API NUMBER: 073 25934 A

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

Horizontal Hole Oil & Gas

Amend reason: AMENDING BHL AND CORRECTING LE/MUW CD NOS

AMEND PERMIT TO DRILL

WELL LOCATION:	Sec:	08	Twp:	15N	Rge:	9W	County	: KING	FISHER		
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 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 73102-5015

DIANNE SHAW, REMAINDERMAN P.O. BOX 330574

ATLANTIC BEACH FL 32233

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

	Name	Depth	Name	Dept	th
1	MISSISSIPPIAN	8900	6		
2	MISSISSIPPIAN (EX CHESTER)	9685	7		
3	WOODFORD	10305	8		
4			9		
5			10		
Spacing Orders:	645049	Location Exception Orders:		Increased Density Orders:	672907
	631851				672906

Pending CD Numbers: 201706746

201706747

Total Depth: 19758 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

Special Orders:

H. SEE MEMO

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 NW NE NE
Feet From: NORTH 1/4 Section Line: 50
Feet From: EAST 1/4 Section Line: 1050

Depth of Deviation: 9207 Radius of Turn: 478 Direction: 359

Total Length: 9800

Measured Total Depth: 19758

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 4/9/2018 - 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 - (F.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 - (F.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

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

PENDING CD - 201706746 4/9/2018 - G60 - (I.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. REC. 1/11/18 (P. PORTER)

PENDING CD - 201706747 4/9/2018 - G60 - (I.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 900' FEL COMPL. INT. (5-15N-9W) NCT 0' FNL, NCT 165' FNL, NCT 900' FEL

DEVON ENERGY PROD. CO. LP. REC. 1/11/18 (P. PORTER)

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)

300 Pointe Parkway Blvd. Yukon, OK 73099 405.787.6270 † 405.787.6276 f www.craftontull.com Crafton Tull

3507325934



SURFACE HOLE DATA STATE PLANE COORDINATES:

ZONE: OK-NORTH NAD27 **X**: 1948363.4

Y: 285344.8 GPS DATUM: NAD27 LAT: <u>35.78377082</u> LONG: <u>-98.17408649</u>

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

GPS DATUM: NAD83 LAT: 35.78381472 LONG: -98.17442525

BOTTOM HOLE DATA STATE PLANE COORDINATES: ZONE: OK-NORTH NAD27

X: 1948170.4 **Y**: 295621.0

GPS DATUM: NAD27 **LAT:** <u>35.81200078</u> LONG: <u>-98.17479958</u>

STATE PLANE COORDINATES: **ZONE: OK-NORTH NAD83 X**: 1916571.0

Y: 295644.7 GPS DATUM: NAD83 I AT: (**LONG:** -98.17513895

BOTTOM HOLE INFORMATION PROVIDED BY OPERATOR LISTED.



OPERATOR: DEVON ENERGY PRODUCTION COMPANY, L.P.

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

WELL NO. <u>10HX</u> 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

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 RIK-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.

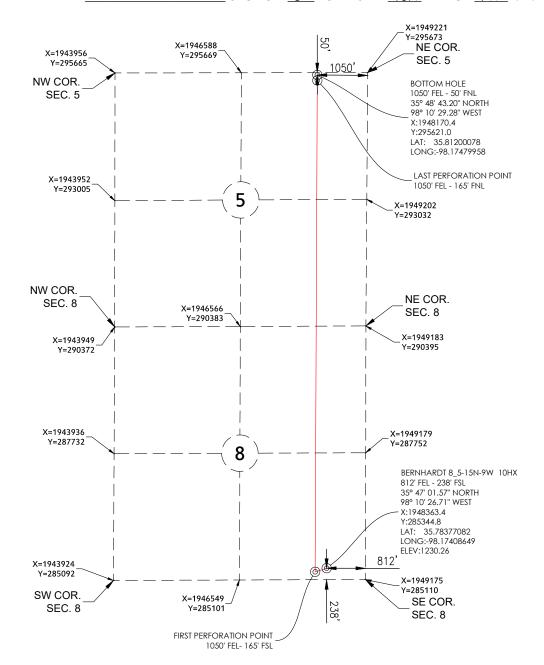
DISTANCE & DIRECTION FROM HWY JCT OR TOWN:

WEST 0.1MI±, PAD SITE IS NORTH OF ROAD.

FROM THE TOWN OF KINGFISHER HEAD WEST ON OK-3

14MI± TO N2710RD, HEAD SOUTH 4MI± TO E850RD, HEAD

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





	REVISION	"BER	_			
R1	SHL SHIFT					
R2	PAD REVISION	PART OF TH	devon			
R3	BH SHIFT	KINGF				
		SCALE: 1" = 2000'				
		PLOT DATE: 04-05-2018	DRAWN BY:	SQ	SHEET NO.:	1 OF 6