

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

API NUMBER: 063 24804

Approval Date: 05/29/2018
Expiration Date: 05/29/2019

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 26 Twp: 6N Rge: 9E County: HUGHES
SPOT LOCATION: NE NE NW NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 260 1570

Lease Name: JEREMY Well No: 23-1H Well will be 260 feet from nearest unit or lease boundary.
Operator Name: CORTERRA ENERGY OPERATING LLC Telephone: 9186150400 OTC/OCC Number: 23995 0

CORTERRA ENERGY OPERATING LLC
1717 S BOULDER AVE STE 900
TULSA, OK 74119-4844

GARY & RUTH DESHIELDS
4185 N. 376 RD.
ATWOOD OK 74827

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	5461	6	
2	WOODFORD	5943	7	
3	SYLVAN	6103	8	
4			9	
5			10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201703287
201803169
201803170

Special Orders:

Total Depth: 11325 Ground Elevation: 811 Surface Casing: 710 Depth to base of Treatable Water-Bearing FM: 510

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

PIT 1 INFORMATION

Type of Pit System: ON SITE
Type of Mud System: AIR

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-34409
H. SEE MEMO

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: 4

Liner not required for Category: 4

Pit Location is AP/TE DEPOSIT

Pit Location Formation: TERRACE

Mud System Change to Water-Based or Oil-Based Mud Requires an Amended Intent (Form 1000).

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: 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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

PIT 3 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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 23 Twp 6N Rge 9E County HUGHES

Spot Location of End Point: NW NW NW NE

Feet From: NORTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 2500

Depth of Deviation: 5261

Radius of Turn: 573

Direction: 350

Total Length: 5164

Measured Total Depth: 11325

True Vertical Depth: 6193

End Point Location from Lease,
Unit, or Property Line: 165

Notes:

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
HYDRAULIC FRACTURING	<p>5/9/2018 - G71 - OCC 165:10-3-10 REQUIRES:</p> <p>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;</p> <p>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,</p> <p>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</p>
MEMO	<p>5/9/2018 - G71 - PITS 2 & 3 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 3 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT</p>
PENDING CD - 201703287	<p>5/9/2018 - G57 - (640)(HOR) 23-6N-9E EST MSSP, WDFD, SLVN POE TO BHL (MSSP) NCT 660' FB POE TO BHL (SLVN) NCT 330' FB POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL REC 5-1-2018 (DUNN)</p>
PENDING CD - 201803169	<p>5/9/2018 - G57 - (I.O.) 23-6N-9E X201703287 MSSP, WDFD, SLVN SHL (26-6N-9E) 315' FNL, 1220' FEL ** COMPL. INT. (23-6N-9E) NCT 150' FSL, NCT 150' FNL, NCT 660' FEL NO OP. NAMED REC 5-8-2018 (JOHNSON)</p> <p>**S/B SHL (26-6N-9E) 260' FNL, 1570' FEL WILL BE CORRECTED AT THE HEARING FOR THE FINAL ORDER PER OPERATOR</p>

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.