API NUMBER: 017 25152

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: 12/29/2017
Expiration Date: 06/29/2018

PERMIT TO DRILL

WELL LOCATION:	Sec:	16	Twp:	14N	Rge: 9W	/ County:	CANADIAN
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SPOT LOCATION: SE NW NW NE FEET FROM QUARTER: FROM NORTH FROM EAST SECTION LINES: 383 2164

Lease Name: LION 9\_4-14N-9W Well No: 1HX Well will be 383 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

JAMES & CAROLYN MANSFIELD 18135 220 STREET NW

CALUMET OK 73014

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

Name Depth Name Depth MISSISSIPPIAN 1 10306 6 2 WOODFORD 10887 7 3 8 4 9 5 10 593703 Spacing Orders: Location Exception Orders: Increased Density Orders: 475493 648601

Pending CD Numbers: 201702315 Special Orders:

Total Depth: 21611 Ground Elevation: 1373 Surface Casing: 1999 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 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: 17-33571

Chlorides Max: 5000 Average: 3000 H. SEE MEMO

Within 1 mile of municipal water well? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: C

Wellhead Protection Area?

Liner not required for Category: C
Pit Location is AP/TE DEPOSIT
Pit Location Formation: TERRACE

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 AP/TE DEPOSIT
Pit Location Formation: TERRACE

## **HORIZONTAL HOLE 1**

Sec 04 Twp 14N Rge 9W County CANADIAN

Spot Location of End Point: NW NE NW NE Feet From: NORTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 1934

Depth of Deviation: 10383 Radius of Turn: 582

Direction: 2

Total Length: 10313

Measured Total Depth: 21611

True Vertical Depth: 10950

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

Notes:

Category Description

DEEP SURFACE CASING 12/5/2017 - 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 12/5/2017 - 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

INTERMEDIATE CASING 12/5/2017 - 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

MEMO 12/5/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

Category Description PENDING CD - 201702314 12/15/2017 - G57 - (I.O.)(640)(HOR) 4-14N-9W EXT 648601 MSSP POE TO BHL NCT 660' FB (COEXIST SP. ORDER #199707) REC 5-9-2017 (P. PORTER) PENDING CD - 201702315 12/15/2017 - G57 - (I.O.) 9 & 4-14N-9W EST MULTIUNIT HORIZONTAL WELL X648601 MSSP 9-14N-9W X593703 WDFD 9-14N-9W\*\* X475493 WDFD 4-14N-9W X201702314 MSSP 4-14N-9W (MSSP ASSOCIATED COMMON SOURCE OF SUPPLY TO WDFD) 50% 9-14N-9W 50% 4-14N-9W DEVON ENERGY PRODUCTION COMPANY, L.P. REC 9/27/2017 (M. PORTER) \*\*\*\*593703 S/B ADDED FOR WDFD 9-14N-9W & REMOVE WDFD FROM SP. ORDER 648601 IN MU: TO BE CORRECTED BY ATTORNEY FOR OPERATOR 12/28/2017 - G57 - (I.O.) 9 & 4-14N-9W PENDING CD - 201702316 X648601 MSSP 9-14N-9W X593703 WDFD 9-14N-9W\*\* X475493 WDFD 4-14N-9W X201702314 MSSP 4-14N-9W X165:10-3-28(C)(2)(B) WDFD (LION 9-4-14N-9W) MAY BE CLOSER THAN 600' FROM ANY EXISTING WELL COMPL. INT.(9-14N-9W) NCT 165' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (4-14N-9W) NCT 0' FSL, NCT 165' FNL, NCT 330' FEL DEVON ENERGY PRODUCTION COMPANY, L.P. REC 9/27/2017 (M. PORTER) \*\*593703 S/B ADDED FOR WDFD 9-14N-9W & REMOVE WDFD FROM SP. ORDER 648601 IN LE: TO BE CORRECTED BY ATTORNEY FOR OPERATOR PENDING CD - 201707581 12/28/2017 - G57 - (I.O.) 4-14N-9W X475493 WDFD 1 WELL DEVON ENERGY PRODUCTION COMPANY, LP. REC 12-5-2017 (MILLER) PENDING CD - 201707582 12/28/2017 - G57 - (I.O.) 9-14N-9W X593703 WDFD 1 WELL DEVON ENERGY PRODUCTION COMPANY, LP. REC 12-5-2017 (MILLER) 12/15/2017 - G57 - (640) 4-14N-9W **SPACING - 475493** EXT 179994 WDFD, OTHERS **EST OTHER** 

**SPACING - 593703** 12/15/2017 - G57 - (640)(HOR) 9-14N-9W

VAC 199782 WDFD

**FST WDFD** 

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

**SPACING - 648601** 12/15/2017 - G57 - (640)(HOR) 9-14N-9W

VAC 193707 MSSSD, OTHER VAC 199782 MNNG, CSTR EXT 641050 MSSP

**EST OTHER** 

POE TO BHL NCT 660' FB

