

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

API NUMBER: 141 20507

Approval Date: 02/13/2017
Expiration Date: 08/13/2017

Straight Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 21 Twp: 3S Rge: 18W County: TILLMAN
SPOT LOCATION: C S2 NW NW FEET FROM QUARTER: FROM NORTH FROM WEST
SECTION LINES: 990 660

Lease Name: HEAP Well No: 1-21 Well will be 660 feet from nearest unit or lease boundary.
Operator Name: ZEPHYR OPERATING CO LLC Telephone: 4052864771 OTC/OCC Number: 20122 0

ZEPHYR OPERATING CO LLC
5225 N SHARTEL AVE STE 200
OKLAHOMA CITY, OK 73118-6035

JAMES R HEAP
BOX 624
FREDERICK OK 73542

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

Name	Depth	Name	Depth
1 STRAWN	5400	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 5700 Ground Elevation: 1203 **Surface Casing: 200** Depth to base of Treatable Water-Bearing FM: 90

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

PIT 1 INFORMATION

Type of Pit System: ON SITE
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: 1B

Liner required for Category: 1B

Pit Location is AP/TE DEPOSIT

Pit Location Formation: TERRACE

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

H. SOIL COMPACTED PIT, NOTIFY DISTRICT PRIOR TO TESTING SOIL PIT LINER

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	2/6/2017 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK HTTP://FRACFOCUS.ORG/ WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE
SPACING	2/13/2017 - G64 - STRAWN UNSPACED; 160-ACRE LEASE (NW4) PER OPERATOR

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