

Initial Application Part I

Received: 08/30/2019

This application is placed in file for record. It MAY or MAY NOT have been reviewed to be determined Administratively Complete

RECEIVED: 8/30/2019	REVIEWER: MAM	TYPE: PC	APP NO: pMAM1924237782
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: Marathon Oil Permian LLC **OGRID Number:** 372098
Well Name: Cave Lion 5 Federal (2H, 6H, 8H, 9H) **API:** 30-025-45421, 45426, 45419, 45420
Pool: WC025G08S2535340; Bonespring, Bradley, WC025G09S263504N; Wolfcamp **Pool Code:** 97088, 72860, 98117

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

PC-1369

1) **TYPE OF APPLICATION:** Check those which apply for [A]

A. Location – Spacing Unit – Simultaneous Dedication

☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD

B. Check one only for [I] or [II]

[I] Commingling – Storage – Measurement

☐ DHC ☐ CTB ☐ PLC ☒ PC ☐ OLS ☐ OLM

[II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

2) **NOTIFICATION REQUIRED TO:** Check those which apply.

- A. ☐ Offset operators or lease holders
 B. ☒ Royalty, overriding royalty owners, revenue owners
 C. ☐ Application requires published notice
 D. ☐ Notification and/or concurrent approval by SLO
 E. ☒ Notification and/or concurrent approval by BLM
 F. ☐ Surface owner
 G. ☒ For all of the above, proof of notification or publication is attached, and/or,
 H. ☐ No notice required

FOR OCD ONLY

- ☐ Notice Complete
☐ Application Content Complete

3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Jennifer Van Curen

Print or Type Name

Signature

Jennifer Van Curen

6/10/19

Date

713-296-2500

Phone Number

jvancuren@marathonoil.com

e-mail Address

Submit 1 Copy To Appropriate District Office
 District I – (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
 District II – (575) 748-1283
 811 S. First St., Artesia, NM 88210
 District III – (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised July 18, 2013

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. Multiple
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Marathon Oil Permian LLC		6. State Oil & Gas Lease No.
3. Address of Operator 5555 San Felipe St., Houston, TX 77056		7. Lease Name or Unit Agreement Name Cave Lion 5 Federal
4. Well Location Unit Letter <u>N</u> : _____ feet from the _____ line and _____ feet from the _____ line Section <u>5</u> Township <u>26S</u> Range <u>35E</u> NMPM County <u>LEA</u>		8. Well Number Multiple
11. Elevation (Show whether DR, RKB, RT, GR, etc.)		9. OGRID Number 372098
		10. Pool name or Wildcat Multiple

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/> DOWNHOLE COMMINGLE <input type="checkbox"/> CLOSED-LOOP SYSTEM <input type="checkbox"/> OTHER: Request to commingle <input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF: REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input type="checkbox"/> CASING/CEMENT JOB <input type="checkbox"/> OTHER: PC-1369 <input type="checkbox"/>
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13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Marathon Oil Permian LLC is requesting approval to pool commingle. The value of the oil and gas will not be affected with the approval of this commingle request. Please see the attached commingle request. Wells will be accurately measured with daily measurement at separation. Notices have been mailed to all interest owners.

Wells to be commingled:


Name	Location	API	Pool
Cave Lion 5 WC Federal 2H	N-5-26S-35E (287' FSL 1811' FWL)	30-025-45421	Bradley; Wolfcamp (Gas) (72860)
Cave Lion 5 WXY Federal 6H	N-5-26S-35E (287' FSL 1781' FWL)	30-025-45426	WC-025 G-09 S5263504N; Wolfcamp (98117)
Cave Lion 5 TB Federal 8H	N-5-26S-35E (287' FSL 1841' FWL)	30-025-45419	WC-025 G-08 S253534O; Bone Spring (97088)
Cave Lion 5 WA Federal 9H	N-5-26S-35E (287' FSL 1841' FWL)	30-025-45420	WC-025 G-09 S5263504N; Wolfcamp (98117)

Spud Date:

Rig Release Date:

Recommend signature by the Director. Subject like approval BLM. MAM

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE  TITLE CTR - Technician HES DATE 8/22/2019

Type or print name Adrian Covarrubias E-mail address: acovarrubias@marathonoil.com PHONE: 713-296-3368

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

APPLICATION FOR CENTRAL TANK BATTERY, SALES, & STORAGE

Proposal for Cave Lion 5 Federal 300-2 CTB Pool Commingle:

Marathon Oil Permian LLC is requesting approval for a pool commingling of the below listed pools at the Central Tank Battery (CTB):

Federal Lease NM-013647

Well Name	Location	API #	Pool; Formation	Oil		GAS	
				BOPD	Gravities	MCFPD	BTU
Cave Lion 5 WC Federal 2H	Sec. 5-T26S-R35E	30-025-45421	WC025G09S5263504N Wolfcamp	1000	42.7	900	1352
Cave Lion 5 WXY Federal 6H	Sec. 5-T26S-R35E	30-025-45426	WC025G09S5263504N Wolfcamp	800	43.0	1500	1330
Cave Lion 5 TB Federal 8H	Sec. 5-T26S-R35E	30-025-45419	WC025G08S253534O Bone Spring	800	43.0	1500	1330
Cave Lion 5 WA Federal 9H	Sec. 5-T26S-R35E	30-025-45420	WC025G09S5263504N Wolfcamp	800	43.0	1500	1330

Attached map shows the federal lease and well locations in Sec. 5-T26S-R35E. The CTB resides on the same lease as the hydrocarbons produced from the wells. Working, royalty, and overriding interest owners are identical. The NMOCD has been sent a copy of the proposal for approval.

The BLM's interest in all wells has identical royalty rates of 12.5% and acreage. Waste is not induced and no correlative rights are impaired. These meters will be calibrated on a regular basis per API, NMOCD and BLM specifications. The BLM and OCD will be notified of any future changes in the CTB.

Oil & Gas metering:

The Central Tank Battery (CTB) will be co-located with the wells location. There are eight oil tanks at the CTB that the wells will utilize and for gas they will have a common central delivery point (CDP) gas sales meter (*pending) which is planned on the SESW, Sec. 5-T26S-R35E. The produced water will go to a common water tank on location.

Each well will have its own 3-phase separator. The oil production will be allocated on a daily basis using the Coriolis meter on the downstream side of the 3-phase separator.

Cave Lion 5 WC Federal 2H oil allocation meter consists of a Micro Motion Coriolis meter (SN-*pending).
Cave Lion 5 WXY Federal 6H oil allocation meter consists of a Micro Motion Coriolis meter (SN-*pending).
Cave Lion 5 TB Federal 8H oil allocation meter consists of a Micro Motion Coriolis meter (SN-*pending).
Cave Lion 5 WA Federal 9H oil allocation meter consists of a Micro Motion Coriolis meter (SN-*pending).

Oil allocation meters will be proven per API & NMOCD specifications as follows:

- Installation
- Monthly for the first three (3) months
- Quarterly thereafter

Gas production will be allocated on a daily basis using the subtraction method from the allocation meters downstream of the 3-phase separator.

Cave Lion 5 WC Federal 2H gas allocation meter consists of an orifice meter (SN-*pending).
Cave Lion 5 WXY Federal 6H gas allocation meter consists of an orifice meter (SN-*pending).
Cave Lion 5 TB Federal 8H gas allocation meter consists of an orifice meter (SN-*pending).
Cave Lion 5 WA Federal 9H gas allocation meter consists of an orifice meter (SN-*pending).

Gas allocation meters will be calibrated as per API & NMOCD specifications as follows

- Installation
- Every six (6) months thereafter

The BLM and OCD will be notified of any future changes in the facilities.

Process and Flow Descriptions:

The Cave Lion 5 WC Federal 2H, Cave Lion 5 WXY Federal 6H, Cave Lion 5 TB Federal 8H, & Cave Lion 5 WA Federal 9H well pad has a tank battery that both wells will utilize and they have a common CDP #(*pending) which is planned on the east side of the CTB well pad at the Cave Lion 5 Federal 300-2 CTB. Oil, gas and water

volumes from each well producing to this battery will be determined by using an individual separator for continuous measurement at the CTB. Oil and water production will be allocated on a daily basis based on the Coriolis (oil) and Mag (water) downstream of each separator. Gas production will be allocated on a daily basis based on the orifice meter downstream of each separator.

The flow of produced fluids is shown in detailed proposed CTB on attachment along with a description of each vessel. The commingling of production is in the interest of conservation and waste and will result in the most effective, economic means of producing the reserves in place from the affected wells and will not result in reduced royalty or improper measurement of production. The proposed commingling will reduce operating expenses as well as reduce the surface facility footprint and overall emissions.

A central tank battery is located at the Cave Lion 5 Federal on federal lease NMNM-013647 in Lea County, New Mexico. The production from the four wells be routed to the CTB where each well will have its own separator for measurement and a common heater treater. After separation and allocation measurement, the oil and water will go to common oil tanks and water tanks. The oil will be sold through a LACT (SN-*pending). The gas from the separator will combine with gas from the heater treater and will be routed to a gas scrubber and then on to the gas CDP (*pending) located in Section 5 on east side of pad.

***meter information will be provided in an updated site facility diagram at the time of completion of construction activities.**

Signed: *Jennifer Van Curen*
Printed Name: Jennifer Van Curen
Title: Sr. Regulatory Compliance Rep
Date: 6/1/19

Economic Justification Worksheet Madera 19 Federal

Economic for lease

Federal lease NMNM093223 Royalty Rate 12.5%

Well Name	BOPD	Oil gravity @ 60 deg	Value / bbl	MCFPD	Dry BTU	Value / mcf
Cave Lion 5 TB Federal 8H	1000	42.7	52.34	900	1352	3.156
Cave Lion 5 WC Federal 2H	800	43.0	52.34	1500	1330	3.156
Cave Lion 5 WXY Federal 6H	800	43.0	52.34	1500	1330	3.156
Cave Lion 5 WA Federal 9H	800	43.0	52.34	1500	1330	3.156

Economic Combined Production

Well Name	BOPD	Oil gravity @ 60 deg	Value / bbl	MCFPD	Dry BTU	Value / mcf
Cave Lion 5 Federal 300-2 CTB	3400	42.9	52.34	5400	1348	3.156

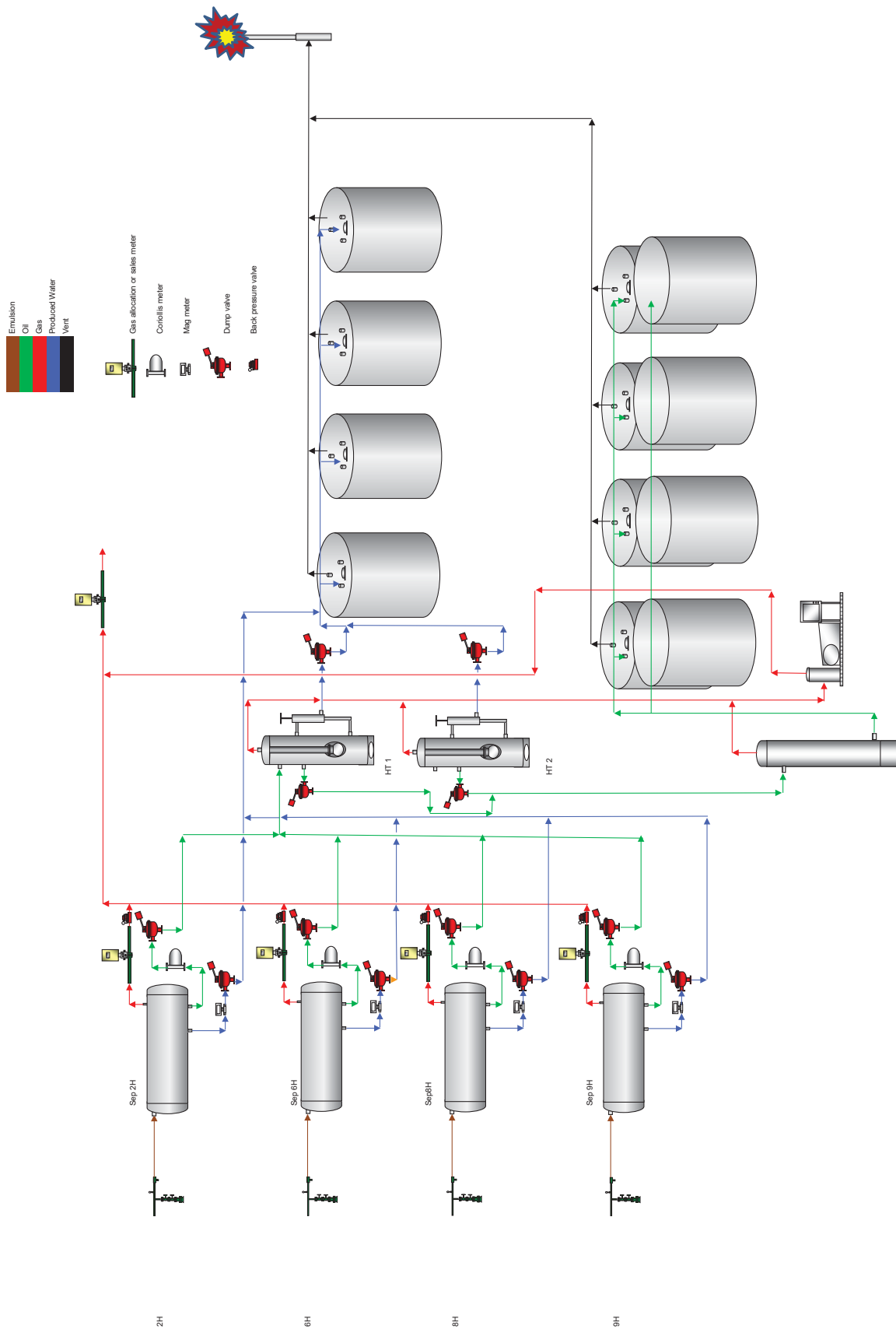
By combining the production of these leases, the royalty value will not be affected due to the contract Marathon has with the purchaser; which states that they will purchase all oil and gas at one price regardless of variance in API gravity for oil or BTU for gas.

Signed: *Jennifer Van Curen*
 Printed Name: Jennifer Van Curen
 Title: Sr. Regulatory Compliance Rep
 Date: 5/16/18

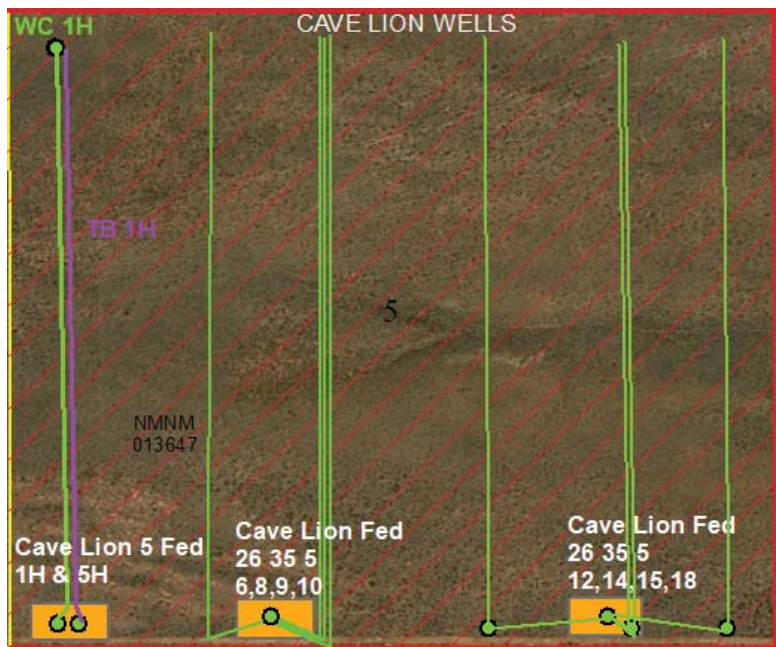
Weighted averages for economic value

1H oil	1000/42.7	42,700	145,900	42.9 API
2H oil	800/43	34,400		
5H oil	800/43	34,400		
6H oil	800/43	34,400		
1H gas	900/1352	1,216,800	7,201,800	1348 BTU
2H gas	1500/1330	1,995,000		
5H gas	1500/1330	1,995,000		
6H gas	1500/1330	1,995,000		

Facility Diagram



Lease Map



AS DRILLED PLAT

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 98117	³ Pool Name WC-025 G-09 S263504N; WOLFCAMP
⁴ Property Code	⁵ Property Name CAVE LION FEDERAL 26 35 5 WA	⁶ Well Number 9H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 3262'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	5	T26S	R35E		287	SOUTH	1841	WEST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	5	T26S	R35E		150	NORTH	2313	WEST	LEA

¹² Dedicated Acres 160.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

<p>¹⁶</p>				<p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>Signature: Date: 05/30/2018</p> <p>Printed Name: Melissa Szudera</p> <p>E-mail Address: mszudera@marathonoil.com</p>	
<p>¹⁸ SURVEYOR CERTIFICATION</p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>APRIL 18, 2018</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor: </p> <p>Certificate Number: LLOYD P. SHORT 21653</p>					

3	04/11/18	JCS
REV.	DATE	BY

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-45426	² Pool Code 98117	³ Pool Name WC-025 G-09 S263504N; WOLFCAMP
⁴ Property Code	⁵ Property Name CAVE LION 5 WXY FEDERAL	⁶ Well Number 6H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 3263'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	5	T26S	R35E		287	SOUTH	1781	WEST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	5	T26S	R35E		101	NORTH	965	WEST	LEA

¹² Dedicated Acres 320.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

<p>¹⁶</p> <p>SECTION 31 A SECTION 32 B T-25-S T-26-S SECTION 32 SECTION 6 965' LAST TAKE/BHL (FARTHEST) MEASURED DEPTH=15,726' 1035' SECTION 5 LAST TAKE POINT/BOTTOM HOLE LOCATION 17,503' MEASURED DEPTH IN FEET NAD 83, SPCS NM EAST X:831986.66 / Y:393864.79 LAT:32.07933880N / LON:103.39492877W NAD 27, SPCS NM EAST X:790799.25' / Y:393807.07' LAT:32.07921262N / LON:103.39446554W KICK OFF POINT/FIRST TAKE POINT 11,653' MEASURED DEPTH IN FEET NAD 83, SPCS NM EAST X:832066.55' / Y:388782.14' LAT:32.06536671N / LON:103.39481358W NAD 27, SPCS NM EAST X:790878.92' / Y:388724.55' LAT:32.06524045N / LON:103.39435116W SURFACE HOLE LOCATION 287' FSL 1781 FWL, SECTION 5 NAD 83, SPCS NM EAST X:832852.39' / Y:388974.69' LAT:32.06587713N / LON:103.39227170W NAD 27, SPCS NM EAST X:791664.75' / Y:388917.09' LAT:32.06575085N / LON:103.39180929W CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 831020.60' / Y: 393959.45' B - X: 833663.69' / Y: 393977.99' C - X: 833719.73' / Y: 388693.48' D - X: 831074.50' / Y: 388675.34' CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 789833.20' / Y: 393901.74' B - X: 792476.27' / Y: 393920.25' C - X: 792532.08' / Y: 388635.88' D - X: 789886.87' / Y: 388617.76' SECTION 6 960' 1781' 993' 100' 287' 864' SECTION 7 D SECTION 8 KOP/FIRST TAKE SHL SECTION 5 SECTION 8</p>	<p>¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: <i>Adrian Covarrubias</i> Date: 7/22/2019 Printed Name: Adrian Covarrubias E-mail Address:</p> <p>¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>Date of Survey: <i>7/22/2019</i> Signature and Seal of Professional Surveyor: <i>[Signature]</i> Certificate Number:</p>
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DISTANCES/AREAS RELATIVE TO NAD83 COMBINED SCALE FACTOR: 1.000006454
CONVERGENCE: 0.4997137472; NOTE: ALL DIMENSIONS IN U.S. FEET

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
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Form C-102
Revised August 1, 2011
Submit one copy to appropriate
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-45421	² Pool Code 72860	³ Pool Name BRADLEY; WOLFCAMP (GAS)
⁴ Property Code	⁵ Property Name CAVE LION 5 WC FEDERAL	⁶ Well Number 2H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 3263'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	5	T26S	R35E		287	SOUTH	1811	WEST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	5	T26S	R35E		617	NORTH	1317	WEST	LEA

¹² Dedicated Acres 320.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
---	-------------------------------	----------------------------------	-------------------------

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

<p>¹⁶</p> <p>SECTION 31 A SECTION 32 B T-25-S SECTION 32 T-26-S SECTION 5</p> <p>SECTION 6 LAST TAKE/BHL 1317' 1327'</p> <p>1322' 1322'</p> <p>(FARTHEST) MEASURED DEPTH=16,380'</p> <p>LAST TAKE POINT/BOTTOM HOLE LOCATION 17,593' MEASURED DEPTH IN FEET NAD 83, SPCS NM EAST X: 832343.62' / Y: 393351.31' LAT: 32.07791891N / LON: 103.39379083W NAD 27, SPCS NM EAST X: 791156.19' / Y: 393293.60' LAT: 32.0777927N / LON: 103.39332773W</p> <p>KICK OFF POINT/FIRST TAKE POINT 12,803' MEASURED DEPTH IN FEET NAD 83, SPCS NM EAST X: 832374.16' / Y: 388784.25' LAT: 32.06536515N / LON: 103.39382062W NAD 27, SPCS NM EAST X: 791186.52' / Y: 388726.66' LAT: 32.06523888N / LON: 103.39335823W</p> <p>SURFACE HOLE LOCATION 287' FSL 1811' FWL, SECTION 5 NAD 83, SPCS NM EAST X: 832882.34' / Y: 388974.66' LAT: 32.06587633N / LON: 103.39217497W NAD 27, SPCS NM EAST X: 791694.71' / Y: 388917.06' LAT: 32.06575005N / LON: 103.39171261W</p> <p>CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 831020.60' / Y: 393959.45' B - X: 833663.69' / Y: 393977.99' C - X: 833719.73' / Y: 388693.48' D - X: 831074.50' / Y: 388675.34'</p> <p>SECTION 6 (NEAREST) MEASURED DEPTH=13,642' KOP/FTP 1294' 1351' 1811' 1301' 1345' 834' 100' 287'</p> <p>SECTION 7 D SECTION 8 C</p> <p>CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 789833.20' / Y: 393901.74' B - X: 792476.27' / Y: 393920.25' C - X: 792532.08' / Y: 388635.88' D - X: 789886.87' / Y: 388617.76'</p>	<p>¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p> 7/22/2019 Signature Date</p> <p>Adrian Covarrubias Printed Name</p> <p>E-mail Address</p> <p>¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>PRELIMINARY THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, SALE OR THE BASIS FOR THE ISSUANCE OF A PERMIT.</p> <p>Certificate Number</p>
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DISTANCES/AREAS RELATIVE TO NAD83 COMBINED SCALE FACTOR: 1.000006454
CONVERGENCE: 0.4997137472; NOTE: ALL DIMENSIONS IN U.S. FEET

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-45419	² Pool Code 97088	³ Pool Name WC-025 G-08 S2535340; BONE SPRING
⁴ Property Code	⁵ Property Name CAVE LION 5 TB FEDERAL	⁶ Well Number 8H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 3262'

¹⁰ Surface Location

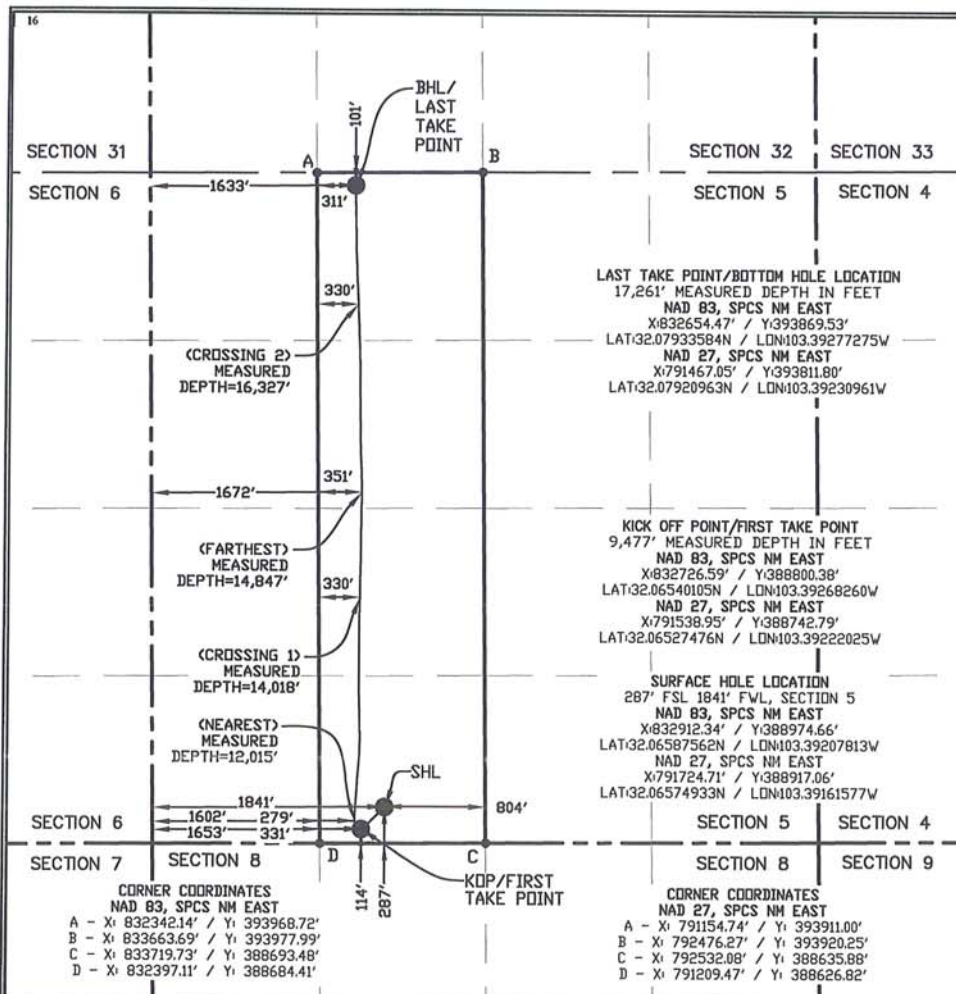
UL or lot no. N	Section 5	Township T26S	Range R35E	Lot Idn	Feet from the 287'	North/South line SOUTH	Feet from the 1841'	East/West line WEST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. C	Section 5	Township T26S	Range R35E	Lot Idn	Feet from the 101'	North/South line NORTH	Feet from the 1633'	East/West line WEST	County LEA
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¹² Dedicated Acres 160.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *[Signature]* Date: 7/22/2019

Printed Name: Adrian Covarrubias

E-mail Address:

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: *[Signature]*
Signature and Seal of Professional Surveyor:

Certificate Number

DISTANCES/AREAS RELATIVE TO NAD83 COMBINED SCALE FACTOR: 1.000006454
CONVERGENCE: 0.4997137472; NOTE: ALL DIMENSIONS IN U.S. FEET

1	06/07/2019	DEF
REV.	DATE	BY

LR 2000

**DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(MASS) Serial Register Page**

Run Date/Time: 3/13/2018 8:46 AM

Page 1 Of 2

01 02-25-1920;041STAT0437;30USC181ETSEQ
Case Type 311211: O&G LSE SIMO PUBLIC LAND
Commodity 459: OIL & GAS
Case Disposition: AUTHORIZED

Total Acres:
1,281.310

Serial Number
NMNM 013647

							Serial Number: NMNM-- 013647	
Name & Address							Int Rel	% Interest
OCCIDENTAL PERMIAN LP	5 E GREENWAY PLAZA #110	HOUSTON	TX	770460521	LESSEE			100.000000000
PINTAIL PROD CO INC	3479 W VICKERY BLVD	FORT WORTH	TX	76107	OPERATING RIGHTS			0.000000000

										Serial Number: NMNM-- 013647	
Mer	Twp	Rng	Sec	S	Type	Nr	Suff	Subdivision	District/ Field Office	County	Mgmt Agency
23	0260S	0350E	005		ALIQ			ALL;	CARLSBAD FIELD OFFICE	LEA	BUREAU OF LAND MGMT
23	0260S	0350E	006		ALIQ			E2;	CARLSBAD FIELD OFFICE	LEA	BUREAU OF LAND MGMT
23	0260S	0350E	007		LOTS			1,2;	CARLSBAD FIELD OFFICE	LEA	BUREAU OF LAND MGMT
23	0260S	0350E	007		ALIQ			NE,E2NW;	CARLSBAD FIELD OFFICE	LEA	BUREAU OF LAND MGMT

Relinquished/Withdrawn Lands										Serial Number: NMNM-- 013647	
23	0260S	0350E	720	FF	NENW, SEGR;	PECOS DISTRICT OFFICE	LEA	BUREAU OF LAND MGMT			

					Serial Number: NMNM-- 013647	
Act Date	Act Code	Action Txt	Action Remarks		Pending Off	
03/21/1971	387	CASE ESTABLISHED	SPAR95;			
03/22/1971	888	DRAWING HELD				
04/09/1971	237	LEASE ISSUED				
05/01/1971	496	FUND CODE	05;145003			
05/01/1971	530	RLTY RATE - 12 1/2%				
05/01/1971	868	EFFECTIVE DATE				
08/09/1971	299	PROTEST FILED				
09/17/1971	298	PROTEST DISMISSED				
10/14/1971	120	APPEAL FILED				
10/18/1971	042	CASE SENT TO	IBLA;			
12/02/1971	149	CASE RECEIVED FROM	IBLA;			
08/11/1980	940	NAME CHANGE RECOGNIZED	CTL SW OIL/PEPPERTREE			
03/25/1981	700	LEASE SEGREGATED	INTO NMNM45705;			
03/26/1981	232	LEASE COMMITTED TO UNIT	;PERRO GRANDE			
12/09/1981	650	HELD BY PROD - ACTUAL				

NO WARRANTY IS MADE BY BLM FOR USE OF THE DATA FOR PURPOSES NOT INTENDED BY BLM

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(MASS) Serial Register Page

Run Date/Time: 3/13/2018 8:46 AM

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Serial Number: NMNM-- 013647

Act Date	Act Code	Action Txt	Action Remarks	Pending Off
02/17/1982	102	NOTICE SENT-PROD STATUS		
09/18/1987	974	AUTOMATED RECORD VERIF	MLM/CB	
06/05/1989	963	CASE MICROFILMED/SCANNED	CNUM 102,859	
02/27/1991	909	BOND ACCEPTED	EFF 02/25/91;NM1855	
04/09/1991	932	TRF OPER RGTS FILED	AMOCO PROD/PINTAIL	
06/20/1991	933	TRF OPER RGTS APPROVED	EFF 05/01/91;	
06/20/1991	974	AUTOMATED RECORD VERIF	MRR/CG	
04/02/1997	140	ASGN FILED	AMOCO/ALTURA ENERGY	
04/25/1997	139	ASGN APPROVED	EFF 05/01/97;	
04/25/1997	974	AUTOMATED RECORD VERIF	JLV	
08/24/1998	899	TRF OF ORR FILED		
06/12/2000	940	NAME CHANGE RECOGNIZED	ALTURA/OCCIDENTALPER	
02/13/2008	899	TRF OF ORR FILED	1	
08/10/2010	899	TRF OF ORR FILED	1	
05/18/2012	899	TRF OF ORR FILED	1	

Line Number	Remark Text	Serial Number: NMNM-- 013647
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Interest owner letter

Ryan Gyllenband
Senior 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

April 15, 2019

Mr. Michael McMillan
New Mexico Oil Conservation Division
1220 South Francis Drive
Santa Fe, NM 87505

Re: Marathon Oil Permian LLC - Surface Commingling
Cave Lion 2H, 6H, 8H & 9H Wells
Section 5, T26S-R35E
Lea County, New Mexico

Mr. McMillan,

Marathon Oil Permian LLC ("Marathon") has filed the attached application with the New Mexico Oil Conservation Division ("Division") for administrative approval to surface lease commingle production according to the provisions of NMAC 19.15.12.10.C from the Cave Lion 5 WC Federal #002H well (API# 30-025-45421), Cave Lion 5 WXY Federal #006H well (API# 30-025-45426), Cave Lion 5 TB Federal #008H well (API# 30-025-45419), and the Cave Lion 5 WA Federal #009H well (API# 30-025-45420) located in Section 5, T26S-R35E, Lea County, New Mexico. There was no compulsory pooling completed for these wells. The interest in all four wells is identical.

Should you have any questions please do not hesitate to contact me at 713-296-2453 or by email at mrgyllenband@marathonoil.com.

Sincerely,

A handwritten signature in blue ink, appearing to read 'R. Gyllenband', written over a light blue horizontal line.

Ryan Gyllenband
Senior Land Professional
Lea County, New Mexico

C-107/notifications not
required since all

interests are identical in
each completion