API NUMBER: 073 26053

Oil & Gas

Horizontal Hole

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

Approval Date: 05/15/2018
Expiration Date: 11/15/2018

PERMIT TO DRILL

WELL LOCATION: Sec: 11 Twp: 19N Rge: 7W County: KINGFISHER

SPOT LOCATION: SE NW NE NW FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: **340 1718** 

Lease Name: RED 1907 Well No: 2-1LOH Well will be 340 feet from nearest unit or lease boundary.

Operator GASTAR EXPLORATION INC Telephone: 7137391800 OTC/OCC Number: 23199 0

GASTAR EXPLORATION INC 1331 LAMAR STE 650

HOUSTON. TX 77010-3131

CHAD BROWN PO BOX 234

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

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

OKARCHE OK 73762

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

Name Depth Name Depth MISSISSIPPIAN 7022 1 6 2 WOODFORD 7673 7 3 8 4 9 5 10 642959 Spacing Orders: Location Exception Orders: 676634 Increased Density Orders: 663342

Pending CD Numbers: Special Orders:

Total Depth: 12719 Ground Elevation: 1122 Surface Casing: 600 Depth to base of Treatable Water-Bearing FM: 360

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? 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: SALT PLAINS

nile of municipal water well? N

PERMIT NO: 18-34465

## **HORIZONTAL HOLE 1**

**KINGFISHER** Sec 02 Twp 19N Rge 7W County

Spot Location of End Point: N2 N2 NE NW Feet From: NORTH 1/4 Section Line: 150 Feet From: EAST 1/4 Section Line: 1980

Depth of Deviation: 6600 Radius of Turn: 573

Direction: 3

Total Length: 5219

Measured Total Depth: 12719 True Vertical Depth: 7673 End Point Location from Lease. Unit, or Property Line: 150

Notes:

Description Category

HYDRAULIC FRACTURING 5/9/2018 - 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

**LOCATION EXCEPTION - 676634** 5/14/2018 - G60 - (I.O.) 2-19N-7W

X663342 WDFD

X642959 MSSP

SHL NCT 0' FNL/FSL, NCT 0 FEL/FWL

POE TO BHL NCT 150' FSL, NCT 150' FNL, NCT 330' FEL/FWL

GASTAR EXPLORATOIN INC.

4/23/18

5/14/2018 - G60 - (640)(HOR) 2-19N-7W **SPACING - 642959** 

**EST OTHERS** EXT WDFD, OTHER

COMPL. INT. NCT 165' FNL/FSL, NCT 330' FEL/FWL

**SPACING - 663342** 5/14/2018 - G60 - (640)(HOR) 2-19N-7W

**EXT 649454 MSSP** COMPL. INT. NCT 660' FB

(COEXIST WITH SP. 53739 MNNG, MSSSD)

