API NUMBER: 047 25140

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

PERMIT TO DRILL

WELL LOCATION: Sec: 19 Twp: 20N Rge: 7W County: GARFIELD

SPOT LOCATION: SE SW SE SE FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: **161 701** 

Lease Name: MR PADRE 2007 Well No: 19-1LOH Well will be 161 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

OTT FAMILY TRUST

C/O MAX WAYNE OTT TRUSTEE

1340 BANSBACH ROAD

DES PERES MO 63131

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

Name Depth Name Depth MISSISSIPPIAN 1 6904 6 2 WOODFORD 7718 7 3 8 4 9 10 640472 Spacing Orders: Location Exception Orders: 673902 Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 12485 Ground Elevation: 1147 Surface Casing: 590 Depth to base of Treatable Water-Bearing FM: 350

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: 8000 Average: 5000

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: BISON

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-34277

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

## **HORIZONTAL HOLE 1**

Sec 19 Twp 20N Rge 7W County GARFIELD

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

Feet From: EAST 1/4 Section Line: 700

Depth of Deviation: 6587 Radius of Turn: 573 Direction: 359 Total Length: 4997

Measured Total Depth: 12485

True Vertical Depth: 7718

End Point Location from Lease,
Unit, or Property Line: 150

Notes:

Category Description

HYDRAULIC FRACTURING 4/9/2018 - 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 - 673902 4/16/2018 - G57 - (I.O.) 19-20N-7W

X640472 MSSP, WDFD

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

COMPL. INT. NCT 150' FSL & FNL, NCT 660' FEL, NCT 330' FWL

GASTAR EXPLORATION INC.

2-23-2018

SPACING - 640472 4/16/2018 - G57 - (640)(HOR) 19-20N-7W

EXT 627271 MSSP, WDFD POE TO BHL (MSSP) NCT 660' FB

POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL

(COEXIST WITH SP. ORDER #62770 MSSLM, SP. ORDER #65632 MNNG)

