

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

API NUMBER: 047 25117

Approval Date: 11/22/2017

Expiration Date: 05/22/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 25 Twp: 20N Rge: 8W

County: GARFIELD

SPOT LOCATION: ☐ NW ☐ NW ☐ NE ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 269 1117

Lease Name: WILLIE 2008

Well No: 24-1LOH

Well will be 269 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

SURVIVING SPOUSE TRUST
1114 WEST CONNECTICUT
HOBBS NM 88242

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	6984	6	
2	WOODFORD	7869	7	
3			8	
4			9	
5			10	

Spacing Orders: 627271

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201706909

Special Orders:

Total Depth: 12759

Ground Elevation: 1184

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: 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: 17-33381

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 24 Twp 20N Rge 8W 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: 6622

Radius of Turn: 744

Direction: 5

Total Length: 4969

Measured Total Depth: 12759

True Vertical Depth: 7869

End Point Location from Lease,

Unit, or Property Line: 150

Notes:

Category

Description

HYDRAULIC FRACTURING

11/8/2017 - 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

PENDING CD - 201706909

11/21/2017 - G58 - (I.O.) 24-20N-8W
X627271 MSSP, WDFD
COMPL. INT. NCT 150' FSL, NCT 150' FNL, NCT 330' FEL
NO OP NAMED
REC 11/7/2017 (M. PORTER)

SPACING - 627271

11/21/2017 - G58 - (640)(HOR) 24-20N-8W
EXT. 622726 MSSP, WDFD, OTHERS
COMPL. INT. (MSSP) NCT 660' FB
COMPL. INT. (WDFD) NCT 330' FB
(SUPERSEDE SP. ORDER 65632 MPMC, MNNG; SUPERSEDE SP. ORDER 70751 MSSLM)

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047 25117 WILLIE 2008 24-1LOH