

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

API NUMBER: 073 25934

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

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 08 Twp: 15N Rge: 9W County: KINGFISHER
SPOT LOCATION: SE SW SE SE FEET FROM QUARTER: FROM SOUTH FROM EAST
SECTION LINES: 238 812

Lease Name: BERNHARDT 8_5-15N-9W Well No: 10HX Well will be 238 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
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
1	MISSISSIPPIAN	8900	6	
2	MISSISSIPPIAN (EX CHESTER)	9685	7	
3	WOODFORD	10305	8	
4			9	
5			10	

Spacing Orders: 645049
631851
671226

Location Exception Orders: 671798

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 19763

Ground Elevation: 1230

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

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

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 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

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 17-33426

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 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

HORIZONTAL HOLE 1

Sec 05 Twp 15N Rge 9W County KINGFISHER

Spot Location of End Point: NW NE NE NE

Feet From: NORTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 500

Depth of Deviation: 9207

Radius of Turn: 477

Direction: 2

Total Length: 9806

Measured Total Depth: 19763

True Vertical Depth: 10305

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

Additional Surface Owner	Address	City, State, Zip
ROBERT JOHN EDWARD, A LIFE ES	2741 FLEETWOOD DRIVE	SAN BRUNO, CA 94066
DEBORAH LOUISE SHAW, A LIFE ES	1845 HELENA DRIVE	CONCORD, CA 94521
DUSTIN SHAW, REMAINDERMAN	1845 HELENA DRIVE	CONCORD, 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

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

This permit does not address the right of entry or settlement of surface damages.

073 25934 BERNHARDT 8_5-15N-9W 10HX

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.

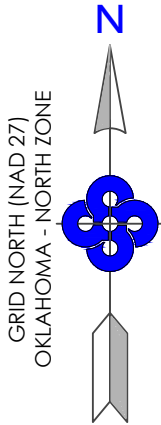
Category	Description
LOCATION EXCEPTION - 671798	2/16/2018 - G60 - (E.O.) 8 & 5-15N-9W X645049 (8-15N-9W) MSNLC, WDFD X631851 (5-15N-9W) MSSP, WDFD X165:10-3-28(C)(2)(B) MSSP, MSNLC, WDFD MAY BE CLOSER THAN 600' TO ANOTHER PROPOSED WELL OR THE LENA SHAWVER 1 WELL COMPL. INT. (8-15N-9W) NCT 165' FSL, NCT 0' FNL, NCT 500' FEL COMPL. INT. (5-15N-9W) NCT 0' FNL, NCT 165' FNL, NCT 500' 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, OTHER 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 - 671226	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 (MSNLC/MSSP ARE ADJACENT COMMON SOURCES OF SUPPLY TO WDFD) 50% 8-15N-9W 50% 5-15N-9W DEVON ENERGY PROD. CO. LP. 12/14/17

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Office of the Conservation Division as to when Surface Casing will be run.



300 Pointe Parkway Blvd.
Yukon, OK 73099
405.787.6270 f 405.787.6276 f
www.craftontull.com
Crafton Tull
SURVEYING CA9731(PE/LS) Exp. 6/30/18

3507325934



OPERATOR: DEVON ENERGY PRODUCTION COMPANY, L.P.

LEASE NAME: BERNHARDT 8_5-15N-9W

WELL NO. 10HX

GOOD DRILL SITE: YES

KINGFISHER COUNTY, STATE: OK

GROUND ELEVATION: 1230.26' GR. AT STAKE

SURFACE HOLE FOOTAGE: 812' FEL - 238' FSL

SECTION: 8 **TOWNSHIP:** T15N **RANGE:** R9W

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

ACCESSIBILITY TO LOCATION: FROM SOUTH LINE

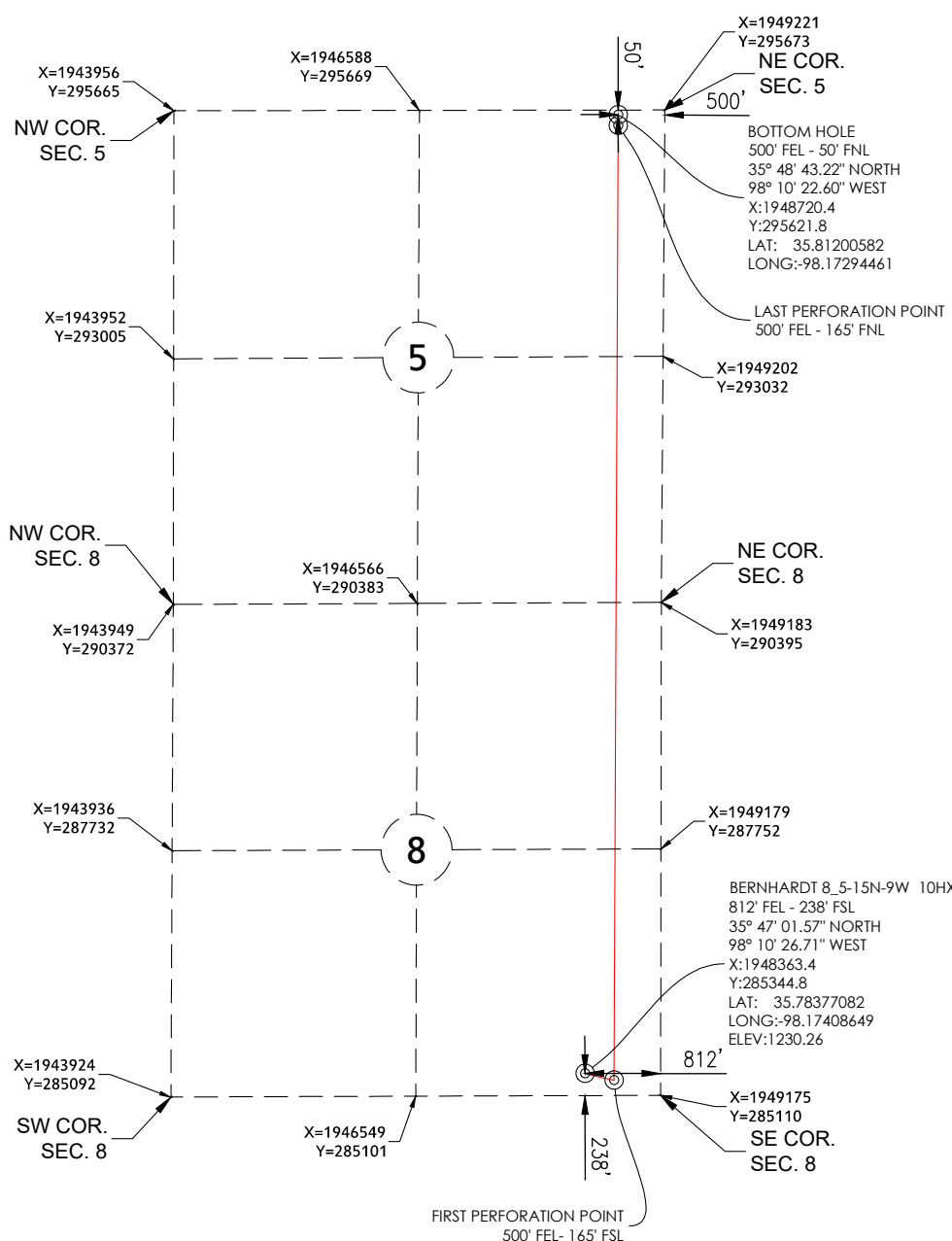
TOPOGRAPHY & VEGETATION:

LOCATION FELL IN A FIELD

DISTANCE & DIRECTION FROM HWY JCT OR TOWN:
FROM THE TOWN OF KINGFISHER HEAD WEST ON OK-3
1.4 MI ± TO N2710RD, HEAD SOUTH 4 MI ± 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. NOTE: X AND Y DATA SHOWN HEREON FOR SECTION CORNERS MAY NOT HAVE BEEN SURVEYED ON THE GROUND, AND FURTHER, DOES NOT 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, DOES NOT REPRESENT A TRUE BOUNDARY SURVEY.

KINGFISHER COUNTY, OKLAHOMA
812' FEL - 238' FSL SECTION 8 TOWNSHIP 15N RANGE 9W I.M.



SURFACE HOLE DATA

STATE PLANE COORDINATES:

ZONE: OK-NORTH NAD27

X: 1948363.4

Y: 285344.8

GPS DATUM: NAD27

LAT: 35.78377082

LONG: -98.17408649

STATE PLANE COORDINATES:

ZONE: OK-NORTH NAD83

X: 1916764.2

Y: 285368.5

GPS DATUM: NAD83

LAT: 35.78381472

LONG: -98.17442525

BOTTOM HOLE DATA

STATE PLANE COORDINATES:

ZONE: OK-NORTH NAD27

X: 1948720.4

Y: 295621.8

GPS DATUM: NAD27

LAT: 35.81200582

LONG: -98.17294461

STATE PLANE COORDINATES:

ZONE: OK-NORTH NAD83

X: 1917121.0

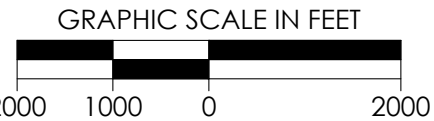
Y: 295645.5

GPS DATUM: NAD83

LAT: 35.81204896

LONG: -98.17328393

BOTTOM HOLE
INFORMATION PROVIDED
BY OPERATOR LISTED.



REVISION		"BERNHARDT 8_5-15N-9W 10HX"		
R1	SHL SHIFT	PART OF THE SE/4 OF SECTION 8, T-15-N, R-9-W PROPOSED DRILL SITE KINGFISHER COUNTY, OKLAHOMA		
		SCALE: 1" = 2000'		
		PLOT DATE: 10-26-2017	DRAWN BY: SQ SHEET NO.: 1 OF 6	