

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

API NUMBER: 047 25112

Approval Date: 11/03/2017

Expiration Date: 05/03/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 19 Twp: 20N Rge: 8W

County: GARFIELD

SPOT LOCATION: ☐ NW ☐ NE ☐ NW ☐ NW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 2351 764

Lease Name: GARY HAJEK 2008

Well No: 18-1LOH

Well will be 288 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

ESTATE OF GARY HAJEK
2298 NORTH 2830 ROAD
HENNESSEY OK 73742

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	7400	6	
2	WOODFORD	8000	7	
3			8	
4			9	
5			10	

Spacing Orders: 646703

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201706463

Special Orders:

Total Depth: 13199

Ground Elevation: 1242

Surface Casing: 680

Depth to base of Treatable Water-Bearing FM: 440

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

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

PERMIT NO: 17-33258

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 18 Twp 20N Rge 8W County GARFIELD

Spot Location of End Point: N2 N2 NW NW

Feet From: NORTH 1/4 Section Line: 150

Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 7047

Radius of Turn: 750

Direction: 358

Total Length: 4974

Measured Total Depth: 13199

True Vertical Depth: 8000

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

Notes:

Category

Description

HYDRAULIC FRACTURING

10/18/2017 - G57 - 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: OCCWEB.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 - 201706463

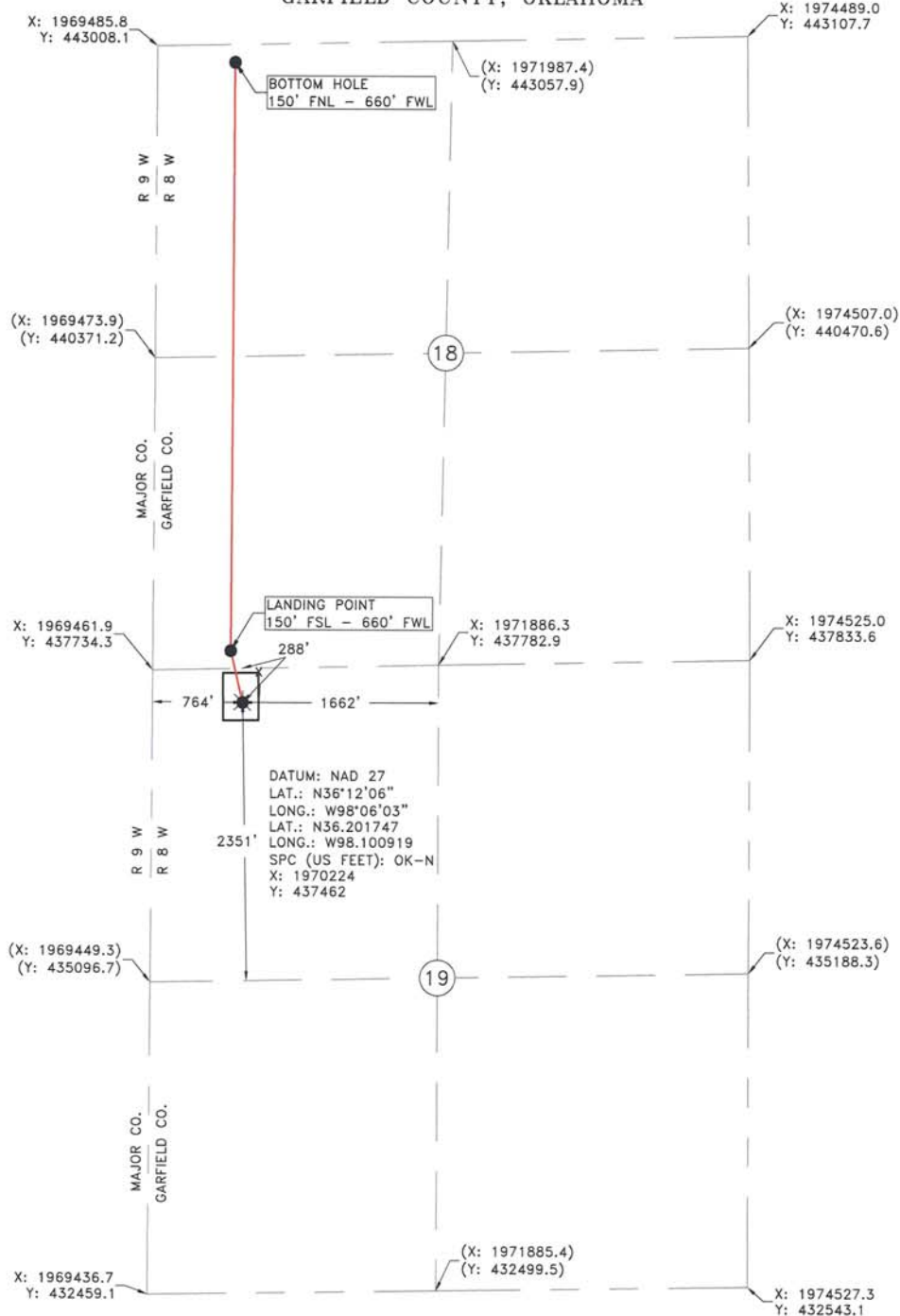
11/1/2017 - G58 - (I.O.) 18-20N-8W
X646703 MSSP, WDFD
COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 330' FWL
NO OP. NAMED
REC 10/17/2017 (M. PORTER)

SPACING - 646703

11/1/2017 - G58 - (640) (HOR) 18-20N-8W
EXT 635569 MSSP, WDFD, OTHERS
COMPL. INT. (MSSP) NCT 660' FB
COMPL. INT. (WDFD) NCT 330' FB
(COEXIST SP. ORDER # 209034 MPLM, MNNG, CRLM)

SECTIONS 18 & 19, T 20 N - R 8 W, I.M.,
GARFIELD COUNTY, OKLAHOMA

BEARINGS ARE GRID
OKLAHOMA SFC. NAD 27, NORTH ZONE

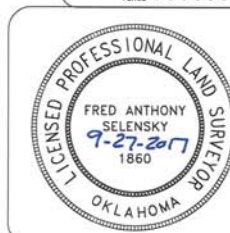


Operator: GASTAR EXPLORATION INC. Date Staked: 09/25/17
Lease Name: GARY HAJEK 2008 18 Well No.: 1LOH Elevation: 1242'
Topography and Vegetation: PASTURE
Good Drill Site? YES Reference or Alt. Location Stakes Set: NONE
Best Accessibility to Location: FROM COUNTY ROAD
Distance and Direction from Hwy. Jct. or town: FROM AMES HEAD EAST CO. RD. E0530/MAIN ST. FOR 4.5 MILES.
TURN SOUTH ON S. BANNER RD/CO. RD. N2750 FOR 3 MILES. TURN EAST ON CO. RD. E0560 FOR .2 MILES. TURN SOUTH INTO LOCATION.

Fred A. Selesky 9-27-2017
FRED ANTHONY SELENSKY
OKLAHOMA L.P.L.S. NO.: 1860

NOTE:
This is a plot 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 plot and notify Gateway Services Group, LLC immediately of any possible discrepancy.

LEGEND
SURFACE LOCATION *
EXISTING WELL 2" BOTTOM HOLE/LANDING POINT ●
PROPOSED DRILL PATH ---
EXISTING PIPELINE ---
ELECTRIC LINE - - - - -
OVERHEAD POWER ---
FENCE - - - - -



Gateway
Gateway Services Group, LLC
P.O. BOX 960
WEEKER, OK 74855
OFF. (405) 273-0954
FAX (405) 273-0580
C.A. NO. 4091 (LS)
EXP. DATE 6-30-2018

EXHIBIT "A" PRELIMINARY
GASTAR EXPLORATION INC.
GARY HAJEK 2008 18-1LOH
288' FNL - 764' FWL
SECTIONS 18 & 19, T 20 N - R 8 W, I.M.,
GARFIELD COUNTY, OKLAHOMA

DRAWN BY: CLC	DATE: 09/26/17	CHK'D: CWP
GATEWAY NO.: 17-0637-002	SCALE: 1"=1000'	
PAGE: 1	WELL#:	DATE:
REV. DWN.	DESCRIPTION	DATE