API NUMBER: 011 23897

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: 12/06/2017
Expiration Date: 06/06/2018

PERMIT TO DRILL

WELL LOCATION:	Sec:	13	Twp:	15N	Rge:	10\	V Cour	ity: BLA	INE		
SPOT LOCATION:	NW	NW	NI	E	NW		FEET FROM QUARTER:	FROM	NORTH	FROM	WES
							SECTION LINES:		285		1331

Lease Name: HORSEFLY 13_24-15N-10W Well No: 4HX Well will be 285 feet from nearest unit or lease boundary.

Operator DEVON ENERGY PRODUCTION CO LP Telephone: 4052353611; 4052353 OTC/OCC Number: 20751 0

DEVON ENERGY PRODUCTION CO LP 333 W SHERIDAN AVE

OKLAHOMA CITY, OK 73102-5010

BARBARA ANN BORNEMANN 959 N. BANNER ROAD

EL RENO OK 73036

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

	Name	Depth	Name	Depth		
1	MISSISSIPPIAN	9230	6			
2	WOODFORD	10663	7			
3			8			
4			9			
5			10			
Spacing Orders:	646358	Location Exception Orders:		Increased Density Orders: 670190		
	594004					

Pending CD Numbers: 201706150 Special Orders:

201706184 201706180

Total Depth: 20193 Ground Elevation: 1286 Surface Casing: 1999 Depth to base of Treatable Water-Bearing FM: 90

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: 17-33296

Chlorides Max: 8000 Average: 5000 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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: FLOWERPOT

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C
Pit Location is NON HSA

Pit Location Formation: FLOWERPOT

HORIZONTAL HOLE 1

Sec 24 Twp 15N Rge 10W County **BLAINE** Spot Location of End Point: SW SW SF SW Feet From: SOUTH 1/4 Section Line: 50 Feet From: WEST 1/4 Section Line: 1355

Depth of Deviation: 9151 Radius of Turn: 425 Direction: 180

Total Length: 10375

Measured Total Depth: 20193
True Vertical Depth: 10663
End Point Location from Lease,
Unit, or Property Line: 50

Notes:

Category Description

DEEP SURFACE CASING 11/3/2017 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF

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

SURFACE CASING

HYDRAULIC FRACTURING 11/3/2017 - G71 - OCC 165:10-3-10 REQUIRES:

1) PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE:

2) WITH NOTICE ALSO GIVEN 48 HOURS IN ADVANCE OF HYDRAULIC FRACTURING ALL WELLS TO BOTH THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES, USING THE

"FRAC NOTICE FORM" FOUND AT THE FOLLOWING LINK:

OCCEWEB.COM/OG/OGFORMS.HTML; AND,

3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION THE

HYDRAULIC FRACTURING OPERATIONS, USING THE FOLLOWING LINK: FRACFOCUS.ORG

INCREASED DENSITY - 670190 12/4/2017 - G58 - (I.O.) 24-15N-10W

X594004 MSSP, WDFD

10 WELLS

DEVON ENERGY PROD. CO., L.P.

11/17/17

INTERMEDIATE CASING 11/3/2017 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-

PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE

MORROW SERIES

Category Description

MEMO 11/3/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

EST. MULTIUNIT HORIZONTAL WELL X646358 (13-15N-10W) MSSP, WDFD X594004 (24-15N-10W) MSSP, WDFD

(WDFD IS AN ADJACENT COMMON SOURCE OF SUPPLY TO MSSP)

50% 13-15N-10W 50% 24-15N-10W NO OP NAMED

REC 10/10/2017 (JACKSON)

PENDING CD - 201706180 12/4/2017 - G58 - (I.O.) 13-15N-10W

X646358 MSSP, WDFD

10 WELLS

DEVON ENERGY PROD. CO., L.P. REC 10/10/2017 (JACKSON)

PENDING CD - 201706184 12/4/2017 - G58 - (I.O.) 13 & 24-15N-10W

X646358 MSSP, WDFD 13-15N-10W X594004 MSSP, WDFD 24-15N-10W

X165:10-3-28(C)(2)(B) MSSP, WDFD (HORSEFLY 13_24-15N-10W 4HX)

MAY BE CLOSER THAN 600' TO ANY PROPOSED WELL AND HORSEFLY 13_24-15N-10W 1HX

COMPL. INT. (13-15N-10W) NCT 165' FNL, NCT 0' FSL, NCT 990' FWL COMPL. INT. (24-15N-10W) NCT 0' FNL, NCT 165' FSL, NCT 990' FWL

DEVON ENERGY PROD. CO., L.P. REC 10/10/2017 (JACKSON)

SPACING - 594004 12/4/2017 - G58 - (640) 24-15N-10W

VAC 169866 CSTR VAC 176175 MNNG, MSSSD

EXT 588576 WDFD EST MSSP

SPACING - 646358 12/4/2017 - G58 - (640)(HOR) 13-15N-10W

VAC 169866 CSTR

VAC 176175 MNNG, MSSSD, OTHER

EXT 641537 WDFD EST MSSP, OTHER

POE TO BHL (MSSP, OTHER) NCT 660' FB

POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL

