

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

API NUMBER: 063 24798

Approval Date: 05/03/2018
Expiration Date: 05/03/2019

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 20 Twp: 6N Rge: 9E County: HUGHES
SPOT LOCATION: NE SW SW SW FEET FROM QUARTER: FROM SOUTH FROM WEST
SECTION LINES: 350 350

Lease Name: JACK Well No: 3031-1HX Well will be 350 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

JOHN WALT SHERRY
7672 E 143 RD
ATWOOD OK 74827

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	4892	6	
2	WOODFORD	5257	7	
3	SYLVAN	5422	8	
4			9	
5			10	

Spacing Orders: 668938
677073

Location Exception Orders: 676580

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 15257

Ground Elevation: 884

Surface Casing: 800

Depth to base of Treatable Water-Bearing FM: 600

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

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: 4

Liner not required for Category: 4

Pit Location is NON HSA

Pit Location Formation: WEWOKA

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

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 18-34410

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: 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: WEWOKA

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 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: WEWOKA

HORIZONTAL HOLE 1

Sec 31 Twp 6N Rge 9E County HUGHES

Spot Location of End Point: SW SE SE SE

Feet From: SOUTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 510

Depth of Deviation: 4426

Radius of Turn: 380

Direction: 185

Total Length: 10234

Measured Total Depth: 15257

True Vertical Depth: 5422

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

Additional Surface Owner	Address	City, State, Zip
BOB J. SHERRY	7670 E 141 RD	ATWOOD, OK 74827
JACK O. SHERRY	1130 E MAIN	HOLDENVILLE, OK 74848

Notes:

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Category	Description
HYDRAULIC FRACTURING	<p>5/1/2018 - 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>
LOCATION EXCEPTION - 676580	<p>5/3/2018 - G58 - (I.O.) 30 & 31-6N-9E X668938 MSSP, WDFD, SLVN SHL 350' FSL, 350' FNL OF 20-6N-9E COMPL. INT. (30-6N-9E) NCT 150' FNL, NCT 0' FSL, NCT 330' FEL COMPL. INT. (31-6N-9E) NCT 0' FNL, NCT 150' FSL, NCT 330' FEL CORTERRA ENERGY OPERATING, LLC 4/20/2018</p>
MEMO	<p>5/1/2018 - G71 - PITS 2 & 3 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 3 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT</p>
SPACING - 668938	<p>5/3/2018 - G58 - (640)(HOR) 30 & 31-6N-9E VAC 538105 WDFD VAC 309868 WDFD EST MSSP, WDFD, SLVN COMPL. INT. (MSSP) NLT 660' FB COMPL. INT. (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL COMPL. INT. (SLVN) NLT 330' FB (COEXIST SP. ORDER 538105 OTHER; SP. ORDER 309868 OTHERS)</p>
SPACING - 677073	<p>5/3/2018 - G58 - (I.O.) 30 & 31-6N-9E EST MULTIUNIT HORIZONTAL WELL X668938 MSSP, WDFD, SLVN (MSSP & SLVN ARE ADJACENT COMMON SOURCE OF SUPPLY TO WDFD) 50% 30-6N-9E 50% 31-6N-9E CORTERRA ENERGY OPERATING, LLC 5/1/2018</p>

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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.