API NUMBER: 071 24909

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:	06/26/2019
Expiration Date:	12/26/2020

24280 0

Well will be 330 feet from nearest unit or lease boundary.

OTC/OCC Number:

PERMIT TO DRILL

WELL LOCATION:	Sec:	32	Twp:	25N	Rge:	1E	County:	KAY			
SPOT LOCATION:	С	SE	N۱	Ν	NW		FEET FROM QUARTER:	FROM	NORTH	FROM	WEST
							SECTION LINES:		990		990
Lease Name: E	ΞTU						We	II No:	32-1		
Operator Name:	SNR N	ORTH	IERN C	KLAH	IOMA (OPE	RATING LLC		Teleph	ione:	4056075447

SNR NORTHERN OKLAHOMA OPERATING LLC PO BOX 18251

OKLAHOMA CITY, OK 73154-0251

CAUGHLIN BROTHERS LLC 14300 P STREET

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

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

TONKAWA OK 74653

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

	Name	Depth	Name	Depth	
1	TONKAWA	2310	6		
2	LAYTON	3150	7		
3	SKINNER	3970	8		
4	MISSISSIPPI CHAT	4200	9		
5	MISSISSIPPI LIME	4231	10		
Spacing Orders:	65738	Location Exception O	rders:	Increased Density Orders:	
	611591				
Ponding CD Nun	phore:			Special Orders	

Pending CD Numbers: Special Orders:

Total Depth: 5000 Ground Elevation: 940 Surface Casing: 300 Depth to base of Treatable Water-Bearing FM: 220

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

PIT 1 INFORMATION Approved Method for disposal of Drilling Fluids:

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? $\quad Y$

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

Notes:

PERMIT NO: 19-36724

Category Description

HYDRAULIC FRACTURING 6/19/2019 - 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 - 611591 6/25/2019 - G58 - MODIFY 65738 TO INCLUDE MSSLM

SPACING - 65738 6/25/2019 - G58 - (UNIT) NW4 NW4 32-25N-1E

EST EAST TONKAWA UNIT FOR TNKW, LYTN, SKNR, RDFK, MSSCT, OTHER