API NUMBER: 073 26548

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: 04/23/2019
Expiration Date: 10/23/2020

PERMIT TO DRILL

WELL LOCATION:	Sec:	10	Twp:	18N	Rge:	8W	County	: KING	SFISHER		
SPOT LOCATION:	SW	SE	SI		SW		FEET FROM QUARTER:	FROM	SOUTH	FROM	WEST
							SECTION LINES:		147		2272

Lease Name: DARREL 1808 Well No: 10-1MH Well will be 147 feet from nearest unit or lease boundary.

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

GASTAR EXPLORATION LLC 1331 LAMAR STE 650

HOUSTON, TX 77010-3131

JOYCE M UNRUH REVOCABLE TRUST

6884 S. MITCHELL ROAD

HENNESSEY OK 73742

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

	Name	Depth	Name	Depth
1	MISSISSIPPI LIME	7729	6	
2	WOODFORD	8229	7	
3		:	8	
4		•	9	
5			10	
Spacing Orders:	624024	Location Exception Orders:		Increased Density Orders:

Pending CD Numbers: 201901681 Special Orders:

Total Depth: 12791 Ground Elevation: 1079 Surface Casing: 470 Depth to base of Treatable Water-Bearing FM: 230

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

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?  $\quad \mbox{Y}$ 

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

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36492

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

## **HORIZONTAL HOLE 1**

Sec 10 Twp 18N Rge 8W County KINGFISHER

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

Depth of Deviation: 7106
Radius of Turn: 461
Direction: 358
Total Length: 4960

Measured Total Depth: 12791

True Vertical Depth: 8229

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

Notes:

Category Description

HYDRAULIC FRACTURING 4/18/2019 - 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 - 201901681 4/23/2019 - G58 - (I.O.) 10-18N-8W

X624024 MSSLM. WDFD

COMPL. INT. NCT 150' FSL, NCT 150' FNL, 660' FWL

NO OP. NAMED REC 4/2/2019 (MILLER)

SPACING - 624024 4/22/2019 - G58 - (640)(HOR) 10-18N-8W

EST MSSLM, WDFD, OTHER POE TO BHL (MSSLM) NCT 660' FB

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

(SUPERSEDE 88230/194129 MSSLM; SUPERSEDE 93365/167248 MSSLM;)

