API NUMBER:	137 27724

Oil & Gas

Directional Hole

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

Approval Date: 07/14/2023 Expiration Date: 01/14/2025

PERMIT TO DRILL

WELL LOCATION: Section: 13 Township: 2N Range: 5W County	STEPHENS
SPOT LOCATION: NW NE SW NW FEET FROM QUARTER: FROM NORTI	
SECTION LINES: 1543	894
Lease Name: CKSMOU Well No: 13-39-	4 Well will be 894 feet from nearest unit or lease boundary.
Operator Name: MACK ENERGY CO Telephone: 405833	29830; 5802525580 OTC/OCC Number: 11739 0
MACK ENERGY CO	WILLIAM JEFFERSON TURNER REV. LIVING TRUST
100 N BROADWAY STE 3300	296117 E. 1630 RD
OKLAHOMA CITY, OK 73102-8831	MARLOW OK 73055
Formation(s) (Permit Valid for Listed Formations Only):	
Name Code Depth	
1 MORROW SUBTHRUST 402MRWST 10187	
Spacing Orders: 731833 Location Exception Ord	ers: No Exceptions Increased Density Orders: No Density
Pending CD Numbers: No Pending Working interest ow	ners' notified: DNA Special Orders: No Special
Total Depth: 10851 Ground Elevation: 1203 Surface Casing	: 1500 Depth to base of Treatable Water-Bearing FM: 210
	Deep surface casing has been approved
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: 23-39128
Surface Water used to Drill: Yes	H. (Other) CLOSED SYSTEM = STEEL PIT PER OPERATOR REQUEST
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: BED AQUIFER
Chlorides Max: 5000 Average: 3000	Pit Location Formation: DUNCAN
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</u> located in a Hydrologically Sensitive Area.	
DIRECTIONAL HOLE 1	
Section: 13 Township: 2N Range: 5W Meridian: IM	
County: STEPHENS	Measured Total Depth: 10851
Spot Location of End Point: SW SW SE NW	True Vertical Depth: 10001
Feet From: NORTH 1/4 Section Line: 2628	
Feet From:WEST1/4 Section Line:1459	End Point Location from Lease, Unit, or Property Line: 1459

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	[7/13/2023 - 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	[7/13/2023 - 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	[7/14/2023 - G56] - (UNIT) 13-2N-5W EST CARTER KNOX SUBTHRUSTED MORROW OPERATING UNIT FOR MRWST