API NUMBER:	051	25015	

Injection

**Directional Hole** 

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

Approval Date: 03/02/2023 Expiration Date: 09/02/2024

## PERMIT TO DRILL

**OKLAHOMA CORPORATION COMMISSION** 

Lease Name: CKSMOU Well will be 997 feet f		
Operator Name: MACK ENERGY CO Telephone: 4058320830/ 5802525580	irom nearest unit or lease boundary.	
	OTC/OCC Number: 11739 0	
MACK ENERGY CO MCCASLAND FARMS		
4700 GAILLARDIA PARKWAY		
OKLAHOMA CITY, OK 73142-1839 SUITE 102		
OKLAHOMA CITY OF	K 73142	
Formation(s) (Permit Valid for Listed Formations Only):		
Name Code Depth		
1 MORROW SUBTHRUST 402MRWST 10156		
Spacing Orders: No Spacing Location Exception Orders: No Exceptions	Density Orders: No Density	
Pending CD Numbers: No Pending Working interest owners' notified: *** Special Orders: No Special		
Total Depth: 11116 Ground Elevation: 1272 Surface Casing: 1500 Depth to base of Treat	table Water-Bearing FM: 350	
Deep s	surface casing has been approved	
Under Federal Jurisdiction: No Approved Method for disposal of Drilling Fluids:	Approved Method for disposal of Drilling Fluids:	
Freeh Weter Currely Well Deillede Ne	D. One time land application (REQUIRES PERMIT) PERMIT NO: 23-38913	
Surface Water used to Drill: Yes	TEM=STEEL PITS PER OPERATOR	
PIT 1 INFORMATION Category of Pit: C		
Type of Pit System: CLOSED Closed System Means Steel Pits Liner not required for Category: C		
Type of Mud System:         WATER BASED         Pit Location is:         NON HSA	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.		
DIRECTIONAL HOLE 1		
Section: 8 Township: 3N Range: 5W Meridian: IM		
County: GRADY Measured Total Depth: 11116		
Spot Location of End Point: NE NE SW NW True Vertical Depth: 10730		
Fact From: NORTH 1/4 Section Line: 1591		
Feet From:WEST1/4 Section Line:1391End Point Location from Lease, Unit, or Property Line:Feet From:WEST1/4 Section Line:1119Lease, Unit, or Property Line:		

NOTES:

This permit does not address the right of entry or settlement of surface damages. The duration of this permit is 18 MONTHS, except as otherwise provided by Rule 165: 10-3-1. Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

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	[3/2/2023 - GC2] - N/A - INJECTION WELL