API NUMBER: 083 24372

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: 01/29/2015 07/29/2015 **Expiration Date** 

PERMIT TO DRILL

WELL LOCATION: Sec: 21 Twp: 19N Rge: 3W County: LOGAN

FEET FROM QUARTER: SPOT LOCATION: FROM NORTH WEST NW ll NE Inw SECTION LINES:

580 1650

Lease Name: CROSSFIELD A 21-19N-3W Well No: 3МН Well will be 580 feet from nearest unit or lease boundary.

**DEVON ENERGY PRODUCTION CO LP** Operator Telephone: 4052353611: 4052353 OTC/OCC Number: 20751 0 Name:

DEVON ENERGY PRODUCTION CO LP 333 W SHERIDAN AVE DEC 34.428

OKLAHOMA CITY. OK 73102-5010 RUTH D. DANIEL-MANAGER, DANIEL MANAGEMENT, LTD 8523 THACKERY #1208

**DALLAS** TX 75225

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

Name Depth Name Depth MISSISSIPPIAN 1 5472 6 2 WOODFORD 5819 7 3 8 4 9 5 10

600665 Spacing Orders: Location Exception Orders: Increased Density Orders: 634170

Pending CD Numbers: 201407227 Special Orders:

Total Depth: 10075 Ground Elevation: 1042 Depth to base of Treatable Water-Bearing FM: 260 Surface Casing: 500

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

Approved Method for disposal of Drilling Fluids: PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 15-29403 H. SEE MEMO 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?

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: GARBER

## 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: GARBER

## **HORIZONTAL HOLE 1**

Sec 21 Twp 19N Rge 3W County LOGAN Spot Location of End Point: SE SW SE SW Feet From: SOUTH 1/4 Section Line: 50 Feet From: WEST 1/4 Section Line: 1750

Depth of Deviation: 5226 Radius of Turn: 358 Direction: 178

Total Length: 4287

Measured Total Depth: 10075

True Vertical Depth: 5819

End Point Location from Lease,
Unit, or Property Line: 50

Notes:

Category Description

INCREASED DENSITY - 634170 1/29/2015 - G76 - 21-19N-3W

X600665 MSSP, WDFD

4 WELLS

DEVON ENERGY PROD. CO., L.P.

12/15/2014

MEMO 1/27/2015 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201407227 1/29/2015 - G76 - (I.O.) 21-19N-3W

X600665 MSSP, WDFD, OTHERS

COMPL. INT. NCT 150 FNL, NCT 150 FSL, NCT 1530 FWL

NO OP. NAMED 11/10/2014 (NORRIS)

SPACING - 600665 1/29/2015 - G76 - (640)(HOR) 21-19N-3W

EXT 591158 MSSP

EXT 597354 WDFD, OTHER

POE TO BHL (MSSP, OTHERS) NCT 660' FB

POE TO BHL (WDFD) NCT 330' FB

(SUPERSEDE NON-DEVELOPED NON-HORIZONTAL SPACING UNITS; COEXIST WITH

PRODUCING NON-HORIZONTAL SPACING UNITS)