

API NUMBER: 071 24893 A

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

Approval Date: 08/14/2018  
Expiration Date: 02/14/2019

Straight Hole Oil & Gas

Amend reason: OCC CORRECTION: UPDATE SPACING & FORMATIONS

**AMEND PERMIT TO DRILL**

WELL LOCATION: Section: 08 Township: 25N Range: 2E County: KAY

SPOT LOCATION: ☐ NE ☐ SW ☐ SE ☐ SE FEET FROM QUARTER: FROM SOUTH FROM EAST  
SECTION LINES: 380 989

Lease Name: WILKERSON Well No: 4-8 Well will be 331 feet from nearest unit or lease boundary.  
Operator Name: CARDINAL RIVER OPERATING LLC Telephone: 4056067481 OTC/OCC Number: 24398 0

CARDINAL RIVER OPERATING LLC  
211 N ROBINSON AVE STE 200  
OKLAHOMA CITY, OK 73102-7109

CLARA D WILKERSON LIVING TRUST  
4300 SOUTH WEST STREET  
PONCA CITY OK 74601

Formation(s) (Permit Valid for Listed Formations Only):

	Name	Code	Depth
1	PONCA	406PONC	900
2	HOOVER	406HOVR	1516
3	TONKAWA	406TNKW	2152
4	OSAGE LAYTON /MISSOURIAN/	405OSGL	2661
5	CHECKERBOARD	405CCKB	2996

	Name	Code	Depth
6	SKINNER	404SKNR	3453
7	RED FORK	404RDFK	3510
8	MISSISSIPPI CHAT	401MSSCT	3636

Spacing Orders: 40500

Location Exception Orders: No Exceptions

Increased Density Orders: No Density Orders

Pending CD Numbers: No Pending

Working interest owners' notified: \*\*\*

Special Orders: No Special Orders

Total Depth: 3940

Ground Elevation: 1018

Surface Casing: 313 IP

Depth to base of Treatable Water-Bearing FM: 230

Under Federal Jurisdiction: No  
Fresh Water Supply Well Drilled: No  
Surface Water used to Drill: Yes

**Approved Method for disposal of Drilling Fluids:**

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-35025  
H. (Other) CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

**PIT 1 INFORMATION**

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 5000 Average: 3000

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 is located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is: AP/TE DEPOSIT

Pit Location Formation: TERRACE

**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
HYDRAULIC FRACTURING	<p>8/7/2018 - G71 - OCC 165:10-3-10 REQUIRES:</p> <p>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;</p> <p>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: <a href="http://OCCWEB.COM/OG/OGFORMS.HTML">OCCWEB.COM/OG/OGFORMS.HTML</a>; AND,</p> <p>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: <a href="http://FRACFOCUS.ORG">FRACFOCUS.ORG</a></p>
SPACING	11/30/2020 - G56 - PONC, HOVR, TNKW, OSGL, CCKB, SKNR, RDFK FORMATIONS UNSPACED; 80 ACRE LEASE (E2 SE4)
SPACING - 40500	11/30/2020 - G56 - (40) SE4 SE4 8-25N-2E EST MSSCT

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.