API NUMBER: 039 22612

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

Approval Date: 10/14/2022

Expiration Date: 04/14/2024

Horizontal Hole Oil & Gas

## **PERMIT TO DRILL**

WELL LOCATION: Section: 13	Township: 14N	Range: 14W County	r: CUSTER				
SPOT LOCATION: NW SE SE	SE FEET FROM	QUARTER: FROM SOUT	H FROM EAST				
	SECT	ON LINES: 355	620				
Lease Name: SANDROCK 1414		Well No: 2H 12	x	Well will be 355	feet from nearest unit	or lease boundary.	
Operator Name: TAMWORTH RESOUR	CES LLC	Telephone: 91840	99839		OTC/OCC Num	ber: 24525 0	
TAMWORTH RESOURCES LLC	;		SWITZER FARMS	INC			
PO BOX 140490			92584 NORTH 245				
BROKEN ARROW,	OK 74014-00	105	11	OTTOTIE	OK 73669		
BROKEN ARROW,	OK 74014 00	,00	THOMAS		OK 73669		
			<del></del>				
Formation(s) (Permit Valid for L	isted Formations O	nly):					
Name	Code	Depth					
1 WOODFORD	319WDFD	14400					
Spacing Orders: 671700		Location Exception Or	ders: 726709	Incr	eased Density Orders:	No Density	
Pending CD Numbers: No Pending	<del></del> J	Working interest ov	vners' notified: ***		Special Orders:	No Special	
Total Depth: 25000 Ground	Elevation: 1634	Surface Casin	a: 1500	Depth to base of	Treatable Water-Bearing	ig FM: 230	
				De	en surface casino	has been approved	
					,	пас вест аррготеа	
Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No				Approved Method for disposal of Drilling Fluids:			
Surface Water used to Drill: Yes				A. Evaporation/dewater and backfilling of reserve pit.  D. One time land application (REQUIRES PERMIT)  PERMIT NO: 22-38632			
			H. (Other)	SEE MEN		WIT 110. 22 00002	
			Th. (Outlot)	OEE WE	WO		
PIT 1 INFORMATION			Category of				
Type of Pit System: ON SITE				Liner required for Category: 1B			
Type of Mud System: WATER BASED Chlorides Max: 8000 Average: 5000				Pit Location is: BED AQUIFER  Pit Location Formation: RUSH SPRINGS			
Is depth to top of ground water great	er than 10ft below base of	nit? Y	Fit Location Formation	on. RositsFRINGS			
Within 1 mile of municipal water we		P					
Wellhead Protection Are							
Pit <u>is</u> located in a Hydrologically	Sensitive Area.						
PIT 2 INFORMATION			Category of	Pit: 3			
Type of Pit System: ON SITE				Category of Pit: 3 Liner required for Category: 3			
Type of Mud System: OIL BASED				Pit Location is: BED AQUIFER			
Chlorides Max: 300000 Average: 200000				on: RUSH SPRINGS			
Is depth to top of ground water greate	er than 10ft below base of	pit? Y					
Within 1 mile of municipal water we							
Wellhead Protection Are							
Pit <u>is</u> located in a Hydrologically	Sensitive Area.						

HORIZONTAL HOLE 1

Section: 12 Township: 14N Range: 14W Meridian: IM Total Length: 10000

County: CUSTER Measured Total Depth: 25000

True Vertical Depth: 15000

Spot Location of End Point: NE NE NW NE

Feet From: NORTH 1/4 Section Line: 65 End Point Location from
Feet From: EAST 1/4 Section Line: 1500 Lease,Unit, or Property Line: 65

NOTES:

NOTES:	
Category	Description
DEEP SURFACE CASING	[10/6/2022 - GC2] - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING
FIELD RULE	[10/6/2022 - GC2] - MIN. 500' PER ORDER 42589
HYDRAULIC FRACTURING	[10/6/2022 - 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 HYDRAULIC FRACTURING OPERATIONS. FORM 6000NHF SHALL BE USED AND IS FOUND AT THIS LINK: OCCEWEB.COM/OG/OGFORMS.HTML; 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
LOCATION EXCEPTION - 726709	[10/11/2022 - GB1] - (I.O.) 12 & 13-14N-14W  X671700 WDFD, OTHER  COMPL INT (13-14N-14W) NCT 165' FSL, NCT 0' FNL, NCT 660' FEL  COMPL INT (12-14N-14W) NCT 0' FSL, NCT 165' FNL, NCT 660' FEL  NO OP NAMED  7/8/2022
МЕМО	[10/6/2022 - GC2] - PIT 1 - 1B MIN. SOIL COMPACTED PIT, NOTIFY DISTRICT PRIOR TO TESTING SOIL PIT LINER, PIT 2 - 3 MIN. 20-MIL PIT LINER REQUIRED, OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 671700	[10/10/2022 - GB1] - (1280)(HOR) 12 & 13-14N-14W VAC OTHER EST WDFD, OTHER COMPL INT NCT 165' FNL/FSL, NCT 330' FEL/FWL