

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

API NUMBER: 083 24373

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

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 21 Twp: 19N Rge: 3W County: LOGAN  
SPOT LOCATION:  S2  NW  NE  NW FEET FROM QUARTER: FROM NORTH FROM WEST  
SECTION LINES: 620 1650

Lease Name: CROSSFIELD A 21-19N-3W Well No: 2WH Well will be 620 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

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
1	MISSISSIPPIAN	5496	6	
2	WOODFORD	5843	7	
3	MISENER-HUNTON	5890	8	
4	SYLVAN	5897	9	
5			10	

Spacing Orders: 600665

Location Exception Orders:

Increased Density Orders: 634170

Pending CD Numbers: 201407225

Special Orders:

Total Depth: 10478

Ground Elevation: 5863

**Surface Casing: 500**

Depth to base of Treatable Water-Bearing FM: 260

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: GARBER

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 15-29405  
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 21 Twp 19N Rge 3W County LOGAN

Spot Location of End Point: SE SW SW SW

Feet From: SOUTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 400

Depth of Deviation: 5505

Radius of Turn: 358

Direction: 195

Total Length: 4410

Measured Total Depth: 10478

True Vertical Depth: 5897

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, OTHER  
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 - 201407225

1/29/2015 - G76 - (I.O.) 21-19N-3W  
X600665 MSSP, WDFD, MSRH, SLVN  
COMPL. INT. NCT 150 FNL, NCT 150 FSL, NCT 330 FWL  
NO OP. NAMED  
REC. 11/10/2014 (NORRIS)

SPACING - 600665

1/29/2015 - G76 - (640)(HOR) 21-19N-3W  
EXT 591158 MSSP  
EXT 597354 WDFD, MSRH, SLVN  
POE TO BHL (MSSP, MSRH, SLVN) NCT 660' FB  
POE TO BHL (WDFD) NCT 330' FB  
(SUPERSEDE NON-DEVELOPED NON-HORIZONTAL SPACING UNITS; COEXIST WITH  
PRODUCING NON-HORIZONTAL SPACING UNITS)

This permit does not address the right of entry or settlement of surface damages.  
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Office of the Conservation Division as to when Surface Casing will be run.

083 24373 CROSSFIELD A 21-19N-3W 2WH