

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

API NUMBER: 087 22180

Approval Date: 09/20/2018

Expiration Date: 03/20/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 31 Twp: 6N Rge: 2W

County: MCCLAIN

SPOT LOCATION:

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 245 235

Lease Name: VAUGHN 6N 2W 29

Well No: 1HX

Well will be 235 feet from nearest unit or lease boundary.

Operator Name: BP AMERICA PRODUCTION COMPANY

Telephone: 8326194857; 2813666

OTC/OCC Number: 1640 0

BP AMERICA PRODUCTION COMPANY  
1100 N BROADWAY AVE STE 200  
OKLAHOMA CITY, OK 73103-4937

RON & KATHY SMITH  
17129 ST. HWY 24  
PURCELL OK 73080

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

Name	Depth	Name	Depth
1 WOODFORD	7800	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 677926

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201807187  
201807188  
201807189

Special Orders:

Total Depth: 17800

Ground Elevation: 1111

**Surface Casing: 560**

Depth to base of Treatable Water-Bearing FM: 310

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 BED AQUIFER

Pit Location Formation: PURCELL

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

PERMIT NO: 18-35305

H. SEE MEMO

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.

PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: OIL BASED

Chlorides Max: 300000 Average: 200000

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: PURCELL

HORIZONTAL HOLE 1

Sec 20 Twp 6N Rge 2W County MCCLAIN

Spot Location of End Point: NE NW NW NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 528

Depth of Deviation: 6922

Radius of Turn: 382

Direction: 5

Total Length: 10278

Measured Total Depth: 17800

True Vertical Depth: 7800

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

Notes:

Category

Description

HYDRAULIC FRACTURING

9/19/2018 - 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)

MEMO

9/19/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201807187

9/19/2018 - G57 - (E.O.)(640)(HOR) 29-6N-2W  
VAC 620093 WDFD  
EXT 677926 WDFD  
POE TO BHL NLT 165' FNL & FSL, NLT 330' FEL & FWL  
REC 9-17-2018 (M. PORTER)

This permit does not address the right of entry or settlement of surface damages.

087 22180 VAUGHN 6N 2W 29 1HX

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.

Category	Description
PENDING CD - 201807188	9/19/2018 - G57 - (E.O.) 20 & 29-6N-2W EST MULTIUNIT HORIZONTAL WELL X677926 WDFD 20-6N-2W X201807187 WDFD 29-6N-2W 50% 20-6N-2W 50% 29-6N-2W BP AMERICA PRODUCTION COMPANY REC 9-17-2018 (M. PORTER)
PENDING CD - 201807189	9/19/2018 - G57 - (E.O.) 20 & 29-6N-2W X677926 WDFD 20-6N-2W X201807187 WDFD 29-6N-2W COMPL. INT. (29-6N-2W) NCT 165' FSL, NCT 0' FNL, NCT 330' FWL COMPL. INT. (20-6N-2W) NCT 0' FSL, NCT 165' FNL, NCT 330' FWL NO OP. NAMED REC 9-17-2018 (M. PORTER)
SPACING - 677926	9/19/2018 - G57 - (640)(HOR) 20-6N-2W VAC 378550 WDFD NE4 & N2 SE4 20-6N-2W EXT 666114 WDFD POE TO BHL NLT 165' FNL & FSL, NLT 330' FEL & FWL
WATERSHED STRUCTURE	9/19/2018 - G71 - WELL WITHIN 1/2 MILE OF AN OKLAHOMA CONSERVATION COMMISSION WATERSHED STRUCTURE. CONTACT THE LOCAL CONSERVATION DISTRICT OFFICE AT (405) 527-3452 PRIOR TO DRILLING



# Well Location Plat

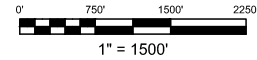
S.H.L. Sec. 31-6N-2W I.M.  
B.H.L. Sec. 20-6N-2W I.M.

Operator: BP AMERICA PRODUCTION COMPANY  
Lease Name and No.: VAUGHN 6N 2W 29 1HX  
Footage: 245' FNL - 235' FEL Gr. Elevation: 1111'  
Section: 31 Township: 6N Range: 2W I.M.  
County: McClain State of Oklahoma  
Terrain at Loc.: Location fell in an open pasture, South and West of an existing fence and West of a two-track road.

API:087 22180



All bearings shown  
are grid bearings.



GPS DATUM

NAD 83

NAD 27

OK SOUTH ZONE

Surface Hole Loc.:  
Lat: 34°57'22.84"N  
Lon: 97°26'32.34"W  
Lat: 34.95634337  
Lon: -97.44231600  
X: 2135608  
Y: 591117

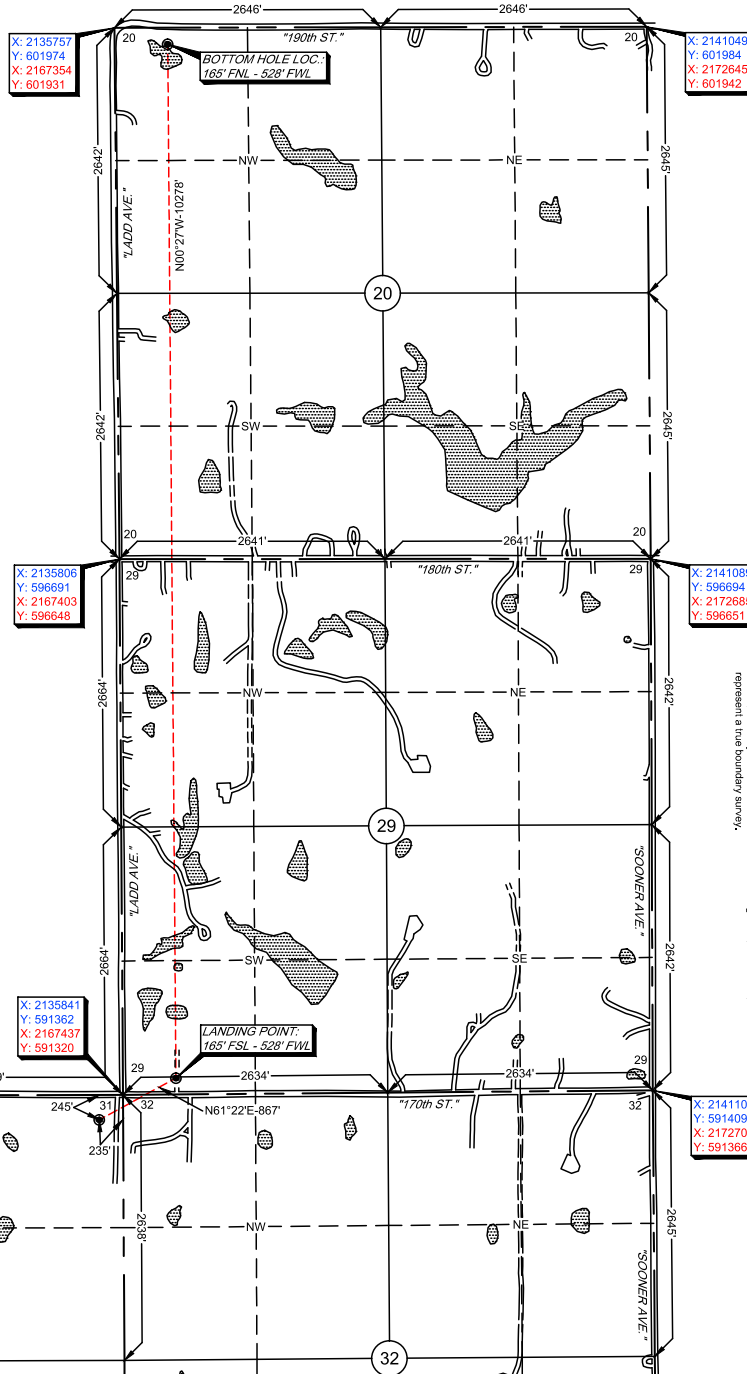
Surface Hole Loc.:  
Lat: 34°57'22.58"N  
Lon: 97°26'31.23"W  
Lat: 34.95627105  
Lon: -97.44200895  
X: 2167204  
Y: 591074

Landing Point:  
Lat: 34°57'26.90"N  
Lon: 97°26'23.17"W  
Lat: 34.95747238  
Lon: -97.43977010  
X: 2136368  
Y: 591532

Landing Point:  
Lat: 34°57'26.64"N  
Lon: 97°26'22.07"W  
Lat: 34.95740007  
Lon: -97.43946309  
X: 2167964  
Y: 591489

Bottom Hole Loc.:  
Lat: 34°59'08.57"N  
Lon: 97°26'23.46"W  
Lat: 34.98571275  
Lon: -97.43985107  
X: 2136287  
Y: 601810

Bottom Hole Loc.:  
Lat: 34°59'08.31"N  
Lon: 97°26'22.36"W  
Lat: 34.98564119  
Lon: -97.43954373  
X: 2167883  
Y: 601767



\*Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of this survey is not guaranteed. The survey was conducted on or about 08/28/18. The accuracy of any inconsistency is determined. GPS data is observed from RTK - GPS. -NOTE: X and Y data shown hereon for Section Corners may NOT have been surveyed on-the-ground, and further, does NOT represent a true Boundary Survey. Section Station distances may be assumed from a Government Survey. This or assumed station distances are not to be used for a true Boundary Survey. This or assumed station distances are not to be used for a true Boundary Survey. This or assumed station distances are not to be used for a true Boundary Survey.

Survey and plat by:  
Arkoma Surveying and Mapping, PLLC  
P.O. Box 238 Wilburton, OK 74578  
Ph. 918-465-5711 Fax 918-465-5030  
Certificate of Authorization No. 5348  
Expires June 30, 2020

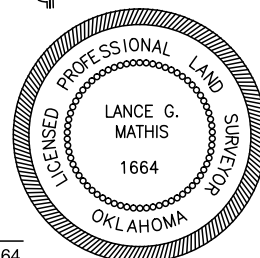
## Certification:

This is to certify that this Well Location Plat represents the results of a survey made on the ground performed under the supervision of the undersigned.

*Lance G. Mathis*  
LANCE G. MATHIS

08/28/18

OK LPLS 1664



Invoice #8078-A

Date Staked: 08/24/18

By: D.K.

Date Drawn: 08/27/18

By: J.K.