API NUMBER: 121 24807

Oil & Gas

Horizontal Hole

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

Approval Date: 12/21/2017
Expiration Date: 06/21/2018

PERMIT TO DRILL

WELL LOCATION:	Sec:	17	Twp:	3N	Rge:	12E	County:	PITTSBURG
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SPOT LOCATION: NW NE NW FEET FROM QUARTER: FROM NORTH FROM WEST SECTION LINES: 296 1534

Lease Name: RESH Well No: 5-8H Well will be 296 feet from nearest unit or lease boundary.

Operator BP AMERICA PRODUCTION COMPANY Telephone: 8326194857; 2813666 OTC/OCC Number: 1640 0

BP AMERICA PRODUCTION COMPANY
737 N ELDRIDGE PKWY

HOUSTON, TX 77079-4411

EDWIN SMITH 870 YOSEMITE LAND

LINCOLN CA 95648

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

	Name	Depth	Name	Deptr	1
1	WOODFORD	9090	6		
2			7		
3			8		
4			9		
5			10		
Spacing Orders:	546851	Location Exception Orders: 66512	6	Increased Density Orders:	664962

Pending CD Numbers: Special Orders:

Total Depth: 13900 Ground Elevation: 785 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 300

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

PIT 1 INFORMATION

Type of Pit System: ON SITE

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: 1B

Liner required for Category: 1B
Pit Location is BED AQUIFER
Pit Location Formation: SAVANNA

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

B. Solidification of pit contents.

H. SEE MEMO

PIT 2 INFORMATION

Type of Pit System: ON SITE

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: 3

Liner required for Category: 3

Pit Location is BED AQUIFER

Pit Location Formation: SAVANNA

HORIZONTAL HOLE 1

Sec 08 Twp 3N Rge 12E County PITTSBURG

Spot Location of End Point: NE NW NW NW Feet From: NORTH 1/4 Section Line: 165
Feet From: WEST 1/4 Section Line: 400

Depth of Deviation: 8300 Radius of Turn: 416 Direction: 355

Total Length: 4947

Measured Total Depth: 13900

True Vertical Depth: 9090

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

Additional Surface Owner Address City, State, Zip

MILDRED DEWERT 24305 VALLEY VIEW CIRCLE CEDAR RIDGE, CA 81413

JACQUELINE SMITH 1784 SHARON AVE CONCORD, CA 94519

Notes:

Category Description

DEEP SURFACE CASING 12/13/2017 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS

OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR

OR SURFACE CASING

HYDRAULIC FRACTURING 12/13/2017 - 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; 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

INCREASED DENSITY - 664962 12/21/2017 - G58 - 8-3N-12E

X546851 WDFD 4 WELLS

BP AMERICA PRODUCTION COMPANY

6/19/2017

Category Description

LOCATION EXCEPTION - 665126 12/21/2017 - G58 - (I.O.) 8-3N-12E

X546851 WDFD, OTHERS

COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FWL

BP AMERICA PRODUCTION COMPANY

6/22/2017

MEMO 12/13/2017 - G71 - PITS 1 & 2 - MIN. 20-MIL PIT LINER REQUIRED, OBM RETURNED TO

VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 546851 12/21/2017 - G58 - (640) 8-3N-12E

EST OTHERS EXT OTHERS

EXT 539583 WDFD, OTHER