API NUMBER: 083 24253

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: 02/04/2014 08/04/2014 Expiration Date:

## PERMIT TO DRILL

WELL LOCATION:	Sec:	23	Twp:	19N	Rge:	3W	County	: LOG	AN		
SPOT LOCATION:	NW	SE	SI		SW		FEET FROM QUARTER:	FROM	SOUTH	FROM	WEST
							SECTION LINES:		340		2246

Lease Name: ROTHERMEL 23-19N-3W Well No: 5WH Well will be 340 feet from nearest unit or lease boundary.

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

DEVON ENERGY PRODUCTION CO LP 333 W SHERIDAN AVE DEC 34.428

OKLAHOMA CITY. OK 73102-5010

STAN AND CHRISTINE KLINGAMAN 7151 INDEPENDENCE

**PERRY** OK 73077

Special Orders:

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	5520	6	
2	WOODFORD	5830	7	
3	MISENER-HUNTON	5875	8	
4			9	
5			10	
Spacing Orders:	605895	Location Exception Orders:		Increased Density Orders:

201308567

201308560

Pending CD Numbers:

Total Depth: 10870 Ground Elevation: 1131 Surface Casing: 570 Depth to base of Treatable Water-Bearing FM: 450

Under Federal Jurisdiction: No 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: 14-26317

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

is located in a Hydrologically Sensitive Area.

Category of Pit: C

Wellhead Protection Area?

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**

County Sec 23 Twp 19N Rge 3W LOGAN Spot Location of End Point: N2 NW NW NF Feet From: NORTH 1/4 Section Line: 50 Feet From: EAST 1/4 Section Line: 2310

Depth of Deviation: 5742 Radius of Turn: 358

Direction: 8

Total Length: 4569

Measured Total Depth: 10870

True Vertical Depth: 6000

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

Notes:

Category Description

MEMO 2/3/2014 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR OPTION,

CONCRETE LINED PIT FOR SOIL FARMING PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201308560 2/3/2014 - G30 - 23-19N-3W

 $\mathsf{X}605895\;\mathsf{MSSP},\,\mathsf{WDFD},\,\mathsf{MSRH},\,\mathsf{OTHER}$  POE NCT 0 FSL, NCT 1980 FEL

1ST PERF NCT 150 FSL, NCT 1980 FEL LAST PERF NCT 150 FNL, NCT 1980 FEL

BHL NCT 0 FNL, NCT 1980 FEL

NO OP. NAMED REC 1/27/14 (LEAVITT)

PENDING CD - 201308567 2/3/2014 - G30 - 23-19N-3W

X605895 MSSP, WDFD, MSRH

3 WELLS NO OP. NAMED REC 1/27/14 (LEAVITT)

SPACING - 605895 2/3/2014 - G30 - (640 HOR) 23-19N-3W

EXT 601235 MSSP, WDFD, MSRH, OTHER

POE TO BHL (MSSP, MSRH) NLT 660' FB, NCT 600' FWB

POE TO BHL (WDFD) NLT 330' FB, NCT 600' FWB

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

PRODUCING NON-HORIZONTAL SPACING UNITS)