API NUMBER: 083 24254

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:	LOGAN

SPOT LOCATION: NW SE SE SW FEET FROM QUARTER: SOUTH WEST FROM SECTION LINES: 340 2226

Lease Name: ROTHERMEL 23-19N-3W Well No: 4MH 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

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

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

Pending CD Numbers: 201308562 Special Orders:

201308566

Total Depth: 10579 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:

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

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

PERMIT NO: 14-26316 D. One time land application -- (REQUIRES PERMIT)

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

Depth of Deviation: 5352 Radius of Turn: 358

Direction: 1

Total Length: 4521

Measured Total Depth: 10579

True Vertical Depth: 5830

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 - 201308562 2/3/2014 - G30 - 23-19N-3W

X605895 MSSP, WDFD, OTHERS POE NCT 0 FSL, NCT 1980 FWL 1ST PERF NCT 150 FSL, NCT 1980 FWL LAST PERF NCT 150 FNL, NCT 1980 FWL

BHL NCT 0 FNL, NCT 1980 FWL

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

PENDING CD - 201308566 2/3/2014 - G30 - 23-19N-3W

X605895 MSSP, WDFD

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, OTHERS

POE TO BHL (MSSP) 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)