API NUMBER: 011 23989

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:	100	v c	County:	BLAII	NE		
SPOT LOCATION:	NE	NN	/ N	Ν	NE		FEET FROM QUAR	RTER:	FROM	NORTH	FROM	EAST
							SECTION LINES:			30		1990

Lease Name: DOPPELGANGER 4_9-15N-10W Well No: 8НХ Well will be 30 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

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN (EX CHESTER)	10108	6	
2	WOODFORD	10743	7	
3			8	
4			9	
5			10	
Spacing Orders:	658264 658265	Location Exception Orders:		Increased Density Orders:
Pending CD Num	nbers: 201801336			Special Orders:

Pending CD Numbers: 201801336

> 201801335 201801349 201801350

Total Depth: 20589 Ground Elevation: 1304 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

H SEE MEMO

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: 18-34214

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: FLOWERPOT

HORIZONTAL HOLE 1

Sec 09 Twp 15N Rge 10W County **BLAINE** Spot Location of End Point: SE SW SF SF Feet From: SOUTH 1/4 Section Line: 50 EAST Feet From: 1/4 Section Line: 945

Depth of Deviation: 9598 Radius of Turn: 477

Direction: 175

Total Length: 10242

Measured Total Depth: 20589

True Vertical Depth: 10743

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

Notes:

Category Description

DEEP SURFACE CASING 4/2/2018 - 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 4/2/2018 - 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 4/2/2018 - 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 4/2/2018 - 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 4/11/2018 - G58 - 4-15N-10W X658265 MSNLC, WDFD 10 WELLS NO OP. NAMED REC 4/3/2018 (MINMIER) PENDING CD - 201801336 4/11/2018 - G58 - 9-15N-10W X658264 MSNLC, WDFD 10 WELLS NO OP. NAMED REC 4/3/2018 (MINMIER) PENDING CD - 201801349 4/11/2018 - 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 - 201801350 4/11/2018 - 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' FEL COMPL. INT (9-15N-10W) NCT 0' FNL, NCT 165' FSL, NCT 330' FEL NO OP. NAMED REC 4/3/2018 (MINMIER)

SPACING – 658264 4/11/2018 - G58 - (640)(HOR) 9-15N-10W EST MSNLC

EXT 643729 WDFD

POE TO BHL (MSNLC) NCT 660' FB

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

SPACING - 658265 4/11/2018 - 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 **BLAINE** County, Oklahoma Township X 1920292.2 15N DOOR 30'FNL-1990'FEL _10W_I.M. Section Range X 1922921.5 Y 295667.0 716N-R10W SOUTH 1990.0' 30.0 he Township Line P T15N-R10W construction purposes information 639. PERF LOT 3 LOT 2 0 GR4 8/2 - N - 5 LOT 1 LOT 4 SURFACE HOLE 30'FNL-1990'FEL NAD-83 (US Feet) 35'48'43.0"N 98'16'01.2"W shown 2506.5 herein 35.81194683°N 98.26700835°W X= 1889332 X= 188933 Y= 295671 GRID NAD-27 OK NORTH S/2-NW/4 or S/2-NE/4 US Feet 500' 1000 4 FIRST PERF 165'FNL-945'FEL NAD-27 (US Feet) 35'48'41.5"N 98'15'47.3"W 35.8115'23364'N 98.265147820'W X= 1921974 Y= 295507 NAD-83 (US Feet) 35'48'41.6"N 98'15'48.6"W 35.81156852'N 98.265348908'W X= 1890375 X 1922890. Y 293137.6 Best Distance Good from _ease Name: Operator: opography & Vegetation t Accessibility to Loc ance & Direction n Hwy Jct or Town_ 6 DEVON Site? the NE DOPPELGANGER ENERGY Cor. X= 1890375 Y= 295531 Location 잌 řes PRODUCTION Sec. ±399′ From 4 ٩ 4-T15N-R10W fell Kingfisher/Blaine From ⊇. 15N-10W 으 X 1922858.4 Y 290502.7 CO., East sloping 1917582.3 PROPOSED NW-SE Reference Stakes Set off DRILL wheat county road power line County PATH Stakes or None field, Line ±226' 9 LAST PERF 165'FSL-945'FEL NAD-27 (US Feet) 35'47'01.3"N 98'15'48.0"W 35.783701776'N 98.263340518'W X= 1921890 Y= 285380 NAD-83 (US Feet) 35'47'01.5"N 98'15'49.3"W 35.78374772'N 98.26368106'W X= 1890290 Y= 285404 LAST PER on WeⅡ Alternate West Ş No. Hwy. 잋 X 1922846.3 Y 287857.8 Location N-S 287868.4 33 9 90 ±3 ELEVATION: miles BOTTOM HOLE 50'FSL-945'FEL NAD-27 (US Feet) 35'47'00.2"N 98'15'48.0"W 35.783385845'N 98.263341250'W X= 1921889 Y= 285265 NAD-83 (US Feet) 35'47'00.4"N 98'15'49.3"W 98'15'49.3"W 35.78343180'N 98.26368179'W X= 1890290 Y= 285289 D Gr. at Stake Gr. at West 2594.7 then NAVD88 NGVD29 ± 2 miles 1917555.7 285224.8 1694. 945.0' CALCULATED X 1922834.1 Y 285213.0 X 1920194.9 Y 285218.9 50.0 FIRST PERF, LAST PERF, BOTTOM HOLE, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED 1000000 Date of Drawing: Mar. ESSIONAL W ROE Invoice # 288613C Date Staked: Feb. 26, 2018 TR was receiver accuracy. DATUM: NAD-27 LAT: 35°48'42.8"N LONG: 98°16'00.0"W **CERTIFICATE:** s information w d with a GPS r foot Horiz./Vert. a SURVE LAT: _35.811901655°N DAN W Dan W. Rogers an Oklahoma Licensed Land LONG: 98.266666958"W STATE PLANE ROGERS Surveyor and an authorized agent of Topographic Land OK LA HOMA Surveyors of Oklahoma, do hereby certify to the COORDINATES: (US Feet) information shown berein This gathered with ±1 for ZONE: _ OK NORTH X:___1920931 on 295648 Oklahoma Lic. No.

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

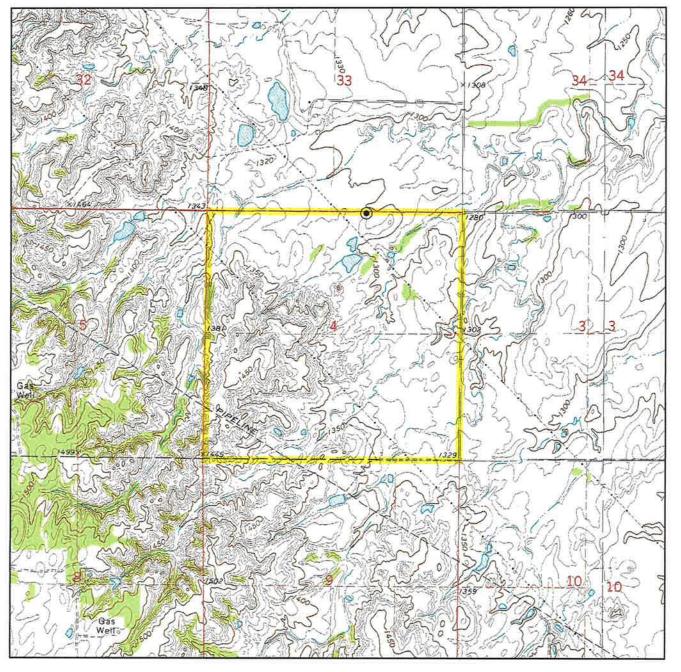
13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS County, Oklahoma
___15N___ Range BLAINE 10W_I.M. <u> 30'FNL-1990'FEL</u> Township X 192029 Range Section X 1922921.5 T16Nhe T15N-R10W construction purposes ONLY. information shown herein PERF 155 1,950 S GRID NAD-27 OK NORTH US Feet X 1922890. Y 293137.6 Distance trom Lease Name: Operator: Topography & Vegetation Accessibility to Ηwy 80 Jct or Town Direction DOPPELGANGER Cor. Location Yes From Loc. fe ±399 fell 9 Kingfisher/Blaine ≥. 15N-10W 1920220.4 290507.4 Reference S Stakes Set Stakes wheat power Stakes or None field, line road Line ±226' 9 on Alternate West Ş Hwy. of, Location N-S 33 go pipeline; ±3 304' Gr. miles West, at Stake then NAVD88 miles FIRST PERF, LAST PERF, BOTTOM HOLE, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED 200213.0 5, Mar. Date of Drawing: ESSIONAL DATUM: NAU-2, LAT: 35°48'42.8"N Invoice # 288613C Date Staked: <u>Feb.</u> 26, 2018 formation was ith a GPS receiver Horiz./Vert. accuracy.) LONG: 98°16'00.0"W **CERTIFICATE:** SURVE 35.811901655°N DAN W Dan W. Rogers an Oklahoma Licensed Land ROGERS LONG: 98.266666958°W Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the STATE PLANE COORDINATES: (US Feet) information shown herein This i gathered with ±1 foc ZONE: OK NORTH 1920931 295648 Oklahoma Lic. No.

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry 13800 Wireless Way, Oklahoma City, OK 73134 www.topographic.com Telephone Numbers: Local (405) 843-4847 Toll Free (800) 654-3219

LOCATION & ELEVATION VERIFICATION MAP



Sec. 4 Twp. 15N Rng. 10W IM

County BLAINE State OK

Operator DEVON ENERGY PRODUCTION CO., LP

Description 30'FNL-1990'FEL

Lease DOPPELGANGER 4_9-15N-10W 8HX

1304' Gr. at Stake NGVD29

Elevation 1304' Gr. at Stake NAVD88

Above Background Data from U.S.G.S. Topographic Map Scale: 1"=2000'

Contour Interval 10'

When elevation is shown hereon it is the ground elevation of the location stake. Review this plat and inform us immediately of

any possible discrepancy.

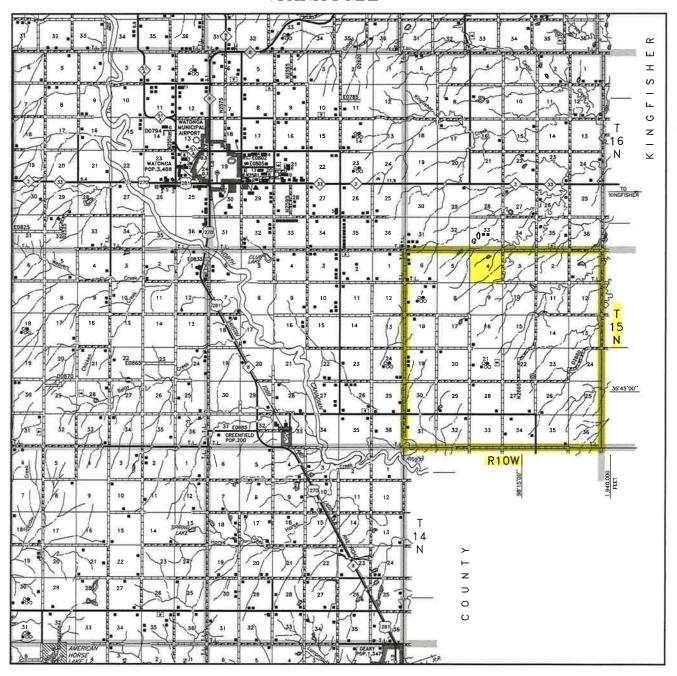


LAND SURVEYORS OF OKLAHOMA

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13800 Wireless Way, Oklahoma City, OK 73134 www.topographic.com
Telephone Numbers: Local (405) 843-4847 Toll Free (800) 654-3219

VICINITY MAP



Scale: 1'' = 3 Miles

 Sec.
 4
 Twp.
 15N
 Rng.
 10W
 IM

 County
 BLAINE
 State
 OK

Operator DEVON ENERGY PRODUCTION CO., LP



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

BLAINE

County, Oklahoma BLAINE County, Oklahoma

30'FNL-1990'FEL Section 4 Township 15N Range 10W I.M. HALO PLAT FIRST PERF 165'FNL-945'FEL X 1920292.2 Y 295681.0 X 1922921.5 Y 295667.0 X 1917662.8 Y 295694.9 SURFACE HOLE 30'FNL-1990'FEL V-DOOR SOUTH 4 X 1917616.9 Y 293147.0 0 GR48/ -0-N-5 GRID NAD-27 OK NORTH US Feet X 1920220.4 Y 290507.4 500' 1000' X 1922858.4 Y 290502.7 X 1917582.3 Y 290512.1 PROPOSED DRILL PATH 600 600 HALO HALO X 1922846.3 Y 287857.8 X 1917569.0 Y 287868.4 9 CALCULATED X 1922834.1 Y 285213.0 X 1917555.7 Y 285224.8 LAST PERF 165'FSL-945'FEL X 1920194.9 Y 285218.9 BOTTOM HOLE 50'FSL-945'FEL NOTE: FIRST PERF, LAST PERF, BOTTOM HOLE, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED,

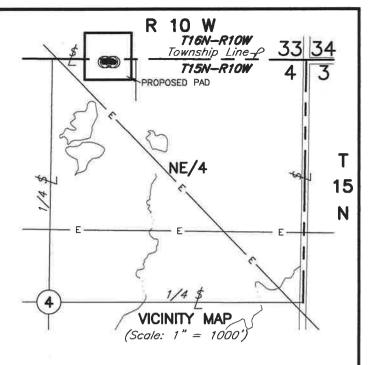
The information shown herein is for construction purposes ONLY.

T 15 N - R 10 W (INDIAN MERIDIAN)

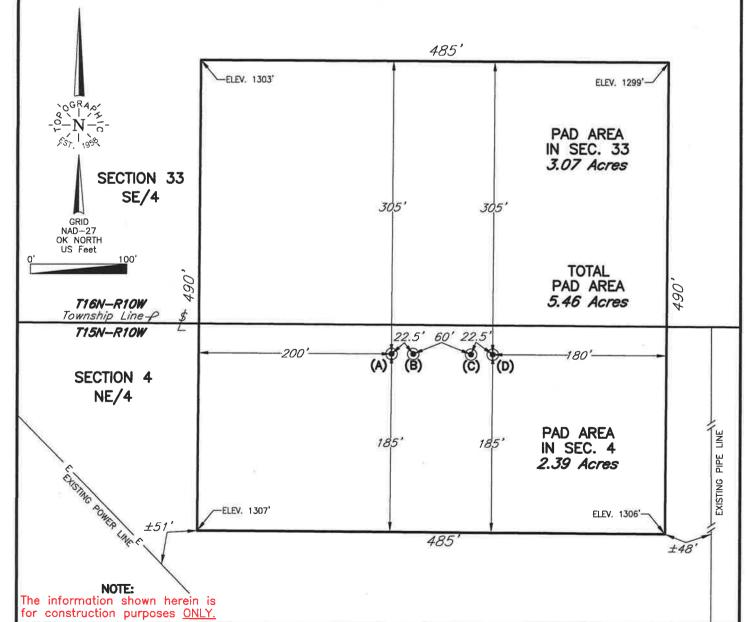
PLAT SHOWING

PROPOSED PAD AREA IN THE
NE/4 OF SECTION 4, T15N — R10W &
SE/4 OF SECTION 33, T16N — R10W
BLAINE COUNTY, OKLAHOMA





- (A) DEVON ENERGY
 PRODUCTION CO., LP
 KRAKEN 33_28-16N-10W 6HX
 30'FNL-2095'FEL
 Elev. 1303' Gr.
- (B) DEVON ENERGY PRODUCTION CO., LP KRAKEN 33_28-16N-10W 7HX 30'FNL-2072.5'FEL Elev. 1303' Gr.
- (C) DEVON ENERGY
 PRODUCTION CO., LP
 DOPPELGANGER 4_9-15N-10W 7HX
 30'FNL-2012.5'FEL
 Elev. 1304' Gr.
- (D) DEVON ENERGY PRODUCTION CO., LP DOPPELGANGER 4_9-15N-10W 8HX 30'FNL-1990'FEL Elev. 1304' Gr.



NO.	REVIS	SION	DATE	BY	and
SUR.	BY:	JW	2/26/		
DRAW	/N BY:		TR		1
APPR	OVED	BY:	DR		1

This plat was prepared exclusively for DEVON ENERGY PRODUCTION CO., LP may not be relied upon by any other entity without the written consent of Topographic Land Surveyors of Oklad

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 Wireless Way, Okla. City, OK. 73134 (405) 843–4847

Certificate of Authorization No. 1293 LS

	SCALE:	1"=	100	
	DATE:		5/18	
oma	INVOICE	NO.:	288613	
	FILE NA	ME: L26.	76B.DWG	
	DWG NO	.:104059	9-L2-676	-В
	SHEET	1 0		