API NUMBER: 083 24303

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: 05/15/2014 Expiration Date: 11/15/2014

## PERMIT TO DRILL

WELL LOCATION:	Sec:	27	Twp	: 18N	Rge:	3W	County	: LOG	AN		
SPOT LOCATION:	SE	SE		SE	SE		FEET FROM QUARTER:	FROM	SOUTH	FROM	EAST
							SECTION LINES:		245		309

Lease Name: PAUL 27-18N-3W Well No: 1WH Well will be 245 feet from nearest unit or lease boundary.

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

DEVON ENERGY PRODUCTION CO LP 333 W SHERIDAN AVE DEC 34.428

OKLAHOMA CITY, OK 73102-5010

GARY HOPFER & BETTY J. HOPFER 11998 KELLBROAD RD.

GUTHRIE OK 73044

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	5612	6	
2	WOODFORD	5942	7	
3	MISENER-HUNTON	5982	8	
4	SYLVAN	6016	9	
5			10	
cing Orders:	607717	Location Exception Orders: 62377	78	Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 10807 Ground Elevation: 985 Surface Casing: 500 Depth to base of Treatable Water-Bearing FM: 140

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 D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-27135
Chlorides Max: 5000 Average: 3000 H. SEE MEMO

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

Spacir

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: 350000 Average: 275000

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 27 Twp 18N Rge 3W County LOGAN NE Spot Location of End Point: NW ΝE ΝE Feet From: NORTH 1/4 Section Line: 50 Feet From: EAST 1/4 Section Line: 400

Depth of Deviation: 5619
Radius of Turn: 358
Direction: 359
Total Length: 4626

Measured Total Depth: 10807

True Vertical Depth: 6016

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

Notes:

Category Description

DEEP SURFACE CASING 5/14/2014 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS

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

SURFACE CASING

LOCATION EXCEPTION - 623778 5/15/2014 - G75 - (I.O.) 27-18N-3W

X607717 MSSP, WDFD, MSRH, SLVN

COMPL. INT. NCT 150 TO SL, NCT 150 TO NL, NCT 330 TO EL

DEVON ENERGY PROD. CO., LP

4-9-2014

MEMO 5/14/2014 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST: PIT 2 -

OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

SPACING - 607717 5/15/2014 - G75 - (640)(HOR) 27-18N-3W

EST MSSP, WDFD, MSRH, SLVN

COMPL. INT. (WDFD) NLT 330' FB, NCT 600' FWB COMPL. INT. (OTHERS) NLT 660' FB, NCT 600' FWB (SUPERSEDE SP. ORDER # 70019 MSSLM, MSNR)