API NUMBER: 073 25478

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: 12/29/2016

Expiration Date: 06/29/2017

PERMIT TO DRILL

WELL LOCATION:	Sec:	33	Twp:	18N	Rge:	7W	County:	KING	SFISHER		
SPOT LOCATION:	NW	NE	NE		NW		FEET FROM QUARTER:	FROM	NORTH	FROM	WEST

SECTION LINES: 148 2146

Lease Name: PICKLE Well No: 33-1H Well will be 148 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

MARILYN M PICKLE, TRUSTEE 16426 EAST 680 ROAD

DOVER OK 73734

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

	Name	Depth	Name	Depth
1	MISS'AN (EX CHESTER)	7445 6		
2		7		
3		8		
4		9		
5		10	)	
Spacing Orders:	659205	Location Exception Orders:		Increased Density Orders:

Pending CD Numbers: 201605681 Special Orders:

Total Depth: 12387 Ground Elevation: 1056 Surface Casing: 540 Depth to base of Treatable Water-Bearing FM: 240

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

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

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well?

.....

Wellhead Protection Area? Y

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

PERMIT NO: 16-31737

## **HORIZONTAL HOLE 1**

Sec 33 Twp 18N Rge 7W County KINGFISHER

Spot Location of End Point: SW SE SE SW
Feet From: SOUTH 1/4 Section Line: 165
Feet From: WEST 1/4 Section Line: 2200

Depth of Deviation: 6960
Radius of Turn: 402
Direction: 179
Total Length: 4795

Measured Total Depth: 12387

True Vertical Depth: 7445

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

Notes:

Category Description

HYDRAULIC FRACTURING 12/23/2016 - 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/ 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 - 201605681 12/23/2016 - G60 - (I.O.) 33-18N-7W

X659205 MSNLC

SHL NCT 0' FSL, NCT 660' FEL, NCT 660' FWL \*\*

COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 660' FEL

NO OP. NAMED

REC. 12/23/16 (P. PORTER)

\*\*SHL WILL BE CORRECTED AT HEARING FOR FINAL ORDER LOCATION EXCEPTION PER

**OPERATOR** 

PUBLIC WATER SUPPLY WELLS 12/23/2016 - G71 - KINGFISHER - 5 PWS/WPA, 2 - NW/4 33-18N-7W, 2 - SW/4 33-18N-7N, & 1 -

NW/4 4-17N-7W

SPACING - 659205 12/23/2016 - G60 - (640)(HOR) 33-18N-7W

**EXT MSNLC** 

COMPL. INT. NCT 660' FB

(COEXIST WITH SP. ORDER 70345/74825 MSSSD)

SURFACE CASING 12/23/2016 - G71 - MIN. 300' PER ORDERS 23720/41036/42410