

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

API NUMBER: 011 23718

Approval Date: 01/05/2017
Expiration Date: 07/05/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 21 Twp: 15N Rge: 11W County: BLAINE
SPOT LOCATION: SE SE SE SW FEET FROM QUARTER: FROM SOUTH FROM WEST
SECTION LINES: 235 2435

Lease Name: REDWOOD 21-15N-11W Well No: 1H Well will be 235 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

ARLYN MOON
PO BOX 7795
EDMOND OK 73083

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	10370	6	
2	WOODFORD	12060	7	
3			8	
4			9	
5			10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201605294
201605295

Special Orders:

Total Depth: 16276 Ground Elevation: 1454 **Surface Casing: 100** 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: 4000

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 16-31980
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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: ALLUVIUM

HORIZONTAL HOLE 1

Sec 21 Twp 15N Rge 11W County BLAINE

Spot Location of End Point: NE NE NE NW

Feet From: NORTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 2430

Depth of Deviation: 11018

Radius of Turn: 478

Direction: 359

Total Length: 4509

Measured Total Depth: 16276

True Vertical Depth: 12060

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

Notes:

Category

Description

HYDRAULIC FRACTURING

1/4/2017 - 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

1/4/2017 - 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

1/4/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS (REQUIRED - NORTH CANADIAN RIVER), PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201605294

1/5/2017 - G60 - (I.O.) 21-15N-11W
EXT 649749 MSSP, WDFD
COMPL. INT. (MSSP) NCT 660' FB
COMPL. INT. (WDFD) NCT 165' FNL/FSL, NCT 330' FEL/FWL
REC. 12/13/16 (M. PORTER)

PENDING CD - 201605295

1/5/2017 - G60 - (I.O.) 21-15N-11W
X201605294 MSSP, WDFD
COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FWL
NO OP. NAMED
REC. 12/13/16 (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.

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

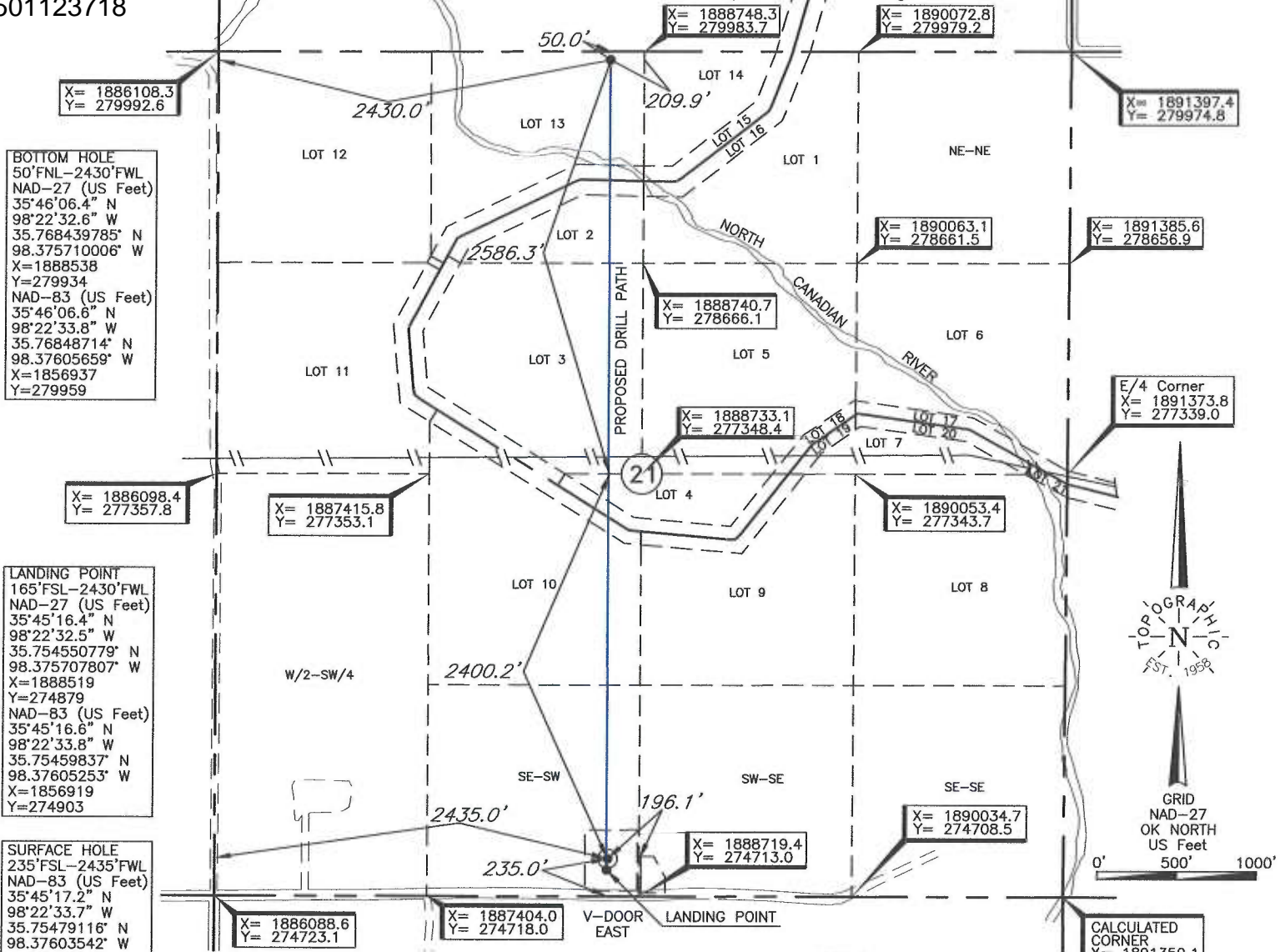
6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
 Certificate of Authorization No. 1293 LS

BLAINE

County, Oklahoma

235'FSL - 2435'FWL Section 21 Township 15N Range 11W I.M.

3501123718



BOTTOM HOLE
 50'FNL-2430'FWL
 NAD-27 (US Feet)
 35°46'06.4" N
 98°22'32.6" W
 35.768439785" N
 98.375710006" W
 X=1888538
 Y=279934
 NAD-83 (US Feet)
 35°46'06.6" N
 98°22'33.8" W
 35.76848714" N
 98.37605659" W
 X=1856937
 Y=279959

LANDING POINT
 165'FSL-2430'FWL
 NAD-27 (US Feet)
 35°45'16.4" N
 98°22'32.5" W
 35.754550779" N
 98.375707807" W
 X=1888519
 Y=274879
 NAD-83 (US Feet)
 35°45'16.6" N
 98°22'33.8" W
 35.75459837" N
 98.37605253" W
 X=1856919
 Y=274903

SURFACE HOLE
 235'FSL-2435'FWL
 NAD-83 (US Feet)
 35°45'17.2" N
 98°22'33.7" W
 35.75479116" N
 98.37603542" W
 X=1856924
 Y=274973

LANDING POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.

NOTE:
 The information shown herein is for construction purposes ONLY.

CALCULATED CORNER
 X= 1891350.1
 Y= 274704.0

Operator: DEVON ENERGY PRODUCTION CO., LP
 Lease Name: REDWOOD 21-15N-11W Well No.: 1H **ELEVATION:** 1454' Gr. at Stake
 Topography & Vegetation Loc. fell in level wheat field
 Good Drill Site? Yes Reference Stakes or Alternate Location Stakes Set None
 Best Accessibility to Location From South off county road
 Distance & Direction from Hwy Jct or Town From Watonga, OK, go ±6.0 mi. South on US Hwy. 281, then ±0.5 mi. East to the SW Cor. of Sec. 21-T15N-R11W

This information was gathered with a GPS receiver with ±1 foot Horiz./Vert. accuracy
 DATUM: NAD-27
 LAT: 35°45'17.1"N
 LONG: 98°22'32.5"W
 LAT: 35.754743581° N
 LONG: 98.375690770° W
 STATE PLANE COORDINATES: (US Feet)
 ZONE: OK NORTH
 X: 1888524
 Y: 274949

Date of Drawing: Nov. 16, 2016
 Invoice # 267185 Date Staked: Oct. 31, 2016 AC

CERTIFICATE:
 I, Thomas L. Howell an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein
Thomas L. Howell
 Oklahoma Lic. No. 1433

