

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

API NUMBER: 073 26177 A

Approval Date: 03/15/2019  
Expiration Date: 09/15/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 04 Twp: 18N Rge: 6W County: KINGFISHER  
SPOT LOCATION:  NE  NW  NW  NE FEET FROM QUARTER: FROM NORTH FROM EAST  
SECTION LINES: 156 2267

Lease Name: IGNITOR 1806 Well No: 4-1LOH Well will be 156 feet from nearest unit or lease boundary.  
Operator Name: GASTAR EXPLORATION LLC Telephone: 7137391800 OTC/OCC Number: 23199 0

GASTAR EXPLORATION LLC  
1331 LAMAR STE 650  
HOUSTON, TX 77010-3131

DOROTHY BURSHIK TURNER  
290 BUCCANEER WAY  
CORONADO CA 92118

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN (LESS CHESTER)	6976	6	
2	WOODFORD	7501	7	
3			8	
4			9	
5			10	

Spacing Orders: 665349 Location Exception Orders: 201810079 Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 12448 Ground Elevation: 1169 Surface Casing: 460 Depth to base of Treatable Water-Bearing FM: 220

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: 18-34949  
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 04 Twp 18N Rge 6W County KINGFISHER

Spot Location of End Point: SE SW SW SE

Feet From: SOUTH 1/4 Section Line: 150

Feet From: EAST 1/4 Section Line: 2260

Depth of Deviation: 6619

Radius of Turn: 382

Direction: 179

Total Length: 5229

Measured Total Depth: 12448

True Vertical Depth: 7563

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

Notes:

Category

Description

HYDRAULIC FRACTURING

2/22/2019 - 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](http://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](http://FRACFOCUS.ORG)

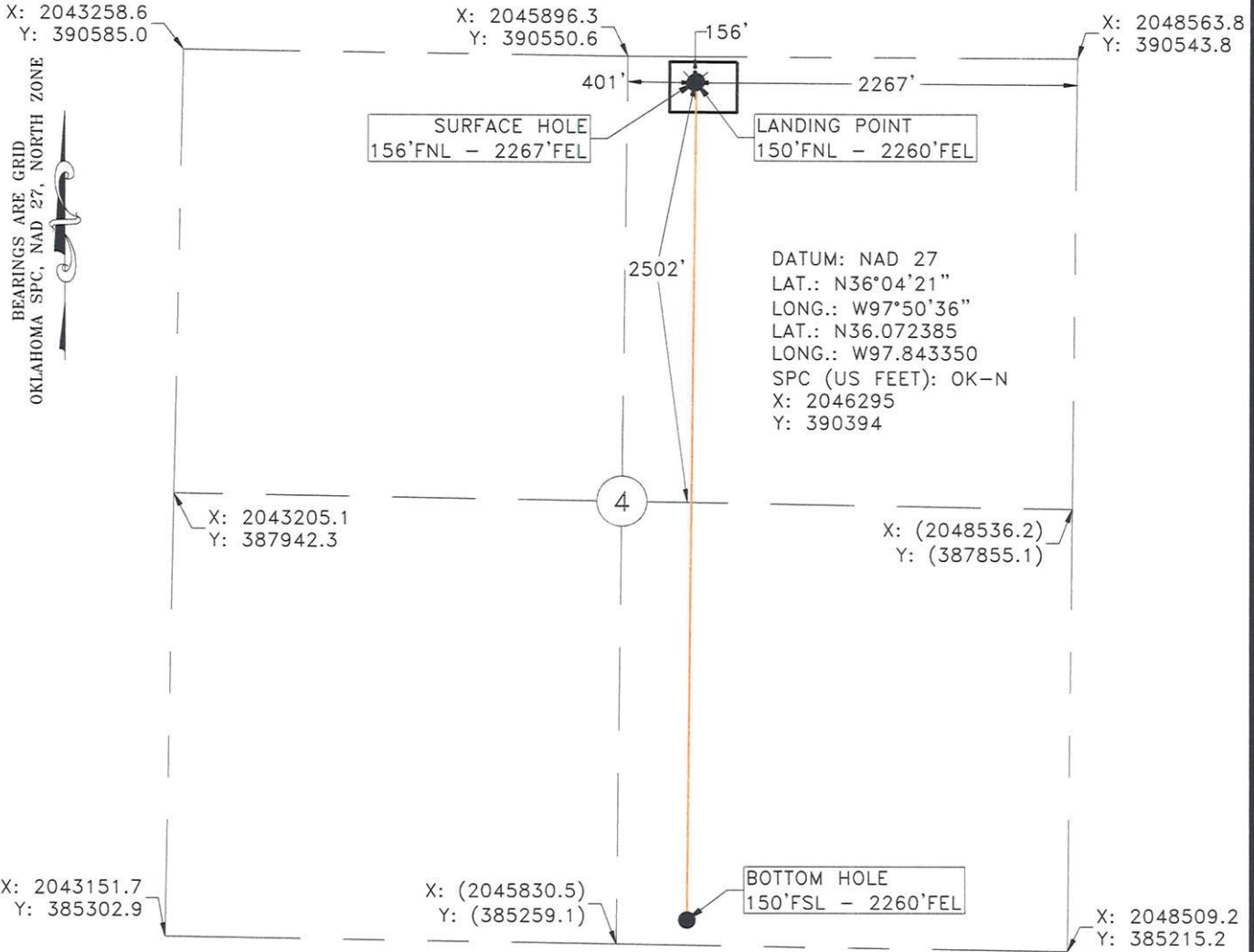
PENDING CD - 201810079

3/15/2019 - G58 - (I.O.) E2 4-18N-6W  
X665349 MSNLC, WDFD  
COMPL. INT. NCT 150' FSL, NCT 150' FNL, NCT 330' FWL, NCT 660' FEL OF E2 OF 4-18N-6W  
NO OP. NAMED  
REC 1/8/2019 (M. PORTER)

SPACING - 665349

3/15/2019 - G58 - (320)(HOR) E2 4-18N-6W  
VAC 48520 MSSSD E2  
EST MSNLC, WDFD, OTHER  
POE TO BHL (MSSP) NLT 660' FB  
POE TO BHL (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL

SECTION 4, T 18 N - R 06 W, I.M.,  
KINGFISHER COUNTY, OKLAHOMA



Operator: GASTAR EXPLORATION INC Date Staked: 7/11/2018  
 Lease Name: IGNITOR 1806 Well No.: 4-1LOH Elevation: 1169.8'  
 Topography and Vegetation: CULTIVATION  
 Good Drill Site? YES Reference or Alt. Location Stakes Set: NONE  
 Best Accessibility to Location: FROM COUNTY ROAD  
 Distance and Direction from Hwy. Jct. or town: FROM HENNESSEY, OK, HEAD SOUTH 2.5 MILES ON  
US HWY 81, THEN EAST 3.1 MILES ON CO. RD. E0650. TURN SOUTH INTO LOCATION.

LEGEND

- SURFACE LOCATION
- EXISTING WELL
- PROPOSED DRILL PATH
- EXISTING PIPELINE
- ELECTRIC LINE
- OVERHEAD POWER
- FENCE
- BOTTOM HOLE/LANDING POINT

**Gateway**  
 Gateway Services Group, LLC

PO. BOX 960  
 MEEKER, OK 74855  
 OFF. (405) 273-0954  
 FAX (405) 273-0580  
 C.A. NO. 4091 (LS)  
 EXP. DATE 6-30-2020

EXHIBIT "A" PRELIMINARY  
 GASTAR EXPLORATION INC.  
 IGNITOR 1806 4-1LOH  
 156'FNL - 2267'FEL  
 SECTION 4, T 18 N - R 06 W, I.M.,  
 KINGFISHER COUNTY, OKLAHOMA

DRAWN BY: JE		DATE: 07/12/18	CHK'D: CLC
GATEWAY NO.: 18-0499-003		SCALE: 1"=1000'	
PAD#:		WELL#:	
REV.	DWN.	DESCRIPTION	DATE
1	AA	ADDED SHL LABEL	7-26-18

*Fred A. Selensky*  
 FRED ANTHONY SELENSKY  
 OKLAHOMA L.P.L.S. NO.: 1860  
 DATE: 7-26-2018



NOTE:  
 This is a plat of a proposed well location and does not represent a true boundary survey. The information shown hereon shall not be relied upon for the location or establishment of land boundary lines. All of the positions shown hereon have not been verified as being actual Section, Quarter or Property corners. Positions shown in (Parentheses) are based upon local occupation and improvements or calculated per proportional measurement and/or G.L.O. record distances. Review this plat and notify Gateway Services Group, LLC immediately of any possible discrepancy.