

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

API NUMBER: 083 24256 A

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

Horizontal Hole Oil & Gas

Amend reason: BHL CHANGE

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 23 Twp: 19N Rge: 3W

County: LOGAN

SPOT LOCATION: NW SE SE SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 340 2186

Lease Name: ROTHERMEL 23-19N-3W

Well No: 2MH

Well will be 340 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

STAN AND CHRISTINE KLINGAMAN
7151 INDEPENDENCE
PERRY OK 73077

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	5520	6	
2 WOODFORD	5830	7	
3		8	
4		9	
5		10	

Spacing Orders: 605895

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201308565
201308566

Special Orders:

Total Depth: 10679

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

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: 14-26314

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 23 Twp 19N Rge 3W County LOGAN

Spot Location of End Point: NW NW NE NW

Feet From: NORTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 1410

Depth of Deviation: 5452

Radius of Turn: 358

Direction: 346

Total Length: 4665

Measured Total Depth: 10679

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 - 201308565

2/3/2014 - G30 - 23-19N-3W
X605895 MSSP, WDFD, OTHERS
POE NCT 0 FSL, NCT 660 FWL
1ST PERF NCT 150 FSL, NCT 660 FWL
LAST PERF NCT 150 FNL, NCT 660 FWL
BHL NCT 0 FNL, NCT 660 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; COEXSIT WITH PRODUCING NON-HORIZONTAL SPACING UNITS)

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 24256 ROTHERMEL 23-19N-3W 2MH