Labor	17,469 32,027
7000010	Mechanical Labor	
7012480 7012180	Rod Pumping unit & Pad Pumping Unit Engine	
7012350	Electrical Power (electrical cooperative construction costs)	23,293
	TOTAL SURFACE EQUIPMENT - TANGIBLE	\$811,576
	TOTAL SURFACE EQUIPMENT COST	\$ 811,576
TIFICIAL LIFT		-
7006640	Сотрапу Labor	3,000
7012180	Gas Lift Equipment	23,000
7012480 7012140	Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP)	
7019350	Well Services-Well/Wellhead Services	22,50
7012270	Materials & Supplies-Tangible	25,000
7012550 7012390	Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip	3,00
7011010	8% Contingency & Taxes	2,50
	TOTAL ARTIFICIAL LIFT	79,000
	TOTAL ARTIFICIAL LIFT COST	\$
	SUMMARY OF ESTIMATED DRILLING WELL COSTS	TOTAL COST
		TOTAL COST
	TOTAL LOCATION COST	\$ 112,500
	TOTAL COMPLETIONS COST	\$ 2,370,330
	TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST	\$ 3,742,378
	TOTAL SORFACE EQUIPMENT COST	\$ 811,576
		\$ 79,000
	GRAND TOTAL COST	\$7,115,78
	Participant's Approval	
Name of		
Name of Company:		
		
Company		

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

AMENDED APPLICATION OF MARATHON OIL PERMIAN LLC FOR A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 16418

AMENDED APPLICATION OF MARATHON OIL PERMIAN LLC FOR A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 16419

,	<u>AFFIDAVIT</u>
STATE OF <u>Lexos</u>)
COUNTY OF X/arris) ss.
COUNTY OF MUCUS	,

Ethan Perry, being duly sworn, deposes and states:

- 1. I am over the age of 18, I am a geologist for Marathon Oil Permian LLC, and have personal knowledge of the matters stated herein. I have been qualified by the Oil Conservation Division ("Division") as an expert petroleum geologist.
- 2. **Exhibit A** is a structure map of the top of the Bone Spring. The proposed project area is identified by black-dashed boxes. The proposed horizontal locations are identified by a blue line, and the proposed wells are numbered 1, 2, and 3.
- 3. Exhibit A identifies Bone Spring wells in the vicinity of the proposed wells, with a line of cross-section running from A to A'.

- 4. Exhibit A shows that the structure dips down to the northwest.
- 5. Exhibit B is a First Bone Spring cross section. It is a stratigraphic cross-section hung on the top of the First Bone Spring Sand. The well logs on the cross-section give a representative sample of the First Bone Spring Sand formation in the area. The target zone for the well is the First Bone Spring Sand, as identified by the words "Producing Zone" and the shaded area across the cross section. That zone is continuous across the well unit.
- 6. Exhibit C is a Gross Interval Isochore of the First Bone Spring. The First Bone Spring is uniform across the proposed well unit.
- 7. **Exhibit D** is a Second Bone Spring cross section. It is a stratigraphic cross-section hung on the base of the Second Bone Spring Sand. The well logs on the cross-section give a representative sample of the Second Bone Spring Sand formation in the area. The target zone for the well is the Second Bone Spring Sand, as identified by the words "Producing Zone" and the shaded area across the cross section. That zone is continuous across the well unit.
- 8. Exhibit E is a Gross Sand Isochore of the Second Bone Spring. The Second Bone Spring is uniform across the proposed well unit.
- 9. **Exhibit F** is a structure map of the top of the Wolfcamp. The proposed project area is identified by black-dashed boxes. The proposed horizontal locations are identified by a blue line, and the proposed wells are numbered 1, 2, and 3.
- 10. Exhibit F identifies Third Bone Spring wells in the vicinity of the proposed wells, with a line of cross-section running from A to A'.
 - 11. Exhibit F shows that the structure dips slightly down to the east.
- 12. **Exhibit G** is a Third Bone Spring cross section. It is a stratigraphic cross-section hung on the top of the Wolfcamp. The well logs on the cross-section give a representative sample

of the Third Bone Spring Sand formation in the area. Note that the gamma ray log in the middle well on the exhibit exhibits API unit scaling issues across the interval of interest. The target zone for the well is the Third Bone Spring Sand, as identified by the words "Producing Zone" and the shaded area across the cross section. That zone is continuous across the well unit.

- 13. **Exhibit H** is Gross Sand Isochore of the Third Bone Spring. The Third Bone Spring is uniform across the proposed well unit.
 - 14. I conclude from the maps that:
 - The horizontal spacing and proration unit is justified from a geologic standpoint.
 - b. There are no structural impediments or faulting that will interfere with horizontal development.
 - c. Each quarter quarter section in the unit will contribute more or less equally to production.
- 15. The preferred well orientation in this area is north-south. This is because the inferred orientation of maximum horizontal stress is roughly east-west at this location.

Ethan Perry

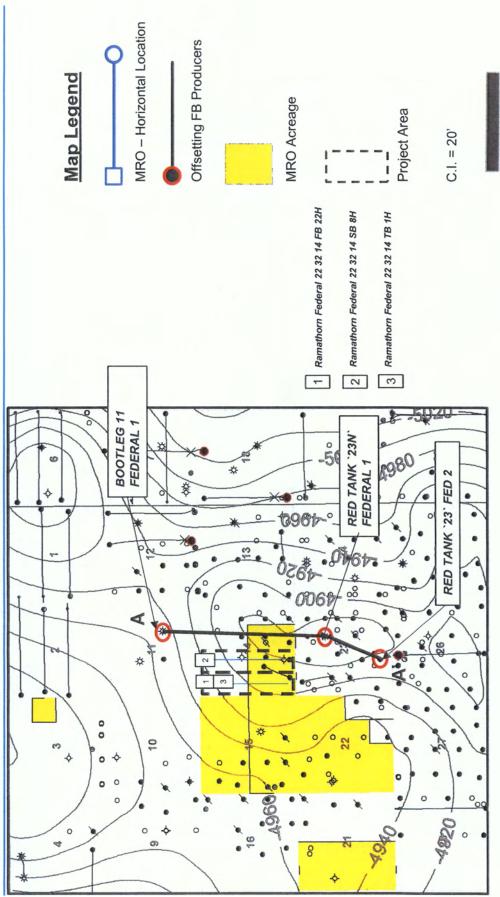
SUBSCRIBED AND SWORN to before me this 18th day of September, 2018 by Ethan Perry, on behalf of Marathon Oil Permian LLC.

Notary Public

My commission expires: 1/23/2019



Structure Map - Top of Bone Spring (SSTVD)

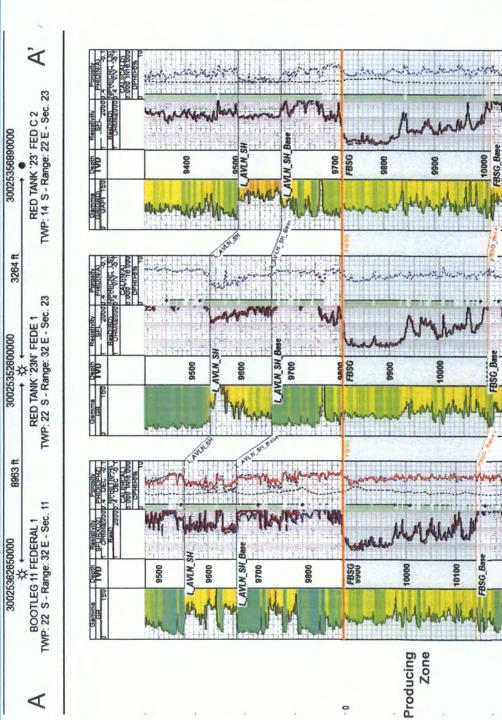






1 mile

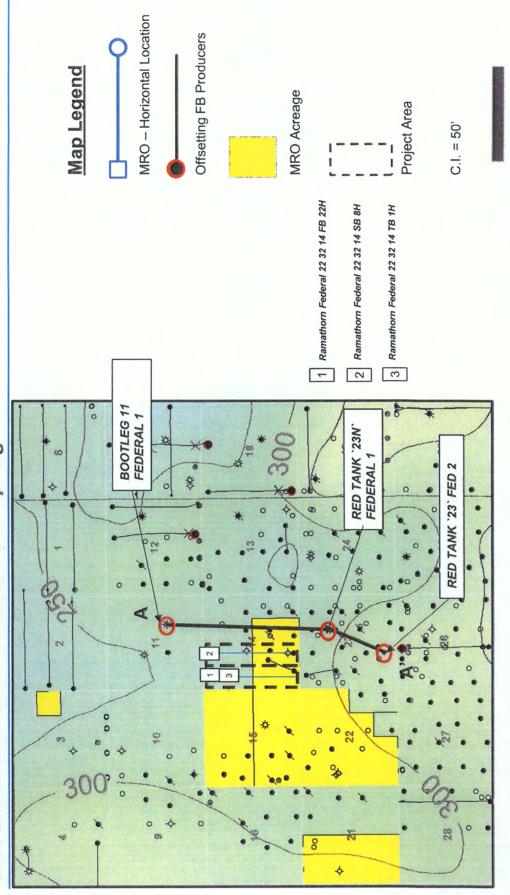
Stratigraphic Cross Section (Top First Bone Spring Datum)







Gross Interval Isochore - First Bone Spring

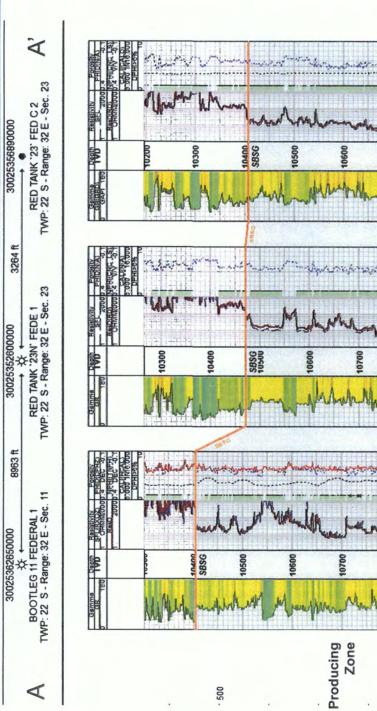


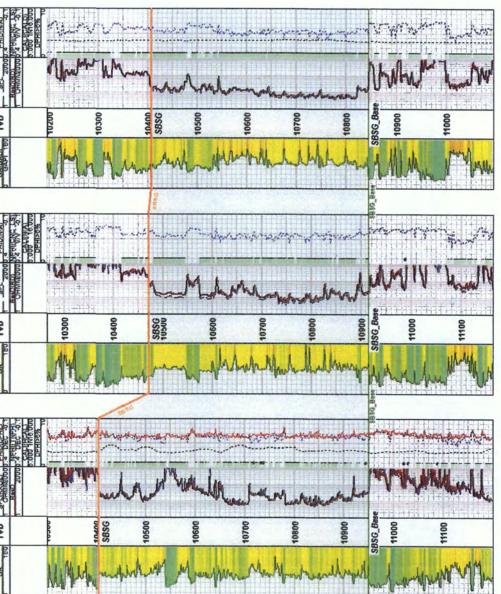




1 mile

Stratigraphic Cross Section (Top Second Bone Spring Base Datum)

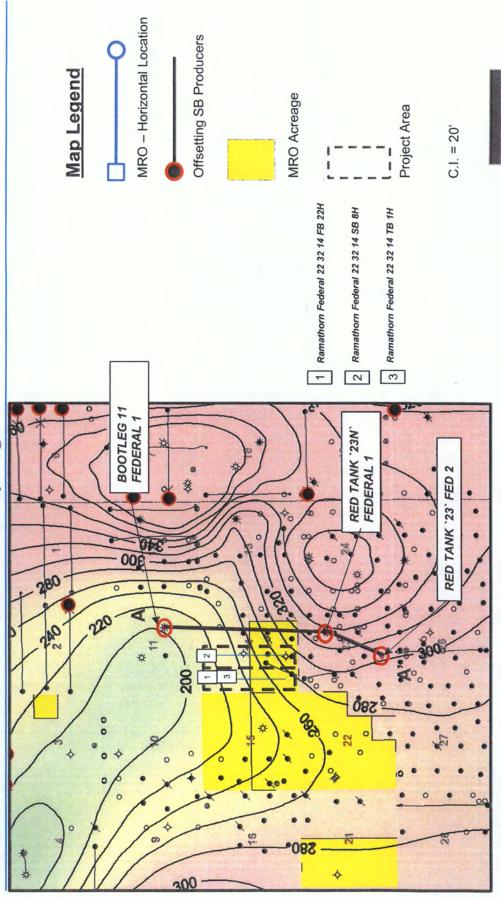






EXHIBIT

Gross Sand Isochore - Second Bone Spring

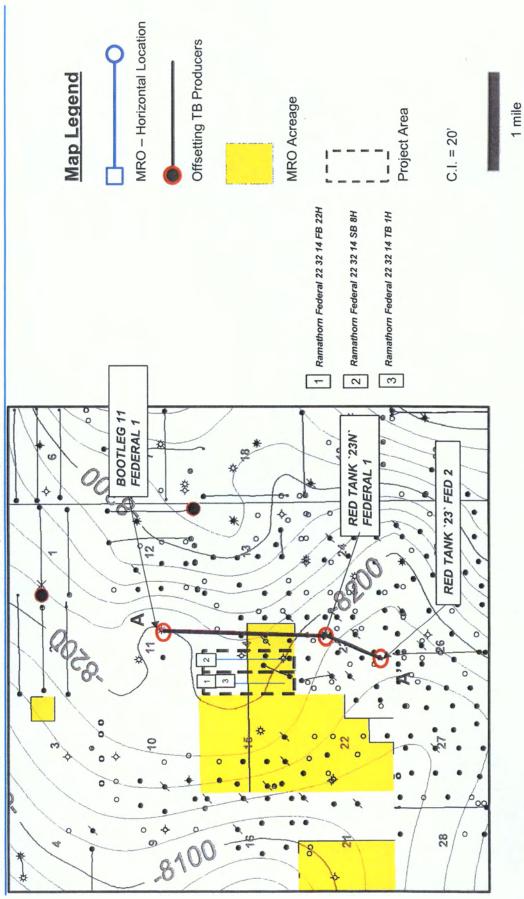




EXHIBIT

1 mile

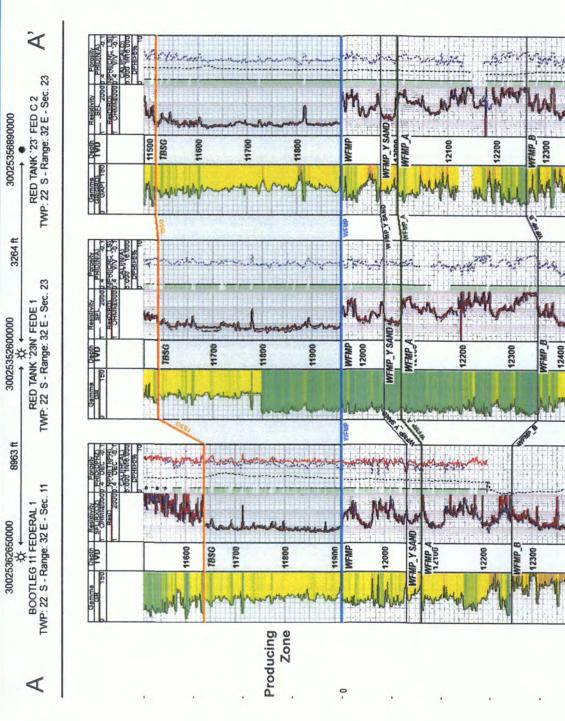
Structure Map - Top of Wolfcamp (SSTVD)





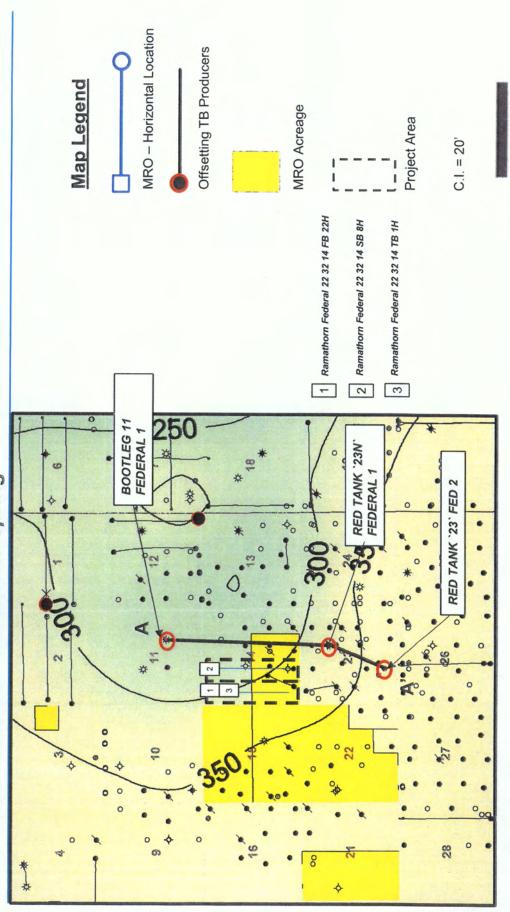


Stratigraphic Cross Section (Top Wolfcamp Datum)





Gross Sand Isochore - Third Bone Spring







1 mile

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

AMENDED APPLICATION OF MARATHON OIL PERMIAN LLC FOR A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 16418

AMENDED APPLICATION OF MARATHON OIL PERMIAN LLC FOR A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 16419

AFFIDAVIT

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

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

Deana M. Bennett

SUBSCRIBED AND SWORN to before me this 19th day of September, 2018 by Deana M. Bennett.

OFFICIAL SEAL

Karlene Schuman

NOTARY PUBLIC
STATE OF NEW MEXICO

My commission expires: 2 2 1 2 1

Harlene Shuma Notary Public

Generated: 9/19/2018 12:08:48 PM
Firm Mail Book ID= 150123
Transaction Report Details - CertifiedPro.net

				Generated: 9/ 19/ 2018 12:08:48 Pivi	2:08:48 PIVI						
Certified Mail Article Number	Date Created	Reference Number	Maritie	Name 2	Address	City	State	Zip	Certified Mailing Status	Service Options	Mail Delivery Date
9314869904300050256604	2018-08-31 9:48 AM	81363-0163	TRAINER PARTNERS LTD		PO BOX 3788	MIDLAND	¥	79702	Delivered	Return Receipt - Electronic	09-17-2018
9314869904300050256598	2018-08-31 9:48 AM	81363-0163	LOSEE ELIZABETH		328 SIERRA PL	ALBUQUERQUE	Σ	87108	To be Returned	Return Receipt - Electronic	
9314869904300050256581	2018-08-31 9:48 AM	81363-0163	BURLINGTON RES OIL & GAS CO LP		PO BOX 51810	MIDLAND	¥	79710	Delivered	Return Receipt - Electronic	09-05-2018
9314869904300050256574	2018-08-31 9:48 AM	81363-0163	PRINCE F IV		2 WISCONSIN CIR	CHEVY CHASE	Ψ	20815	To be Returned	Return Receipt - Electronic	
9314869904300050256567	2018-08-31 9:48 AM	81363-0163	RANSOME-LOSEE ANNE		3505 CALLE CUERVO #218	ALBUQUERQUE	Σ	87046	Delivered	Return Receipt - Electronic	09-18-2018
9314869904300050256550	2018-08-31 9:48 AM	81363-0163	EOG RESOURCES INC		5509 Champions Drive	Midland	¥	90262	Delivered	Return Receipt - Electronic	09-06-2018
9314869904300050256543	2018-08-31 9:48 AM	81363-0163	DEVON ENERGY PROD CO LP		333 W SHERIDAN AVE	ОКГАНОМА СПУ	ŏ	73102	Delivered	Return Receipt - Electronic	09-04-2018
9314869904300050256536	2018-08-31 9:48 AM	81363-0163	ECHO PROD INC		PO BOX 1210	GRAHAM	¥	76450	Delivered	Return Receipt - Electronic	09-06-2018
9314869904300050256529	2018-08-31 9:48 AM	81363-0163	CONOCO PHILLIPS CO		PO BOX 7500	BARTLESVILLE	ð	74005	Delivered	Return Receipt - Electronic	09-04-2018
9314869904300050256512	2018-08-31 9:48 AM	81363-0163	XTO HOLDINGS LLC		22777 SPRINGWOODS VILLAGE PKWY	SPRING	¥	77389	Delivered	Return Receipt - Electronic	09-04-2018
9314869904300050256505	2018-08-31 9:48 AM	81363-0163	XTO Holdings, LLC		810 Houston Street	Fort Worth	¥	76102	Delivered	Return Receipt - Electronic	09-05-2018
9314869904300050256499	2018-08-31 9:48 AM	81363-0163	Crownrock Minerals, LP		P.O. Box 51933	Midland	¥	79710	Delivered	Return Receipt - Electronic	09-04-2018
9314869904300050256482	2018-08-31 9:48 AM	81363-0163	Sundance Minerals		P.O. Box 17224	Fort Worth	¥	76102	Delivered	Return Receipt - Electronic	09-04-2018
9314869904300050256475	2018-08-31 9:48 AM	81363-0163	The Roach Foundation		100 Throckmorton Street, Suite 480	Fort Worth	ř	76102	Delivered	Return Receipt - Electronic	09-13-2018
9314869904300050256468	2018-08-31 9:48 AM	81363-0163	DCB 1998 Trust, Ben J. Fortson, Jr., Trustee		301 Commerce Street, Suite 3301	Fort Worth	¥	76102	To be Returned	Return Receipt - Electronic	
9314869904300050256451	2018-08-31 9:48 AM	81363-0163	CCB 1998 Trust, Ben J. Fortson, Jr., Trustee		301 Commerce Street, Suite 3301	Fort Worth	ř	76102	To be Returned	Return Receipt - Electronic	
9314869904300050256444	2018-08-31 9:48 AM	81363-0163	MWB 1998 Trust, Ben J. Fortson, Jr., Trustee		301 Commerce Street, Suite 3301	Fort Worth	ř	76102	To be Returned	Return Receipt - Electronic	
9314869904300050256437	2018-08-31 9:48 AM	81363-0163	Robert C. Grable		201 Main Street, Suite 2500	Fort Worth	ř	76102	Delivered	Return Receipt - Electronic	09-04-2018
9314869904300050256420	2018-08-31 9:48 AM	81363-0163	Ben J. Fortson III Children's Trust	, Ben J. Fortson III, Trustee	301 Commerce Street, Suite 3301	Fort Worth	¥	76102	To be Returned	Return Receipt · Electronic	
9314869904300050256413	2018-08-31 9:48 AM	81363-0163	Bill Burton		301 Commerce Street, Suite 3301	Fort Worth	¥	76102	To be Returned	Return Receipt - Electronic	
9314869904300050256406	2018-08-31 9:48 AM	81363-0163	MAPOO-NET, a Texas general partnership		100 Park Avenue, Suite 1007	Oklahoma City	š	73102	Delivered	Return Receipt - Electronic	09-17-2018
9314869904300050256390	2018-08-31 9:48 AM	81363-0163	Kimbell Art Foundation		301 Commerce Street, Suite 2240	Fort Worth	¥	76102	Delivered	Return Receipt - Electronic	09-04-2018
9314869904300050256383	2018-08-31 9:48 AM	81363-0163	Wade S. Anderson		3807 South County Rd. 1135	Midland	¥	90/6/	Mailed	Return Receipt - Electronic	
9314869904300050256376	2018-08-31 9:48 AM	81363-0163	Allan C. Anderson		3807 South County Rd. 1135	Midland	¥	90/6/	Mailed	Return Receipt - Electronic	
9314869904300050256369	2018-08-31 9:48 AM	81363-0163	Curtis A. Anderson		600 W. Illinois, Ste. 701	Midland	×	79701	Delivered	Return Receipt - Electronic	09-05-2018
9314869904300050256352	2018-08-31 9:48 AM	81363-0163	RKI Exploration and Production		210 Park Avenue, Suite 700	Oklahoma City	ĕ	73102	To be Returned	Return Receipt - Electronic	
9314869904300050256345	2018-08-31 9:48 AM	81363-0163	COG Operating LLC		600 West Illinois Ave.	Midland	¥	79701	Delivered	Return Receipt - Electronic	09-05-2018



Karlene Schuman Modrall Sperling Roehl Harris & Sisk P.A. 500 Fourth Street, Suite 1000 Albuquerque NM 87114







Firm Mailing Book ID: 150123

Rest.Del.Fee Contents	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice
Reference	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163
R.R.Fee	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50
Fee	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45
Postage	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63
Name, Street & P.O. Address	COG Operating LLC 600 West Illinois Ave. Midland, TX 79701 Midland TX 79701	RKI Exploration and Production 210 Park Avenue, Suite 700 Oklahoma City, OK 73102 Oklahoma City OK 73102	Curtis A. Anderson 600 W. Illinois, Ste. 701 Midland TX 79701	Allan C. Anderson 3807 South County Rd. 1135 Midland TX 79706	Wade S. Anderson 3807 South County Rd. 1135 Midland TX 79706	Kimbell Art Foundation 301 Commerce Street, Suite 2240 Fort Worth TX 76102	MAP00-NET, a Texas general partnership 100 Park Avenue, Suite 1007 Oklahoma City OK 73102	Bill Burton 301 Commerce Street, Suite 3301 Fort Worth TX 76102	Ben J. Fortson III Children's Trust , Ben J. Fortson III Trustee , Bon J. Fortson III Trustee Street, Suite 3301 Fort Worth TX 76102	Robert C. Grable 201 Main Street, Suite 2500 Fort Worth TX 76102	MWB 1998 Trust, Ben J. Fortson, Jr., Trustee 301 Commerce Street, Suite 3301 Fort Worth TX 76102	CCB 1998 Trust, Ben J. Fortson, Jr., Trustee 301 Commerce Street, Suite 3301 Fort Worth TX 76102	DCB 1998 Trust, Ben J. Fortson, Jr., Trustee 301 Commerce Street, Suite 3301 Fort Worth TX 76102	The Roach Foundation 100 Throckmorton Street, Suite 480 Fort Worth TX 76102
Article Number	9314 8699 0430 0050 2563 45	9314 8699 0430 0050 2563 52	9314 8699 0430 0050 2563 69	9314 8699 0430 0050 2563 76	9314 8699 0430 0050 2563 83	9314 8699 0430 0050 2563 90	9314 8699 0430 0050 2564 06	9314 8699 0430 0050 2564 13	9314 8699 0430 0050 2564 20	9314 8699 0430 0050 2564 37	9314 8699 0430 0050 2564 44	9314 8699 0430 0050 2564 51	9314 8699 0430 0050 2564 68	9314 8699 0430 0050 2564 75
Line	1	7	3	4	\$	9	7	∞	6	10	11	12	13	14



Karlene Schuman Modrall Sperling Rochl Harris & Sisk P.A. 500 Fourth Street, Suite 1000 Albuquerque NM 87114



Firm Mailing Book ID: 150123

Rest.Del.Fee	Contents	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	\$0.00 Notice	80.00	\$177.66
	əo	163	163	163	163	163	163	163	163	163	163	163	163	163		Grand Total:
	Reference	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163	81363-0163		
	R.R.Fee	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$40.50	
	Fee	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$93.15	
	Postage	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$1.63	\$44.01	
1															Totals:	
	Name, Street & P.O. Address	Sundance Minerals I P.O. Box 17224 Fort Worth TX 76102	Crownrock Minerals, LP P.O. Box 51933 Midland TX 79710	XTO Holdings, LLC 810 Houston Street Fort Worth TX 76102	XTO HOLDINGS LLC 22777 SPRINGWOODS VILLAGE PKWY SPRING TX 77389	CONOCO PHILLIPS CO PO BOX 7500 BARTLESVILLE OK 74005	. 71	DEVOILER 333 W SHERIDAN AVE OKLAHOMA CITY OK 73102	EOG RESOURCES INC 5509 Champions Drive Midland TX 79706	RANSOME-LOSEE ANNE 3505 CALLE CUERVO #218 ALBUQUERQUE NM 87046	PRINCE F IV 2 WISCONSIN CIR CHEVY CHASE MD 20815	BURLINGTON RES OIL & GAS CO LP PO BOX 51810 MIDLAND TX 79710	LOSEE ELIZABETH 328 SIERRA PL ALBUOUEROUE NM 87108	TRAINER PARTNERS LTD PO BOX 3788 MIDLAND TX 79702		
	Article Number	9314 8699 0430 0050 2564 82	9314 8699 0430 0050 2564 99	9314 8699 0430 0050 2565 05	9314 8699 0430 0050 2565 12	9314 8699 0430 0050 2565 29	9314 8699 0430 0050 2565 36	9314 8699 0430 0050 2565 43	9314 8699 0430 0050 2565 50	9314 8699 0430 0050 2565 67	9314 8699 0430 0050 2565 74	9314 8699 0430 0050 2565 81	9314 8699 0430 0050 2565 98	9314 8699 0430 0050 2566 04		
	Line	15	16	17	18	19	20	21	22	23	24	25	26	27		

List Number of Pieces Listed by Sender

Dated:

Postmaster: Name of receiving employee

Total Number of Pieces Received at Post Office

Affidavit of Publication

STATE OF NEW MEXICO COUNTY OF LEA

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

> Beginning with the issue dated September 07, 2018 and ending with the issue dated September 07, 2018.

Ministrative Coordinator

Sworn and subscribed to before me this 7th day of September 2018.

Business Manager

My commission expires January 29, 2019



OFFICIAL SEAL **GUSSIE BLACK** Notary Public State of New Mexico

My Commission Expires 1-29

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

LEGAL NOTICE September 7, 2018

CASE No. 16418; Notice to all affected parties, as well as the heirs and devisees of COG Operating LLCI; RKI Exploration and Production; Curtis A. Anderson; Allan C. Anderson; Wade S. Anderson; Kimbell Art Foundation; MAPOO-NET, a Texas general 1998 Trust; Ben J. Fortson, Jr., Trustee; CB 1998 Trust; Ben J. Fortson, Jr., Trustee; CB 1998 Trust; Ben J. Fortson, Jr., Trustee; CB 1998 Trust; Ben J. Fortson, Jr., Trustee; The Roach Foundation; LLC; CONOCO PHILLIPS CO. ECHO PROD INC; DEVON ENERGY PROD CO LP. EOG GAS CO LP; LOSEE ELIZABETH; and TRAINER PARTINERS LTD of Marethon Oil and compulsory pooling, Lea County, New Mexico. The State of New Mexico, through hearing at 8:15 a.m. on September 20, 2018, to consider this application, Applicant seeks and computed the Division: approving the creation of a non-standard spacing and proration unit and pooling all uncommitted mineral interests within a Bone Spring honzontal spacing unit underlying the W/z W/z of Section 14. Township 22 South, Hange 32 East. NMPM, Lea County, New Mexico, The State of the Ramathon Federal Com 22 32 14 FB 174 and Ramathon Federal Com 22 32 14 FB 22H wells, to be considered will be the cost of drilling and completing said wells, the allocation of these Marathon as operator of the wells, and a 200% charge for supervision, designation of wells, and allowing a one-year period between when the wells are drilled and when the first well is completed. Said area is located approximately 26 miles northwest of Loving, New Mexico.

CASE No. 16419: Notice to all affected parties, as well as the heirs and devisees of COG Operating LLCI; RNI Exploration and Production; Curifs A. Anderson; Allan C. Anderson; Wade S. Anderson; Kimbell Ar. Foundation; MAPOUNET, a Texas general 1998 Trust, Ben J. Fortson, Jr., Trustee; CCB 1998 Trust, Ben J. Fortson, Jr., Sundance Minerals; LC Cownrock Minerals, LP; XTO Holdings, LLC; XTO Holdings, LLC; XTO HOLDINGS RESOURCES INC. RANSOME LOSEE ANNE; PRINCE F IV. BURLINGTON RES OIL A. Permian LLC: a amended application for a non-standard specing and proration unit its Oil Conservation Division, nereby gives notice that the Division well conduct a public arr order from the Division, nereby gives notice that the Division Applicant seeks unit and pooling all uncommitted mineral interests within a Bone Spring horzontal specing unit underlying the Erz W/2 of Section 14. Township 22 South, Range 32 East, NMPM, Lea 22.32 14 58 8H well, to be horzontally ortilled. The producing area for this well will be allocation of these costs of drilling and completing said well, the election of the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, drilling said well, and allowing a one year pence deliverent when the well is drilled and when the well is completed. Said area is located approximately 26 miles northwest of Loving.

CASE No. 16420: Notice to all affected parties, as well as the fielts and devisees of GOG Operating LLCI: RKI Exploration and Production: Curtis A. Anderson; Allan C. Anderson; Wade S. Anderson; Kimbell Art Foundation; MAPOO NET, a Texas general partnership; Blit Burton; Ben J. Fortson III Children's Trust; Robert C. Grable; MWB Trust, Ben J. Fortson, Jr., Trustee; CCB 1998 Trust, Ben J. Fortson, Jr., Trustee; DCB 1998 Trust, Ben J. Fortson, Jr., Trustee; The Roach Foundation; L.C. CONOCO PHILLIPS CO: ECHO PROD INC; DEVON ENERGY PROD CO LP: FOG GAS CO LP; LOSEE ELIZABETH; and TRAINER PARTNERS L.TD of Marsthon oil and compulsory gooling, Lea County, New Mexico. The State of New Mexico through the aring at 8:15 a.m. on September 20, 2018, to consider this application. Applicant seeks unit and pooling all procommitted mineral interests within a Wolfcamp herizontal specing county, New Mexico, The State of New Mexico, This spacing unit underlying the W2 of Section 14. Township 22 South, Range 32 East, NMPIM, Lea 22:32:14 WA 2H and Ramathorn Federal Com 22:32:14 WX 7H wells, to be horizontally the cost of drilling and completing said wells, the allocation of Marathon as operation of year period between when the wells and eloyed for risk involved in drilling said wells, and allowing a one area is located approximately 26 miles northwest of Loving, New Mexico.

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