

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

API NUMBER: 011 23746

Approval Date: 02/21/2017  
Expiration Date: 08/21/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 21 Twp: 17N Rge: 11W County: BLAINE  
SPOT LOCATION:  SW  SW  SW  SW FEET FROM QUARTER: FROM SOUTH FROM WEST  
SECTION LINES: 200 150

Lease Name: VIERSEN 21\_17N-11W Well No: 1H Well will be 150 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

VIERSEN OIL AND GAS CO.  
P.O. BOX 702708  
TULSA OK 74170

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	8804	6	
2	WOODFORD	10293	7	
3			8	
4			9	
5			10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201606192  
201700770

Special Orders:

Total Depth: 14620

Ground Elevation: 1470

Surface Casing: 1999

Depth to base of Treatable Water-Bearing FM: 50

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: 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: BLAINE

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

PERMIT NO: 17-32061

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: BLAINE

HORIZONTAL HOLE 1

Sec 21 Twp 17N Rge 11W County BLAINE

Spot Location of End Point: NE NW NW NW

Feet From: NORTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 380

Depth of Deviation: 9318

Radius of Turn: 477

Direction: 3

Total Length: 4551

Measured Total Depth: 14620

True Vertical Depth: 10293

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

Notes:

Category

Description

DEEP SURFACE CASING

1/23/2017 - 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

1/23/2017 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK [HTTP://FRACFOCUS.ORG/](http://fracfocus.org/) WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE

INTERMEDIATE CASING

1/23/2017 - 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

1/23/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201606192

1/27/2017 - G60 - (640) 21-17N-11W  
EST MSSP  
EXT 648603 WDFD  
COMPL. INT. (MSSP) NCT 660' FB  
COMPL. INT. (WDFD) NCT 165' FNL/FSL & NCT 330' FEL/FWL  
REC. 1/24/17 (M. PORTER)

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

PENDING CD - 201700770

2/7/2017 - G60 - (E.O.) 21-17N-11W  
X201606192 MSSP, WDFD  
COMPL. INT. (21-17N-11W) NCT 165' FSL, NCT 150' FNL, NCT 330' FWL  
DEVON ENERGY PRODUCTION CO. LP  
REC. 2/17/17 (LEVITT)

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.



214 East Main  
Oklahoma City, OK 73104  
405.787.6270 f 405.787.6276 f  
www.craftontull.com  
**Crafton Tull**  
SURVEYING CA973(PE/LS) Exp. 6/30/18

**OPERATOR:** DEVON ENERGY PRODUCTION COMPANY, L.P.

**LEASE NAME:** VIERSEN 21-17N-11W

**WELL NO.** 1H

**GOOD DRILL SITE:** YES

**BLAINE COUNTY, STATE:** OK

**GROUND ELEVATION:** 1470.22' GR. AT STAKE

**SURFACE HOLE FOOTAGE:** 150' FWL - 200' FSL

**SECTION:** 21 **TOWNSHIP:** 17N **RANGE:** R11W

**BOTTOM HOLE:** 21-17N-R11W,I.M.

**ACCESSIBILITY TO LOCATION:** FROM E720 RD

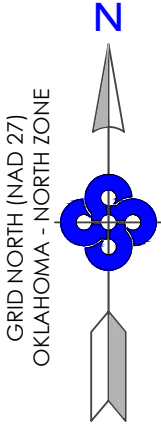
**TOPOGRAPHY & VEGETATION:**

LOCATION FELL ON A ROCKY OUTCROP

**DISTANCE & DIRECTION FROM HWY JCT OR TOWN:**

FROM THE TOWN OF HITCHCOCK, WEST ON E720 2.25MI TO N2590 RD, SOUTH .75MI TO THE ENTRANCE FOR THE LEASES, THROUGH THE WEST GATE AND 3MI± ALONG LEASE ROADS APPROXIMATED ON THE MAP PAGE

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.



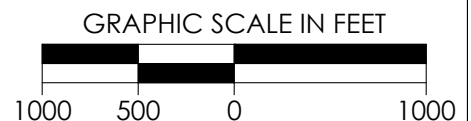
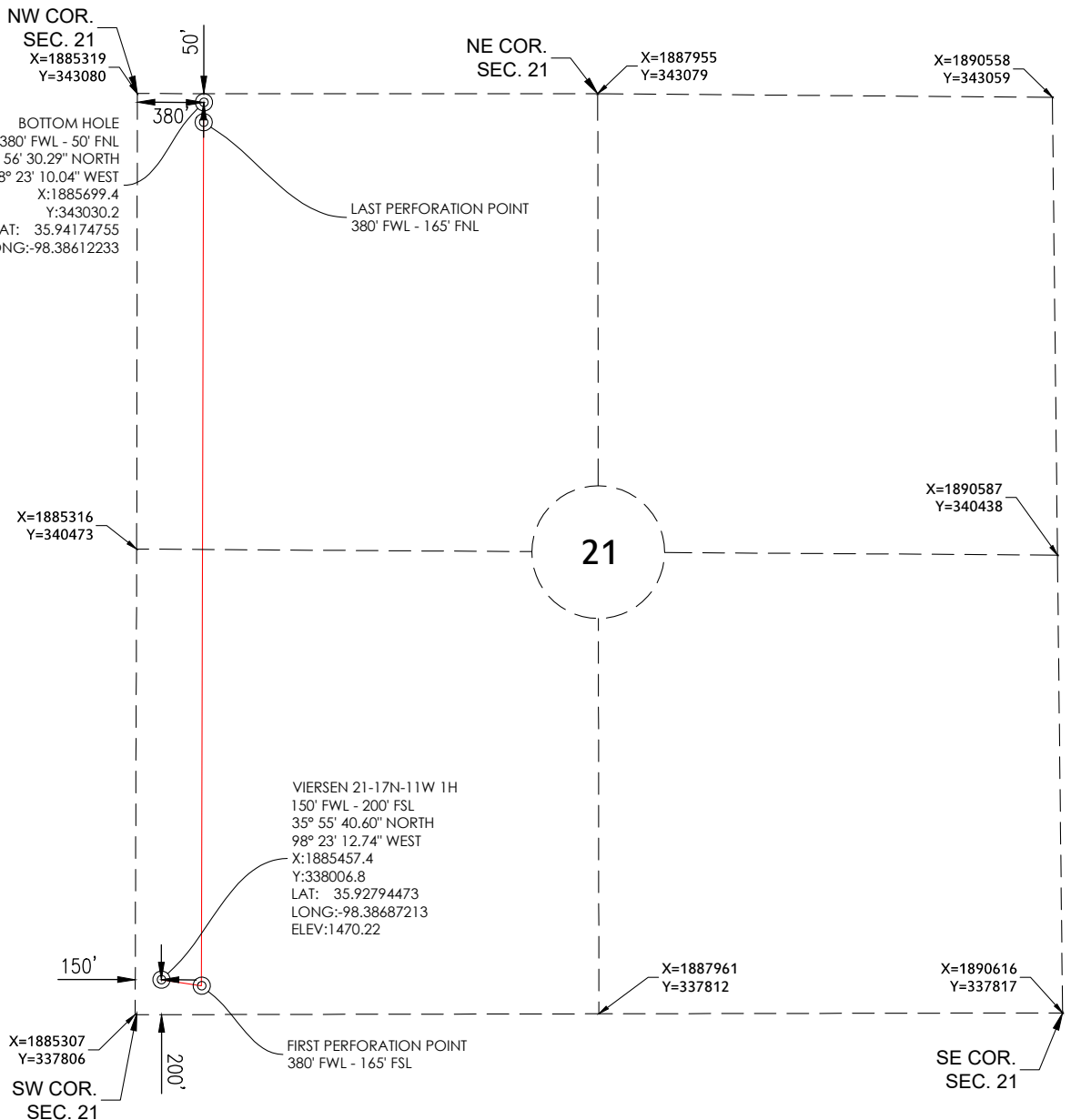
3501123746

BLAINE COUNTY, OKLAHOMA  
150' FWL - 200' FSL SECTION 21 TOWNSHIP 17N RANGE 11W I.M.

**SURFACE HOLE DATA**  
**STATE PLANE COORDINATES:**  
**ZONE:** OK-NORTH NAD27  
**X:** 1885457.4  
**Y:** 338006.8  
**GPS DATUM:** NAD27  
**LAT:** 35.92794473  
**LONG:** -98.38687213  
**STATE PLANE COORDINATES:**  
**ZONE:** OK-NORTH NAD83  
**X:** 1853856.3  
**Y:** 338030.9  
**GPS DATUM:** NAD83  
**LAT:** 35.92798551  
**LONG:** -98.38722313

**BOTTOM HOLE DATA**  
**STATE PLANE COORDINATES:**  
**ZONE:** OK-NORTH NAD27  
**X:** 1885699.4  
**Y:** 343030.2  
**GPS DATUM:** NAD27  
**LAT:** 35.94174755  
**LONG:** -98.38612233  
**STATE PLANE COORDINATES:**  
**ZONE:** OK-NORTH NAD83  
**X:** 1854098.2  
**Y:** 343054.3  
**GPS DATUM:** NAD83  
**LAT:** 35.94178795  
**LONG:** -98.38647363

BOTTOM HOLE & PERFORATION INFORMATION PROVIDED BY OPERATOR LISTED.



REVISION	"VIERSEN 21-17N-11W 1H"		
	PART OF THE SW/4 OF SECTION 21, T-17-N, R-11-W PROPOSED DRILL SITE BLAINE COUNTY, OKLAHOMA		
	SCALE: 1" = 1000'	PLOT DATE: 02-02-2017	DRAWN BY: DW SHEET NO.: 1 OF 6