

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

API NUMBER: 083 24418

Approval Date: 11/15/2017

Expiration Date: 05/15/2018

Straight Hole

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 14 Twp: 16N Rge: 2W

County: LOGAN

SPOT LOCATION: C SW NE

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 660 660

Lease Name: LEONA

Well No: 1

Well will be 660 feet from nearest unit or lease boundary.

Operator Name: LIBERTY OPERATING INC

Telephone: 4053296200

OTC/OCC Number: 15227 0

LIBERTY OPERATING INC
1827 ATCHISON DR
NORMAN, OK 73069-8225

WILLIAM R. & KATHLEEN A. WARNER
1110 MOCKINGBIRD ROAD
GUTHRIE OK 73044

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

	Name	Depth		Name	Depth
1	LAYTON	4484	6	HUNTON	5530
2	HOGSHOOTER	4512	7		
3	CLEVELAND	4698	8		
4	SKINNER	5346	9		
5	MISENER	5518	10		

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 5600

Ground Elevation: 1095

Surface Casing: 540

Depth to base of Treatable Water-Bearing FM: 490

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

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 BED AQUIFER

Pit Location Formation: GARBER

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 17-33463
H. CLOSED SYSTEM = STEEL PITS (REQUIRED - COUNTRY CLUB LAKE)

Notes:

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.

Category	Description
HYDRAULIC FRACTURING	<p>11/14/2017 - G57 - 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: OCCWEB.COM/OG/OGFORMS.HTML; 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: FRACFOCUS.ORG</p>
SPACING	<p>11/15/2017 - G57 - FORMATIONS UNSPACED; 160-ACRES NE/4 14-16N-2W</p>