

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

API NUMBER: 073 26535

Approval Date: 04/16/2019

Expiration Date: 10/16/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 16 Twp: 18N Rge: 8W

County: KINGFISHER

SPOT LOCATION: ☐ NW ☐ NW ☐ NE ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 218 1207

Lease Name: PHOENIX 1808

Well No: 16-1MH

Well will be 218 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

BARRY BOLLENBACH
PO BOX 901
KINGFISHER OK 73750

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	7777	6	
2	WOODFORD	8277	7	
3			8	
4			9	
5			10	

Spacing Orders: 641116

Location Exception Orders: 692345

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 13011

Ground Elevation: 1072

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: 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? 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: 19-36491
H. CLOSED SYSTEM=STEEL PITS (REQUIRED - CIMARRON RIVER)

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 16 Twp 18N Rge 8W County KINGFISHER

Spot Location of End Point: S2 S2 SW SE

Feet From: SOUTH 1/4 Section Line: 150

Feet From: EAST 1/4 Section Line: 1980

Depth of Deviation: 7341

Radius of Turn: 446

Direction: 185

Total Length: 4970

Measured Total Depth: 13011

True Vertical Depth: 8277

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

Notes:

Category

Description

HYDRAULIC FRACTURING

4/13/2019 - 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: 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

LOCATION EXCEPTION - 692345

4/16/2019 - G56 - (I.O.) 16-18N-8W
X641116 MSSLM, WDFD
COMPL INT NCT 150' FNL, NCT 150' FSL, NCT 330' FEL
GASTAR EXPLOR. INC.
3/4/2019

SPACING - 641116

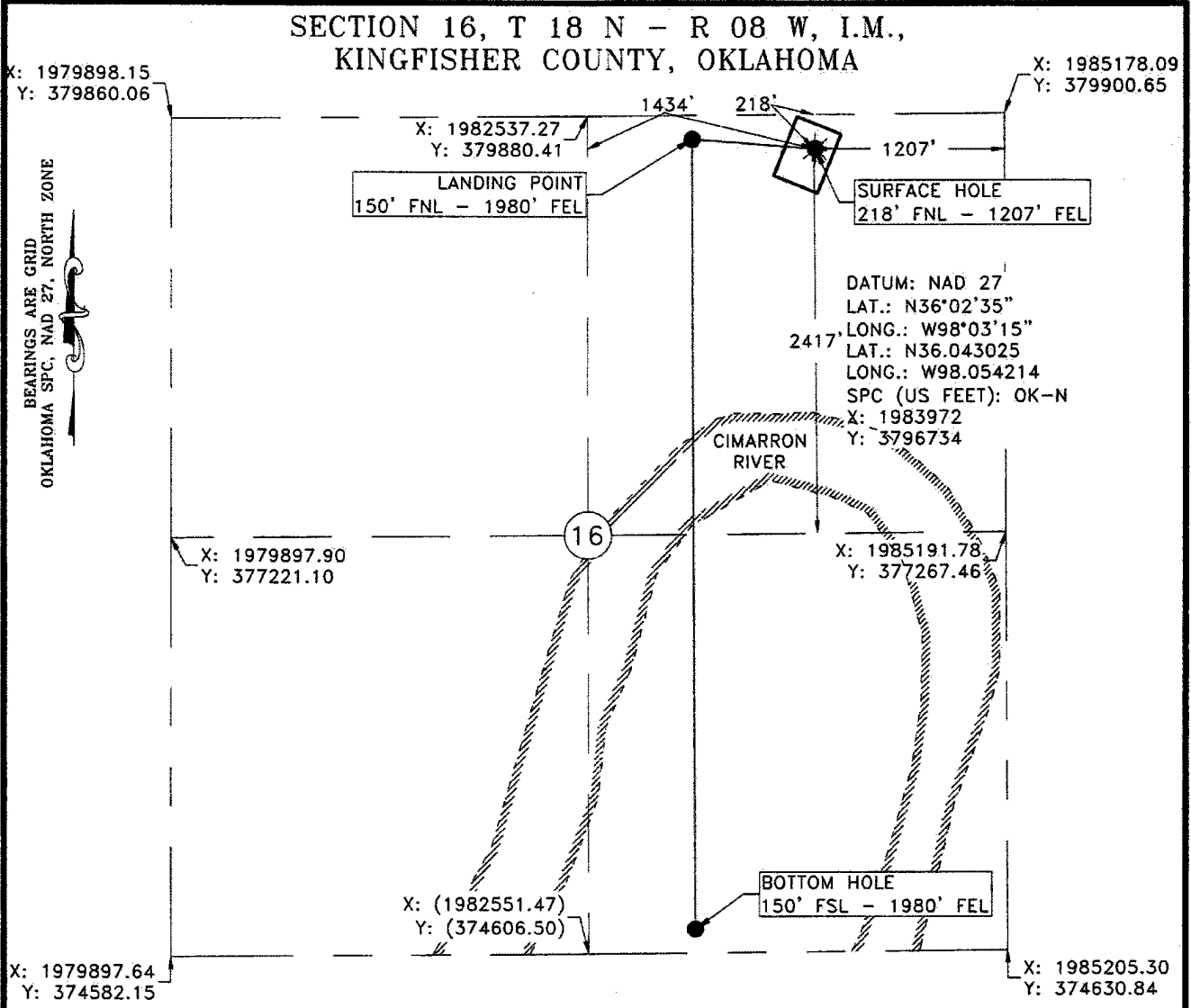
4/16/2019 - G56 - (640)(HOR) 16-18N-8W
EXT 624024 MSSLM, WDFD, OTHER
COMPL INT (MSSLM) NCT 660' FB
COMPL INT (WDFD) NCT 165' FNL OR FSL, NCT 330' FEL OR FWL
(COEXIST WITH SP # 81983 MSSP, OTHER)

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.

073 26535 PHOENIX 1808 16-1MH



Operator: GASTAR EXPLORATION LLC Date Staked: 3/24/2019
Lease Name: PHOENIX 1808 Well No.: 16-1MH Elevation: 1071.8'
Topography and Vegetation: PASTURE
Good Drill Site? YES Reference or Alt. Location Stakes Set: NONE
Best Accessibility to Location: FROM TWO TRACT ROAD
Distance and Direction from Hwy. Jct. or town: FROM HENNESSEY, HEAD WEST 8.5 MILES ON HIGHWAY 51, THEN SOUTH 4.5 MILES ON CO. RD. 2780, THEN SOUTHWEST ON A TWO TRACT ROAD FOR 0.61 MILE, TO WELL LOCATION

LEGEND
SURFACE LOCATION *
EXISTING WELL *
PROPOSED DRILL PATH - - -
EXISTING PIPELINE - - -
ELECTRIC LINE - - -
OVERHEAD POWER - - -
FENCE - - -

Fred A. Selensky
FRED ANTHONY SELENSKY
OKLAHOMA L.P.L.S. NO.: 1860
DATE: 3-27-2019

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.



Gateway
Gateway Services Group, LLC
PO. BOX 960
WEEKER, 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 LLC
PHOENIX 1808 16-1MH
218' FNL - 1207' FEL
SECTION 16, T 18 N - R 08 W, I.M.,
KINGFISHER COUNTY, OKLAHOMA

DRAWN BY: AL	DATE: 3/25/2019	CHK'D: CLC
GATEWAY NO.: 19-0094-002	SCALE: 1"=1000'	
PAD#:	WELL#:	
REV. DWN.	DESCRIPTION	DATE