				s an s a taina a taina a taina		n angli a li g an angli a li g an ang ang angli ang
BI	015) UNITED STATES DEPARTMENT OF THE INTERIOR NMOCD				FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018 5. Lease Serial No.	
SUNDRY Do not use thi abandoned wel	NOTICES AND REPO is form for proposals to I. Use form 3160-3 (API	RTS ON WI drill or to re D) for such p	proposals.		6. If Indian, Allottee o	r Tribe Name
SUBMIT IN 1	TRIPLICATE - Other inst	tructions on		<u>2 2 2018</u>	7. If Unit or CA/Agree	ement, Name and/or No.
 Type of Well ☑ Oil Well ☑ Gas Well ☑ Other 			REC	EIVED	8. Well Name and No. CAVE LION 5 FEI	DERAL BC 1H
2. Name of Operator MARATHON OIL PERMIAN L	Contact: LC E-Mail: jvancuren(JENNIFER V @marathonoil.c			 API Well No. 30-025-44087 	
3a. Address 5555 SAN FELIPE HOUSTON, TX 77056	5555 SAN FELIPE				10. Field and Pool or Exploratory Area JABALINA	
4. Location of Well (Footage, Sec., T					11. County or Parish, State	
Sec 5 T26S R35E 185FSL 330FWL					LEA COUNTY, NM	
12. CHECK THE AF	PPROPRIATE BOX(ES)	TO INDICA	TE NATURE OF	F NOTICE, F	REPORT, OR OTH	IER DATA
TYPE OF SUBMISSION			TYPE OF	ACTION		
 Notice of Intent Subsequent Report 	 Acidize Alter Casing Casing Repair 		pen Iraulic Fracturing v Construction	 Production Reclamate Recompletion 		 □ Water Shut-Off □ Well Integrity ☑ Other
☐ Final Abandonment Notice	Change Plans		g and Abandon		rily Abandon	Production Start-up
13. Describe Proposed or Completed Op- If the proposal is to deepen direction: Attach the Bond under which the woi following completion of the involved testing has been completed. Final At determined that the site is ready for f	ally or recomplete horizontally, rk will be performed or provide l operations. If the operation re bandonment Notices must be fi	give subsurface the Bond No. o sults in a multip	locations and measure n file with BLM/BIA le completion or reco	red and true vert Required subs mpletion in a ne	tical depths of all pertin sequent reports must be w interval, a Form 316	ent markers and zones. filed within 30 days 0-4 must be filed once
MIRU, 12/8/207 @ 23:30 calle 17.5" hole from 145' to 1,120' run 13 3/8" csg, 27 jnts of 54.9 pump 20 bbls spacer, 638 sks surface. Notified Steve Caffer psi for 30 min, 10 psi drop, go orbit valve, PU BHA. 12/13 Cl to 5435'. 12/15 - Circulate hol BLM of intent to run and ceme Run 9 5/8" csg, 130 jnts of 40 sks lead cement, 400 sks tail psi for 30 min, 20 psi drop, go	Circulate hole clean, TO 5# J55 BTC to 1110', WC be lead cement, 290 sks ta y with BLM on upcoming od test. Hook up gas bus eaned out shoe track, pe e clean, TOOH, LD BHA, ent 9 5/8" casing Left mes # J55 BTC to 5423', 12/1 cement with 491 sks cem	H, L/D BHA. C, NUWH, build I cement with BOP test @ 2 ter lines to fic frorm FIT. Sta pull wear build Ssage with Sta 6 - Cement 9 tent to surfact	12/11 Make up sl op's, wellhead bo 348 sks cement 20:30. 12/12 Test we line, NU flow li shing Derrick insperve Caffey @ 18: 5/8" pump 20 bb 9. Pressured test	hoe track and wl. Cement of returned to casing to 15 ne to hole section boection. Notifi 30 pm on 12 Is spacer, 12 ed casing to	d casing 100 ie /15. 49	
14. I hereby certify that the foregoing is	Electronic Submission #	ON OIL PERM	AN LLC, sent to t	the Hobbs	- //	
Name (Printed/Typed) JENNIFE	R VAN CUREN		Title SR. RE	GULATORY	COMPLIANCE RE	RECORD/
Signature (Electronic	Submission)		Date 02/23/20	018	A	TAA
	THIS SPACE F	OR FEDER	AL OR STATE	OFFICE US		
_Approved By Conditions of approval, if any, are attached certify that the applicant holds legal or eq which would entitle the applicant to cond	uitable title to those rights in th		Title	BU	CARLSBAD FYEL	AGENTERATE
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent	U.S.C. Section 1212, make it a statements or representations a	a crime for any p s to any matter v	erson knowingly and vithin its jurisdiction.	willfully to mal	ke to any department or	agency of the United
(Instructions on page 2) ** OPERA	TOR-SUBMITTED ** C	PERATOR	-SUBMITTED *	* OPERATO	OR-SUBMITTED	** 12

Additional data for EC transaction #405613 that would not fit on the form

32. Additional remarks, continued

1

5445'. Circulate, perform FIT. 12/17 - Drill 8.75" hole from 5445' to 9358'. Sweeps and circulate hole clean. Check well flowing, well static. TOOH from 9358' to BHA. Change out motor. 12/18 - Function test blind rams, TIH to 9253'. Relog gamma from 9253' to 9358'. 12/19 - Drill 8.75" hole to 9759'. Trouble shoot rotating head leaking. Replace air line to clamp on bowl assembly. Drill to 11214'. 12/20 - Circulate, TOOH from 11214' to 103'. TIH from 103' to 11164'. Relog gamma from 11164' to 11214'. Drill 8.75" hole to 11214' to 11690'. Start drill curve from 11690' to 11845", Sweep and circulate, flow check (well static). 12/22 - RU and run 7" csg, 278 jnts, 29# P110-CY csg to 11835'. 12/23 - Cement csg, pump 30 bbls spacer, 700 sks lead cement, 335 sks tail cement, no cement to surface. Notify Pat McKelvey and and Charles Nimmer with BLM. Allowed to proceed with operations but requested a bond log after rig is moved off but before completions work begins. 12/24 - Pressure test 7" casing to 4382 psi for 30 min, 67 psi drop, good test. Drill curve 10' of new formation. Drill 6 1/8" curve from 11855' to 12850'. 12/26 - Service rig, function upper & lower pipe rams. Drill 6 1/8" lateral to 13165'. Sweep & circulate, TOOH for lateral BHA, TIH. Relog gamma from 13097' to 13165'. Drill 6 18" lateral to 17054'. Sweep & circulate clean. Notify BLM P. Flowers of liner run & cementing on 12/29 @ 16:24. 12/30 - run 4.5" casing, 116 jnts, 13.5# P110IC TXP to 17050'. 12/31 - Cement 4.5" casing, pump 30 bbls spacer, 555 sks tail cemept with 122 sks cement return to surface. 1/1 - Pressure test liner to 2708 psi for 30 min, held, good test. PU equipment, RDMO. 1/3/2018



Wellbore Schematic Well Name: CAVE LION 5 FEDERAL BC 1H

State/Province Prospect Area NEW MEXICO RED HILLS Well Configuration Type Well Objective HORIZONTAL EXPLOITATIO		ILLS	Well Subtype	Lat/Long Datu NAD27	32.065479	Longitude (*) -103.396492	
			Well Objective EXPLOITATION	Well Status COMPLETION		Ground Elevation (ft) 3,271.00	KB-Ground Distance (ft) 25:00
L. Trickell		an a	HORIZONTAL	WE LION 5 FEDERAL BC 1H, 2/2	0/2018 2:06:54 PM	4	and Marine Provided Structure
MD tKB)	TVD (ftKB)	Incl (°)	and the second second	Vertical sche	and an and the second	una di dinana katalari Mana di dinana katalari	Contraction and the second
				Venical scrie	matic (actual)		
24.9	24.9	0.4	alay finya di a mandro di kana da di Aliye di kani 10 marta kina da mata kita kanya kana da ma				
27.9	27.9	0.4			-		
28 9	28.9	0.4					
29.2	29.2	0.4			1		
29.5	29.5	0.4					
30.3	30.8	0.4					
513	51.8	0.4					ductor 1; OD 20.000 in;
145.0	145.0	0.4	Des:Surface Casing Cer			ID:19.000 in; De Length:120.00 ft	pth MD:25.0-145.0 ftKE
1,026.9	1,026.9	0.6	MD:29.6-1,120.0 ftKB; Date	12/11/2017		2011941.120.001	•
1,025.2	1,028.2	0.6					
1,108.5	1,108.6	0.5					ace; OD:13.375 in;
1,110.2	1,110.2	0.5					pth MD:29.6-1,110.2
1.120.1	1,120 1	0.5	Des:Intermediate Casing Cer	nent; Depth			
4,671.9	4,665.5	1.0	MD:27.9-5,435.0 ftKB; Date	12/16/2017			
5.380.2	5,373.5	1.6					
5.381.9	5,375.1	1.6					
8,421.3	5,414.5	1.6				No.:3: Des:Inten	mediate 1; OD:9.625 in
5.422.9	5,416.1	1.6					th MD:27.9-5,423.0 ftK
5,435 0	5,428.3	1.6	Des:Intermediate Casing Cer MD:4,672.0-11			Lengur.5,595.07	n
11,557.9	11,558.9	2.4		12/23/2017			
11,584.0	11,574.9	2.4					
11.585.5	11,577.6	2.4					
11,557.6	11,578.5	2,4		1	LL S		
11,552.8	11,583.8	2.4	-				
11,594.5	11,585.4	2.4					
11:548.5	11,639.5	2.3					
11,592.9	11,683.8	2.2					
11,738.8	11,729.7	2.1					
11,740.2	11,731.0	2.1					
11,787.4	11,778.2	5.0					
11,833.3	11,823.4	9.8				No.:4; Des:Inten	mediate 2; OD:7.000 in;
11,835.0	11,825.0	9.9	Des:Production Casing Cer MD:11,567.8-17				oth MD:28.7-11,835.0
15,997.4	12,407.3	91.5		ate:1/1/2018		iterigut. 11	,000.20 IL
15,999.0	12,407.3	91.5					
17,000.7	12,407.2	91.5					
17,047.9	12,406.0	91.5					uction 1; OD:4.500 in;
17,049.9	12,406.0	91.5				ID:3.920 in; Dep ftKB; Length 5,4	oth MD:11,567.8-17,050 182.21 ft
MEXIC ON BA	O, TRAVEL V	VEST ON A	ID STATE HIGHWAY 128 FOR 1 2.3 MILES TO A LEASE ROAD	IWAY 128 (EAST KANSAS AVE 4.1 MILES TO CONTY RD # 2 (E ON THE LEFT. TRAVEL SOUTH THE RIGTH. TRAVEL EAST ON	ATTLE AXE ROAD	D) ON THE LEFT. T	RAVEL SOUTHWEST
	ON THE LEFT			Page 1/1			eport Printed: 2/20/2

C	ave Lion 5 Federal	BC 1H - Casing an	d Cement Operations	5
Casing detail	Surface	Intermediate	Production	Liner
Date	12/11/2017	12/15/2017	12/22/2017	12/9/2017
Hole size	17 1/2"	12 1/4"	8 3/4"	6 1/8"
Casing size	13 3/8"	9 5/8"	7"	4 1/2"
Weight	54.5	40	29	13.5
Туре	J-55	J-55	P110-CY Blue	P110-IC
Thread	BTC	BTC	Blue	TXP
Depth (MD)	1,110.20	5,423.0'	11,835.0'	17050
Amount jnts	27	130	278	116
Cement detail	Surface	Intermediate	Production	Liner
Date	12/11/2017	12/16/2017	12/23/2017	12/31/2017
Top depth KB	29.6'	27.9'	4.672.0	11,567.8'
Bottom depth KB	1,120.0'	5,435.0'	11,835.0'	17,050.0'
Lead sks	638	1,249	700	
Yield	1.8	1.92	2.81	8
WOC to 500 psi	7:51 hrs/min	11:51 hrs/min	6:40 hrs	
Tail sks	290	400	335	555
Yield	1.36	1.33	1.19	1.22
WOC to 500 psi	7:26 hrs/min	5:14 hrs/min	6:40 hrs	17:09 hrs/min
Gel spacer	20 bbl	20 bbl	20 bbls	
Fresh Water Spacer			10 bbls	
Tuned Spacer III				30 bbls
Class	C	C	C	Н
Circulate to surface				
(sks)	348	491	0	122
		7	Lift Pressure	
Top meas. method	Circulate	Circulate	Calculations	Circulate
TOC	29.6'	27.9'	4,672'	11,567'
Pressure testing	Surface	Intermediate	Production	Liner
Date	12/12/2017	12/16/2017	12/24/2017	1/1/2017
PSI	1500	1800	4382	2708
Time (min)	30	30	30	30
Bled off	0	20	67	0
Drop	0%	1%	2%	0%
Good test	Yes	Yes	Yes	Yes