API NUMBER: 073 25932

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:	02/23/2018
Expiration Date:	08/23/2018

PERMIT TO DRILL

County: KINGFISHER WELL LOCATION: Sec: 08 Twp: 15N Rge: 9W

FEET FROM QUARTER: SPOT LOCATION: sw SOUTH FROM EAST SE ll se SE

SECTION LINES: 238 872

Lease Name: BERNHARDT 8\_5-15N-9W Well No: 7HX Well will be 238 feet from nearest unit or lease boundary.

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

DEVON ENERGY PRODUCTION CO LP 333 W SHERIDAN AVE

OKLAHOMA CITY. OK 73102-5010 DIANNE SHAW, REMAINDERMAN

P.O. BOX 330574

ATLANTIC BEACH FL 32233

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

Name Depth Name Depth MISSISSIPPIAN 1 8895 6 2 MISSISSIPPIAN (EX CHESTER) 9680 7 3 WOODFORD 10300 8 9 10 645049 Spacing Orders: Location Exception Orders: 671796 Increased Density Orders: 672906 631851 672907

Pending CD Numbers: Special Orders:

Total Depth: 19960 Ground Elevation: 1232 Surface Casing: 1999 Depth to base of Treatable Water-Bearing FM: 460

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: 17-33424

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?

Wellhead Protection Area?

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: CHICKASHA

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 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: CHCKASHA

## **HORIZONTAL HOLE 1**

Sec 05 Twp 15N Rge 9W County KINGFISHER

Spot Location of End Point: NE NE NW NE
Feet From: NORTH 1/4 Section Line: 50
Feet From: EAST 1/4 Section Line: 1600

Depth of Deviation: 9389
Radius of Turn: 478
Direction: 356
Total Length: 9820

Measured Total Depth: 19960

True Vertical Depth: 19000

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

Additional Surface OwnerAddressCity, State, ZipROBERT JOHN EDWARD, A LIFE ES2741 FLEETWOOD DRIVESAN BRUNO, CA 94066DEBORAH LOUISE SHAW, A LIFE ES1845 HELENA DRIVECONCORD, CA 94521DUSTIN SHAW, REMAINDERMAN1845 HELENA DRIVECONCORD, CA 94521

Notes:

Category Description

DEEP SURFACE CASING 2/15/2018 - 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 2/15/2018 - 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 - 672906 2/16/2018 - G60 - (E.O.) 8-15N-9W

X645049 MSNLC

9 WELLS

DEVON ENERGY PRODUCTION CO, LP

1/31/18

Category Description

INCREASED DENSITY - 672907 2/16/2018 - G60 - (E.O.) 5-15N-9W

X631851 MSSP

9 WELLS

DEVON ENERGY PRODUCTION CO, LP

1/31/18

INTERMEDIATE CASING 2/15/2018 - 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

LOCATION EXCEPTION - 671796 2/16/2018 - G60 - (E.O.) 8 & 5-15N-9W

X645049 (8-15N-9W) MSNLC, WDFD X631851 (5-15N-9W) MSSP, WDFD

X165:10-3-28(C)(2)(B) MSSP, MSNLC, WDFD MAY BE CLOSER THAN 600' TO ANOTHER

PROPOSED WELL OR THE CASTONGUAY UNIT 1 WELL

COMPL. INT. (8-15N-9W) NCT 165' FSL, NCT 0' FNL, NCT 1350' FEL COMPL. INT. (5-15N-9W)

NCT 0' FNL, NCT 165' FNL, NCT 1350' FEL

DEVON ENERGY PROD. CO. LP.

1/3/18

MEMO 2/15/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 631851 2/16/2018 - G60 - (640)(HOR) 5-15N-9W

EST MSSP, WDFD, OTHER COMPL. INT. (MSSP) NLT 660' FB

COMPL. INT. (WDFD) NLT 330' FEL & FWL, NCT 165' FNL & FSL (COEXIST WITH 56289 MCSTR; SP. ORDER 212941 MSSSD)

SPACING - 645049 2/16/2018 - G60 - (640)(HOR) 8-15N-9W

EST MSNLC, HNTN EXT 642679 WDFD

COMPL. INT. (MSNLC, HNTN) NCT 660' FB

COMPL. INT. (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL

(COEXIST WITH SP. OR DER 176175 MSSSD, HNTN)

SPACING - 671224 2/16/2018 - G60 - (E.O.) 8 & 5-15N-9W

EST MULTIUNIT HORIZONTAL WELL X645049 (8-15N-9W) MSNLC, WDFD X631851 (5-15N-9W) MSSP. WDFD

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

50% 8-15N-9W 50% 5-15N-9W

DEVON ENERGY PROD. CO. LP.

12/14/17

300 Pointe Parkway Blvd. Yukon, OK 73099 40.5 787 6270 t 40.5 787 6276 f www.craftontull.com Crafton Tull

3507325932

OPERATOR: DEVON ENERGY PRODUCTION COMPANY, L.P. LEASE NAME: BERNHARDT 8\_5-15N-9W WELL NO. 7HX

KINGFISHER COUNTY, STATE:OK **GROUND ELEVATION:**1232.13' GR. AT STAKE SURFACE HOLE FOOTAGE: 872' FEL - 238' FSL

SECTION: 8 TOWNSHIP: T15N RANGE: R9W

BOTTOM HOLE: 5-T15N-R9W,I.M.

GOOD DRILL SITE: YES

ACCESSIBILITY TO LOCATION: FROM SOUTH LINE

**TOPOGRAPHY & VEGETATION:** LOCATION FELL IN A FIELD

**DISTANCE & DIRECTION FROM HWY JCT OR TOWN:** FROM THE TOWN OF KINGFISHER HEAD WEST ON OK-3 14MI± TO N2710RD, HEAD SOUTH 4MI± TO E850RD, HEAD WEST 0.1 MI±, PAD SITE IS NORTH OF ROAD.

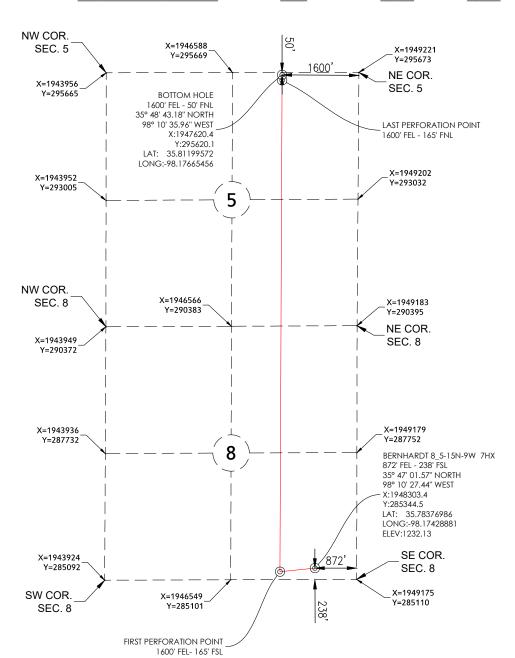
PLEASE NOTE THAT THIS LOCATION WAS STAKED ON THE GROUND UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL LAND SURVEYOR, BUT ACCURACY OF THIS EXHIBIT IS NOT GUARANTEED, PLEASE CONTACT CRAFTON TULL PROMPTLY IF ANY INCONSISTENCY IS DETERMINED, GPS DATA IS OBSERVED FROM RTK-GPS.

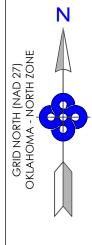
OBSERVED FROM RIK-GPS.

NOTE:X AND Y DATA SHOWN HEREON FOR SECTION CORNERS MAY NOT HAVE BEEN SURVEYED ON THE GROUND, AND FURTHER, <u>DOES NOT</u> REPRESENT A TRUE BOUNDARY SURVEY.

QUARTER SECTION DISTANCES MAY BE ASSUMED FROM A GOVERNMENT SURVEY PLAT OR ASSUMED AT A PROPORTIONATE DISTANCE FROM OPPOSING SECTION CORNERS, OR OCCUPATION THEREOF, AND MAY NOT HAVE BEEN MEASURED ON THE GROUND, AND FURTHER, <u>DOES NOT</u> REPRESENT A TRUE BOUNDARY SURVEY.

**COUNTY, OKLAHOMA KINGFISHER** 872' FEL - 238' FSL \_ SECTION <u>8</u> TOWNSHIP <u>15N</u> RANGE <u>9W</u> I.M.





**SURFACE HOLE DATA** STATE PLANE COORDINATES:

**ZONE:** OK-NORTH NAD27

X: 1948303.4

GPS DATUM: NAD27

LAT: <u>35.78376986</u> LONG: -98.17428881

**STATE PLANE COORDINATES: ZONE: OK-NORTH NAD** 

X: 1916704.1

**GPS DATUM: NAD83** LAT: <u>35.78381377</u> LONG: <u>-98.17462759</u>

BOTTOM HOLE DATA
STATE PLANE COORDINATES:

**ZONE:** OK-NORTH NAD2 **X**: 1947620.4

**Y**: 295620.1

GPS DATUM: NAD27 **LAT:** 35.81199572 LONG: <u>-98.17665456</u>

**STATE PLANE COORDINATES: ZONE: OK-NORTH NAD83** 

**X**: 1916021.0 Y: 295643.8

GPS DATUM: NAD83 LAT: 3 LONG: -98.17699398 **BOTTOM HOLE** 

INFORMATION PROVIDED BY OPERATOR LISTED.



**GRAPHIC SCALE IN FEET** 2000 1000 0 2000

REVISION		"BERNHARDT 8_5-15N-9W 7HX"				
		PART OF THE SE/4 OF SECTION 8, T-15-N, R-9-W PROPOSED DRILL SITE KINGFISHER COUNTY, OKLAHOMA				devon
		SCALE: 1" = 2000' PLOT DATE: 09-22-2017	DRAWN BY:	SQ	SHEET NO.:	1 OF 6