

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

API NUMBER: 073 25400

Approval Date: 10/18/2016  
Expiration Date: 04/18/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 27 Twp: 18N Rge: 8W

County: KINGFISHER

SPOT LOCATION:  SW  SW  SW  SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 149 2400

Lease Name: SNOWDEN

Well No: 27-1H

Well will be 149 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

ELDON AND JANICE SNOWDEN  
11490 NORTH 2790 ROAD  
DOVER OK 73734

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

Name	Depth	Name	Depth
1 MISS'AN (EX CHESTER)	7860	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 650884

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201603614

Special Orders:

Total Depth: 12879

Ground Elevation: 1124

**Surface Casing: 470**

Depth to base of Treatable Water-Bearing FM: 230

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: 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 BED AQUIFER

Pit Location Formation: CEDAR HILLS

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 16-31662  
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 27 Twp 18N Rge 8W County KINGFISHER

Spot Location of End Point: NE NW NW NE

Feet From: NORTH 1/4 Section Line: 198

Feet From: WEST 1/4 Section Line: 2207

Depth of Deviation: 7377

Radius of Turn: 632

Direction: 5

Total Length: 4509

Measured Total Depth: 12879

True Vertical Depth: 8012

End Point Location from Lease,  
Unit, or Property Line: 198

Notes:

Category	Description
HYDRAULIC FRACTURING	10/17/2016 - 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 <a href="http://fracfocus.org/">HTTP://FRACFOCUS.ORG/</a> 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 - 201603614	10/17/2016 - G60 - (I.O.) 27-18N-8W X650884 MSNLC SHL NCT 0' FSL, NCT 660' FEL OR FWL COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 660' FWL NO OP. NAMED REC. 9/13/16 COLAW
SHL AND BHL	10/18/2016 - G60 - FIXED PER STAKING PLAT
SPACING - 650884	10/17/2016 - G60 - (640)(HOR) 27-18-8W EST MSNLC, OTHERS POE TO BHL NLCT 660' FB (COEXIST WITH SP. ORDER 86410 MSSLM)

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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.

PETRO LAND SERVICES SOUTH, LLC

10404 VINEYARD BLVD. SUITE D, OKLA. CITY, OKLA. 73120 • OFFICE (405) 212-3109  
Certificate of Authorization No. 7318

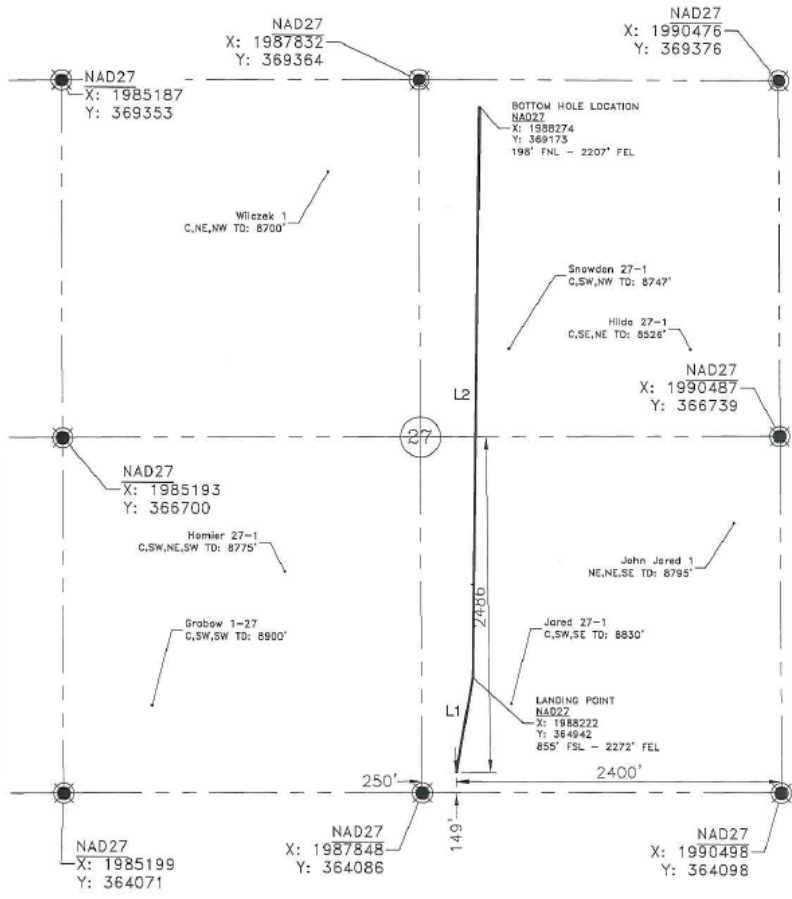
KINGFISHER County, Oklahoma  
2400' FEL 149' FSL Section 27 Township 18N Range 8W I.M.

EXHIBIT

GRID  
NAD27  
ZONES  
OK North  
Scale:  
1" = 1000'

THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY.  
LANDING POINT, BOTTOM HOLE LOCATION, PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.

OPERATOR: GASTAR EXPLORATION, LLC  
LEASE NAME: SNOWDEN 27  
TOPOGRAPHY & VEGETATION: Location fell in plowed field  
GOOD DRILL SITE? Yes  
REFERENCE STAKES OR ALTERNATE LOCATION STAKE(S) SET:  
BEST ACCESSIBILITY TO LOCATION: From E 0700 Rd.  
DIST & DIRECTION: From Hwy 101, OR TOWN: From Loyel, OK, head East on E 0720 Rd for 3.9 miles. Turn left on N 2780 Rd. for 2 miles, then turn right onto E 0700 Rd. for 0.5 miles.



LEGEND:  
PARENTHESIS = (CALCULATED)

NOTE:  
This exhibit represents a proposed well location and does not represent a true boundary survey. The footages and ties shown are from lines of occupation and/or GPS Accuracy, not from actual property owners. Existing well locations are shown as dots. Accuracy and location not verified.

DATUM: NAD27  
LAT: 36°00'02.23"N  
LONG: 98°02'24.85"W  
LAT: 36.000620°N  
LONG: 98.040237°W

STATE PLANE  
COORDINATES (US SRV FEET):  
ZONE: OK North  
X: 1988097.8  
Y: 364235.5

ELEVATION:  
1124.6' GROUND AT STAKE

PROPOSED DRILL PATH	
LINE:	DISTANCE
L1:	717'
L2:	4231'
WELL DISTANCES	
TO S. SECTION LINE:	149'
TO E. SECTION LINE:	2400'
TO W 1/4 LINE:	250'
TO N 1/4 LINE:	2486'



CERTIFICATE  
I, Beau Winfrey, an Oklahoma Licensed Land Surveyor and an authorized agent of Petro Land Services South, LLC, do hereby certify to the information shown herein.  
10/15/2016  
Oklahoma RPLS No.1766



SURVEY & MAPPING BY:  
PLS