API NUMBER: 051 25016

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

Approval Date: 03/03/2023

Expiration Date: 09/03/2024

Directional Hole Oil & Gas

## **PERMIT TO DRILL**

				<u>. – .</u>	X 1 V 1 1		DIVILL							
WELL LOCATION:	Section: 08	Township: 3N	Range:	5W	County:	GRADY	,							
SPOT LOCATION:	SE SE NW	NE F	EET FROM QUARTER:	FROM	NORTH	FROM	EAST							
			SECTION LINES:		997		1548							
Lease Name:	скѕмои			Well No:	5-5-6			Well will be	997	feet from n	earest unit	or lease	boundary.	
Operator Name:	MACK ENERGY CO		Te	elephone:	40583298	830: 58	02525580			OTC/0	OCC Num	ber:	11739 0	
						1 [								
MACK ENERGY CO						N	ICCASLAND F	ARMS						
						4	700 GAILLARD	DIA PARKWAY	1					
OKLAHOMA CITY, OK 73142-1839						s	SUITE 102							
						c	OKLAHOMA CI	TY		OK	73142			
						L								
Formation(s)	(Permit Valid for L	isted Formati	ione Only):											
, ,	(Ferriii Valid IOI L					1								
Name	IDTI IDI IOT	Code		Depth										
1 MORROW SU		402MRWS		11821										
Spacing Orders: 7	31833		Locat	ion Excep	tion Order	s: N	o Exception:	S	Inc	creased Densi	sity Orders:	No D	ensity	
Pending CD Numbers: No Pending Working interest own						ers' notif	ied: ***			Speci	ial Orders:	No S	pecial	
Total Depth: 11912 Ground Elevation: 1268 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 350								50						
									D	eep surfac	ce casing	has be	en approved	
Under F	Under Federal Jurisdiction: No						Approved Method for disposal of Drilling Fluids:							
Fresh Water Supply Well Drilled: No							D. One time land application (REQUIRES PERMIT) PERMIT NO: 23-38909							
Surface Water used to Drill: Yes							H. (Other) CLOSED SYSTEM=STEEL PITS PER OPERATOR							
									REQUE					
PIT 1 INFORM	IATION						Categor	y of Pit: C						
Type of Pit System: CLOSED Closed System Means Steel Pits						Li	Liner not required for Category: C							
Type of Mud System: WATER BASED							Pit Location is: NON HSA							
Chlorides Max: 5000 Average: 3000							Pit Location Formation: CHICKASHA							
Is depth to top of ground water greater than 10ft below base of pit? Y														
Within 1 mile of municipal water well? N														
Wellhead Protection Area? N Pit <u>is not</u> located in a Hydrologically Sensitive Area.														
Pit <u>is not</u> loc	ated in a Hydrologically S	Sensitive Area.												
DIDECTION														
DIRECTIONAL I														
O 1' E	T 1: 011	_	-14/ B		18.4									

Section: 5 Township: 3N Range: 5W Meridian: IM

County: GRADY Measured Total Depth: 11912

Spot Location of End Point: SW SE SW SE True Vertical Depth: 11837

Feet From: SOUTH 1/4 Section Line: 109 End Point Location from
Feet From: EAST 1/4 Section Line: 1900 Lease, Unit, or Property Line: 109

NOTES:

Category	Description
DEEP SURFACE CASING	[3/2/2023 - GC2] - 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	[3/2/2023 - GC2] - 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 - 731883	[3/3/2023 - GC2] - (UNIT) 5 & 8-3N-5W EST CARTER KNOX SUBTHRUSTED MORROW OPERATING UNIT FOR MRWST