

API NUMBER: 011 24341

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

Approval Date: 12/05/2022

Expiration Date: 06/05/2024

Horizontal Hole

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Section: 16 Township: 15N Range: 11W County: BLAINE

SPOT LOCATION: ☐ NE ☐ SE ☐ SE ☐ SW FEET FROM QUARTER: FROM SOUTH FROM WEST
SECTION LINES: 455 2593

Lease Name: REDWOOD 21-15N-11W Well No: 2H Well will be 455 feet from nearest unit or lease boundary.

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

DEVON ENERGY PRODUCTION CO LP
333 W SHERIDAN AVE
OKLAHOMA CITY, OK 73102-5015

RODNEY E. COWAN
85651 N. 2610 RD.
WATONGA OK 73772

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

	Name	Code	Depth
1	MISSISSIPPIAN	359MSSP	9600
2	WOODFORD	319WDFD	12000

Spacing Orders: 661836

Location Exception Orders: 722981

Increased Density Orders: 722696

Pending CD Numbers: No Pending

Working interest owners' notified: ***

Special Orders: No Special

Total Depth: 17310

Ground Elevation: 1451

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 60

Deep surface casing has been approved

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

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 22-38750

H. (Other)

SEE MEMO

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is: ALLUVIAL

Pit Location Formation: ALLUVIUM

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: ALLUVIAL

Pit Location Formation: ALLUVIUM

This permit does not address the right of entry or settlement of surface damages. The duration of this permit is 18 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.

HORIZONTAL HOLE 1

Section: 21	Township: 15N	Range: 11W	Meridian: IM	Total Length: 5633
	County: BLAINE			Measured Total Depth: 17310
Spot Location of End Point: S2	SW	SW	SW	True Vertical Depth: 12000
Feet From: SOUTH		1/4 Section Line: 50		End Point Location from
Feet From: WEST		1/4 Section Line: 330		Lease, Unit, or Property Line: 50

NOTES:

Category	Description
DEEP SURFACE CASING	[12/5/2022 - GC2] - APPROVED; (1) NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING. (2) SUBSEQUENT WELLS ON SAME PAD WILL NOT BE ALLOWED DEEP SURFACE CASING IN THE EVENT OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING.
HYDRAULIC FRACTURING	[12/5/2022 - GC2] - OCC 165:10-3-10 REQUIRES: 1) NOTICE SHALL BE GIVEN AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS ON A HORIZONTAL WELL TO OPERATORS PRODUCING WELLS WITHIN 1 MILE OF THE COMPLETION INTERVAL OF THE SUBJECT WELL. THE NOTICE TO SUCH OPERATORS SHALL CONTAIN THE INFORMATION IN FORM 6000NOO. IF THE HYDRAULIC FRACTURING OPERATIONS SCHEDULE CHANGES AFTER NOTICE HAS BEEN PROVIDED, RESULTING IN A DELAY OF OPERATIONS OF MORE THAN 5 DAYS FROM THE INITIAL NOTICE, NEW NOTICE IS REQUIRED TO BE GIVEN; 2) NOTICE WILL BE GIVEN TO THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS. FORM 6000NHF SHALL BE FOUND HERE: HTTPS://OKLAHOMA.GOV/OCC/DIVISIONS/OIL-GAS/OGCD-FORMS ; AND, 3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS IS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION OF HYDRAULIC FRACTURING OPERATIONS, FOUND AT FRACFOCUS.ORG
INCREASED DENSITY - 722696	[12/5/2022 - G56] - 21-15N-11W X661836 MSSP 4 WELLS DEVON ENERGY PROD CO, LP 1/7/2022
INTERMEDIATE CASING	[12/5/2022 - GC2] - 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
LOCATION EXCEPTION - 722981	[12/5/2022 - G56] - (I.O.) 21-15N-11W X661836 MSSP, WDFD COMPL INT NCT 165' FNL, NCT 165' FSL, NCT 330' FWL DEVON ENERGY PROD CO, LP 1/21/2022
MEMO	[12/5/2022 - GC2] - CLOSED SYSTEM=STEEL PITS (REQUIRED - NORTH CANADIAN RIVER), OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 661836	[12/5/2022 - G56] - (640)(HOR) 21-15N-11W EXT 649479 MSSP, WDFD COMPL INT (MSSP) NCT 660' FB COMPL INT (WDFD) NCT 165' FNL/FSL, NCT 330' FEL/FWL