API NUMBER: 071 24887

Straight Hole

Oil & Gas

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

Approval Date: 04/17/2018
Expiration Date: 10/17/2018

PERMIT TO DRILL

WELL LOCATION:	Sec:	23	Twp:	25N	Rge:	2E	County	: KAY			
SPOT LOCATION:	W2	NW		١W	NE		FEET FROM QUARTER:	FROM	NORTH	FROM	WEST
							SECTION LINES:		330		95

Lease Name: GILLHAM Well No: 6-23 Well will be 330 feet from nearest unit or lease boundary.

Operator TWISTED OAK OPERATING LLC Telephone: 4056067481 OTC/OCC Number: 22261 0

TWISTED OAK OPERATING LLC 11218 TWISTED OAK RD

OKLAHOMA CITY, OK 73120-5330

DEAN LARAY GILLHAM, LIFE ESTATE 141 SPUNKY CREEK DRIVE

CATOOSA OK 74105

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

	Name	Depth		Name	Depth
1	NEWKIRK	1319	6	AVANT	2471
2	PAWHUSKA	1475	7	PERRY	2702
3	OREAD	1807	8	LAYTON	2762
4	LOVELL	2033	9	HOGSHOOTER	2937
5	TONKAWA	2145	10		

Spacing Orders: No Spacing Location Exception Orders: Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 3100 Ground Elevation: 0 Surface Casing: 330 Depth to base of Treatable Water-Bearing FM: 280

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

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

Chlorides Max: 5000 Average: 3000 H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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

Within 1 mile of municipal water well? N

within i fille of fluricipal water well?

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 BED AQUIFER
Pit Location Formation: OSCAR

Notes:

PERMIT NO: 18-34331

Category Description

SPACING

HYDRAULIC FRACTURING 4/16/2018 - G57 - 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

 $4/16/2018 - G57 - FORMATIONS \ UNSPACED; \ LEASE \ OUTLINE \ 26-ACRES \ W2 \ NW4 \ NE4 \ (LOT \ 8)$

23-25N-2E PER OPERATOR

This permit does not address the right of entry or settlement of surface damages.
The duration of this permit is SIX 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.

071 24887 GILLHAM 6-23