

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

API NUMBER: 073 25330

Approval Date: 07/05/2016
Expiration Date: 01/05/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 07 Twp: 18N Rge: 7W County: KINGFISHER
SPOT LOCATION: SW SW SW SE FEET FROM QUARTER: FROM SOUTH FROM WEST
SECTION LINES: 223 170

Lease Name: TOMAHAWK Well No: 7-1H Well will be 170 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

WALTERSCHEIDT IRREVOCABLE TRUST
1210 COLEMAN TRAIL
KINGFISHER OK 73750

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

Name	Depth	Name	Depth
1 OSWEGO	6639	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 653944

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201600498

Special Orders:

Total Depth: 11415

Ground Elevation: 1118

Surface Casing: 500

Depth to base of Treatable Water-Bearing FM: 300

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: 16-31210

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 07 Twp 18N Rge 7W County KINGFISHER

Spot Location of End Point: NW NW NW NE

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 60

Depth of Deviation: 6140

Radius of Turn: 622

Direction: 359

Total Length: 4298

Measured Total Depth: 11415

True Vertical Depth: 6733

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

Notes:

Category

Description

HYDRAULIC FRACTURING

7/1/2016 - 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/](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 - 201600498

7/1/2016 - G60 - (I.O.) 7-18N-7W
X653944 OSWG
SHL NCT 0' FSL, NCT 0' FEL, NCT 0' FWL
COMPL. INT. NCT 330' FSL, NCT 330' FNL, NCT 660' FEL
NO OP. NAMED
REC. 5-4-16 (M. PORTER)

SPACING - 653944

7/1/2016 - G60 - (640)(HOR) 7-18N-7W
EST OSWG, OTHER
POE TO BHL NCT 660' FB
(COEXIST WITH SP. ORDER 49980 OSWG)