Examiner Hearing November 16, 2018 Before the Oil Conservation Division

Case Numbers 20058 and 20059

Mammoth Fed Com 26 34 1 TB 1H and Mammoth Fed Com 26 34 1 TB 10H



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

APPLICATION OF MARATHON
OIL PERMIAN LLC FOR APPROVAL
OF A SPACING UNIT AND COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO.

CASE	NO.	
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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 Bone Spring spacing unit; and (2) pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the W/2 W/2 of Section 1, Township 26 South, Range 34 East, and W/2 W/2 Section 36, Township 25 South, Range 34 East, N.M.P.M., Lea County, New Mexico. In support of this application, Marathon states as follows:

- 1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
- 2. Marathon seeks to dedicate the W/2 W/2 of Section 1, Township 26 South, Range 34 East, and W/2 W/2 Section 36, Township 25 South, Range 34 East, N.M.P.M., Lea County, New Mexico to form a 320-acre, more or less, spacing unit.
- 3. Marathon plans to drill the **Mammoth Fed Com 26 34 1 TB 1H** well to a depth sufficient to test the Bone Spring formation. This well will be horizontally drilled.
 - This well 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 well or to otherwise commit their interests to the well.
- 6. The creation of a spacing 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 November 15, 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 spacing unit;
- B. Pooling all mineral interests in the Bone Spring formation underlying a horizontal spacing unit underlying the W/2 W/2 of Section 1, Township 26 South, Range 34 East, and W/2 W/2 Section 36, Township 25 South, Range 34 East, N.M.P.M., Lea County, New Mexico;
- C. Designating Marathon as operator of this unit and the well to be drilled thereon;
- D. Authorizing Marathon to recover its costs of drilling, equipping and completing this well;
- 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 well in the event a working interest owner elects not to participate in the well.
- G. Allowing a time 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.

By: Welka M. Bennett 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. ________: Application of Marathon Oil Permian LLC for a spacing and 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 Bone Spring spacing unit; and (2) pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the W/2 W/2 of Section 1, Township 26 South, Range 34 East, and W/2 W/2 Section 36, Township 25 South, Range 34 East, N.M.P.M., Lea County, New Mexico. This proposed spacing unit will be dedicated to the Mammoth Fed Com 26 34 1 TB 1H well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 14 miles west south west of Jal, New Mexico.

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

APPLICATION OF MARATHON
OIL PERMIAN LLC FOR APPROVAL
OF A SPACING UNIT AND COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO.

CASE NO.	
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- 3. Marathon plans to drill the **Mammoth Fed Com 26 34 1 TB 10H** well to a depth sufficient to test the Bone Spring formation. This well will be horizontally drilled.
 - 4. This well 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 well or to otherwise commit their interests to the well.
- 6. The creation of a spacing 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.
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- B. Pooling all mineral interests in the Bone Spring formation underlying a horizontal spacing unit underlying the E/2 W/2 of Section 1, Township 26 South, Range 34 East, and E/2 W/2 Section 36, Township 25 South, Range 34 East, N.M.P.M., Lea County, New Mexico;
- C. Designating Marathon as operator of this unit and the well to be drilled thereon;
- D. Authorizing Marathon to recover its costs of drilling, equipping and completing this well;
- 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 well in the event a working interest owner elects not to participate in the well.
- G. Allowing a time 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

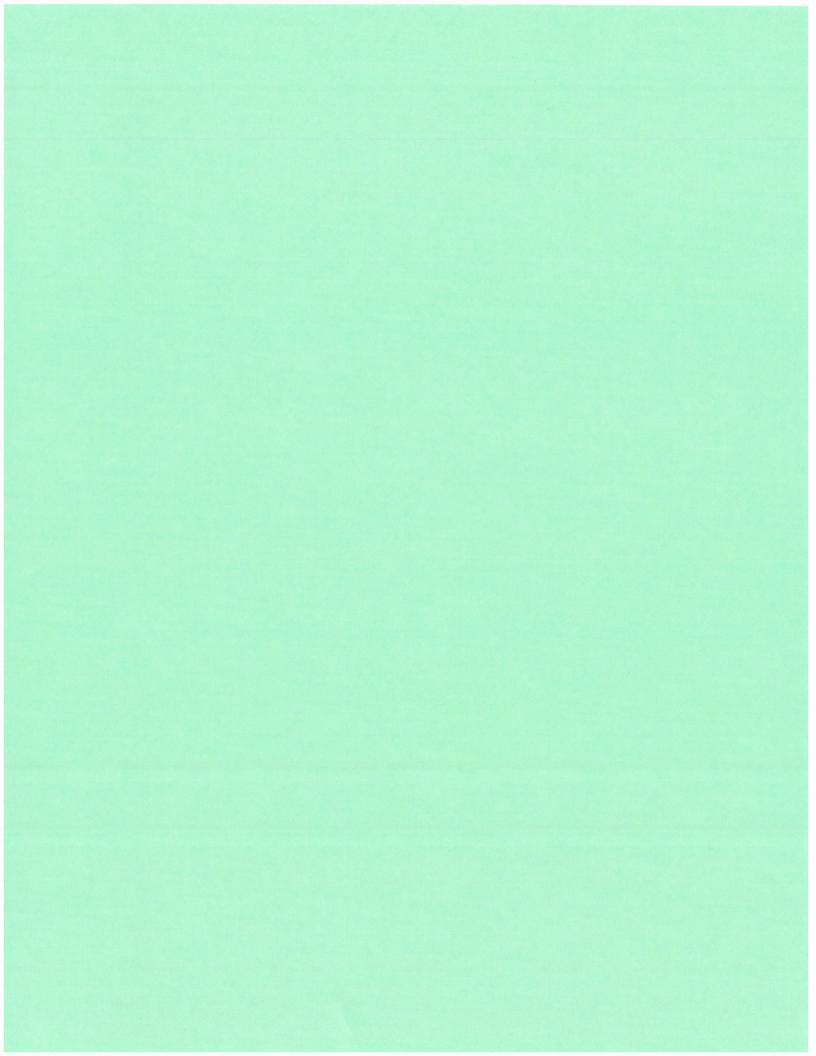
Deana M. Bennett

Post Office Box 2168

500 Fourth Street NW, Suite 1000

Albuquerque, New Mexico 87103-2168

Telephone: 505.848.1800 Attorneys for Applicant



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

APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL OF A SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 20058

APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL OF A SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 20059

	<u>AFFIDAVIT</u>
STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

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 working interest owners into the horizontal spacing units described below, and in the wells to be drilled in the units.
- 4. No opposition is expected because the interest owners being pooled have been contacted regarding the proposed wells, but have failed or refused to voluntarily commit their interests in the wells.

EXHIBIT 1

- 5. In Case No. 20058, Marathon seeks an order pooling all mineral interests in a Bone Spring spacing unit underlying the W/2 W/2 of Section 1, Township 26 South, Range 34 East, and W/2 W/2 Section 36, Township 25 South, Range 34 East, N.M.P.M., Lea County, New Mexico. This proposed spacing unit will be dedicated to the **Mammoth Fed Com 26 34 1 TB 1H** well, to be horizontally drilled.
- 6. In Case No. 20059, Marathon seeks an order pooling all mineral interests in a Bone Spring spacing unit underlying the E/2 W/2 of Section 1, Township 26 South, Range 34 East, and E/2 W/2 Section 36, Township 25 South, Range 34 East, N.M.P.M., Lea County, New Mexico. This proposed spacing unit will be dedicated to the **Mammoth Fed Com 26 34 1 TB 10H** well, to be horizontally drilled.
- 7. Plats outlining the units being pooled are attached hereto as **Exhibit A**. 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.
 - 8. There are no depth severances within the Bone Spring formation.
- 9. I have conducted a diligent search of the public records in the county where the wells are located, and conducted phone directory and computer searches to locate contact information for parties entitled to notification, and mailed all parties well proposals, including an Authorization for Expenditure.
- 10. In my opinion, Marathon has made a good faith effort to obtain voluntary joinder of the working interest owners in the proposed wells. A summary of my attempts to contact working interest owners is attached as **Exhibit B**.

11. Attached as **Exhibit C** are proposed C-102s for the wells. The wells will develop the WC-025 G-08 S2535340 Bone Spring pool, pool code 97088, which is an oil pool.

12. The producing interval for the wells will be orthodox and will comply with the Division's set back requirements.

13. **Exhibits D and E** 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.

14. 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.

15. Marathon requests the maximum cost plus 200% risk charge be assessed against non-consenting working interest owners.

- 16. Marathon requests that it be designated operator of the wells.
- 17. The attachments to this affidavit were prepared by me, or compiled from company business
- 18. I attest that the information provided herein is correct and complete to the best of my knowledge and belief.
- 19. The granting of this application is in the interests of conservation and the prevention of waste.

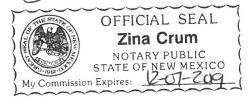
Ryan Gyllenband

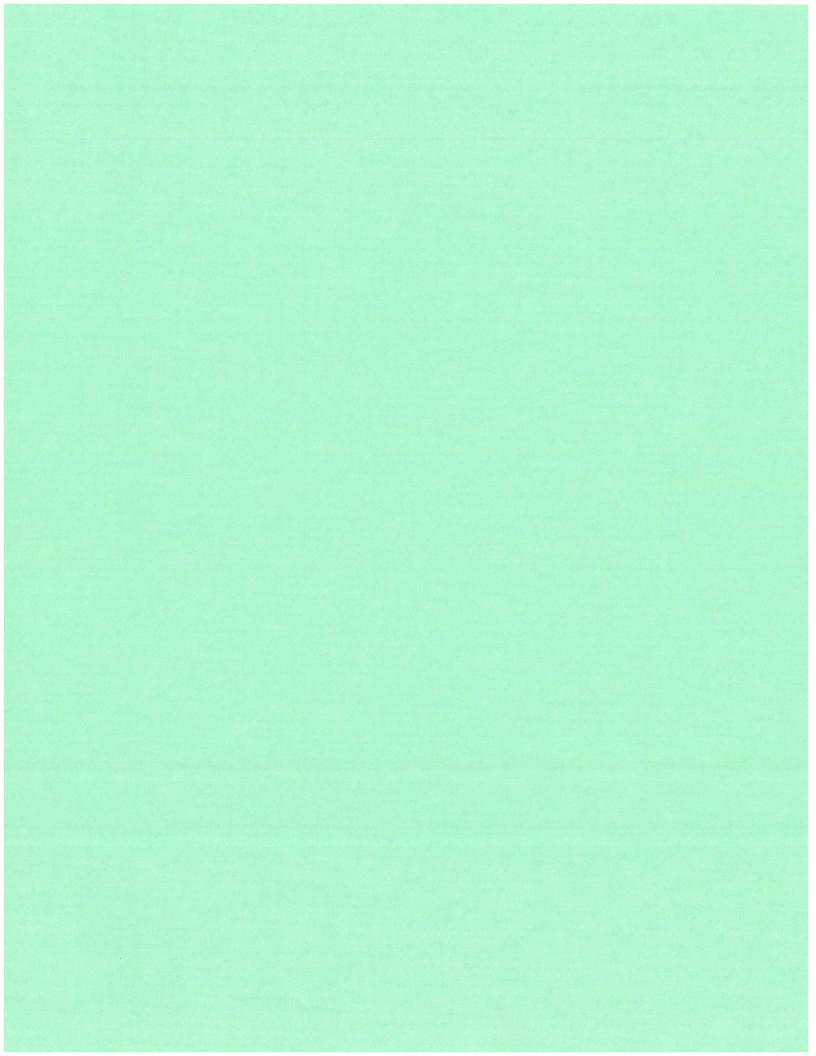
SUBSCRIBED AND SWORN to before me this 14th day of November, 2018 by Ryan

Gyllenband on behalf of Marathon Oil Permian LLC.

Notary/Public

My commission expires: 12-07-2019





W/2 W/2 of Section 36, 25S-34E, and W/2 W/2 of Section 1, 26S-34E - 320 acres Lease Tract Map Mammoth Fed Com 26 34 1 TB 1H

Tract 1: State Acreage Tract 2: State Acreage Tract 3: Fed Acreage

25S-35E		9	26S-35E
	9		
Tract 1	Tract 2	Tract 3	
25S-34E	£0 √0	~	26S-34E



MarathonOil

W/2 W/2 of Section 36, 25S-34E, and W/2 W/2 of Section 1, 26S-34E - 320 acres Summary of Interests Mammoth Fed Com 26 34 1 TB 1H

Committed Working Interest: Marathon Oil Permian LLC OXY USA Inc.

<u>Uncommitted Working Interest:</u> EOG Resources, Inc.

75.000000%

62.500000% 12.500000%

25.000000%

25.0000000%



0 acres Lease Tract Map Mammoth Fed Com 26 34 1 TB 10H

E/2 W/2 of Section 36, 25S-34E, and E/2 W/2 of Section 1, 26S-34E – 320	Tract 1
36, 25	
E/2 W/2 of Section 36, 25S-34E, and	Tract 1: State Acreage Tract 2: State Acreage Tract 3: Fed Acreage

	MarathonOil
25S-35E	6 26S-35E
Tract 1 Tract 2	Tract 3
25S-34E	2 26S-34E
9 0 0 0	

E/2 W/2 of Section 36, 25S-34E, and E/2 W/2 of Section 1, 26S-34E - 320 acres Summary of Interests Mammoth Fed Com 26 34 1 TB 10H

62.500000%	37.500000%
50.000000% 12.50000%	37.500000%
Committed Working Interest: Marathon Oil Permian LLC OXY USA Inc.	Uncommitted Working Interest: EOG Resources, Inc.



Force Pooled Owners		Type	diZ	State	City Midland	Force Pooled Owners Address 1 5509 Champions Drive	Owner Name EOG Resources, Inc.
iss 1 City State Zip T Champions Drive Midland TX 79706 Mill	City State Zip T Midland TX 79706 WI		2010	* -)	
City State Zip T	City State Zip T	1/4/1	90797	XL	Midland	Champions D	EOG Resources, Inc.
	Force Pooled Owners	Туре	Zip	State	City	Address 1	Owner Name

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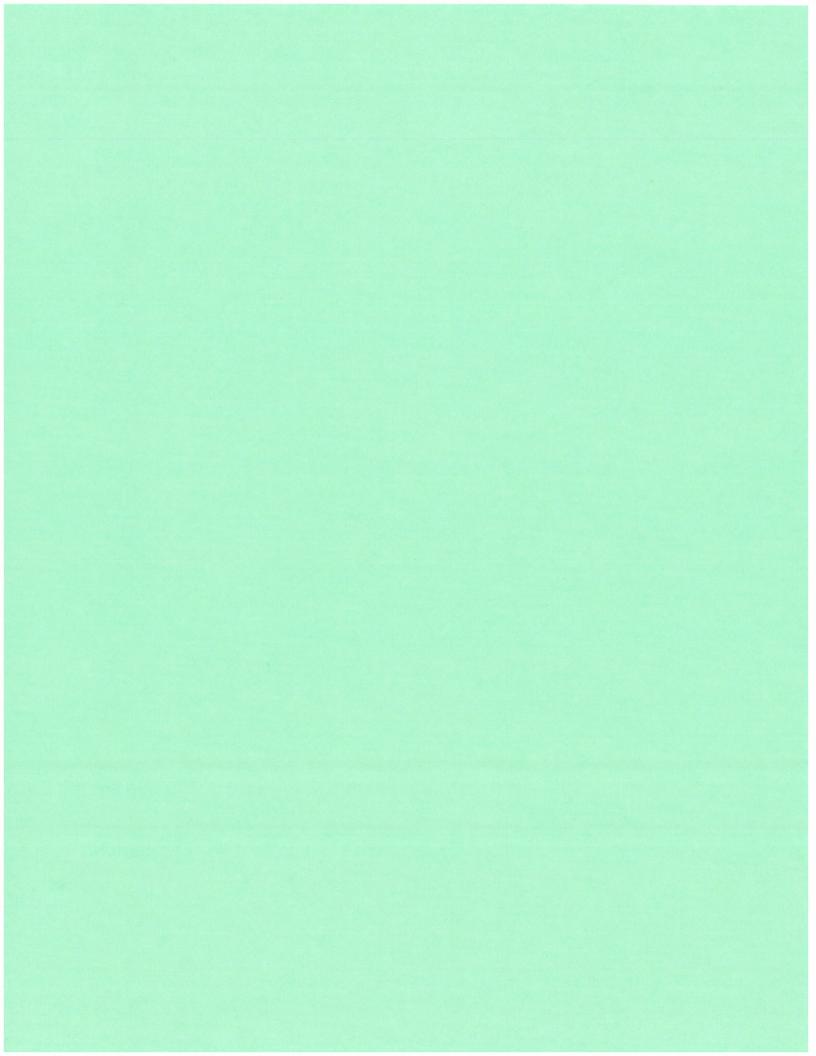
	UKKIS				
Owner Name	Address 1	City	State	Zip	Type
OXY USA Inc.	5 E Greenway Plaza #110	Houston	XT	77046 ORRI	ORRI
Post Oak Crown IV, LLC	34 S. Wynden Dr., Suite 300	Houston	X	77056 ORRI	ORRI
Post Oak Crown IV-B, LLC	34 S. Wynden Dr., Suite 300	Houston	X	77056 ORRI	ORRI
Crown Oil Partners, LP	P.O. Box 50820	Midland	X	79710 ORRI	ORRI
Crown Ventures III, LLC	P.O. Box 50820	Midland	X	79710 ORRI	ORRI
Crown Oil Partners IV Employee Holdings, LLC	P.O. Box 50820	Midland	X	79710 ORRI	ORRI
CEP Minerals LLC	P.O. Box 50820	Midland	X	79710 ORRI	ORRI
Oak Valley Mineral and Land LP	P.O. Box 50820	Midland	X	79710 ORRI	ORRI
Good News Minerals LLC	P.O. Box 50820	Midland	XT	79710 ORRI	ORRI
Mavros Minerals II LLC	P.O. Box 50820	Midland	X	79710 ORRI	ORRI
Mike Moylett	P.O. Box 50820	Midland	TX	79710 ORRI	ORRI
Collins & Jones Investments, LLC	508 W. Wall Street, Suite 1200	Midland	XL	79701 ORRI	ORRI
LMC Energy	550 W Texas Ave., Suite 945	Midland	XT	79701 ORR	ORRI
Gerard G. Vavrek	1521 2nd Ave. NO 1604	Seattle	WA	98101 ORRI	ORRI
Jesse A. Faught, Jr.	P.O. Box 52603	Midland	XX	79710 ORRI	ORRI
H. Jason Wacker, Hillcrest Petroleum LLC	5601 Hillcrest	Midland	TX	79707 ORR	ORRI
David M. Cromwell	2008 Country Club Drive	Midland	XT	79701 ORRI	ORRI
Zunis Energy, LLC	15 E 5th Street, Suite 3300	Tulsa	OK	74103 ORR	ORRI
James F. Adelson, Trustee of the Jame F. Adelson Revocable Trust	15 E 5th Street, Suite 3300	Tulsa	OK	74103 ORRI	ORRI
Kaleb Smith	2501 Lubbock Ave.	Fort Worth	XX	76109 ORR	ORRI
Deane Durham	3603 Trinity Meadows PI.	Midland	TX	79707 ORRI	ORRI
Oscura Resources Inc.	P.O. Box 2292	Roswell	NM	88202 ORRI	ORRI
Branex Resources, Inc.	P.O. Box 2990	Ruidoso	NM	88355 ORRI	ORRI
EMG Oil Properties, Inc.	1000 W. Fourth Street	Roswell	NM	88201 ORRI	ORRI
Tierra Royalties, LLC	2929 Allen Parkway, Suite 200	Houston	TX	77019 ORRI	ORRI
C. Fred Luthy, Jr., Registered Agent for Pennies from Heaven, LLC	P.O. Box 830308	Dallas	TX	75283 ORRI	ORRI
Cyrene L. Inman, Successor Trustee of the Cyrene L. Inman Trust	P.O. Box 830308	Dallas	TX	75283 ORRI	ORRI

Offsets

	Ollacta				
Owner Name	Address 1	City	State Zip	Zip	Type
Devon Energy Production Co. LP	333 W Sheridan Ave.	Oklahoma City	OK	73102	73102 Lesse of Record
Devon Energy Operating Co. LP	20 N Broadway #1500	Oklahoma City	OK V	72102	72102 Lesse of Record
EOG M Resources, Inc.	5509 Champions Drive	Midland	XL	90262	79706 Lesse of Record
EOG A Resources, Inc.	5509 Champions Drive	Midland	XL	190262	79706 Lesse of Record

EOG Y Resources, Inc.	5509 Champions Drive	Midland	XT	79706 Lesse of Record
Chevron USA Inc.	6301 Deauville	Midland	XL	79706 Lesse of Record

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Summary of Attempted Contacts

- Marathon sent well proposal letters on September 5, 2018.
- Marathon hen 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 also published notice in a newspaper of general circulation in the county where the well will be located.



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

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

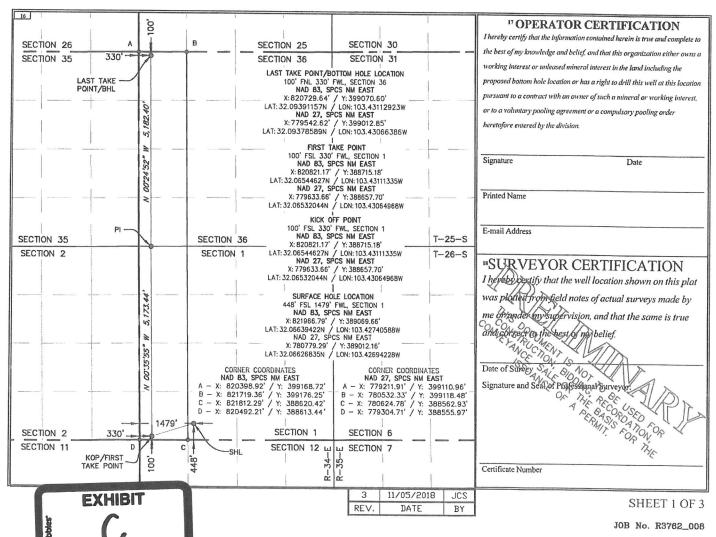
¹ API Numbe	er	² Pool Code	³ Pool N	³ Pool Name	
		97088	WC-025 G-08 S253	5340; BONE SPRII	NG
⁴ Property Code		⁵ Pr	operty Name	⁶ Well Num	ber
		MAMMOTH FED	COM 26-34-1 TB	1 H	
⁷ ogrid n₀. 372098		and the same of th	perator Name OIL PERMIAN LLC	⁹ Elevation 3281	

¹⁰ Surface Location

UL or lot no.	Section 1	Township 26S	Range 34E	Lot Idn	Feet from the	North/South line SOUTH	Feet from the 1479	East/West line WEST	County 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
D	36	25S	34E		100	NORTH	330	WEST	LEA
12 Dedicated Acres	13 Joint or	r Infill 14 (Consolidation (Code 15 Or	der No.				
320.00									
		,							

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.



District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
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Phone: (505) 476-3460 Fax: (505) 476-3462

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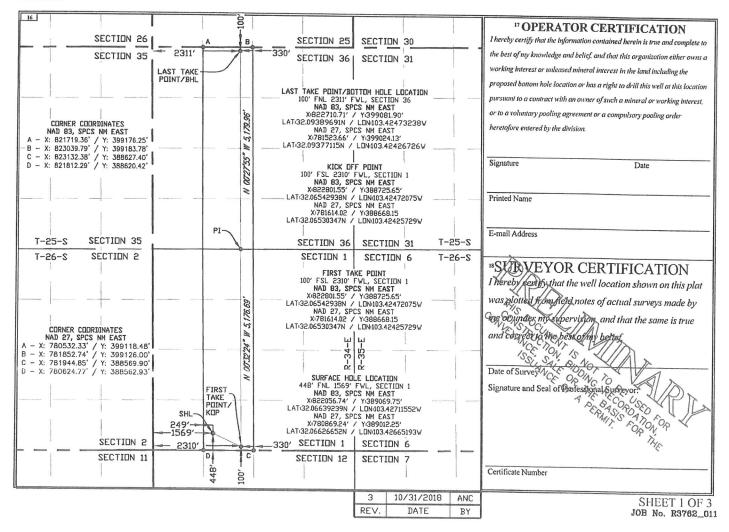
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

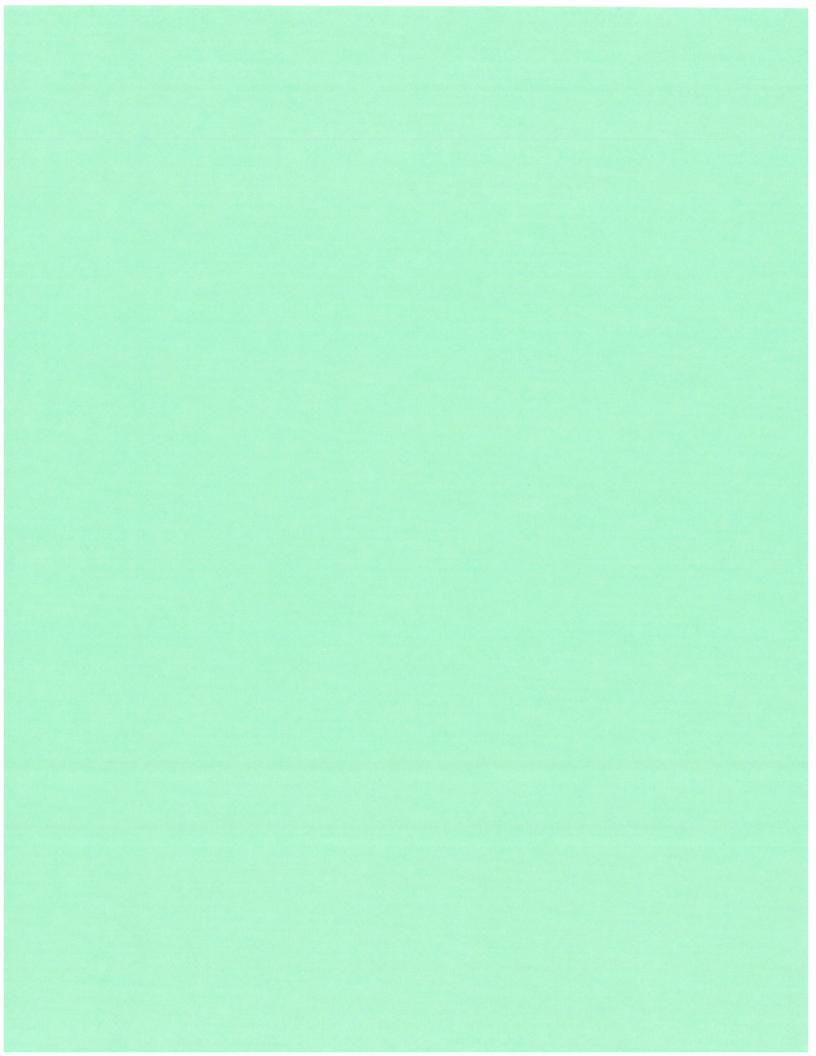
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number			1	² Pool	15-060017080				ool Name			
				97088 WC-025 G-08 S2535340; E				BONE	SPRING			
⁴ Property Code			⁵ Property Name								⁶ Well Number	
				MAMM	OTH FED	COM	26 - 34 - 1	TB		10H		
OGRID N					8 Op	erator Na	me				9 Elevation	
37209	8			MA	ARATHON	OIL P	ERMIAN LLO	2		3281°		
											0201	
	Surface Location Surface Location											
UL or lot no.	Section			e Lot	Idn Feet fr	om the	North/South line	Feet fro	n the Eas	st/West line	County	
N	1	26S	34E		448		SOUTH	156	9 WE	ST	LEA	
			"E	ottom I	Hole Locati	on If I	Different Fron	n Surface				
UL or lot no.	Section	Township				om the	North/South line			st/West line	County	
С	36	25S	34E		100		NORTH	231	1		LEA	
12 Dedicated Acres	13 Joint or	r Infill	14 Consolidatio	n Code	⁵ Order No.							
320.00												

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Ryan Gyllenband Land Professional



Marathon Oil Permian LLC

5555 San Felipe Street Houston, TX 77056 Telephone: 713.296.2453

Telephone: 713.296.2453 Mobile: 281.684.7389

Fax: 713.513.4006

mrgyllenband@marathonoil.com

September 5, 2018

VIA CERTIFIED RETURN RECEIPT MAIL

EOG Resources, Inc. 5509 Champions Drive Midland, TX 79706

Re: Mammoth Federal 1H, 2H, 7H, 10H & 11H Well Proposals

Section 1, T26S-R34E & Section 36, T25S-R34E

Lea County, New Mexico

Dear EOG Resources, Inc.:

Marathon Oil Permian LLC ("MRO") proposes the drilling of the following wells located in Section 1, 26S-34E, and Section 36, 25S-34E, Lea County, New Mexico to be drilled from the same pad location.

- Mammoth Federal Com 26 34 1 TB 1H with a proposed first take point located 330' FWL and 100' FSL of Section 1, T26S-R34E and a proposed last take point located 330' FWL and 100' FNL of Section 36, T25S-R34E. The well will have a targeted interval located in the Bone Spring Formation (~12,495' TVD) with an estimated treated lateral length of 10,249'. The total estimated drilling and completion cost is \$10,428,194 as shown in the attached AFE.
- Mammoth Federal Com 26 34 1 WA 2H with a proposed first take point located 330' FWL and 100' FSL of Section 1, T26S-R34E and a proposed last take point located 330' FWL and 100' FNL of Section 36, T25S-R34E. The well will have a targeted interval located in the Wolfcamp Formation (~12,738' TVD) with an estimated treated lateral length of 10,249'. The total estimated drilling and completion cost is \$10,432,434 as shown in the attached AFE.
- Mammoth Federal Com 26 34 1 WXY 7H with a proposed first take point located 1,320' FWL and 100' FSL of Section 1, T26S-R34E and a proposed last take point located 1,320' FWL and 100' FNL of Section 36, T25S-R34E. The well will have a targeted interval located in the Wolfcamp Formation (~12,616 TVD) with an estimated treated lateral length of 10,251. The total estimated drilling and completion cost is \$10,429,254 as shown in the attached AFE.
- Mammoth Federal Com 26 34 1 TB 10H with a proposed first take point located 2,310' FWL and 100' FSL of Section 1, T26S-R34E and a proposed last take point located 2,310 FWL and 100' FNL of Section 36, T25S-R34E. The well will have a targeted interval located in the Wolfcamp Formation (~12,495' TVD) with an estimated treated lateral length of 10,253. The total estimated drilling and completion cost is \$10,427,134 as shown in the attached AFE.
- Mammoth Federal Com 26 34 1 WA 11H with a proposed first take point located 2,310' FWL and 100' FSL of Section 1, T26S-R34E and a proposed last take point located 2,310 FWL and 100' FNL of Section 36, T25S-R34E. The well will have a targeted interval located in the Wolfcamp Formation (~12,616' TVD) with an estimated treated lateral length of 10,253. The total estimated drilling and completion cost is \$10,429,254 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 W/2 of Section 1, 26S-34E and W/2 of Section 36, 25S-34E covering all depths

Our title records show that you own 31.25% 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:

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

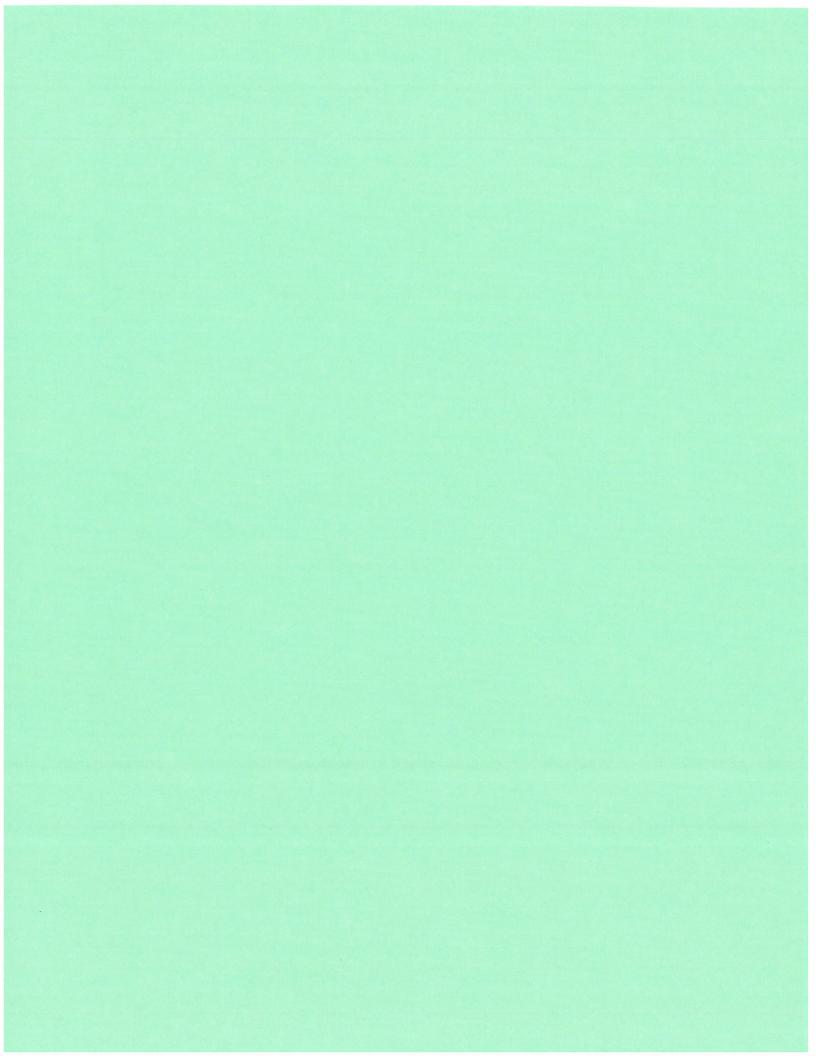
Should you have any questions regarding this or other matters, please don't hesitate to contact me at the above listed numbers.

Sincerely,

Ryan Gyllenband

Mammoth Federal 1H, 2H, 7H, 10H, & 11H

Mammoth Federal Com 26 34 1 TB 1H
elects to participate in the drilling, completing, and equipping of the aforementioned well.
elects NOT to participate in the drilling, completing, and equipping of the aforementioned well.
Mammoth Federal Com 26 34 1 WA 2H
elects to participate in the drilling, completing, and equipping of the aforementioned weil.
elects NOT to participate in the drilling, completing, and equipping of the aforementioned well.
Mammoth Federal Com 26 34 1 WXY 7H
elects to participate in the drilling, completing, and equipping of the aforementioned well.
elects NOT to participate in the drilling, completing, and equipping of the aforementioned well.
Mammoth Federal Com 26 34 1 TB 10H
elects to participate in the drilling, completing, and equipping of the aforementioned well.
elects NOT to participate in the drilling, completing, and equipping of the aforementioned well.
Mammoth Federal Com 26 34 1 WA 11H
elects to participate in the drilling, completing, and equipping of the aforementioned well.
elects NOT to participate in the drilling, completing, and equipping of the aforementioned well.
EOG Resources, Inc.
EOG Resources, Inc.
By:
Print Name:
Title:



MARATHON OIL PERMIAN LLC AUTHORITY FOR EXPENDITURE DETAIL OF ESTIMATED WELL COSTS DATE 6/27/2018

DRILLING & LOCATION PREPARED BY MATTHEW RUGAARD

COMPLETION PREPARED BY JOSH SHANNON

FACILITIES PREPARED BY MATT HENSCHEN

ARTIFICIAL LIFT PREPARED BY BILLY MOORE

Asset Team	PERMIAN	
Field	WC-025 G-08 S2535 FORMATION: 3 BONE SPRINGS WILDCAT	EXPLORATION
Lease/Facility	MAMMOTH FEDERAL COM 26 34 1 TB 1H DEVELOPMENT	_ RECOMPLETION
Location	LEA COUNTY X EXPLOITATION	WORKOVER
Prospect	RED HILLS	_ WORKOVER
Est Total Depth	23,053 Est Drilling Days 28.8 Est Completion Days	5 11
LOCATION COST		
GL CODE	DESCRIPTION	
7001270	DESCRIPTION Location and Access	ESTIMATED COS
7001250	Land Broker Fees and Services	30,0
	Carro States Feed did Sciences	30,0
	TOTAL LOCATION COST - INTANGIBLE	60,00
DRILLING COST -	TANGIBLE	
7012050	Conductor Pipe	
7012050	Surface Casing	28,0
7012050	Intermediate Casing 1	17,0
7012050		147,00
7012050	Intermediate Casing 2	
	Production Casing	347,00
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	10,00
7012550	Drilling Wellhead Equipment	50,00
7012040	Casing & Tubing Access	24,00
7012270	Miscellaneous MRO Materials	5,00
	TOTAL DRILLING - TANGIBLE	
DRILLING COST		628,00
ORILLING COST -	NIANGIBLE	
7019200	Drilling Rig Mob/Demob	27,00
7019220	Drilling Rig - day work/footage	
7019040	Directional Drilling Services	648,00
7019020	Cement and Cementing Service Surface	252,50
7019020	Cement and Cementing Service Intermediate 1	15,00
7019020	Comments 16	25,00
7019020		
7019140		140,00
7012310	Mud Fluids & Services	73,00
	Solids Control equipment	52,00
7012020	Bits	70,00
7019010	Casing Crew and Services	
7016350	Fuel (Rig)	30,00
7019140	Fuel (Mud)	89,00
7001460	Water (non potable)	18,00
7019000	Well Logging Services	25,00
7019150	Mud Logging+geosteering	
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	25,000
7019110		15,000
	Casing inspection/cleaning	15,000
7019110	Drill pipe/collar inspection services	10,000
7016180	Freight - truck	25,000
7001460	Water hauling and disposal (includes soil farming)	
7001440	Vacuum Trucks	60,000
7000030	Contract Labor - general	10,000
7018150	Rental Tools and Equipment (surface rentals)	30,000
7018150	Rig Equipment and Misc.	115,200
7001110	Telecommunications Services	14,400
7001120	Consulting Services	5,000
7001400		135,360
7018120	Safety and Environmental	46,080
	Rental Buildings (trailers)	23,040
7019310	Coring (sidewalls & analysis)	
7011010	8% Contingency & Taxes	165,239
	TOTAL DRILLING - INTANGIBLE	\$2,158,819
	TOTAL DRILLING COST	ća 200 c : -
MPLETION - TAI	_	\$2,786,819
7012580		
7012040	Tubing	75,000
	Tubing Accessories (nipple, wireline entry)	15,000
7012550 7012560	Wellhead Equip	20,000
	Packers - Completion Equipment	60,000
	TOTAL COMPLETION - TANGIBLE	\$170,000
ARATHON OIL PERM	IAN LLC	c (on (o
THORITY FOR EXPE	DATE	6/27/2018
TAIL OF ESTIMATED		
set Team	PERMIAN	
ld	WC-025 G-08 S2535 FORMATION: 3 BONE SPRINGS	E

EXT

MAMMOTH FEDERAL COM 26 34 1 TB 1H

Lease/Facility

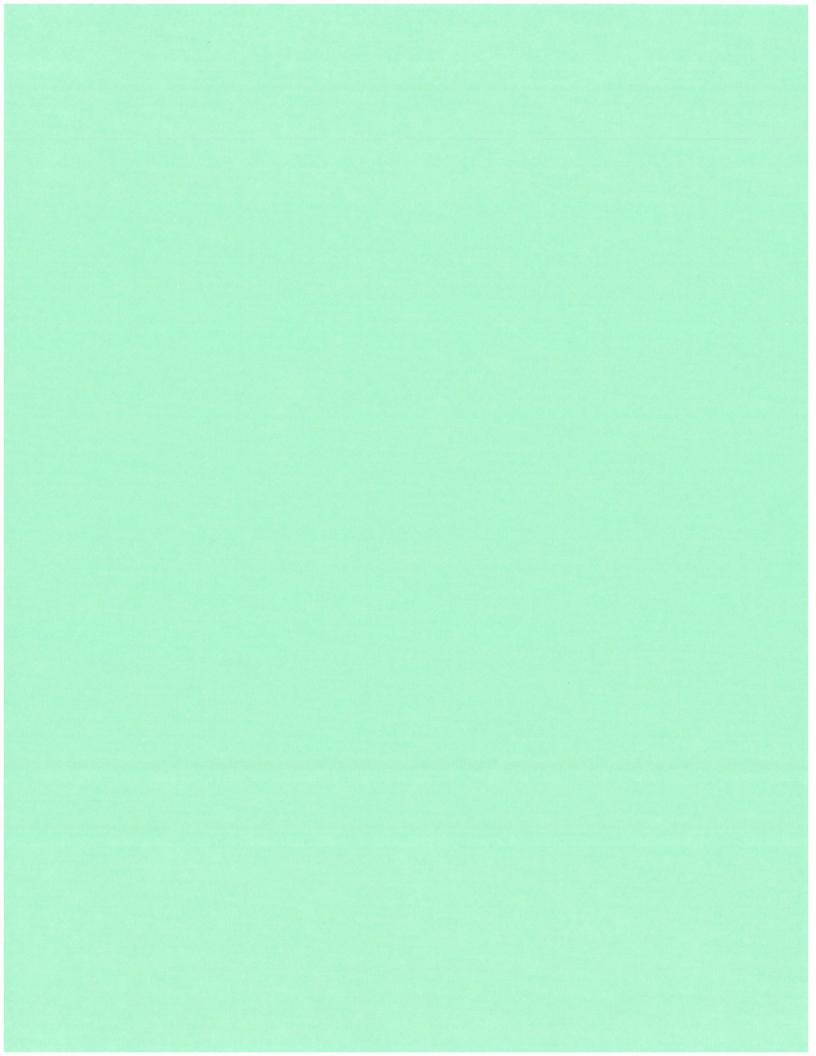
GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	
7019220	Drilling Rig During Completion	20,000
7019140	Mud Fluids & Services	80,000
7019030	Coiled Tubing Services (3 runs)	240.000
7019240	Snubbing Services	240,000
7019270	Pulling/Swab Units	
7016350	Fuel (from drlg)	-
7019010	Casing Crew and Services	
7019020	Cement and Cementing Services	
7019080	Well Testing Services (flow hand & equip)	
7019320	Fracturing Services	195,000
7019330	Perforating	3,850,000
7019360	Wireline Services	300,000
7001460	Water Hauling & Disposal (frac fluids)	10,000
7016180	Freight - Truck (haul pipe; drlg & compl)	600,000
7018150	BOP Rental & Testing	15,000
7018150	Rental Tools and Equipment (incl drig; lightplant,hydra-walk)	· ·
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	
7000030	Contract Labor - general	-
7001110	Telecommunications Services	50,000
7001400	Safety and Environmental	130,000
7001120	Consulting Services	
7018150	Zipper Manifold	60,000
7019300	Frack Stack Rentals	165,000
7016190		70,000
7018150	Freight (Transportation Services)	
7018120	Equipment Rental (w/o operator, frac tanks, lightplants)	140,000
7000030	Rental Buildings (trailers)	60,000
7011010	Contract Labor - Pumping (pump-down pumps)	120,000
	8% Contingency & Taxes	426,800
т	DTAL COMPLETION - INTANGIBLE	
		\$6,531,800
1	OTAL COMPLETION COST	\$6,701,800
SURFACE EQUIPMEN	- TANGIBLE	
7012350	Misc. Piping, Fittings & Valves	
7006640	Company Labor & Burden	85,794
7000030	Contract Labor - General	<u> </u>
7001110	Telecommunication equip (Telemetry)	67,540
7012410	Line Pipe & Accessories	
7012270	Miscellaneous Materials (containment system)	26,786
7008060	SCADA	43,227
7016180	Freight - truck	
7001190	Contract Engineering	
7012290	Metering and Instrumentation	29,116
7012290		235,914
	I&E Materials	
7012200	Gas Treating	
7012200	Dehydration	
7012010	Compressor	
7012350	Power	
7012610	Vapor Recovery Unit	
7012440	Separator & other pressure vessels	85,919
7012500	Tanks	144,894
7012100	Heater Treater	17.330
7012640	Flare & Accessories	
7000010	Electrical Labor	11,646
7000010	Mechanical Labor	29,116
7012480	Rod Pumping unit & Pad	
7012180	Pumping Unit Engine	<u>-</u>
7012350	Electrical Power (electrical cooperative construction costs)	·
		23,293
то	TAL SURFACE EQUIPMENT - TANGIBLE	\$800,575
TO	TAL SURFACE EQUIPMENT COST	\$ 800,575
ARTIFICIAL LIFT		
	Company Labor	
7006640		2,500
7006640 7012180		
	Gas Lift Equipment	38,000
7012180	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump	
7012180 7012480	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP)	38,000
7012180 7012480 7012140	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services	38,000 - - - 20,000
7012180 7012480 7012140 7019350	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible	38,000 - - 20,000 13,000
7012180 7012480 7012140 7019350 7012270	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment	38,000 - - - 20,000
7012180 7012480 7012140 7019350 7012270 7012550	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip	38,000 - - 20,000 13,000
7012180 7012480 7012140 7019350 7012270 7012550 7012390 7011010	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes	38,000 - - 20,000 13,000
7012180 7012480 7012140 7019350 7012270 7012550 7012390 7011010	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip	38,000 - - 20,000 13,000
7012180 7012480 7012140 7019350 7012270 7012550 7012390 7011010	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes	38,000 - 20,000 13,000 5,500
7012180 7012480 7012140 7019350 7012270 7012550 7012390 7011010	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes AL ARTIFICIAL LIFT TAL ARTIFICIAL LIFT COST	38,000 20,000 13,000 5,500
7012180 7012480 7012140 7019350 7012270 7012550 7012390 7011010	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes AL ARTIFICIAL LIFT TAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS	38,000
7012180 7012480 7012140 7019350 7012270 7012550 7012390 7011010	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes AL ARTIFICIAL LIFT TAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST	\$ 79,000
7012180 7012480 7012140 7019350 7012270 7012550 7012390 7011010	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes AL ARTIFICIAL LIFT TAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS	\$ 79,000 TOTAL COST \$ 60,000
7012180 7012480 7012140 7019350 7012270 7012550 7012390 7011010	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes AL ARTIFICIAL LIFT TAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST	\$ 79,000 TOTAL COST \$ 60,000 \$ 2,786,819
7012180 7012480 7012140 7019350 7012270 7012550 7012390 7011010	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes AL ARTIFICIAL LIFT TAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST TOTAL COMPLETIONS COST	\$ 79,000 TOTAL COST \$ 60,000 \$ 2,786,819 \$ 6,701,800
7012180 7012480 7012140 7019350 7012270 7012550 7012390 7011010	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes AL ARTIFICIAL LIFT TAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST	\$ 79,000 TOTAL COST \$ 60,000 \$ 2,786,819
7012180 7012480 7012140 7019350 7012270 7012550 7012390 7011010	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes AL ARTIFICIAL LIFT TAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST TOTAL COMPLETIONS COST	\$ 79,000 TOTAL COST \$ 60,000 \$ 2,786,819 \$ 6,701,800
7012180 7012480 7012140 7019350 7012270 7012550 7012390 7011010	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes AL ARTIFICIAL LIFT TAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST TOTAL SURFACE EQUIPMENT COST TOTAL ARTIFICIAL LIFT COST	\$ 79,000 TOTAL COST \$ 60,000 \$ 2,786,819 \$ 6,701,800 \$ 800,575 \$ 79,000
7012180 7012480 7012140 7019350 7012270 7012550 7012390 7011010	Gas Lift Equipment Rod Pumping, Sucker Rods & Rod Pump Elect Sub Pumps (ESP) Well Services-Well/Wellhead Services Materials & Supplies-Tangible Surface Wellhead Equipment Pig Launchers/Receivers & Rel Equip 8% Contingency & Taxes AL ARTIFICIAL LIFT TAL ARTIFICIAL LIFT COST SUMMARY OF ESTIMATED DRILLING WELL COSTS TOTAL LOCATION COST TOTAL DRILLING COST TOTAL COMPLETIONS COST TOTAL COMPLETIONS COST TOTAL SURFACE EQUIPMENT COST	\$ 79,000 TOTAL COST \$ 60,000 \$ 2,786,819 \$ 6,701,800 \$ 800,575

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

DATE	0/2//2018
DRILLING & LOCATION PREPARED BY	MATTHEW RUGAARD
COMPLETION PREPARED BY	JOSH SHANNON
FACILITIES PREPARED BY	MATT HENSCHEN
ARTIFICIAL LIFT PREPARED BY	BILLY MOORE

Asset Team	PERMIAN	
Field	WC-025 G-08 \$2535 FORMATION: 3 BONE SPRINGS WILDCAT	EVEL OR
Lease/Facility	MAMMOTH FEDERAL COM 26 34 1 TB 10H DEVELOPMENT	EXPLORATION
Location	LEA COUNTY X EXPLOITATION	RECOMPLETION
Prospect	RED HILLS	WORKOVER
Est Total Depth	Est Drilling Days 28.8 Est Completion Day	/s11
LOCATION COST -	INTANGIBLE	
GL CODE	DECOMPTON.	
7001270	DESCRIPTION	ESTIMATED CO
7001250	Location and Access	30,0
7001230	Land Broker Fees and Services	30,0
	TOTAL LOCATION COST. INTERNAL	
	TOTAL LOCATION COST - INTANGIBLE	60,0
DRILLING COST - 1	TANCIDLE	
DRILLING COST - 1	ANGIBLE	
7012050		
7012050	Conductor Pipe	28,0
	Surface Casing	17,0
7012050	Intermediate Casing 1	147,0
7012050	Intermediate Casing 2	147,0
7012050	Production Casing	346,0
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	
7012550	Drilling Wellhead Equipment	10,0
7012040	Casing & Tubing Access	50,0
7012270	Miscellaneous MRO Materials	24,0
		5,0
	TOTAL DRILLING - TANGIBLE	627,0
ORILLING COST - II	NTANCIDI F	527,0
	TOTAL	
7019200	Drilling Rig Mob/Demob	1,000
7019220	Drilling Rig - day work/footage	27,0
7019040	Directional Drilling Services	648,0
7019020	C	252,5
7019020		15,0
7019020	C	25,0
	Cement and Cementing Service Intermediate 2	
7019020	Cement and Cementing Service Production	140,0
7019140	Mud Fluids & Services	73,0
7012310	Solids Control equipment	
7012020	Bits	52,00
7019010	Casing Crew and Services	70,00
7016350	Fuel (Rig)	30,00
7019140	Fuel (Mud)	89,00
7001460		18,00
7019000	Water (non potable)	25,00
	Well Logging Services	
7019150	Mud Logging+geosteering	25,00
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,00
7019110	Casing inspection/cleaning	15,00
7019110	Drill pipe/collar inspection services	
7016180	Freight - truck	10,00
7001460	Water hauling and disposal (includes soil farming)	25,00
7001440	Vacuum Trucks	60,00
7000030	Contract Labor - general	10,00
7018150	Rental Tools and Equipment (surface rentals)	30,00
7018150		115,20
7018130	Rig Equipment and Misc.	14,40
	Telecommunications Services	5,00
7001120	Consulting Services	135,36
7001400	Safety and Environmental	46,08
7018120	Rental Buildings (trailers)	23,04
7019310	Coring (sidewalls & analysis)	23,04
7011010	8% Contingency & Taxes	165,17
	TOTAL DRILLING - INTANGIBLE	\$2,158,75
	TOTAL DRIVING COST	72,130,73
Marks	TOTAL DRILLING COST	\$2,785,75
MPLETION - TAN	GIBLE	
7012580	Tubing	
7012040	Tubing Accessories (nipple, wireline entry)	75,000
7012550	Wellhead Equip	15,000
7012560	Packers - Completion Equipment	20,000
	Completion Equipment	60,000
	TOTAL COMPLETION - TANGIBLE	\$170,000
	AN LIC	
RATHON OIL DEDGE		6/27/2018
	DITURE DATE _	
ARATHON OIL PERMI THORITY FOR EXPEN TAIL OF ESTIMATED 1	DITURE -	
THORITY FOR EXPEN	DITURE -	
THORITY FOR EXPEN FAIL OF ESTIMATED I et Team	MELL COSTS PERMIAN	
THORITY FOR EXPEN ALL OF ESTIMATED V et Team	DITURE – WELL COSTS	

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	20,000
7019220	Drilling Rig During Completion	80,000
7019140 7019030	Mud Fluids & Services	
7019030	Coiled Tubing Services (3 runs)	240,000
7019270	Snubbing Services Pulling/Swab Units	-
7016350	Fuel (from drig)	
7019010	Casing Crew and Services	
7019020	Cement and Cementing Services	
7019080	Well Testing Services (flow hand & equip)	
7019320	Fracturing Services	195,000
7019330	Perforating	3,850,000
7019360	Wireline Services	300,000
7001460	Water Hauling & Disposal (frac fluids)	10,000
7016180	Freight - Truck (haul pipe; drig & compl)	600,000
7018150	BOP Rental & Testing	15,000
7018150	Rental Tools and Equipment (incl drlg; lightplant,hydra-walk)	<u> </u>
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	-
7000030	Contract Labor - general	<u> </u>
7001110	Telecommunications Services	50,000
7001400	Safety and Environmental	130,000
7001120	Consulting Services	
7018150	Zipper Manifold	60,000
7019300	Frack Stack Rentals	165,000
7016190	Freight (Transportation Services)	70,000
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	-
7018120	Rental Buildings (trailers)	140,000
7000030	Contract Labor - Pumping (pump-down pumps)	60,000
7011010		120,000
	8% Contingency & Taxes	426,800
	TOTAL COMPLETION - INTANGIBLE	\$6,531,800
	TOTAL COMPLETION COST	
SURFACE EQUIPME		\$6,701,800
7012350	Misc. Piping, Fittings & Valves	85,794
7006640	Company Labor & Burden	-
7000030	Contract Labor - General	67,540
7001110	Telecommunication equip (Telemetry)	-
7012410	Line Pipe & Accessories	26,786
7012270	Miscellaneous Materials (containment system)	43,227
7008060	SCADA	43,227
7016180	Freight - truck	_
7001190	Contract Engineering	29,116
7012290	Metering and Instrumentation	
7012290	I&E Materials	235,914
7012200	Gas Treating	
7012200	Dehydration	_ <u> </u>
7012010	Compressor	
7012350	Power	-
7012610	Vapor Recovery Unit	-
7012440	Separator & other pressure vessels	<u> </u>
7012500	Tanks	85,919
7012100	Heater Treater	144,894
7012640		17,330
7000010	Flare & Accessories	11,646
7000010	Electrical Labor	29,116
7012480	Mechanical Labor	
	Rod Pumping unit & Pad	
7012180 7012350	Pumping Unit Engine	-
/012350	Electrical Power (electrical cooperative construction costs)	23,293
	TOTAL SURFACE EQUIPMENT - TANGIBLE	\$800,575
	TOTAL SURFACE EQUIPMENT COST	\$ 800,575
ARTIFICIAL LIFT		- 600,373
7006640	Company Labor	
7012180	Gas Lift Equipment	2,500
7012480	Rod Pumping, Sucker Rods & Rod Pump	38,000
7012140	Elect Sub Pumps (ESP)	
7019350	Well Services-Well/Wellhead Services	-
7012270	Materials & Supplies-Tangible	20,000
7012550	Surface Wellhead Equipment	13,000
7012390	Pig Launchers/Receivers & Rel Equip	5,500
7011010		
	8% Contingency & Taxes	
	TOTAL ARTIFICIAL LIFT	79,000
	TOTAL ARTIFICIAL LIFT COST	\$\$
	SUMMARY OF ESTIMATED DRILLING WELL COSTS	TOTAL COST
		TOTAL COST
	TOTAL LOCATION COST	\$ 60,000
	TOTAL DRILLING COST	
	TOTAL COMPLETIONS COST	\$ 2,785,759
		\$ 6,701,800
	TOTAL SURFACE EQUIPMENT COST	\$ 800,575
	TOTAL ARTIFICIAL LIFT COST	\$ 79,000
	CDAND TOTAL COST	
	GRAND TOTAL COST	\$10,427,134



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

APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL OF A SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 20058

APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL OF A SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

AFFIDAVIT

CASE NO. 20059

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

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 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 and 4.
- 3. Exhibit A identifies Third Bone Spring wells in the vicinity of the proposed wells, and has a line of cross-section running from A to A'.
 - 4. Exhibit A shows that the structure dips north to south.

- 5. **Exhibit B** 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 formation in the area. The target zone for the well is the Third Bone Spring, identified by the words "Producing Zone" and the shaded area across the cross section, along with a red arrow. That zone is continuous across the well unit.
- 6. **Exhibit C** is a Gross Sand Isochore of the Third Bone Spring. The Third Bone Spring thickness is relatively uniform across the proposed well unit.
 - 7. I conclude from the maps that:
 - a. The horizontal spacing unit is justified from a geologic standpoint.
 - b. There are no structural impediments or faulting that will interfere with horizontal development.
 - c. Each quarter quarter section in the unit will contribute more or less equally to production.
- 8. The preferred well orientation in this area is north to south. This is because the maximum horizontal stress orientation is more or less east to west.
- 9. The granting of this application is in the interests of conservation and the prevention of waste.

Ethan Perry

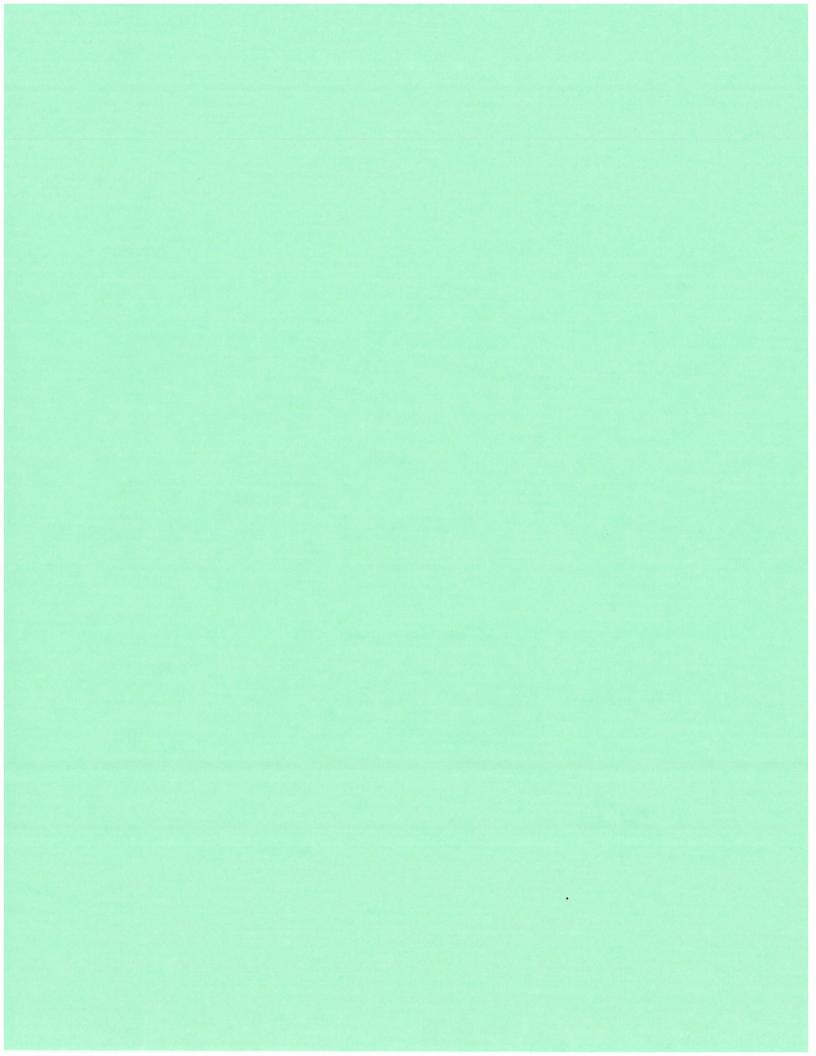
SUBSCRIBED AND SWORN to before me this 14th day of November, 2018 by Ethan Perry, on behalf of Marathon Oil Permian LLC.

OFFICIAL SEAL
Karlene Schuman

NOTARY PUBLIC

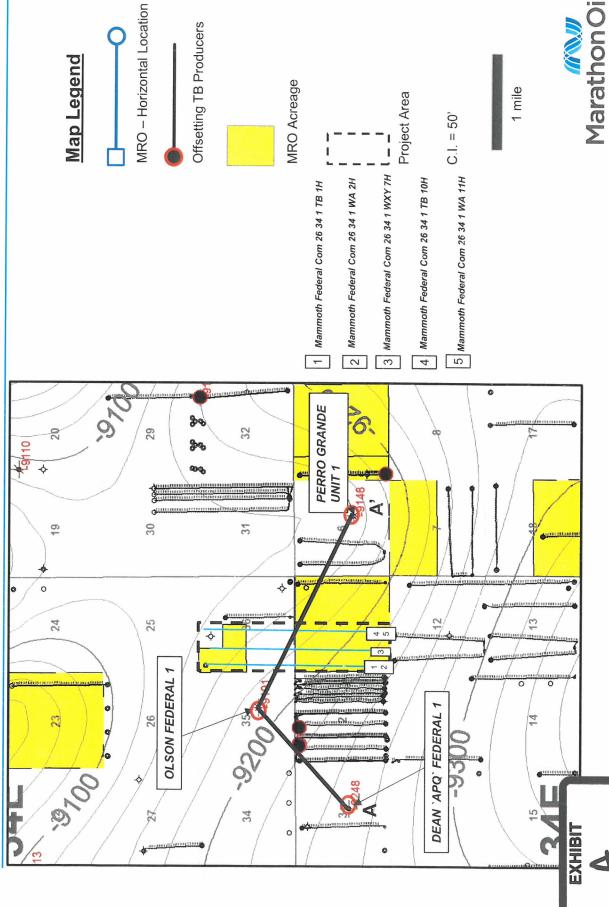
My commission expires:

Notary Public



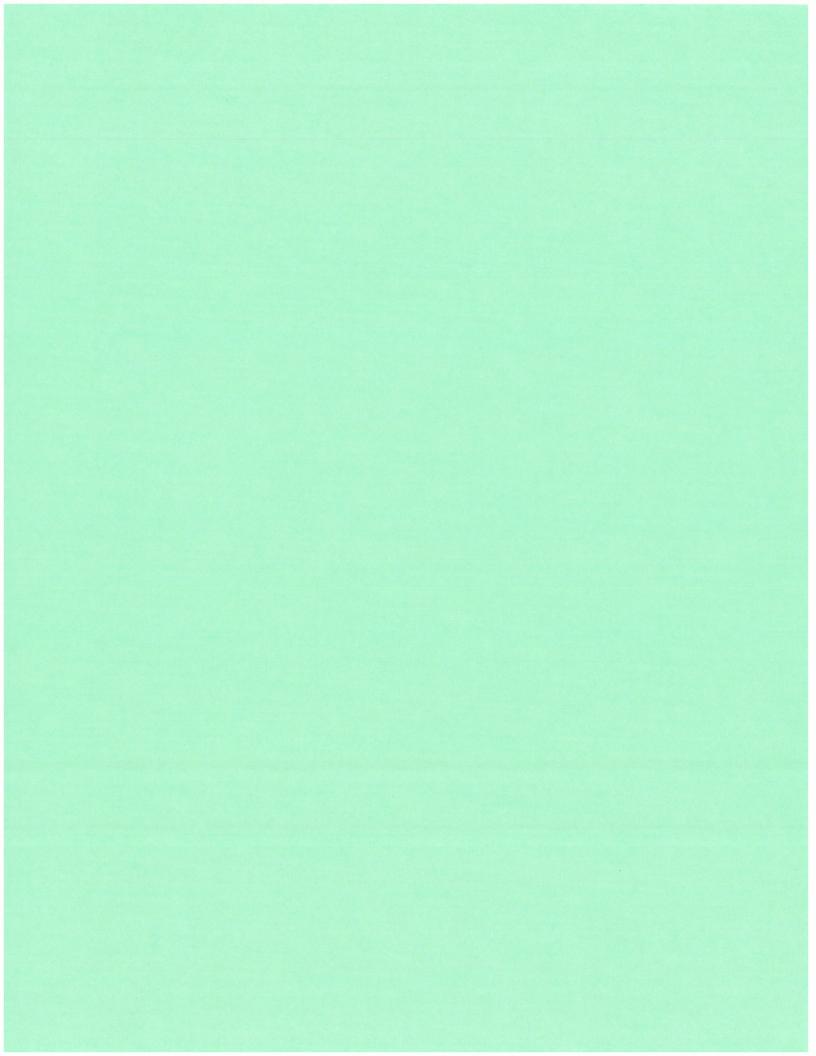
Mammoth Federal Com 26 34 1 TB 1H, WA 2H, WXY 7H, TB 10H and **WA 11H**

Structure Map – Top of Wolfcamp (SSTVD)



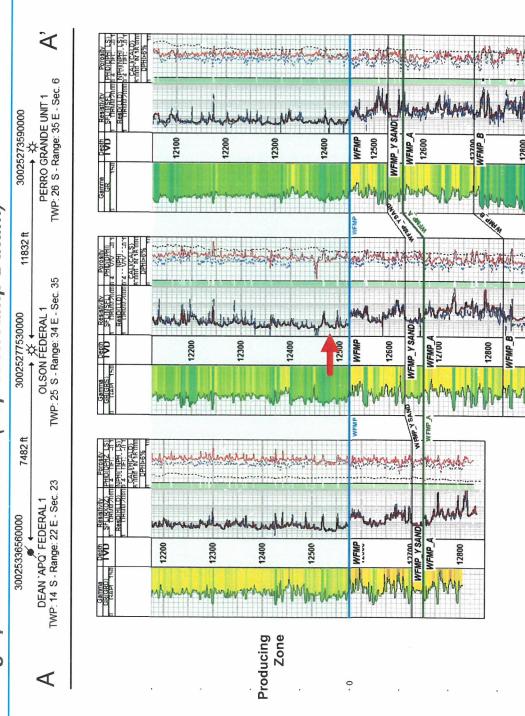


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Mammoth Federal Com 26 34 1 TB 1H, WA 2H, WXY 7H, TB 10H and **WA 11H**

Stratigraphic Cross Section (Top Wolfcamp Datum)

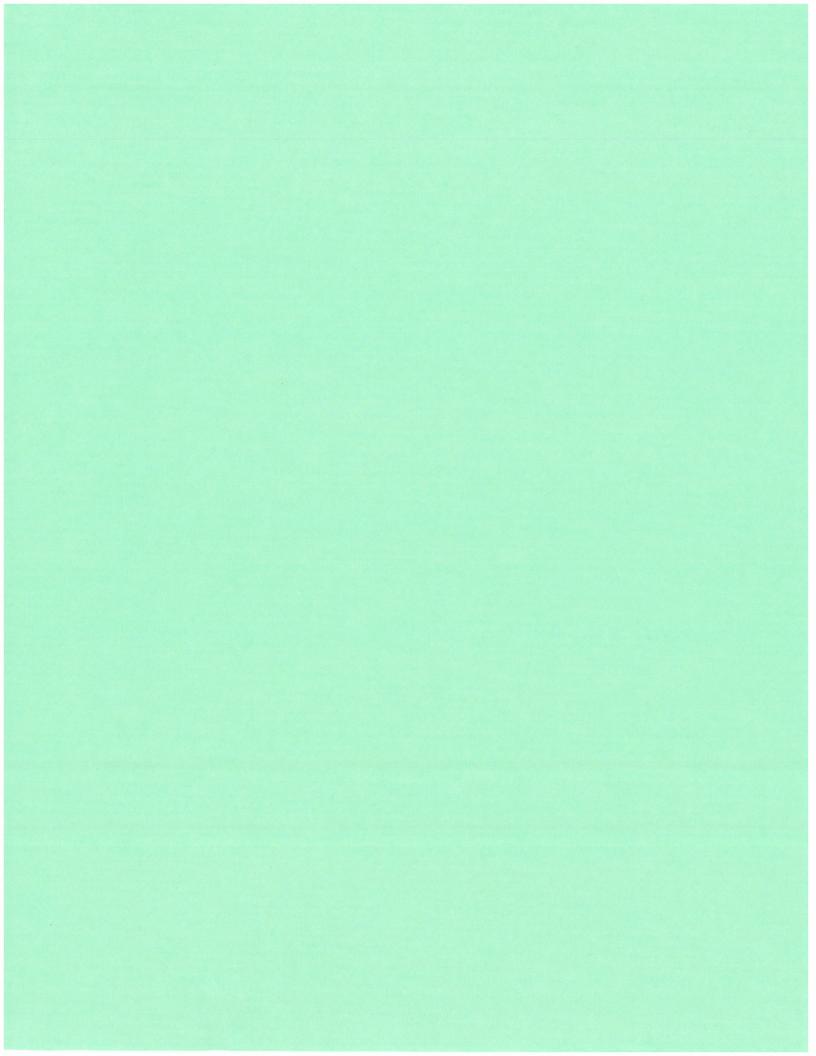




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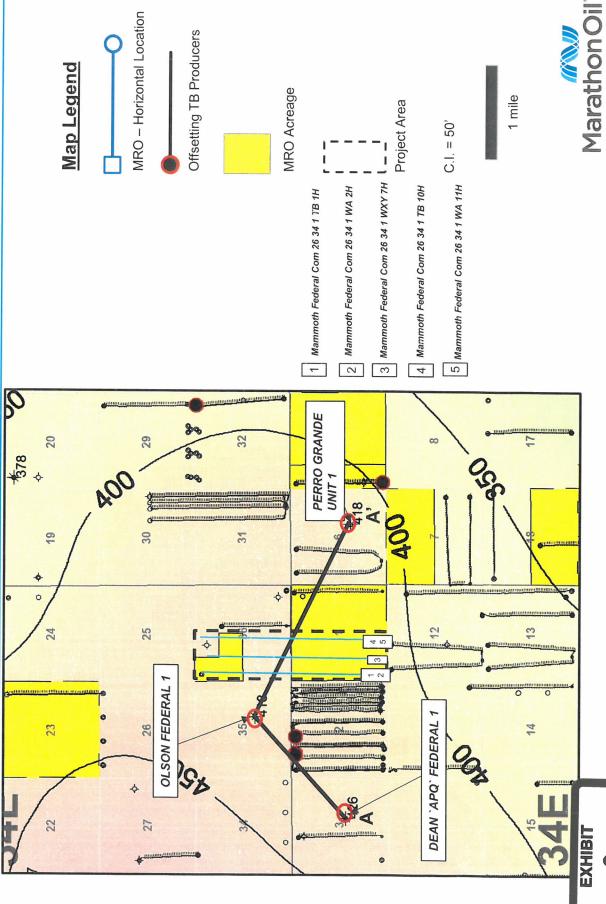
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EXHIBIT



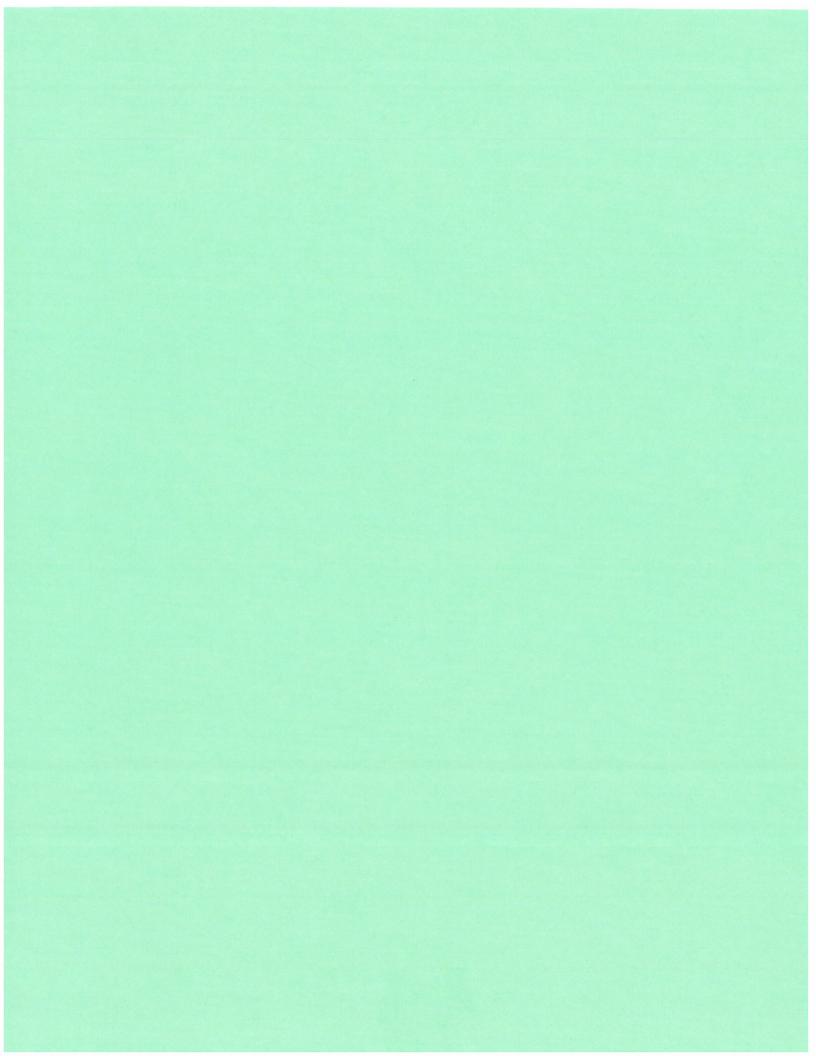
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Gross Sand Isochore - Third Bone Spring





gppies,



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

APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL OF A SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 20058

APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL OF A SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 20059

APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL OF A SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 20060

<u>AFFIDAVIT</u>

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

Jennifer L. Bradfute, 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 a notice letter and that proof of receipt is attached hereto. The Applicant exercised reasonable diligence in locating address information to notify affected parties of this application.

emifer L. Bradfute

SUBSCRIBED AND SWORN to before me this 13th day of November, 2018 by Jennifer L. Bradfute.



Page 1 2018 Walz CertifiedPro.net

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

PS Form 3877 Cype of Mailing: CERTIFII

Type of Mailing: CERTIFIED 10/26/2018





\$1.42 \$3.45
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Crown Oil Partners IV Employce Holdings, LLC \$1.42 P.O. Box 50820 Midland TX 79710
\$1.42
Oak Valley Mineral and Land LP S1.42 P.O. Box 50820 Midland TX 79710
\$1.42
\$1.42
\$1.42
Collins & Jones Investments, LLC 508 W. Wall Street, Suite 1200 Midland TX 79701
\$1.42
\$1.42





Type of Mailing: CERTIFIED 10/26/2018

PS Form 3877

Firm Mailing Book ID: 154388

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Line	Article Number	Name, Street & P.O. Address	Postage	Fee	R.R.Fee	Reference	Rest.Del.Fee Contents
91	9314 8699 0430 0052 2217 16	Jesse A. Faught, Jr. P.O. Box 52603 Midland TX 79710	\$1.42	\$3.45	\$1.50	81363-0178	\$0.00 Notice
17	9314 8699 0430 0052 2217 23	H. Jason Wacker, Hillcrest Petroleum LLC 5601 Hillcrest Midland TX 79707	\$1.42	\$3.45	\$1.50	81363-0178	\$0.00 Notice
18	9314 8699 0430 0052 2217 30	David M. Cromwell 2008 Country Club Drive Midland TX 79701	\$1.42	\$3.45	\$1.50	81363-0178	\$0.00 Notice
19	9314 8699 0430 0052 2217 47	Zunis Energy, LLC 15 E 5th Street, Suite 3300 Tulsa OK 74103	\$1.42	\$3.45	\$1.50	81363-0178	\$0.00 Notice
20	9314 8699 0430 0052 2217 54	James F. Adelson, Trustee of the Jame F. Adelson Revocable Trust 15 E 5th Street, Suite 3300 Tulsa OK 74103	\$1.42	\$3.45	\$1.50	81363-0178	\$0.00 Notice
21	9314 8699 0430 0052 2217 61	Kaleb Smith 2501 Lubbock Ave. Fort Worth TX 76109	\$1.42	\$3.45	\$1.50	81363-0178	\$0.00 Notice
22	9314 8699 0430 0052 2217 78	Deane Durham 3603 Trinity Meadows Pl. Midland TX 79707	\$1.42	\$3.45	\$1.50	81363-0178	\$0.00 Notice
23	9314 8699 0430 0052 2217 85	Oscura Resources Inc. P.O. Box 2292 Roswell NM 88202	\$1.42	\$3.45	\$1.50	81363-0178	\$0.00 Notice
24	9314 8699 0430 0052 2217 92	Branex Resources, Inc. P.O. Box 2990 Ruidoso NM 88355	\$1.42	\$3.45	\$1.50	81363-0178	\$0.00 Notice
25	9314 8699 0430 0052 2218 08	EMG Oil Properties, Inc. 1000 W. Fourth Street Roswell NM 88201	\$1.42	\$3.45	\$1.50	81363-0178	\$0.00 Notice
26	9314 8699 0430 0052 2218 15	Tierra Royalties, LLC 2929 Allen Parkway, Suite 200 Houston TX 77019	\$1.42	\$3.45	\$1.50	81363-0178	\$0.00 Notice
27	9314 8699 0430 0052 2218 22	C. Fred Luthy, Jr., Registered Agent for Pennies from Heaven, LLC P.O. Box 830308 Dallas TX 75283	\$1.42	\$3.45	\$1.50	81363-0178	\$0.00 Notice
28	9314 8699 0430 0052 2218 39	Cyrene L. Inman, Successor Trustee of the Cyrene L. Inman Trust P.O. Box 830308 Dallas TX 75283	\$1.42	\$3.45	\$1.50	81363-0178	\$0.00 Notice
29	9314 8699 0430 0052 2218 46	Devon Energy Production Co. LP 333 W Sheridan Ave. Oklahoma City OK 73102	\$1.42	\$3.45	\$1.50	81363-0178	\$0.00 Notice

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





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	Reference	81363-0178	81363-0178	81363-0178	81363-0178	81363-0178			
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	Fee	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$117.30		
	Postage	\$1.42	\$1.42	\$1.42	\$1.42	\$1.42	\$48.28		
							Totals:		Dated:
	Name, Street & P.O. Address		Contanonia City On 72102 EOG M Resources, Inc. 5509 Champions Drive Midland TX 79706	EOG A Resources, Inc. 5509 Champions Drive Midland TX 79706	EOG Y Resources, Inc. 5509 Champions Drive Midland TX 79706	Chevron USA Inc. 6301 Deauville Midland TX 79706			Postmaster: Name of receiving employee
	Article Number	9314 8699 0430 0052 2218 53	9314 8699 0430 0052 2218 60	9314 8699 0430 0052 2218 77	9314 8699 0430 0052 2218 84	9314 8699 0430 0052 2218 91			Total Number of Pieces Received at Post Office
	Line Art	30 931	31 931	32 931	33 9314	34 9314			List Number of Pieces Listed by Sender

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Transaction Report Details - CertifiedPro.net	Firm Mail Book ID= 154388	Generated: 11//13/2018 39/4911 PW	

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5	City	Midland	Midland	Midiand	Midland	Oklahoma City	Oklahoma City	Dallas	Dallas	Houston	Roswell	Ruidoso	Roswell	Midland	Fort Worth	Tulsa	Tulsa	Midland	Midland	Midland	Seattle	Midland	Midland	Midland	Midland	Midland	Midland	Midland	Midland	Midland	Midland	Houston	Houston	Houston	Midland
	Address	6301 Deauville	5509 Champions Drive	5509 Champions Drive	5509 Champions Drive	20 N Broadway #1500	333 W Sheridan Ave.	P.O. Box 830308	P.O. Box 830308	2929 Allen Parkway, Suite 200	1000 W. Fourth Street	P.O. Box 2990	P.O. Box 2292	3603 Trinity Meadows Pl.	2501 Lubbock Ave.	15 E 5th Street, Suite 3300	15 E 5th Street, Suite 3300	2008 Country Club Drive	5601 Hillcrest	P.O. Box 52603	1521 2nd Ave. NO 1604	550 W Texas Ave., Suite 945	508 W. Wall Street, Suite 1200	P.O. Box 50820	P.O. Box 50820	P.O. Box 50820	P.O. Box 50820	P.O. Box 50820	P.O. Box 50820	P.O. Box 50820	P.O. Box 50820	34 S. Wynden Dr., Suite 300	34 S. Wynden Dr., Suite 300	5 E Greenway Plaza #110	5509 Champions Drive
	Name 2							Cyrene L. Inman Trust	Pennies from Heaven, LLC							Adelson Revocable Trust																			
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Affidavit of Publication

STATE OF NEW MEXICO COUNTY OF LEA

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

> Beginning with the issue dated November 02, 2018 and ending with the issue dated November 02, 2018.

Sworn and subscribed to before me this 2nd day of November 2018.

and Rosell

ussie Black Business Manager

My commission expires anuary 29, 2019 OFFICIAL SEAL GUSSIE BLACK Notary Public State of New Maxico
My Commission Expires

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

LEGAL

LEGAL NOTICE NOVEMBER 2, 2018

LEGAL NOTICE
NOVEMBER 2, 2018

CASE NO. 20058: Notice to all affected parties, as well as the heirs and devisees of EOG RESOURCES, INC., OXY USA INC., POST OAK CROWN NY, LLC, POST OAK CROWN NY, PARTNERS, LP, OY EMPLOYEE HOLDINGS, LC, CEP MINERAL SERVING NY, LEGAL SERVING NY, LLC, MAYROS MINERALS II LLC, MIKE MOYLETT, COLLINS & JONES INVESTMENTS, LLC, LMC ENERGY, GERALD G, VAYREK, LESSE A FAUGHT, JR. H. JASON WACKER, HILLCREST PETROLEUM LLC, DAVID M. CROMWELL, ZUNIS ENERGY LLC, JAMES F, ADELSON, TRUSTEE OF THE SAMES F, ADELSON, TRUSTEE OF THE SAMES F, ADELSON, TRUSTEE OF THE CYRENE L. INMAN, SUCCESSOR TRUSTEE OF THE CYRENE L. INMAN, SUCCESSOR TRUSTEE OF THE CYRENE L. INMAN TRUST, DEVON ENERGY PRODUCTION CO. LP. DEVON ENERGY OPERATING CO. L.P. DEVON ENERGY PRODUCTION CO. L.P. DEVON ENERGY OPERATING CO. L.P. DEVON ENERGY

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