

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

API NUMBER: 011 24165

Approval Date: 01/29/2019  
Expiration Date: 07/29/2020

Horizontal Hole Oil & Gas  
Multi Unit

PERMIT TO DRILL

WELL LOCATION: Sec: 12 Twp: 15N Rge: 10W County: BLAINE  
SPOT LOCATION:  NE  SW  SE  SW FEET FROM QUARTER: FROM SOUTH FROM WEST  
SECTION LINES: 400 1750

Lease Name: MINNIE HAHA 12\_1-15N-10W Well No: 2HX Well will be 400 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 73102-5015

ROBERT & KIM MCGRUDER, CO-TRUSTEES  
P.O. BOX 704  
MILTON FL 32572

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	9200	6	
2	WOODFORD	10650	7	
3			8	
4			9	
5			10	

Spacing Orders: 594508 Location Exception Orders: Increased Density Orders: 689878  
587191 689879  
586086

Pending CD Numbers: 201809637 Special Orders:  
201809636

Total Depth: 20030 Ground Elevation: 1276 **Surface Casing: 1999** Depth to base of Treatable Water-Bearing FM: 60

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: Yes

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? 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

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-35994  
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: FLOWERPOT

HORIZONTAL HOLE 1

Sec 01 Twp 15N Rge 10W County BLAINE

Spot Location of End Point: NW NE NW NW

Feet From: NORTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 940

Depth of Deviation: 9000

Radius of Turn: 477

Direction: 355

Total Length: 10281

Measured Total Depth: 20030

True Vertical Depth: 10650

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

Notes:

Category

Description

DEEP SURFACE CASING

12/21/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING

HYDRAULIC FRACTURING

12/21/2018 - 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](http://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](http://FRACFOCUS.ORG)

INCREASED DENSITY - 689878

1/29/2019 - G75 - 12-15N-10W  
X594508 MSSP  
3 WELLS  
NO OP. NAMED  
1-16-2019

INCREASED DENSITY - 689879

1/29/2019 - G75 - 1-15N-10W  
X587191 MSSP  
3 WELLS  
NO OP. NAMED  
1-16-2019

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.

Category	Description
INTERMEDIATE CASING	12/21/2018 - 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	12/21/2018 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT
PENDING CD - 201809636	1/29/2019 - G75 - (I.O.) 12 & 1-15N-10W EST MULTIUNIT HORIZONTAL WELL X594508 MSSP, WDFD 12-15N-10W X587191 MSSP 1-15N-10W X586086 WDFD 1-15N-10W (WDFD ADJACENT COMMON SOURCE OF SUPPLY TO MSSP) 50% 12-15N-10W 50% 1-15N-10W DEVON ENERGY PROD. CO., L.P. REC 12-10-2018 (M. PORTER)
PENDING CD - 201809637	1/29/2019 - G75 - (I.O.) 12 & 1-15N-10W X594508 MSSP, WDFD 12-15N-10W X587191 MSSP 1-15N-10W X586086 WDFD 1-15N-10W COMPL. INT. (12-15N-10W) NCT 165' FSL, NCT 0' FNL, NCT 330' FWL COMPL. INT. (1-15N-10W) NCT 0' FSL, NCT 165' FNL, NCT 330' FWL DEVON ENERGY PROD. CO., L.P. REC 12-10-2018 (M. PORTER)
SPACING - 586086	1/29/2019 - G75 - (640) 1-15N-10W EST WDFD
SPACING - 587191	1/29/2019 - G75 - (640) 1-15N-10W VAC 176175 MNNG, MSSSD VAC 400763 CSTR EST MSSP
SPACING - 594508	1/29/2019 - G75 - (640) 12-15N-10W VAC 169866 CSTR VAC 176175 MNNG, MSSSD EST OTHERS EXT 587191 MSSP EXT 588547 WDFD

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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.



300 Pointe Parkway Blvd.  
Yukon, OK 73099  
405.787.6270 t 405.787.6276 f  
www.craftontull.com

**Crafton Tull**  
SURVEYING CA973(PE/LS) Exp. 6/30/20

OPERATOR: DEVON ENERGY PRODUCTION COMPANY, L.P.

LEASE NAME: MINNIE HAHA 12\_1-15N-10W

WELL NO. 2HX

GOOD DRILL SITE: YES

BLAINE                      COUNTY, STATE: OK

GROUND ELEVATION: 1275.59' GR. AT STAKE

SURFACE HOLE FOOTAGE: 1750' FWL - 400' FSL

SECTION: 12 TOWNSHIP: T15N RANGE: R10W

BOTTOM HOLE: 1-T15N-R10W.I.M.

ACCESSIBILITY TO LOCATION: FROM SOUTH LINE

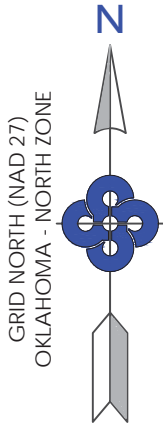
TOPOGRAPHY & VEGETATION:                     

LOCATION FELL IN A FIELD                     

DISTANCE & DIRECTION FROM HWY JCT OR TOWN:                       
AT THE JCT. OF HWY 8 & HWY E, E. 11 MI. TO N 2680 RD.  
S. 4 MI. TO E 0850 RD. E. 1600 FEET. PAD IS ON N. SIDE OR  
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.

API 011-24165

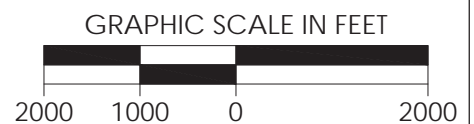
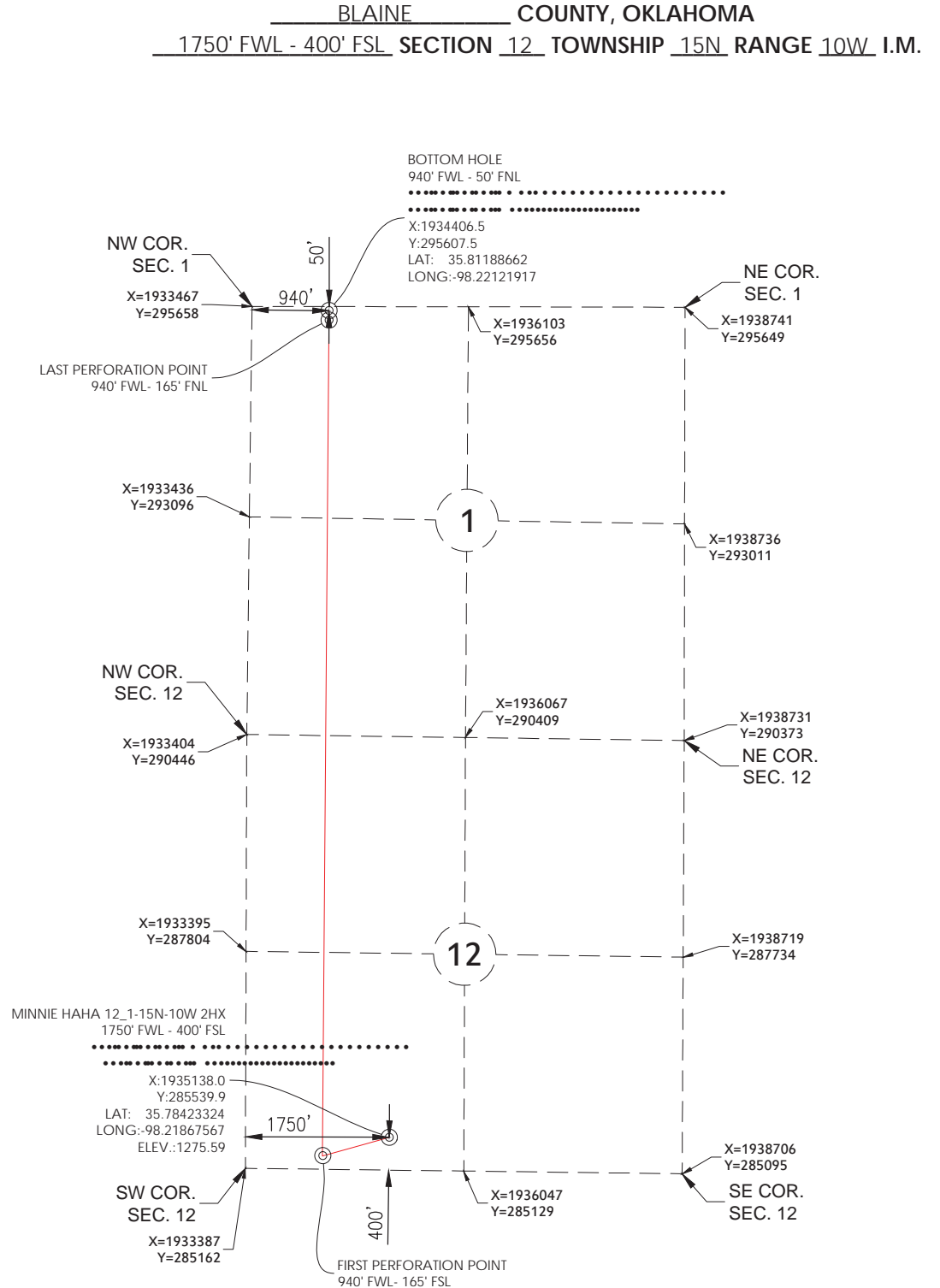


**SURFACE HOLE DATA**  
STATE PLANE COORDINATES:  
ZONE: OK-NORTH NAD27  
X: 1935138.0  
Y: 285539.9  
GPS DATUM: NAD27  
LAT: 35.78423324  
LONG: -98.21867567  
STATE PLANE COORDINATES:  
ZONE: OK-NORTH NAD83  
X: 1903538.5  
Y: 285563.6  
GPS DATUM: NAD83  
LAT: 35.78427699  
LONG: -98.21901625

**BOTTOM HOLE DATA**  
STATE PLANE COORDINATES:  
ZONE: OK-NORTH NAD27  
X: 1934406.5  
Y: 295607.5  
GPS DATUM: NAD27  
LAT: 35.81188662  
LONG: -98.22121917  
STATE PLANE COORDINATES:  
ZONE: OK-NORTH NAD83  
X: 1902806.8  
Y: 295631.2  
GPS DATUM: NAD83  
LAT: 35.81192958  
LONG: -98.22156059

BOTTOM HOLE INFORMATION PROVIDED BY OPERATOR LISTED.

Date: 2018.11.30 10:59:44-06'00'



REVISION	"MINNIE HAHA 12_1-15N-10W 2HX"		
	PART OF THE SW/4 OF SECTION 12, T-15-N, R-10-W PROPOSED DRILL SITE BLAINE COUNTY, OKLAHOMA		
	SCALE: 1" = 2000'	PLOT DATE: 11-30-2018	DRAWN BY: JJ SHEET NO.: 1 OF 6