

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

API NUMBER: 073 25555

Approval Date: 03/13/2017
Expiration Date: 09/13/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 28 Twp: 19N Rge: 8W

County: KINGFISHER

SPOT LOCATION: SW SW SW SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 184 177

Lease Name: PUDGE 1908 28

Well No: 1H

Well will be 177 feet from nearest unit or lease boundary.

Operator Name: GASTAR EXPLORATION INC

Telephone: 7137391800

OTC/OCC Number: 23199 0

GASTAR EXPLORATION INC
1331 LAMAR STE 650
HOUSTON, TX 77010-3131

BARRY K BOLLENBACH
1013 PARK PLAZA
KINGFISHER OK 73750

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

Name	Depth	Name	Depth
1 MISSISSIPPI	7678	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 622905

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201605683

Special Orders:

Total Depth: 13168

Ground Elevation: 1158

Surface Casing: 490

Depth to base of Treatable Water-Bearing FM: 250

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

PIT 1 INFORMATION

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 17-32249

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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.

HORIZONTAL HOLE 1

Sec 28 Twp 19N Rge 8W County KINGFISHER

Spot Location of End Point: N2 N2 NW NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 7315

Radius of Turn: 573

Direction: 2

Total Length: 4953

Measured Total Depth: 13168

True Vertical Depth: 7888

End Point Location from Lease,
Unit, or Property Line: 165

Notes:

Category

Description

HYDRAULIC FRACTURING

3/9/2017 - 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/](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

PENDING CD - 201605683

3/13/2017 - G60 - (I.O.) 28-19N-8W
X622905 MISS
SHL NCT 0' FSL, NCT 0' FNL, NCT 0' FEL, NCT 0' FWL
COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 660' FEL, NCT 660' FWL
NO OP. NAMED
REC. 1/10/17 (NORRIS)

SPACING - 622905

3/10/2017 - G60 - (640)(HOR) 28-19N-8W
EXT 618433 MISS, OTHER
COMPL. INT. NCT 660' FB
(SUPERCEDE SP. ORDER 200472/386272 MSSSD N2, SW4, W2 SE4)