

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

API NUMBER: 063 24737

Approval Date: 11/29/2017

Expiration Date: 05/29/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 11 Twp: 7N Rge: 9E

County: HUGHES

SPOT LOCATION: ☐ SW ☐ SE ☐ SE ☐ SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 315 395

Lease Name: CAROL

Well No: 1201-1HX

Well will be 315 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

D&L CATTLE II, L.L.C.
1536 WHITE CHIMNEY ROAD
STUART OK 74570

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	4209	6	
2	WOODFORD	4723	7	
3	SYLVAN	4922	8	
4			9	
5			10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201705507
201707624
201707625

Special Orders:

Total Depth: 16000

Ground Elevation: 862

Surface Casing: 660

Depth to base of Treatable Water-Bearing FM: 610

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: ON SITE

A. Evaporation/dewater and backfilling of reserve pit.

Type of Mud System: AIR

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

PERMIT NO: 17-33522

Is depth to top of ground water greater than 10ft below base of pit? Y

H. SEE MEMO

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 BED AQUIFER

Pit Location Formation: WEWOKA

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 BED AQUIFER

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: WEWOKA

HORIZONTAL HOLE 1

Sec 11 Twp 7N Rge 9E County HUGHES

Spot Location of End Point: NE NW NW NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 440

Depth of Deviation: 4390

Radius of Turn: 866

Direction: 3

Total Length: 10250

Measured Total Depth: 16000

True Vertical Depth: 4922

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.

063 24737 CAROL 1201-1HX

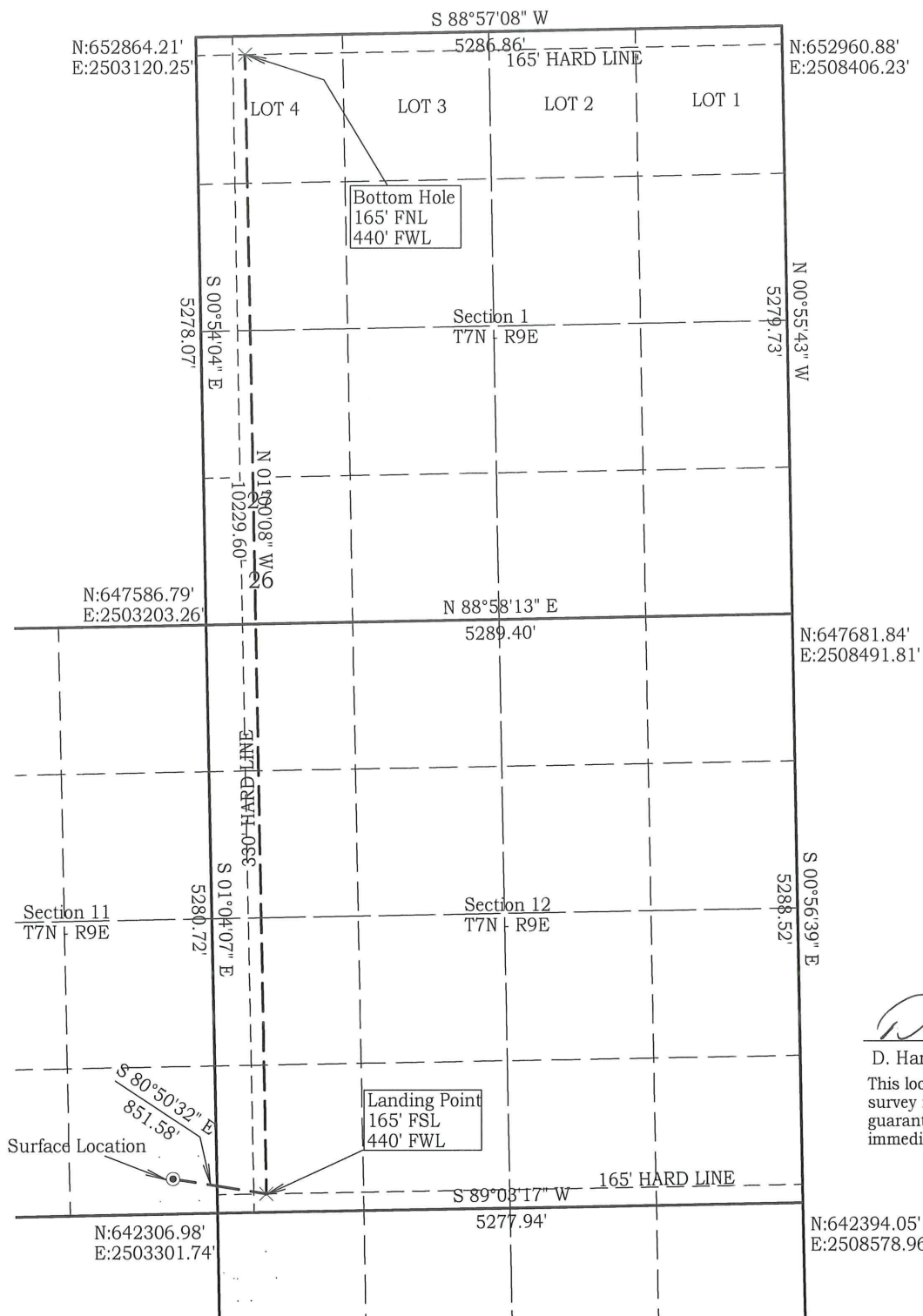
Category	Description
HYDRAULIC FRACTURING	<p>11/22/2017 - G71 - OCC 165:10-3-10 REQUIRES:</p> <p>1) PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 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>11/22/2017 - G71 - PITS 2 & 3 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 3 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT</p>
PENDING CD - 201705507	<p>11/29/2017 - G60 - (E.O.)(640)(HOR) 1 & 12-7N-9E VAC 363064 E2 MSSP 1-7N-9E ** VAC 513659 W2 MSSP, WDFD 1-7N-9E EST MSSP, WDFD, HNTN COMPL. INT. (MSSP) NCT 660' FB COMPL. INT. (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL COMPL. INT. (SLVN) NCT 330' FB REC. 11/21/17 (MCKEOWN)</p> <p>**WILL BE CORRECTED TO VAC 362808/363064 MSSP (1-7N-9E) PER ATTORNEY FOR OPERATOR</p>
PENDING CD - 201707624	<p>11/29/2017 - G60 - (E.O.) 1 & 12-7N-9E X201705507 MSSP, WDFD, SLVN SHL 315' FSL, 395' FEL (11-7N-9E) COMPL. INT. (12-7N-9E) NCT 150' FSL, NCT 0' FNL, NCT 330' FWL COMPL. INT. (1-7N-9E) NCT 0' FSL, NCT 150' FNL, NCT 330' FWL CORTERRA ENERGY, LLC. REC. 11/21/17 (MCKEOWN)</p>
PENDING CD - 201707625	<p>11/29/2017 - G60 - (E.O.) 1 & 12-7N-9E EST MULTIUNIT HORIZONTAL WELL X201705507 MSSP, WDFD, SLVN 50% 1-7N-9E 50% 12-7N-9E CORTERRA ENERGY, LLC. REC. 11/21/17 (MCKEOWN)</p>

M & M Land Surveying, Inc.

520 "E" Street NW. Ardmore, OK. 73401
Office 580-226-0446 Mobile 580-221-4999

Surface Location	315' FSL - 395' FEL	Elevation 862'
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ALL SECTION CORNER COORDINATES ARE NAD 27



Bearings are GRID NORTH



SCALE 1" = 1000'

Job # 17347
Date 9/18/17

Pad Corner Elevations

NE/C = 869'
SE/C = 869'
SW/C = 859'
NW/C = 859'

NAD 27 OK SOUTH

Surface Location
Latitude: 35.087647°
Longitude: 96.318996°
Y= 642,615'
X = 2,502,901'
Landing Point
N= 642,479'
E = 2,503,742'
Bottom Hole
N= 652,707'
E = 2,503,563'

NAD 83 OK SOUTH

Surface Location
Latitude: 35.087733°
Longitude: 96.319282°
Y = 642,663'
X = 2,471,303'
Landing Point
N = 642,527'
E = 2,472,144'
Bottom Hole
N = 652,755'
E = 2,471,965'

Debra A. Sullivan

D. Harry McClintick, R.P.L.S. # 1367, CA # 3093

This location has been staked according to the best official survey records available to us, but its accuracy is not guaranteed. Please review this plat and notify us immediately of any discrepancy.

