API NUMBER: 051 25045

OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION P.O. BOX 52000 OKLAHOMA CITY, OK 73152-2000 (Rule 165:10-3-1)

Approval Date: 07/20/2023

Expiration Date: 01/20/2025

Directional Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION:	Section: 0	9 T	ownship: 3	3N Rai	nge: 5W	County: G	RADY					
SPOT LOCATION:	NW SE	SW	sw	FEET FROM QUAI	RTER: FROM	SOUTH	FROM WEST					
				SECTION L	INES:	472	700					
Lease Name:	скѕмои				Well No:	8-7-6		Well will be	472	feet from nearest unit	or lease bo	undary.
Operator Name:	MACK ENER	GY CO			Telephone:	40583298	30; 5802525580			OTC/OCC Num	ber: 11	739 0
MACK ENER	GY CO						ALTON COBB					
100 N BROADWAY STE 3300							BOX 463					
OKLAHOMA CITY, OK 73102-8831							RUSH SPRINGS	;		OK 73082		
Formation(s)	(Permit Va	lid for List	ed Form	nations Only):							
Name			Code		Depth							
1 MORROW S	SUBTHRUST		402MR	WST	11350							
Spacing Orders:	731833			ι	ocation Excep	otion Orders:	No Exceptions	;	Ind	creased Density Orders:	No De	nsity
Pending CD Numb	ers: No Pe	ending			Working int	erest owner	s' notified: DNA			Special Orders:	No Spe	ecial
Total Depth: 1	11964	Ground Ele	vation: 12	16	Surface (Casing:	1500	Depth t	o base o	of Treatable Water-Bearin	ng FM: 340	
									D	eep surface casing	has beer	n approved
Under	Federal Jurisdic	tion: No					Approved Method for	disposal of Drill	ing Flui	ds:		
Fresh Water Supply Well Drilled: No						D. One time land application (REQUIRES PERMIT) PERMIT NO: 23-39146						
Surface	e Water used to	Drill: Yes					H. (Other)		CLOSE REQUE	D SYSTEM=STEEL PITS ST	PER OPER	RATOR
PIT 1 INFOR	MATION						Category	of Pit: C				
Type of	Pit System: CL	OSED Clos	ed System	Means Steel P	its		Liner not required for	Category: C				
Type of Mud System: WATER BASED Chlorides Max: 5000 Average: 3000							Pit Location is: BED AQUIFER Pit Location Formation: DUNCAN					
	top of ground w		han 10ft he	elow base of nit?	· v		Pit Location Form	iation: DUNCA	N			
	mile of municipa	-		now base of pit.								
	Wellhead Prote											
Pit <u>is</u> lo	ocated in a Hydr	ologically Ser	nsitive Area	а.								
DIRECTIONAL	HOLE 1											
Section: 9	Townsh	ip: 3N	Ran	nge: 5W	Meridiar	n: IM						
Section: 9		ip: 3N ty: GRAE		nge: 5W	Meridiar	n: IM	Measur	ed Total Dep	th: 1	1964		
Section: 9 Spot Location	Coun	ty: GRAD			Meridiar SW	n: IM		ed Total Dep Vertical Dep				
	Coun	ty: GRAD	SW		SW		True	Vertical Dep	th: 1	1870		

NOTES:

Category	Description
DEEP SURFACE CASING	[7/18/2023 - GE7] - APPROVED; (1) NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING. (2) SUBSEQUENT WELLS ON SAME PAD WILL NOT BE ALLOWED DEEP SURFACE CASING IN THE EVENT OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING.
HYDRAULIC FRACTURING	[7/18/2023 - GE7] - OCC 165:10-3-10 REQUIRES:
	1) NOTICE SHALL BE GIVEN AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS ON A HORIZONTAL WELL TO OPERATORS PRODUCING WELLS WITHIN 1 MILE OF THE COMPLETION INTERVAL OF THE SUBJECT WELL. THE NOTICE TO SUCH OPERATORS SHALL CONTAIN THE INFORMATION IN FORM 6000NOO. IF THE HYDRAULIC FRACTURING OPERATIONS SCHEDULE CHANGES AFTER NOTICE HAS BEEN PROVIDED, RESULTING IN A DELAY OF OPERATIONS OF MORE THAN 5 DAYS FROM THE INITIAL NOTICE, NEW NOTICE IS REQUIRED TO BE GIVEN;
	2) NOTICE WILL BE GIVEN TO THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS. FORM 6000NHF SHALL BE FOUND HERE: HTTPS://OKLAHOMA.GOV/OCC/DIVISIONS/OIL-GAS/OGCD-FORMS; AND,
	3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS IS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION OF HYDRAULIC FRACTURING OPERATIONS, FOUND AT FRACFOCUS.ORG
SPACING - 731833	[7/18/2023 - G56] - (UNIT) NW4, SW4 9-3N-5W EST CARTER KNOX SUBTHRUSTED MORROW OP UNIT FOR MRWST