API NUMBER: 011 23986

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: 04/16/2018 10/16/2018 **Expiration Date**

PERMIT TO DRILL

| WELL LOCATION: | Sec: | 04 | Twp: | 15N | Rge: | 10W | County: | BLAINE |
|----------------|------|----|------|-----|------|-----|---------|--------|
|----------------|------|----|------|-----|------|-----|---------|--------|

FEET FROM QUARTER: SPOT LOCATION: NE NE || NE lww NORTH WEST SECTION LINES: 250 2357

Lease Name: DOPPELGANGER 4_9-15N-10W Well No: 5HX Well will be 250 feet from nearest unit or lease boundary.

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

DEVON ENERGY PRODUCTION CO LP 333 W SHERIDAN AVE

OKLAHOMA CITY. OK 73102-5015 LOOSEN FAMILY LIMITED PARTNERSHIP

P.O. BOX 1337

OKLAHOMA CITY OK 73101-

Special Orders:

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

Depth Name Depth MISSISSIPPIAN (EX CHESTER) 1 10148 6 2 WOODFORD 10783 7 3 8 4 9 10 658264 Spacing Orders: Location Exception Orders: Increased Density Orders: 658254

Pending CD Numbers: 201801336

> 201801335 201801343 201801344

Total Depth: 20208 Ground Elevation: 1309 Surface Casing: 1999 Depth to base of Treatable Water-Bearing FM: 40

Under Federal Jurisdiction: 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 Chlorides Max: 8000 Average: 5000

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?

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

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-34190

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: FLOWERPOT

HORIZONTAL HOLE 1

Sec 09 Twp 15N Rge 10W County BLAINE

Spot Location of End Point: S2 S2 S2 S2 Feet From: SOUTH 1/4 Section Line: 50
Feet From: WEST 1/4 Section Line: 2640

Depth of Deviation: 9212 Radius of Turn: 477

Direction: 179

Total Length: 10247

Measured Total Depth: 20208

True Vertical Depth: 10783

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

Notes:

Category Description

DEEP SURFACE CASING 3/23/2018 - 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 3/23/2018 - 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 3/23/2018 - 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 3/23/2018 - 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 - 201801335 4/10/2018 - G58 - 4-15N-10W X658265 MSNLC, WDFD 10 WELLS NO OP. NAMED **REC 4/3/2018 (MINMIER)** PENDING CD - 201801336 4/10/2018 - G58 - 9-15N-10W X658264 MSNLC, WDFD 10 WELLS NO OP. NAMED REC 4/3/2018 (MINMIER) PENDING CD - 201801343 4/10/2018 - G58 - (I.O.) 4 & 9-15N-10W EST MULTIUNIT HORIZONTAL WELL X658265 MSNLC, WDFD (4-15N-10W) X658264 MSNLC, WDFD (9-15N-10W) 50% 4-15N-10W 50% 9-15N-10W NO OP. NAMED **REC 4/3/2018 (MINMIER)** PENDING CD - 201801344 4/10/2018 - G58 - (I.O.) 4 & 9-15N-10W X658265 MSNLC, WDFD (4-15N-10W) X658264 MSNLC, WDFD (9-15N-10W) X165:10-3-28(C)(2)(B) MAY BE CLOSER THAN 600' TO PROPOSED WELL COMPL. INT (4-15N-10W) NCT 0' FNL, NCT 0' FSL, NCT 330' FWL COMPL. INT (9-15N-10W) NCT 0' FNL, NCT 165' FSL, NCT 330' FWL

SPACING - 658264 4/10/2018 - G58 - (640)(HOR) 9-15N-10W

EST MSNLC EXT 643729 WDFD

NO OP. NAMED REC 4/3/2018 (MINMIER)

POE TO BHL (MSNLC) NCT 660' FB

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

SPACING - 658265 4/10/2018 - G58 - (640)(HOR) 4-15N-10W

EXT 644506 MSNLC, WDFD POE TO BHL (MSNLC) NCT 660' FB

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

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA
13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS 011-23986 BLAINE County, Oklahoma

15N Range 250'FNL-2357.5'FWL Section Township _ Range _10W_I.M. X 1920292.2 Y 295681.0 T16N-R10W Township Line-P he construction purposes T15N-R10W 250.0 information X 1917662.8 Y 295694.9 X 1922921. Y 295667.0 2357.57 V-DOOF SOUTH >272.9' LOT 1 OGR40/ 2-N-5 FIRST PERF 165'FNL-2640'FWL NAD-27 (US Feet) 35'48'41.5"N 98'16'07.7"W 35.811535230'N 98.268795310'W X= 1920300 Y= 295516 NAD-83 (US Feet) 35'48'41,7"N 98'16'08.9"W 35.81158044'N 98.26913684'W X= 1888700 Y= 295540 LOT 4 LOT 3 shown 2289. herein SURFACE HOLE 250'FNL-2357.5'FWL NAD-83 (US Feet) 35'48'40.9'N 98'16'12.3"W 35.81134900'N 98.27009446'W X= 1888416 Y= 295456 8 <u>ه</u>. GRID NAD-27 OK NORTH US Feet S/2-NW/4 S/2-NE/4 ð Y= 295540 500' 1000 X 1922890. Y 293137.6 Distance & from Hwy Best Good Operator: Lease Name: Topography & Vegetation South t Accessibility to Loc ance & Direction n Hwy Jct or Town_ Drill to Site? DEVON the DOPPELGANGER ENERGY Cor Location 으 Yes PRODUCTION From Sec. Loc 4 fell 1920220.4 -19 Kingfisher/Blaine ⊇. 15N-1 X 1922858.4 Y 290502.7 East sloping 1917582.3 290512.1 00 MOI Reference S Stakes Set 5 wheat county County Stakes field road Line None PROPOSED DRILL PATH 9 9 We∥ Alternate St. No.: Hwy. X 1922846.3 Y 287857.8 5HX Location 1917569.0 287868.4 33 go LAST PERF 165'FSL-2640'FWL NAD-27 (US Feet) 35'47'01.3"N 98'16'08.6"W 35.783699467'N 98.269049297'W X= 1920197 Y= 285384 NAD-83 (US Feet) 35'47'01.5"N 98'16'09.8"W 35.78374545'N 98.26939030'W X= 1888597 Y= 285408 ± 3 309¹ **ELEVATION:** miles 2594.3 Gr. 0 6 BOTTOM HOLE 50'FSL-2640'FWL NAD-27 (US Feet) 35'47'00.2"N 98'16'08.6"W 35.783383536'N 98.269050171'W X= 1920196 Y= 285269 NAD-83 (US Feet) 35'47'00.3"N 98'16'09.8"W 35.78342953'N 98.26939117'W X= 1888596 Y= 285293 West, 1 P. Stake Stake then NAVD88 ±2 miles ±1' EAST OF 1/4 SEC LINE 2638.4 1917555.7 2640.0 CALCULATED X 1922834.1 Y 285213.0 50.0 FIRST PERF, LAST PERF, BOTTOM HOLE, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED. DITTI III 2018 Date of Drawing: _ Mar. ESSIONAL Invoice # 288614B Date Staked: Feb. 26, 2018 was receiver occuracy. DATUM: NAD-27 TR 35°48'40.7"N LAT: LONG: 98°16'11.1"W **CERTIFICATE:** This information gathered with a GPS with ±1 foot Horiz./Vert. LAT: <u>35.811303778</u>°N SURVE DAN W. Dan W. Rogers an Oklahoma Licensed Land LONG: 98.269752961°W **ROGERS** Surveyor and an authorized agent of Topographic Land STATE PLANE 1200 Surveyors of Oklahoma, do hereby certify to the COORDINATES: OK LAHOMA OTH (US Feet) information shown herein ZONE: OK NORTH X: 1920016 295433 1200 Oklahoma Lic. No.