					OMB	FORM APPROVED DMB NO. 1004-0137 pires: January 31, 2018	
_	NOTICES AND REPO		Håd Kid		5. Lease Serial No. NMNM13647		
Do not use thi abandoned we	is form for proposals to II. Use form 3160-3 (API	di n of the ter D) for such p		ohhs	6. If Indian, Allottee	or Tribe Name	
SUBMIT IN 1	TRIPLICATE - Other inst	tructions on (7. If Unit or CA/Agr	eement, Name and/or No.	
1. Type of Well S Oil Well Gas Well Oth	AUG 21		8. Well Name and No. CAVE LION 5 WA FEDERAL 9H				
2. Name of Operator MARATHON OIL PERMIAN L	Contact: LC E-Mail: jvancuren@	JENNIFER V		EIVED	 API Well No. 30-025-45420- 	00-X1	
3a. Address 5555 SAN FELIPE STREET HOUSTON, TX 77056	· · · · · · · · · · · · · · · · · · ·	3b. Phone No. Ph: 713.29			10. Field and Pool or WOLFCAMP	Exploratory Area	
4. Location of Well (Footage, Sec., T	, R., M., or Survey Description)			11. County or Parish	, State	
Sec 5 T26S R35E SESW 287 32.065876 N Lat, 103.392075			LEA COUNTY, NM			, NM	
12. CHECK THE A	PPROPRIATE BOX(ES)	TO INDICA	TE NATURE O	F NOTICE,	REPORT, OR OT	HER DATA	
TYPE OF SUBMISSION			TYPE O	ACTION			
Notice of Intent				—	ion (Start/Resume)	UWater Shut-Off	
Subsequent Report	Alter Casing		aulic Fracturing	Reclams		Well Integrity	
	Casing Repair	_	Construction	Recomp		Other Drilling Operations	
Final Abandonment Notice	Change Plans Convert to Injection		and Abandon Back	U Tempor	arily Abandon Disposal		
MIRU. 3/4/2019 ? Notified BLI to 975?. Notified BLM of inten 1164?. TOH to BHA. Run 13 3 bbsl of spacer, 725x of lead of - Perform BOP Test. Tested c track and 10? of new formatio BLM of upcoming casing and to 5441?. Cement csg by pum 260sx cmt to surface. 3/11 ? F Drill out cement and float equi to 9651?. 3/13 ? Flow check. 0 from 9550? to 9651?. 3/14 ? O	t to run and cement casin 3/8? csg, 28 jts, 54.5#, J5 cement, and 345sx of tail sg to 1500 psi for 30 min, n to 1074?. Drill 12 ?? se cementing job. TOH to BI ping 20 bbls spacer, 1300 ressure test csg to 3000 pment and drill 10? of ner Circulate bottoms up. TOI	g. 3/6 ? Conti 5, STC to 115 cement with 5 20 psi drop, g ction from 117 HA. 3/10 ? Ru 5sx lead ceme psi for 30 min w formation to H to BHA. TIH	nue drilling 17 ? 4?. Cement cas 19sx of cement jood test. 3/8 - I 4? to 5455?. 3/9 n 9 5/8? csg, 12 ent, and 385sx ta 60 psi drop, go 5465?. Drill 8 from BHA to 95	? casing to ing by pump to surface. 2 rill shoe 9 ? Notified 2 jts, 40#, J ail cement w ood test. ? from 5465 550?. Re log	bing 30 3/7 55, LTC ith ? gamma		
14. I hereby certify that the foregoing is		470070				<u> </u>	
~~~	# Electronic Submission For MARATHC Imitted to AFMSS for proce	ON OIL PERMI	NLLC. sent to	the Hobbs	-		
Name (Printed/Typed) JENNIFER VAN CUREN			Title SR. REGULATORY COMPLIANCE REP				
Signature (Electronic S	Submission)		Date 06/21/2	019			
	THIS SPACE FO	OR FEDERA		OFFICE U	SE		
Approved By			Title Accep	ted for	Record	JUL 1 0 2019	
onditions of approval, if any, are attached rtify that the applicant holds legal or equiphich would entitle the applicant to condu	utable title to those rights in the		Jon	athon She Isbad Fleid (	pard		
itle 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s				willfully to ma	ke to any department o	r agency of the United	
Instructions on page 2) <b>** BLM REV</b>	SED ** BLM REVISED	D ** BLM RE	VISED ** BLN	I REVISED	** BLM REVISE	ED ** K2	

## Additional data for EC transaction #470079 that would not fit on the form

## 32. Additional remarks, continued

TIH to 10195. 3/15 ? Continue drilling 8 ?? from 10195? to 12015?. Flow check and circulate. TOH to BHA. 3/16 Notified BLM of upcoming casing and cement job. Run 7? csg, 290jts, 29#, P110, VA Roughneck to 12004?. 3/17 ? Cement csg by pumping 20 bbls spacer, 780sx lead cement, and 200sx tail cement, with no cement to surface observed. Wash up. RDMO. 6/3 ? MIRU. 6/4 ? Pressure test csg to 6000 psi for 30 min, held, good test. 6/5 ? Drill 6 1/8? vertical section from 12025? to 12240?. Flow check and circulate. TOH to BHA. TIH to 12140 and re log gamma from 12140? to 12240?. Continue drilling 6 1/8? vertical from 12240? to 12917?. 6/7 ? Flow check and circulate. TOH from 12917 to BHA. Lay down 6 1/8? curve assembly. TIH to 12823?. Re log gamma from 12823? to 12917?. Drill 6 1/8? curve from 12917? to 13200?. 6/8 ? Drill 6 1/8? lateral from 13200? to 16629. 6/11 - Flow check. TOH to BHA. 6/12 ? TIH to 16530?. Re-log gamma from 16530? to 16629?. Continue drilling 6 1/8? lateral from 16629? to 17619?. Circulate. 6/13 ? Notified BLM of upcoming liner run and cement job. Run 4 ?? liner, 142jts, 13.5#, P110, VA Roughneck from 11682? to 17607?. 6/15 ? Cement liner by pumping 20 bbls of spacer, 605sx of tail cement, with 128sx of cement to surface. Pressure test liner to 4798 psi for 30 min, held, good test. RDMO.



	Ca	ve Lion 5 WA Fede 30-025-45420		· · · · · · · · · · · · · · · · · · ·
SPUD	TD Reached	Rig Release	Total Depth	Ground Elevation
3/5/2019	6/13/2019	6/18/2019	17619 / 12740	3262
Casing detail	Surface	Intermediate	Production	Liner
Date	3/6/2019	3/10/2019	3/16/2019	6/13/2019
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	J55	J55	P110	P110
Thread	STC	LTC	VA roughneck	VA Roughneck
Тор	0	0	0	11682
Depth (MD)	1154	5441	12004	17607
Amount jnts	28	122	290	142
Cement detail	Surface	Intermediate	Production	Liner
Date	3/6/2019	3/10/2019	3/17/2019	6/15/2019
Top depth KB	0	0	3085	11,682
Bottom depth KB	1154	5441	12004	17607
Lead sks	725	1305	780	
Yield	1.73	2.27	3.22	
Tail sks	345	385	200	605
Yield	1.33	1.33	1.17	1.18
WOC to 500 psi		4.5 hrs		
Spacer	30 bbls	20 bbls	20 bbls	20 bbls
Class	С	С	С	Н
Circulate to				
surface (sks)	519	260	0	128
Fop meas.				
method	Circulate	Circulate	Calculations	Circulate
гос	0	0	3085	11682
Pressure testing	Surface	Intermediate	Production	Liner
Date	3/8/2019	3/11/2019	6/4/2019	6/15/2019
PSI	1500	3000	6000	4798
Fime (min)	30		30	30
Bled off	20	60	0	0
Drop	1%	2%	0%	0%
Good test	Yes	Yes	Yes	Yes

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	Ca	ve Lion 5 WA Fed	eral 9H	
		30-025-45420	)	
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Spacer	30 bbls	20 bbls	20 bbls	20 bbls
Class	С	С	C	H
Circulate to				
surface (sks)	519	260	0	128
Top meas.				
method	Circulate	Circulate	Calculations	Circulate
тос	Ö	0	3085	11682
Pressure testing	Surface	Intermediate	Production	Liner
Date	3/8/2019	3/11/2019	6/4/2019	6/15/2019
PSI	1500	3000	6000	4798
Time (min)	30	30	30	30
Bled off	20	60	0	0
Drop	1%	2%	0%	0%
Good test	Yes	Yes	Yes	Yes

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