API NUMBER: 071 24896

Oil & Gas

Straight Hole

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

Approval Date:	09/25/2018
Expiration Date:	03/25/2020

PERMIT TO DRILL

PERMIT TO DRILL										
WELL LOCATION		SE SE SE	County: KAY FEET FROM QUARTER: FROM SECTION LINES:	SOUTH FROM	EAST 450					
Lease Name:	WILKERSON		Well No:	5-8		Well will be 450	feet from nearest	unit or lease boundary.		
Operator Name:	TWISTED OA	K OPERATING LLC		Telephone: 40	56067481	отс	C/OCC Number:	22261 0		
TWISTED OAK OPERATING LLC 211 N ROBINSON AVE STE 200					-	CLARA D. WILKERSON LIVING TRUST 4300 S. WEST STREET				
OKLAHOMA CITY, OK 73102			73102-7109		PONCA	CITY	OK 746	301		
Formation(s	Name HOOVER TONKAWA OSAGE LAYTON CHECKERBOARI	alid for Listed Forn /MISSOURIAN/	Depth 1541 2185 2703 3046	6 7 8 9			Depth			
5	SKINNER		3481	1	0					
Spacing Orders:	No Spacing	No Spacing Location Exception Or			Increased Density Orders:					
Pending CD Numbers:					Special Orders:					
Total Depth: 4150 Ground Elevation: 983			3 Surface (Surface Casing: 280			Depth to base of Treatable Water-Bearing FM: 230			
Under Federa	I Jurisdiction: No	,	Fresh Water	Supply Well Drilled:	No		Surface Water use	d to Drill: Yes		
PIT 1 INFORMATION				Approved Method for disposal of Drilling Fluids:						
Type of Pit Syst	em: CLOSED C	losed System Means S	teel Pits							

D. One time land application -- (REQUIRES PERMIT)

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

Notes:

Type of Mud System: WATER BASED

Is depth to top of ground water greater than 10ft below base of pit? Y

is located in a Hydrologically Sensitive Area.

Chlorides Max: 5000 Average: 3000

Within 1 mile of municipal water well?

Wellhead Protection Area? N

Liner not required for Category: C
Pit Location is AP/TE DEPOSIT
Pit Location Formation: TERRACE

Category of Pit: C

PERMIT NO: 18-35026

Category Description

HYDRAULIC FRACTURING 8/28/2018 - G71 - OCC 165:10-3-10 REQUIRES:

1) PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE;

2) WITH NOTICE ALSO GIVEN 48 HOURS IN ADVANCE OF HYDRAULIC FRACTURING ALL WELLS TO BOTH THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES, USING THE "FRAC NOTICE FORM" FOUND AT THE FOLLOWING LINK:

OCCEWEB.COM/OG/OGFORMS.HTML; AND,

3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION THE HYDRAULIC FRACTURING OPERATIONS, USING THE FOLLOWING LINK: FRACFOCUS.ORG

SPACING 9/24/2018 - G75 - FORMATIONS UNSPACED; 80-ACRE LEASE (E2 SE4)

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS API 071-24896 KAY _ County, Oklahoma 1228'FSL-450'FEL <u>2E</u> I.M. 8 Township <u>25N</u> Range Section _ The W. OAKLAND RD. information shown herein is construction purposes ONLY. X= 2257901 Y= 607765 X= 2260530 Y= 607784 X= 2263163 Y= 607792 ó ____ X= 2263193 Y= 605158 X= 2257924 Y= 605135 1410 -N-º 1958 GRID 1228 NAD-27 OK NORTH US Feet 500* 1000* X= 2263223 Y= 602519 Operator: CARDINAL RIVER GAS COMPANY **ELEVATION:** Lease Name: WILKERSON Well No.: __5-8 983' Gr. at Stake Topography & Vegetation Loc. fell in terraced plowed field. Reference Stakes or Alternate Location Stakes Set None Good Drill Site? _____ Best Accessibility to Location From East off county road. Distance & Direction From the junction of US Hwy. 177 & US Hwy. 60, go ±2 miles from Hwy Jct or Town South on US Hwy, 177, then go ±1.5 miles West to the SE Cor. of Sec. 8-T25N-R2E. DE ESSIONAL Date of Drawing: July 27, 2018 Invoice # 299284 Date Staked: July 26, 2018 TR DATUM: <u>NAD-27</u> LAT: <u>36°39'18.8"N</u> LONG: 97'06'15.3"W **CERTIFICATE:** LAT: 36.655232530°N THOMAS L Thomas L. Howell an Oklahoma Licensed Land HOWELL LONG: 97.104262247°W Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the STATE PLANE COORDINATES: (US Feet) information shown herein ZONE: OK NORTH Thoma I. Nowe LAHOMA X: 2262759 603746 Oklahoma Lic. No. ___143.