## 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	•	M1924237782
1.	NEW MEXICO OII	Engineering Bure	<b>N DIVISION</b> eau -	A CONTROL OF MERINA
THIS CHECKLIST	ADMINISTRATIVE	E APPLICATION C IISTRATIVE APPLICATIONS F		NVISION RULES AND
	REGULATIONS WHICH REQUIRE PF			
Applicant: Marathon Oil Pe			OGRID	Number: <u>372098</u>
Well Name: Cave Lion 5 Feder				25-45421, 45426, 45419, 45420
Pool: WC025G08S2535340; Bones	pring, Bradley, WC025G09S263504	N; Wolfcamp	Pool Co	ode: 97088, 72860, 98117
<ol> <li>TYPE OF APPLICATIO         <ul> <li>A. Location – Space</li> <li>NSL</li> <li>B. Check one only</li> <li>[1] Comminglin</li> <li>DHC</li> <li>[1] Injection –</li> <li>[WFX</li> </ul> </li> <li>NOTIFICATION REOU         <ul> <li>A. Offset opera</li> <li>B. Royalty, overa</li> <li>C. Application</li> <li>D. Notification</li> <li>F. Notification</li> <li>F. Surface own</li> </ul> </li> </ol>	IND N: Check those which cing Unit – Simultaneou NSP <sub>(PROJECT ARE</sub> y for [1] or [11] ng – Storage – Measure CTB PLC [ Disposal – Pressure Inc PMX SWD [ IRED TO: Check those ators or lease holders erriding royalty owners, requires published not and/or concurrent ap and/or concurrent ap and/or concurrent ap	ICATED BELOW         apply for [A]         us Dedication         apply for [A]         ement         Apply for [A]         PC       NSP(prora         apply for [A]         ement         ement         Apply for [A]         ement         ement	TION UNIT) SD	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

6/10/19 Date

713-296-2500

Phone Number

Jennifer Van Curen

Signature

jvancuren@marathonoil.com e-mail Address

ved by OCD: 8/30/20	019 9:21:0	5 AM				
Submit 1 Copy To Appropria Office	te District	S	State of New Me	exico		Form C-1
<u>District I</u> – (575) 393-6161 1625 N. French Dr., Hobbs, N	JM 88240	Energy, N	linerals and Natu	ral Resources	WELL API	Revised July 18, 20
<u>District II</u> - (575) 748-1283			NSERVATION		Multiple	
811 S. First St., Artesia, NM 3 District III – (505) 334-6178	88210		0 South St. Fra		Type of Lease	
1000 Rio Brazos Rd., Aztec, 1	NM 87410		Santa Fe, NM 8'		STAT	
<u>District IV</u> – (505) 476-3460 1220 S. St. Francis Dr., Santa	Fe, NM	L		1505	6. State Oil	& Gas Lease No.
87505 SUN	DRY NOTIO	CES AND REPO	ORTS ON WELLS		7. Lease Nat	me or Unit Agreement Name
(DO NOT USE THIS FORM DIFFERENT RESERVOIR.	FOR PROPOS	ALS TO DRILL O	R TO DEEPEN OR PL	UG BACK TO A	Cave Lion 5 F	-
PROPOSALS.) 1. Type of Well: Oil W	Vell 🗌 🤇	Gas Well 🔲 (	Other			<sup>nber</sup> Multiple
2. Name of Operator Marathon Oil Permian Ll	_C				9. OGRID N 372098	Number
3. Address of Operator					10. Pool nar	ne or Wildcat
5555 San Felipe St., Hou	uston, TX 77	056			Multiple	
4. Well Location	N					
Unit Letter	:		from the			et from thelin
Section	5		nship 26S Ra Show whether DR	•	NMPM	County LEA
			Show whether DK	, KKD, KI, OK, el	(.)	
TEMPORARILY ABANE	DON 🗌	CHANGE PLA			RILLING OPNS.	P AND A
PULL OR ALTER CASI		MULTIPLE CO	MPL	CASING/CEME	NT JOB [	
DOWNHOLE COMMING CLOSED-LOOP SYSTE	GLE 🗌 EM 🗌		OMPL	CASING/CEME	от јов [ PC-136	⊐ 9 г
DOWNHOLE COMMING CLOSED-LOOP SYSTE OTHER: 13. Describe propos of starting any p	GLE	commingle eted operations. k). SEE RULE	(Clearly state all	OTHER:	PC-136 and give pertinen	D <b>9</b> t dates, including estimated of ach wellbore diagram of
DOWNHOLE COMMING CLOSED-LOOP SYSTE OTHER: 13. Describe propos of starting any p proposed compl	GLE GLE CM Request to red or completed or completed or completed work of the completed work of the completed work of the completed of	commingle eted operations. k). SEE RULE mpletion.	Clearly state all 1 (Clearly state all 1 2 19.15.7.14 NMAC	OTHER: pertinent details, a C. For Multiple C	PC-136 and give pertinen Completions: Att	t dates, including estimated of ach wellbore diagram of
DOWNHOLE COMMING CLOSED-LOOP SYSTE OTHER: 13. Describe propos of starting any p proposed compl Marathon Oil Permian	GLE GLE CM Request to sed or completed or completed or completed or completed work of the set of the s	commingle eted operations. k). SEE RULE mpletion. ting approval to po attached commin	Clearly state all p (Clearly state all p 2 19.15.7.14 NMAC	OTHER: pertinent details, a C. For Multiple C alue of the oil and g	PC-136 and give pertinen Completions: Att	t dates, including estimated
DOWNHOLE COMMING CLOSED-LOOP SYSTE OTHER: 13. Describe propos of starting any p proposed compl Marathon Oil Permian commingle request. P	GLE Request to red or completed proposed word etion or reconnection or reconnection LLC is request lease see the iled to all interest	commingle eted operations. k). SEE RULE mpletion. ting approval to po attached commin	Clearly state all p (Clearly state all p 2 19.15.7.14 NMAC	OTHER: pertinent details, a C. For Multiple C alue of the oil and g	PC-136 and give pertinen Completions: Att	t dates, including estimated of ach wellbore diagram of red with the approval of this
DOWNHOLE COMMING CLOSED-LOOP SYSTE OTHER: 13. Describe propos of starting any p proposed compl Marathon Oil Permian commingle request. P Notices have been mai Wells to be commingle Name Cave Lion 5 WC Feder Cave Lion 5 WXY Feder Cave Lion 5 TB Federa	GLE EM Request to red or comple proposed wor etion or reco LLC is request Please see the iled to all intered d: ral 2H I eral 6H I al 8H	commingle eted operations. ·k). SEE RULE ompletion. ting approval to pr attached commin est owners. Locatio N-5-26S-35E (287 N-5-26S-35E (287 N-5-26S-35E (287	Clearly state all j (Clearly state all j 2 19.15.7.14 NMAC ool commingle. The v gle request. Wells wil gle request. Wells wil SL 1811' FWL) 7 FSL 1811' FWL) 7 FSL 1841' FWL)	OTHER: pertinent details, a C. For Multiple C alue of the oil and ga l be accurately mean API 30-025-45421 30-025-45426 30-025-45419	PC-136 and give pertinen completions: Att as will not be affect sured with daily me Bradley; Wc WC-025 G-09 St WC-025 G-08 S2	t dates, including estimated of ach wellbore diagram of ed with the approval of this pasurement at separation. Pool Difcamp (Gas) (72860) 5263504N; Wolfcamp (98117) 53534O; Bone Spring (97088)
DOWNHOLE COMMING CLOSED-LOOP SYSTE OTHER: 13. Describe propos of starting any p proposed compl Marathon Oil Permian commingle request. P Notices have been mai Wells to be commingle Name Cave Lion 5 WC Feder Cave Lion 5 WXY Feder	GLE EM Request to red or comple proposed wor etion or reco LLC is request Please see the iled to all intered d: ral 2H I eral 6H I al 8H	commingle eted operations. ·k). SEE RULE ompletion. ting approval to pr attached commin est owners. Locatio N-5-26S-35E (287 N-5-26S-35E (287 N-5-26S-35E (287	Clearly state all j (Clearly state all j 2 19.15.7.14 NMAC pol commingle. The v gle request. Wells will gle request. Wells will on "FSL 1811' FWL)	OTHER: pertinent details, a C. For Multiple C alue of the oil and ga l be accurately mean API 30-025-45421 30-025-45426 30-025-45420	PC-136 and give pertinen completions: Att as will not be affect sured with daily me Bradley; Wc WC-025 G-09 St WC-025 G-08 S2	t dates, including estimated of ach wellbore diagram of ed with the approval of this easurement at separation. Pool Difcamp (Gas) (72860) 5263504N; Wolfcamp (98117)
DOWNHOLE COMMING CLOSED-LOOP SYSTE OTHER: 13. Describe propos of starting any p proposed compl Marathon Oil Permian commingle request. P Notices have been mai Wells to be commingle Name Cave Lion 5 WC Feder Cave Lion 5 WC Feder Cave Lion 5 TB Federa Cave Lion 5 WA Feder	GLE Request to red or comple- proposed wor etion or reco LLC is request Please see the iled to all intered d: ral 2H I eral 6H I al 8H al 9H	commingle eted operations. ck). SEE RULE ompletion. ting approval to po attached commin est owners. Location N-5-26S-35E (287 N-5-26S-35E (287 N-5-26S-35E (287) N-5-26S-35E (287)	(Clearly state all ) (Clearly	OTHER: pertinent details, a C. For Multiple C alue of the oil and ga l be accurately mean API 30-025-45421 30-025-45426 30-025-45420	PC-136 and give pertinen completions: Att as will not be affect sured with daily me Bradley; Wc WC-025 G-09 St WC-025 G-08 S2	t dates, including estimated of ach wellbore diagram of ed with the approval of this pasurement at separation. Pool Difcamp (Gas) (72860) 5263504N; Wolfcamp (98117) 53534O; Bone Spring (97088)
DOWNHOLE COMMING CLOSED-LOOP SYSTE OTHER: 13. Describe propos of starting any p proposed compl Marathon Oil Permian commingle request. P Notices have been mai Wells to be commingle Name Cave Lion 5 WC Feder Cave Lion 5 WC Feder Cave Lion 5 TB Federa Cave Lion 5 TB Federa Cave Lion 5 WA Feder Spud Date:	GLE Request to red or comple- proposed wor etion or reco LLC is request Please see the iled to all intered d: ral 2H I eral 6H I al 8H al 9H	commingle eted operations. ck). SEE RULE ompletion. ting approval to po attached commin est owners. Location N-5-26S-35E (287 N-5-26S-35E (287 N-5-26S-35E (287 N-5-26S-35E (287) N-5-26S-35E (287)	(Clearly state all j (Clearly state all j ) 19.15.7.14 NMAC pol commingle. The v gle request. Wells wil on "FSL 1811' FWL) "FSL 1811' FWL) "FSL 1841' FWL) T' FSL 1841' FWL) Rig Release Da	OTHER: pertinent details, a C. For Multiple C alue of the oil and ga l be accurately mean API 30-025-45421 30-025-45426 30-025-45420 30-025-45420	PC-136 and give pertinen Completions: Att as will not be affect sured with daily me Bradley; Wc WC-025 G-09 S5 WC-025 G-09 S5	t dates, including estimated of ach wellbore diagram of ed with the approval of this pasurement at separation. Pool Difcamp (Gas) (72860) 5263504N; Wolfcamp (98117) 53534O; Bone Spring (97088)
DOWNHOLE COMMING CLOSED-LOOP SYSTE OTHER: 13. Describe propos of starting any p proposed compl Marathon Oil Permian I commingle request. P Notices have been mai Wells to be commingle Name Cave Lion 5 WC Feder Cave Lion 5 WC Feder Cave Lion 5 WXY Fede Cave Lion 5 TB Federa Cave Lion 5 WA Feder Spud Date: Recommend sgnature by the I hereby certify that the in	GLE Request to red or comple- proposed wor etion or reco LLC is request Please see the iled to all intered d: ral 2H I eral 6H I al 8H al 9H	commingle eted operations. ck). SEE RULE ompletion. ting approval to po attached commin est owners. Location N-5-26S-35E (287 N-5-26S-35E (287 N-5-26S-35E (287 N-5-26S-35E (287) N-5-26S-35E (287)	(Clearly state all j (Clearly state all j ) 19.15.7.14 NMAC cool commingle. The v gle request. Wells will on "FSL 1811' FWL) "FSL 1811' FWL) "FSL 1841' FWL) 7' FSL 1841' FWL) T' FSL 1841' FWL) Rig Release Da M. MAM	OTHER: pertinent details, a C. For Multiple C alue of the oil and ga l be accurately mean API 30-025-45421 30-025-45426 30-025-45420 aute:	PC-136 and give pertinen Completions: Att as will not be affect sured with daily me Bradley; Wc WC-025 G-09 S5 WC-025 G-09 S5 WC-025 G-09 S5 WC-025 G-09 S5	t dates, including estimated of ach wellbore diagram of ted with the approval of this easurement at separation.     Pool Olfcamp (Gas) (72860) 5263504N; Wolfcamp (98117) 53534O; Bone Spring (97088) 263504N; Wolfcamp (98117)
DOWNHOLE COMMING CLOSED-LOOP SYSTE OTHER: 13. Describe propos of starting any p proposed compl Marathon Oil Permian commingle request. P Notices have been mai Wells to be commingle Name Cave Lion 5 WC Feder Cave Lion 5 WC Feder Cave Lion 5 WA Feder Cave Lion 5 WA Feder Spud Date: Recommend sgnature by the I hereby certify that the in SIGNATURE	GLE Request to red or comple- proposed wor- etion or reco LLC is request Please see the iled to all intered d: ral 2H I eral 6H I al 8H ral 9H Director. Subjection a	commingle eted operations. :k). SEE RULE ompletion. ting approval to po attached commin est owners. Location N-5-26S-35E (287 N-5-26S-35E (287 N-5-26S-35E (287 N-5-26S-35E (287) N-5-26S-35E (287) N-5-26S-35E (287) N-5-26S-35E (287) N-5-26S-35E (287)	Clearly state all p (Clearly state all p 19.15.7.14 NMAC pol commingle. The v gle request. Wells will on "FSL 1811' FWL) "FSL 1811' FWL) "FSL 1841' FWL) TFSL 1841' FWL) Rig Release Da M. MAM complete to the b	OTHER: pertinent details, a C. For Multiple C alue of the oil and ga I be accurately mean API 30-025-45421 30-025-45426 30-025-45420 aute:	PC-136 and give pertinen Completions: Att as will not be affect sured with daily me Bradley; WC WC-025 G-09 S5 WC-025 G-09 S5 WC-025 G-09 S5 dge and belief.	L dates, including estimated of ach wellbore diagram of ach wellbore diagram of this easurement at separation. Pool Pool Dlfcamp (Gas) (72860) 5263504N; Wolfcamp (98117) 53534O; Bone Spring (97088) 263504N; Wolfcamp (98117)
DOWNHOLE COMMING CLOSED-LOOP SYSTE OTHER: 13. Describe propos of starting any p proposed compl Marathon Oil Permian commingle request. P Notices have been mai Wells to be commingle Name Cave Lion 5 WC Feder Cave Lion 5 WC Feder Cave Lion 5 WA Feder Cave Lion 5 WA Feder Spud Date: Recommend sgnature by the I hereby certify that the in SIGNATURE	GLE Request to red or comple- proposed wor etion or reco LLC is request Please see the iled to all intered d: ral 2H I eral 6H I al 8H al 9H	commingle eted operations. rk). SEE RULE ompletion. ting approval to po attached commin est owners. Location N-5-26S-35E (287 N-5-26S-35E (287 N-5-26S-35E (287 N-5-26S-35E (287) N-5-26S-35E (287) N-5-26S-35E (287) N-5-26S-35E (287) N-5-26S-35E (287)	Clearly state all p (Clearly state all p 19.15.7.14 NMAC pol commingle. The v gle request. Wells will on "FSL 1811' FWL) "FSL 1811' FWL) "FSL 1841' FWL) TFSL 1841' FWL) Rig Release Da M. MAM complete to the b	OTHER: pertinent details, a C. For Multiple C alue of the oil and ga l be accurately mean API 30-025-45421 30-025-45426 30-025-45420 alue of my knowled te: Est of my knowled Technician HES	PC-136 and give pertinen Completions: Att as will not be affect sured with daily me Bradley; WC WC-025 G-09 S5 WC-025 G-09 S5 WC-025 G-09 S5 dge and belief.	L dates, including estimated of ach wellbore diagram of ach wellbore diagram of this easurement at separation. Pool Difcamp (Gas) (72860) 5263504N; Wolfcamp (98117) 53534O; Bone Spring (97088) 263504N; Wolfcamp (98117)
DOWNHOLE COMMING CLOSED-LOOP SYSTE OTHER: 13. Describe propos of starting any p proposed compl Marathon Oil Permian commingle request. P Notices have been mai Wells to be commingle Name Cave Lion 5 WC Feder Cave Lion 5 WC Feder Cave Lion 5 TB Federa Cave Lion 5 TB Federa Cave Lion 5 WA Feder Spud Date: <u>Recommend sgnature by the</u> I hereby certify that the in SIGNATURE Type or print name <u>For State Use Only</u>	GLE Request to red or comple- proposed wor- etion or reco LLC is request Please see the iled to all intered d: ral 2H I eral 6H I al 8H ral 9H Director. Subje nformation a A. M.	commingle eted operations. rk). SEE RULE ompletion. ting approval to po attached commin est owners. Location N-5-26S-35E (287 N-5-26S-35E (287 N-5-26S-35E (287 N-5-26S-35E (287) N-5-26S-35E (287) N-5-26S-35E (287) N-5-26S-35E (287) N-5-26S-35E (287)	(Clearly state all j (Clearly state all j ) 19.15.7.14 NMAG ool commingle. The v gle request. Wells will on "FSL 1811' FWL) "FSL 1841' FWL) TFSL 1841' FWL) TFSL 1841' FWL) Rig Release Da M. MAM complete to the b TITLE	OTHER: pertinent details, a C. For Multiple C alue of the oil and ga I be accurately mean API 30-025-45421 30-025-45426 30-025-45420 aute:	PC-136 and give pertinen Completions: Att as will not be affect sured with daily me Bradley; Wc WC-025 G-09 S5 WC-025 G-09 S5 WC-025 G-09 S5 dge and belief.	L dates, including estimated of ach wellbore diagram of ach wellbore diagram of this easurement at separation. Pool Pool Dlfcamp (Gas) (72860) 5263504N; Wolfcamp (98117) 53534O; Bone Spring (97088) 263504N; Wolfcamp (98117)

#### PPLICATION 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				Oi	1	GAS	5
Well Name	Location	API #	Pool; Formation	BOPD	Gravities	MCFPD	BTU
Cave Lion 5 WC Federal 2H	Sec. 5-T26S-R35E	30-025-45421	WC025G09S5263504N Wolfcamp	b 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 Sprin	ng 800	43.0	1500	1330
Cave Lion 5 WA Federal 9H	Sec. 5-T26S-R35E	30-025-45420	WC025G09S5263504N Wolfcamp	p 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: <u>Jennifer Van Curen</u> 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

Federal lease NMNM093223 Royalty Rate 12.5%

Well Name	BOPD	Oil gravity @	Value /	MCFPD	Dry BTU	Value / mcf
		60 deg	bbl		-	
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.

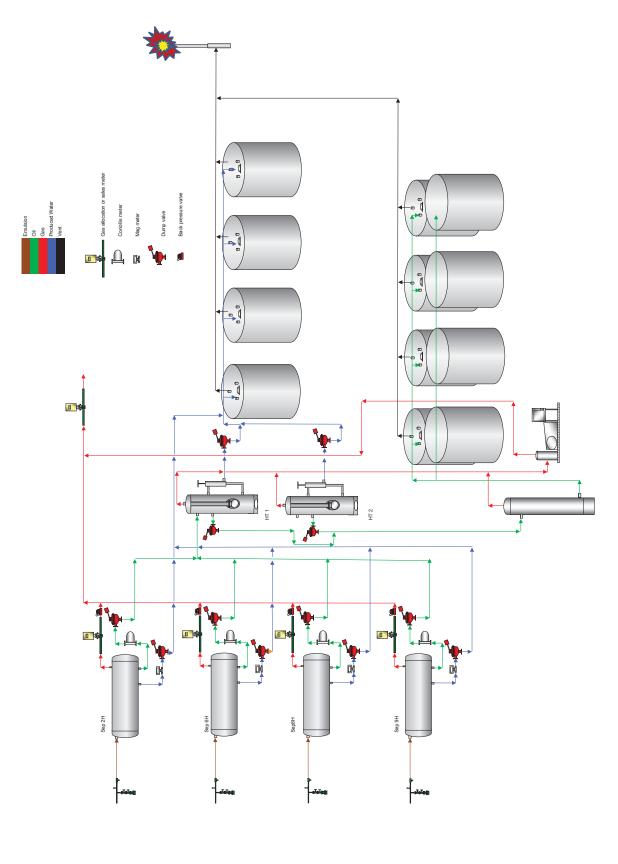
Signed: <u>Jennifer Van Curen</u> Printed Name: Jennifer Van Curen

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

Weighted averages for economic value

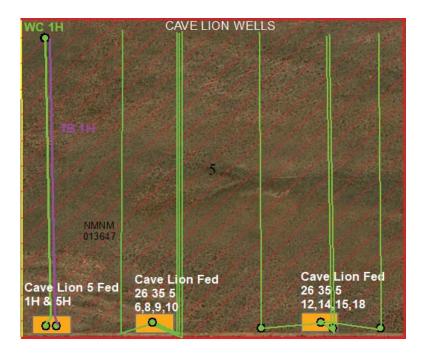
1H oil	1000/42.7	42,700	145,900	42.9 API
2H oil	800/43	34,400		
5H oil	800/43	34,400		
6H oil	800/43	34,400		
1H gas	900/1352	1,216,800	7,201,800	1348 BTU
2H gas	1500/1330	1,995,000		
5H gas	1500/1330	1,995,000		
6H gas	1500/1330	1,995,000		

## Facility Diagram



9 9 9 2

### 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

				T		-		
PI N.snb-	<sup>2</sup> Pool Code <sup>3</sup> Pool Name							
			98117		WC-025 G	-09 S263	504N; WO	LFCAMP
ode				<sup>5</sup> Property N	lame			<sup>6</sup> Well Number
		C	CAVE LIC	ON FEDERAL	26 35 5	WA		9H
0.				<sup>8</sup> Operator N	Name			<sup>9</sup> Elevation
8			MARA	THON OIL	PERMIAN LLC	<u>`</u>		3262'
-				Surface I	Location			
Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wes	line County
5	T26S	R35E		287	SOUTH	1841	WEST	LEA
		" Bo	ttom Hol	e Location If	Different Fron	n Surface		
Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wes	line County
5	T26S R35E 150 NORTH 2313 WEST LEA							LEA
13 Joint or	r Infill <sup>14</sup> Consolidation Code <sup>15</sup> Order No.							
	ode o. 8 Section 5 Section 5	section Township 5 T26S Section Township 5 T26S	ode (C) o. 18 Section Township Range 5 T26S R35E "Bo Section Township Range 5 T26S R35E	ode     98117       ode     CAVE LIC       o.     MARA       98     MARA       Section     T26S       R35E     Lot Idn       5     T26S       Section     Township       Range     Lot Idn       5     T26S       Range     Lot Idn       Section     Township       Range     Lot Idn       Section     T26S	ode     \$98117       ode     \$Property N CAVE LION FEDERAL       o.     *Operator N MARATHON OIL       08     WARATHON OIL       98     *Operator N MARATHON OIL       98     Section Township       126S     R35E       126S     R35E       126S     Range       126S     Lot Idn       126S     Range       126S     Lot Idn       126S     Range       126S     Range       126S     Range       126S     150	98117     WC-025     G       * Property Name       CAVE LION FEDERAL 26 35 5       * Operator Name       MARATHON OIL PERMIAN LLC       * Surface Location       * Surface Location       Section       T26S     R35E     287       * Bottom Hole Location If Different From       Section       Section       Township     Range       Lot Idn       Feet from the       North/South line       5       T26S     R35E       Lot Idn       Feet from the       North/South line       Section       Township       Range       Lot Idn       Feet from the       NORTH	98117         WC-025         G-09         S263           ode         SProperty Name           CAVE         LION         FEDERAL         26         35         5         WA           o.         Soperator Name         MARATHON         OIL         PERMIAN         LLC           V8         Variable         MARATHON         OIL         PERMIAN         LLC           Section           5         T26S         R35E         Lot Idn         Feet from the 287         SOUTH         1841           Teomship         Range         Lot Idn         Feet from the 287         SOUTH         1841           South Hole Location If Different From Surface           Section         Township         Range         Lot Idn         Feet from the 150         NORTH         2313	98117     WC-025 G-09 S263504N; WO       ode     SProperty Name       CAVE LION FEDERAL 26 35 5 WA       o.     SOPErator Name       98     MARATHON OIL PERMIAN LLC       VB     Variable       Surface Location       Section Township       726S     R35E       Lot Idn       Feet from the 287       SOUTH       1841       WEST       USTACE Location       Section Township       Range     Lot Idn       Feet from the 287       SOUTH       1841       WEST       USTACE Location If Different From Surface       Section Township       Range       Lot Idn       Feet from the       Section Township       Range       Lot Idn       Feet from the       Section Township       Range       Lot Idn       Feet from the       NORTH       2

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.

I hereby certify that the information contained herein is true the best of my knowledge and belief, and that this organizat working interest or unleased mineral interest in the land im	
LOFOTION 74 L L L T 25 S SECTION 52 SECTION 55 L "	luding the
proposed bottom hole location or has a right to drill this we	
	·
BHL/ LAST AKE POINT/BOTTOM HOLE LOCATION Or to a voluntary pooling agreement or a compulsory poolin heretofore entered by the division.	1g order
TAKE POINT 150' FNL 2313' FWL, SECTION 5 NAD 83, SPCS NM EAST	/2010
X:833335.29' / Y39825.69' LAT:32.07919900N / LON:103.39057610W	2018
LAT:32.07907276N / LON:103.39011306W Melissa Szudera Printed Name	
EIDST TAKE POINT	
150' FS 2315' FWL SECTION 5 NAD 83, SPCS NW EAST	om
X:833388.15' / Y:388841.21'	
ND 27, SPCS NM EAST X:792200.50' / Y:388783.61' IAT:32 06537110N / 10N-103 30008380W	TION
LAT:32.06537110N / LON:103.39008380W SORVETOR CERTIFICA	
was plotted from field notes of actual survey	s made by
SURFACE HOLE LOCATION 287' FSL 1841' FWL, SECTION 5 me or under my supervision, and that the sa	me is true
X:832912.34' / Y:388974.66'	
FIRST TAKE POINT LAT:32.06587562N / LON:103.39207810W ND 27, SPCS NM EAST X:91724.71' / Y:388917.06' APRIL 18, 2018	
SHL Date of Survey	SHOP
Signature and Seal of Performance Supervisional Supervisional	NET
SECTION 6	181
SECTION 7 D PI- C SECTION 8 SECTION 9 PO 10 8 21	653)
CORNER COORDINATES DE CORNER COORDINATES NAD 83, SPCS NM EAST NAD 27, SPCS NM EAST	
NAD 83, SPCS NM EAST         N         -         NAD 27, SPCS NM EAST         -         NAD 27, SPCS NM EAST         -	Su
C – X: 833719.73' / Y: 388693.48' C – X: 792532.08' / Y: 388635.88' Certificate Number	L-SUK
LLUID P. SHURY 21	353
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) 476-3466 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 <sup>2</sup> Pool Code				<sup>3</sup> Pool Name				
30-	-025-	45426		98117		WC-025 G	-09 82635	504N; WI	DLFCAMP	
<sup>4</sup> Property	Code				5 Property				<sup>6</sup> Well Nun	iber
				CAVE	LION 5 V	XY FEDERAL			6H	
<sup>7</sup> OGRID	No.				<sup>8</sup> Operator	Name			<sup>9</sup> Elevation	n
37209	8			MARAT	HON DIL F	PERMIAN LLC	)		326	3′
		_			<sup>10</sup> Surface I	Location		_		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/W	est line	County
Ν	5	T26S	R35E		287	SOUTH	1781	WEST	LE	4
			"Bo	ttom Hol	e Location If	Different From	Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/W	est line	County
С	5	T26S R35E 101 NORTH 965 WES						WEST	LE	A
<sup>12</sup> Dedicated Acres 320,00	<sup>13</sup> Joint of	r Infill <sup>14</sup> C	Consolidation (	Code <sup>15</sup> Or	der 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.

SECTION 31 A SECTION 32			SECTION 32	<sup>17</sup> 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
SECTION 6 965'	LAST TAKE/BHL	17,503' MEASI NAD 83 X:831986. LAT:32.07933880 NAD 27 X:790799.	SECTION 5           T/BOTTOM HOLE LOCATION           WRED DEPTH IN FEET           , SPCS NM EAST           66 / Y:393864.79'           DN / LON:103.39492877W           , SPCS NM EAST           25' / Y:393807.07'           EN / LON:103.39446554W	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. 7/22/2019
<del></del> 1035'- <del></del>	(FARTHEST) MEASURED DEPTH=15,726'	11,653' MEASL NAD 83, X8320665 LAT:32.0653667 NAD 27, X7908785 LAT:32.06524043	NT/FIRST TAKE PDINT JRED DEPTH IN FEET SC / VJ308702.14' IN / LDN:03.39401358W , SPCS NM EAST SC / VJ308724.55' 5N / LDN:03.39435116W HOLE LOCATION	Signature Date Adrian Covarrubias Printed Name E-mail Address
		287' FSL 17' NAD 83, X832852.3' LAT32.0557713 NAD 27, X7791664.7' LAT32.05575085 CORNEF NAD 83, A - X 83105 B - X 83365	BI FWL, SECTION 5 SPCS NM EAST / Y.388974.69' N / LUNI03.39227170W SPCS NM EAST 5' / Y388917.09' N / LUNI03.39180929W R COURDINATES SPCS NM EAST 0.60' / Yi 393975,45' 3.69' / Yi 393975,9' 3.69' / Yi 398693.48'	<sup>15</sup> SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was produced from field notes of actual surveys made by me or under my supervision, and that the same is true
	(NEAREST) MEASURED DEPTH=12,704' SHL	D - Xi 83107 CORNEI NAD 27, A - Xi 78983 B - Xi 79247 C - Xi 79253	A50' / Yi 398675.34' R COURDINATES , SPCS NM EAST 3320' / Yi 393901.74' 1627' / Yi 393902.25' 12.08' / Yi 388635.88' 16.87' / Yi 388617.76'	and my rect of the best of my belief. Date of Starley Seal of Professional Surveyor:
SECTION 6	2001 2001	c	SECTION 5 SECTION 8	- OF THE RECORDED
TAKE				Certificate Number

DISTANCES/AREAS RELATIVE TO NADB3 COMBINED SCALE FACTOR: 1.000006454 CONVERGENCE: 0.4997137472'; NOTE; ALL DIMENSIONS IN U.S. FEET District 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, Aztee, 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 <sup>1</sup>API Number <sup>2</sup> Pool Code <sup>3</sup> Pool Name BRADLEY; WOLFCAMP (GAS) 72860 30-025-45421 <sup>4</sup> Property Code <sup>5</sup> Property Name <sup>6</sup> Well Number CAVE LION 5 WC FEDERAL 2H<sup>7</sup>OGRID No. <sup>8</sup> Operator Name <sup>9</sup> Elevation 372098 MARATHON OIL PERMIAN LLC 3263' <sup>10</sup> 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 R35E T26S 287 SOUTH 1811 WEST LEA "Bottom Hole Location If Different From Surface UL or lot no. Section Township Lot Idn Range Feet from the North/South line Feet from the East/West line County 5 T26S R35E 617 D NORTH 1317 WEST LEA 12 Dedicated Acres <sup>3</sup> Joint or Infill <sup>14</sup> Consolidation Code 15 Order 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.

SECTION 31 A SECTION 32 B SECTION 6 LAST TAKE/BH. 1317 1327 1327 SECTION 52 T-26-S SECTION 52 the best of ny bankledge and belief and that the approximation with the table is and a complete to the best of ny bankledge and belief and that the approximation with a comment of the table is and that the approximation with a comment of the table is and that the approximation with a comment of the table is and table is an and table is a	16					1	"OPERATOR CERTIFICATION
SECTION 6 LAST TAKE/BHL TAGE T	SECTION 31	I SECTION 70	17,		T 05 C	SECTION 32	I hereby certify that the information contained herein is true and complete to
LAST TACE/BH. 1317       1327       LAST TACE/BL. 1317       1327       International content of the based on the start of the diff. Iso content to the diff. Iso content to the start of the dif		SECTION 32	0				the best of my knowledge and belief, and that this organization either owns a
TAKE/BIL       1317       1327       1327       1327       1327       Image: the second seco	SECTION 6	LAST-	1		T-26-S	SECTION 5	working interest or unleased mineral interest in the land including the
ISI/       ISZ/       ISZ/       ISZ/       ISZ/SIGED INECTION IN FEET NAD 82, SPCS NU EAST X82343.62 / Y.33323.53.13' LAT.52.077160/N1 / LON: IOJ.333508200 W NAD 27, SPCS NU EAST X70156.11 / Y.38372.603       er to a voluntary pooling agreement or a computatory pooling agreement or a comp				1			proposed bottom hole location or has a right to drill this well at this location
MAD B3, SPCS ME LST,     x83234.53 (*)     x83234.53 (*)     beruffyner entyred by the division.       1322'     1322'     1322'     1322'     7/22/2019       1322'     1322'     1322'     1322'     1322'       1322'     1322'     1322'     1322'     1322'       1322'     1322'     1322'     1322'     1322'       1322'     1322'     1322'     1322'       1322'     1322'     1322'     1322'       1322'     1322'     1322'     1322'       1322'     1322'     1322'     1322'       1322'     1322'     1322'     1322'       1322'     1322'     1322'     1322'       1322'     1322'     1322'     1322'       1283'     1322'     1322'     1322'       1283'     1322'     1322'     1322'       1294'     1351'     132'     1335'       1294'     1351'     1345'     100'       1294'     1351'     1345'     100'       1294'     1351'     1345'     100'       1294'     1351'     1345'     100'       1294'     1351'     1345'     100'       1294'     1351'     1345'     100'			1327'		LAST TAKE POINT,	BOTTOM HOLE LOCATION	pursuant to a contract with an owner of such a mineral or working interest,
LAT: 32.07719011 / LON: 33.3320.03 WADD 27.95 CS NH EAST WADD 27.95 CS NH EAST A - K. 70000457 (Y. 30007.34' HIGH WADD 27.95 CS NH EAST A - K. 70000457 (Y. 30007.34' HIGH WADD 27.95 CS NH EAST A - K. 7000457 (Y. 30007.34' HIGH WADD 27.95 CS NH EAST A - K. 7000457 (Y. 30007.34' HIGH WADD 27.95 CS NH EAST A - K. 7000457 (Y. 30007.34' HIGH WADD 27.95 CS NH EAST A - K. 7000457 (Y. 30007.34' HIGH WADD 27.95 CS NH EAST A - K. 7000457 (Y. 30007.34' HIGH WADD 27.95 CS NH EAST A - K. 7000457 (Y. 30007.34' HIGH WADD 27.95 CS NH EAST A - K. 7000457 (Y. 30007.34' HIGH WADD 27.95 CS NH EAST A - K. 7000457 (Y. 30007.34' HIGH WADD 27.95 CS NH EAST A - K. 7000457 (Y. 30007.34' HIGH WADD 27.95 CS NH EAST A - K. 700045					NAD 83,	SPCS NM EAST	or to a voluntary pooling agreement or a compulsory pooling order
MD 27, SPCs MR EAST X 71155.191 / Y.33523.60 LAT:32.0777927N / LON:103.59332773W MAD 83, SPCS MR EAST MEASURED DEPTH-16, S800 MEASURED DEPTH-16, S8000 MEASURED DEPTH-16, S8000 MEASURED DEPT							heretofore entered by the division.
Image: Section 6       Image: Section 7       Deferments of the section sected secting section sected section section section sected section					NAD 27.	SPCS NM EAST	7/22/2019
KICK OF POINT IZE, BSPC NU EAST MAD 82, SPCS NU EAST X, 2018262 // Y. 388784.25 LAT. 32.06532618/N / LON: 103.393320.62W       Printed Name         MAD 82, SPCS NU EAST X, 201826.62       Finited Name         SECTION 6       MAD 82, SPCS NU EAST X, 201826.62       Printed Name         MAD 82, SPCS NU EAST X, 201826.62       MAD 82, SPCS NU EAST X, 201826.62       Printed Name         MAD 82, SPCS NU EAST X, 201826.62       MAD 82, SPCS NU EAST X, 201826.62       Printed Name         SURPACE HOLE LOCATION X, 201826.23       SURPACE HOLE LOCATION X, 201826.23       Printed Name         SURPACE HOLE LOCATION X, 201826.23       SURPACE HOLE LOCATION X, 201827, SPCS NU EAST X,							Signature Date
KICK OF POINT INCK OF POINT MEASURED DEPTH=16,380       Finted Name         INCK OF POINT INCOMPART TAKE POINT INCOMPART AND CONTROLLING DEPTH=16,380       Printed Name         INC OF POINT INCOMPART AND CONTROLLING INCOMPART AND AND CONTROLLING INCOMPART AND CONTROLLING INCOMPART AND AND CONTROLLING INCOMPART AND AND CONTROLLING INCOMPART AND AND CONTROLLING INCOMPART AND AND CONTROLING INCOMPART AND AND CONTROLLING INCOMPART AN						1	
(FARTHEST) MEASURED DEPTH=16,360°       12,603° MEASURED MEASURED DEPTH=16,360°       12,603° MEASURED MEASURED DEPTH=16,380°       12,603° MEASURED MEASURED DEPTH=13,642°       13,501°       13,511°       14,510,500 %       10,510,312,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,510,7190°       10,500,7190°       10,500,7190°       10,500,7190°       10,500,7190°       10,500,7190°       10,500,7190°       10,500,7190°       10,500,7190°       10,500,7190°       10,500,			1322'		KICK OFF POINT	FIRST TAKE POINT	
MEASURED       LX:2327/FIL:       // 38876.66'         LAT: 32.05535151/       LON:103.3932062W       RAST         NAD 27, SPCS NU EAST       SECTION 6       SECTION 7       D         SECTION 7       D       SECTION 8       CONNER COORDINATES NAD 827, SPCS NU EAST       F: 33807.84'         SECTION 7       D       SECTION 8       CONNER COORDINATES NAD 827, SPCS NU EAST       SEC. 5         SECTION 7       D       SECTION 8       CONNER COORDINATES NAD 827, SPCS NU EAST       SEC. 5         SECTION 7       D       SECTION 8       CONNER COORDINATES NAD 827, SPCS NU EAST       SEC. 5         SECTION 7       D       SECTION 8       C       CONNER COORDINATES NAD 827, SPCS NU EAST       SEC. 8         SECTION 7       D       SECTION 8       C       CONNER COORDINATES NAD 827, SPCS NU EAST       SEC. 8         SECTION 7       D       SECTION 7       D       SECTION 8       C       CONNER COORDINATES NAD 827, SPCS NU EAST       SEC. 8         SECTION 7       D       SECTION 7       D       SECTION 7       C       CONNER COORDINATES NAD 827, SPCS NU EAST       SEC. 8         SECTION 7       D       SECTION 7       D       SECTION 7       C       C       CONNER COORDINATES NAD 827, SPCS NU EAST       C       C <td></td> <td>(FARTHEST) -</td> <td></td> <td></td> <td>12,803' MEASUR</td> <td>ÉD DEPTH IN FEET</td> <td>Frinted Name</td>		(FARTHEST) -			12,803' MEASUR	ÉD DEPTH IN FEET	Frinted Name
Bit Discusses       Bit Discusses       E-mail Address         MAD 27, SpCs NM EAST X: 791186.52' Y: 388726.66'       E-mail Address         X: 791186.52' Y: 388726.66'       LAT: 32.05523880 / LON: 103.39335623W       Image: Constraint of the					X: 832374.16	/ Y: 388784.25'	
LAT: 32.06523888N / LON: 103.39335823W SURFACE HOLE LOCATION 287 FSL 1811' FML SECTION 5 NAD 83, SPCS NM EAST X: 29694.46' LAT: 32.06575005N / LON: 103.39217497W NAD 27, SPCS NM EAST X: 79694.71' Y 338971.66' LAT: 32.06575005N / LON: 103.39217497W NAD 27, SPCS NM EAST X: 79694.71' Y 338971.66' LAT: 32.06575005N / LON: 103.39217497W NAD 27, SPCS NM EAST A - X: 831072.66' / Y: 333959.45' B - X: 831072.66' / Y: 339397.69' C C C CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 782476.27' / Y: 388673.34' D - X: 831072.66' / Y: 339301.74' B - X: 782476.27' / Y: 338920.25' C C CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 782476.27' / Y: 338920.25' C - X: 782476.27' / Y: 338920.25' C - X: 782476.27' / Y: 338920.25' C - X: 782476.27' / Y: 339320.174' B - X: 782476.27' / Y: 339320.25' C - X: 782476.27' / Y: 33920.25' C - X: 78					NAD 27, S	PCS NM EAST	E-mail Address
SURFACE HOLE LOCATION 287' FSL 1811' FWL, SECTION 5 NAD 283, SPCS NM EAST X: S32882.34' / Y: 388974.66' LAT: 32.06507633N / LON: 103.39171457W MAD 27, SPCS NM EAST X: 791694.71' / Y: 388917.06' LAT: 32.06575005N / LON: 103.39171261W MEASURED DEPTH=13,642' 1294' 1351' KOP/FTP 1811' 1345' SECTION 6 SECTION 7 D SECTION 8 C C C C C C C C C C C C C							
287' FSL 1811' FWL, SECTION 5 NAD 83, SPCS NM EAST     was plotted from field notes of actual surveys made by me or under my supervision, and that the some is true and correct to the best of my belief.       (NEAREST) MEASURED DEPTH=13,642'     1351'     CORNER COORDINATES NAD 83, SPCS NM EAST X:791694.71' / Y:388917.06'     was plotted from field notes of actual surveys made by me or under my supervision, and that the some is true and correct to the best of my belief.       (NEAREST) MEASURED DEPTH=13,642'     1351'     CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 831060.07 / Y: 338959.45' B - X: 833663.69' / Y: 339377.99'     Date of Survey       SECTION 6     1301'     1345'     C       SECTION 7 D     SECTION 8     C     CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 789833.20' / Y: 393901.74' B - X: 789833.20' / Y: 393901.74' B - X: 782476.27' / Y: 338920.25' C - X: 83370.74'     SEC. 5		1				1	<b><sup>18</sup>SURVEYOR CERTIFICATION</b>
MAD 83, SPC5 NM EAST         X:832862.34' / Y:388974.66'         X:832862.34' / Y:388974.66'         LAT:32.06587503N / LON:103.39217497W         NAD 27, SPC5 NM EAST         X:791694.71' / Y:388917.06'         LAT:32.06575005N / LON:103.39217497W         NAD 27, SPC5 NM EAST         X:791694.71' / Y:388917.06'         LAT:32.06575005N / LON:103.39171261W         Weasure of the best of my belies         MEASURED         DEPTH=13,642'         1294'         1294'         1294'         1811'         B34'         C - X: 8337174.50' / Y: 39397.45'         B - X: 831074.50' / Y: 39397.45'         SECTION 8         C - X: 792376.21K         E - X: 798433.20' / Y: 39390.74'         B - X: 798230.05' / Y: 39390.74'         B - X: 7984		1					I hereby certify that the well location shown on this plat
LAT: 32.06587633N / LON: 103.3917497W NAD 27, SPCS NM EAST X: 791694.71' / Y: 393907.06' LAT: 32.06575005N / LON: 103.39171261W MEASURED DEPTH=13,642' 1294' 1351' CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 831020.60' / Y: 393959.45' B - X: 831020.60' / Y: 39397.99' C - X: 8331074.50' / Y: 388675.34' SEC. 5 C CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 789833.20' / Y: 393901.74' B - X: 789833.20' / Y: 393901.74' B - X: 792476.27' / Y: 393900.75' C - X: 792532.06' / Y: 393801.74' B - X: 792476.27' / Y: 393900.75' C - X: 792532.06' / Y: 393801.74' B - X: 792476.27' / Y: 393900.75' C - X: 792532.06' / Y: 393801.74' B - X: 792476.27' / Y: 393900.75' C - X: 792532.06' / Y: 393800.75' C - X: 792532.06' / Y: 39					NAD 83, S	PCS NM EAST	was plotted from field notes of actual surveys made by
MAD 27, SPCS NM EAST         X:91664.71 / Y:388917.06'         MEASURED         DEPTH=13,642'         1294'         1294'         1294'         1294'         1811'         1811'         1811'         1345'         C         CORNER COORDINATES NAD 83, SPCS NM EAST         A - X: 831020.60' / Y: 393959.45'         B - X: 831074.50' / Y: 388675.34'         D - X: 831074.50' / Y: 393901.74'         B - X: 7989833.20' / Y: 393901.74'         B - X: 798933.20' / Y: 39390.25'         C - X: 79253.06' / Y: 39390		1					me or under my supervision and that the same is true
SECTION 6         SECTION 8         Conver coordinates NAD 83, SPCS NM EAST A - X: 831020.60' / Y: 333959.45' B - X: 831020.60' / Y: 333959.45' B - X: 831020.60' / Y: 333959.45' B - X: 831020.60' / Y: 333977.99' B - X: 831020.60' / Y: 333977.99' B - X: 831020.60' / Y: 333959.45' B - X: 831020.60' / Y: 333977.99' B - X: 831074.50' / Y: 338675.34' D - X: 831074.50' / Y: 338675.34' SEC. 5         Date of Survey Signature and Seal of Professional Serveror: B - X: 8300.60' / Y: 338675.34' D - X: 831074.50' / Y: 338675.34' D - X: 831074.50' / Y: 338901.74' B - X: 789833.20' / Y: 333901.74' B - X: 789833.20' / Y: 333901.74' B - X: 789232.06' / Y: 338901.74' B - X: 789232.06' / Y: 338805.88'         Description         Description         Description           Convert         Conve					NAD 27, S	PCS NM EAST	
NAD 27, SPCS NM EAST           NAD 27, SPCS NM EAST           N         A - X: 789833.20' / Y: 393901.74'           B - X: 792476.27' / Y: 393902.25'           C - X: 792532.08' / Y: 388635.88'		INFAREST					and correct to the best of my belles.
NAD 27, SPCS NM EAST           NAD 27, SPCS NM EAST           N         A - X: 789833.20' / Y: 393901.74'           B - X: 792476.27' / Y: 393902.25'           C - X: 792532.08' / Y: 388635.88'		MEASURED				1	ALL USON OF
NAD 27, SPCS NM EAST           NAD 27, SPCS NM EAST           N         A - X: 789833.20' / Y: 393901.74'           B - X: 792476.27' / Y: 393902.25'           C - X: 792532.08' / Y: 388635.88'			V		CORNER C	COORDINATES	Date of Survey
B C TION B A - X: 789833.20' / Y: 393901.74' B - X: 792476.27' / Y: 393901.74' C - X: 792532.08' / Y: 389835.88' Certificate Number			1351				Signature and Seal of Professional Surveyor: 8 and
B C TION B A - X: 789833.20' / Y: 393901.74' B - X: 792476.27' / Y: 393901.74' C - X: 792532.08' / Y: 389835.88' Certificate Number				22.2022	B - X: 833663.6	9' / Y: 393977.99'	ALL IS DON'TH PET
NAD 27, SPCS NM EAST           NAD 27, SPCS NM EAST           N         A - X: 789833.20' / Y: 393901.74'           B - X: 792476.27' / Y: 393902.25'           C - X: 792532.08' / Y: 388635.88'	SECTION 6			834	D - X: 831074.5	AL / W. 300000 71	O KUMENN'LE OF
NAD 27, SPCS NM EAST           NAD 27, SPCS NM EAST           N         A - X: 789833.20' / Y: 393901.74'           B - X: 792476.27' / Y: 393902.25'           C - X: 792532.08' / Y: 388635.88'		1	1040		CORNER C		- Of OCUCAT SANCE
N         B         - X: 792532.08' / Y: 38320.25'         Certificate Number           C         - X: 792532.08' / Y: 388353.88'         Certificate Number	SECTION / D	SECTION 8	1 I		NAD 27, SP	CS NM EAST	It style with the service
C - X: /92532.08 / Y: 388635.88 I Certificate Number		1	-10		B - X: 792476.2	7' / Y: 393920.25'	Cartificate Number
$U = \lambda_1 / 03000.07 / 11 300017/0$							Certificate ryuboer

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	E.
District II	EI
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	

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

District IV

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

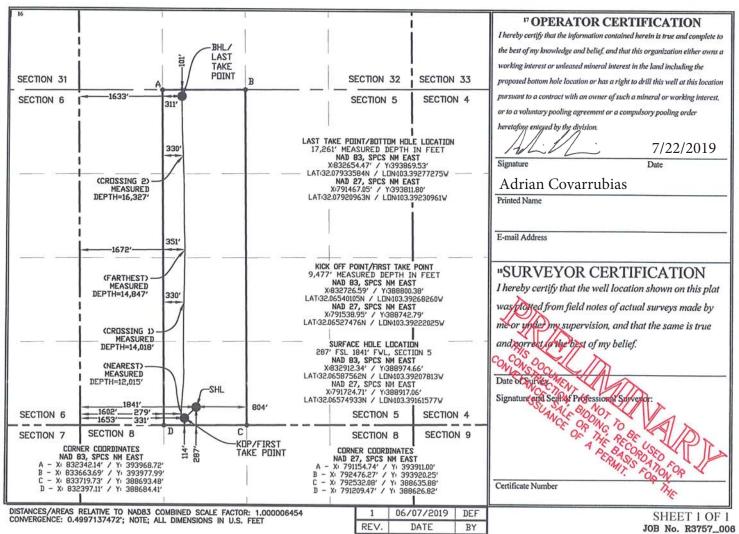
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number 30-025-45419		<sup>2</sup> Pool Code 97088		2	WC-025 G-0	<sup>3</sup> Pool Nam 08 S25353		PRING		
<sup>4</sup> Property Code		_	<sup>5</sup> Property Name						<sup>6</sup> Well Number	
		CAVE LION 5 TB FEDERAL							8H	
<sup>7</sup> OGRID No.		<sup>8</sup> Operator Name						9	<sup>9</sup> Elevation	
372098			MARATHON OIL PERMIAN LLC					3262'		
					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	
Ν	5	T26S	R35E		287'	SOUTH	1841'	WEST	LEA	
			" Bot	tom Hol	e 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	
С	5	T26S	R35E		101'	NORTH	1633'	WEST	LEA	
<sup>12</sup> Dedicated Acres 160.00	<sup>13</sup> Joint of	r Infill	Consolidation C	Code 15 Or	der 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.





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

Page 1 Of 2 Serial Number

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

NMNM 013647

#### Serial Number: NMNM-- 013647

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

Mer	Twp Rng	Sec	SType	Nr	Suff Subdivision	District/ Field Office	Serial N County	umber: NMNM 013647 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 Nun	nber: 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	e 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		

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

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

				Serial Number: NMNM 0136
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

Page 2 Of 2

### 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,

Ryan Gyllenband Senior Land Professional Lea County, New Mexico

## C-107/notifications not required since all

interests are identical in each completion