

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

API NUMBER: 083 24376

Approval Date: 02/12/2015  
Expiration Date: 08/12/2015

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 33 Twp: 19N Rge: 3W County: LOGAN  
SPOT LOCATION:  NE  NW  NE  NW FEET FROM QUARTER: FROM NORTH FROM WEST  
SECTION LINES: 275 1741

Lease Name: CROSSFIELD B 33-19N-3W Well No: 2WH Well will be 275 feet from nearest unit or lease boundary.

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

DEVON ENERGY PRODUCTION CO LP  
333 W SHERIDAN AVE DEC 34.428  
OKLAHOMA CITY, OK 73102-5010

CHARLES ROTHERMEL & BETTY JANE ROTHERMEL  
3700 WEST HIGHWAY 51  
MULHALL OK 73063

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	5514	6	
2 WOODFORD	5841	7	
3 MISENER-HUNTON	5899	8	
4		9	
5		10	

Spacing Orders: 590189

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201409115  
201409116

Special Orders:

Total Depth: 10717

Ground Elevation: 1001

Surface Casing: 500

Depth to base of Treatable Water-Bearing FM: 370

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

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: GARBER

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 15-29306

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: GARBER

HORIZONTAL HOLE 1

Sec 33 Twp 19N Rge 3W County LOGAN

Spot Location of End Point: S2 SE SW SW

Feet From: SOUTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 990

Depth of Deviation: 5508

Radius of Turn: 358

Direction: 189

Total Length: 4647

Measured Total Depth: 10717

True Vertical Depth: 5899

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

Notes:

Category

Description

MEMO

2/12/2015 - G76 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201409115

2/11/2015 - G76 - 33-19N-3W  
X590189 MSSP, WDFD, MSRH  
COMPL. INT. NCT 150 FNL, NCT 150 FSL, NCT 330 FWL  
NO OP. NAMED  
REC. 1/12/2015 (M. PORTER)

PENDING CD - 201409116

2/11/2015 - G76 - 33-19N-3W  
X590189 MSSP, OTHER  
1 WELL  
REC. 1/12/2015 (DECKER)

SPACING - 590189

2/11/2015 - G76 - (640)(HOR) 33-19N-3W  
EST MSSP, WDFD, MSRH  
POE TO BHL (MSSP, MSRH) NLT 660' FB, NCT 600' FWB  
POE TO BHL (WDFD) NLT 330' FB, NCT 600' FWB  
(SUPERSEDE ORDER # 71472 MISS)

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.

083 24376 CROSSFIELD B 33-19N-3W 2WH