

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

API NUMBER: 073 26661

Approval Date: 01/16/2020

Expiration Date: 07/16/2021

Horizontal Hole  
Multi Unit

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 10 Twp: 16N Rge: 6W

County: KINGFISHER

SPOT LOCATION: ☐ NE ☐ NE ☐ NE ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 282 210

Lease Name: RUTH 10-16-6

Well No: 4HC

Well will be 210 feet from nearest unit or lease boundary.

Operator CHESAPEAKE OPERATING LLC  
Name:

Telephone: 4059357539; 4059358

OTC/OCC Number: 17441 0

CHESAPEAKE OPERATING LLC  
PO BOX 18496  
OKLAHOMA CITY, OK 73154-0496

JERALD SCHROEDER  
P.O. BOX 1508  
EUFALA OK 74432

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

Name	Depth	Name	Depth
1 OSWEGO	6630	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 654841  
672942  
694101

Location Exception Orders: 694105  
694103  
698963

Increased Density Orders: 694102  
694104

Pending CD Numbers:

Special Orders:

Total Depth: 16600

Ground Elevation: 1103

**Surface Casing: 1500**

Depth to base of Treatable Water-Bearing FM: 160

Deep surface casing has been approved

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: 25000 Average: 8000

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: SALT PLAINS

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 20-37197  
H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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

Sec 15 Twp 16N Rge 6W County KINGFISHER

Spot Location of End Point: S2 NE SE SE

Feet From: SOUTH 1/4 Section Line: 715

Feet From: EAST 1/4 Section Line: 330

Depth of Deviation: 5870

Radius of Turn: 900

Direction: 181

Total Length: 9315

Measured Total Depth: 16600

True Vertical Depth: 6653

End Point Location from Lease,  
Unit, or Property Line: 330

## Notes:

Category	Description
DEEP SURFACE CASING	1/15/2020 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING
EXCEPTION TO RULE - 698963 (201901329)	1/15/2020 - G56 - (I.O.) 15-16N-6W X165:10-3-28(C)(2)(B) OSWG (RUTH 3-16-6 4HC)*** MAY BE CLOSER THAN 600' TO STEPHENS 1 WELL CHESAPEAKE OPERATING, LLC 7/10/2019  ***S/B RUTH 10-16-6 4HC, WILL BE CORRECTED AT FINAL HEARING PER ATTORNEY FOR OPERATOR
HYDRAULIC FRACTURING	1/15/2020 - G71 - OCC 165:10-3-10 REQUIRES:  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;  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: <a href="http://OCCWEB.COM/OG/OGFORMS.HTML">OCCWEB.COM/OG/OGFORMS.HTML</a> ; AND,  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: <a href="http://FRACFOCUS.ORG">FRACFOCUS.ORG</a>
INCREASED DENSITY - 694102 (201901327)	1/16/2020 - G56 - 15-16N-6W X672942 OSWG 1 WELL CHESAPEAKE OPERATING, LLC 4/4/2019
INCREASED DENSITY - 694104 (201901330)	1/16/2020 - G56 - 10-16N-6W X654841 OSWG 1 WELL CHESAPEAKE OPERATING, LLC 4/4/2019
LOCATION EXCEPTION - 694103 (201901328)	1/15/2020 - G56 - (I.O.) 15-16N-6W X672942 OSWG COMPL. INT. NCT 0' FNL, NCT 330' FSL, NCT 330' FEL NO OP NAMED 4/4/2019
LOCATION EXCEPTION - 694105 (201901331)	1/15/2020 - G56 - (I.O.) 10-16N-6W X654841 OSWG COMPL. INT. NCT 330' FNL, NCT 0' FSL, NCT 330' FEL NO OP NAMED 4/4/2019

This permit does not address the right of entry or settlement of surface damages.

073 26661 RUTH 10-16-6 4HC

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.

SPACING - 654841	1/15/2020 - G56 - (640)(HOR) 10-16N-6W EST OSWG, OTHER POE TO BHL NCT 660' FB (COEXIST SP. ORDER # 62116 OSWG)
SPACING - 672942	1/15/2020 - G56 - (640)(HOR) 15-16N-6W EXT 654841 OSWG, OTHER POE TO BHL NCT 660' FB (COEXIST SP. ORDER # 62116 OSWG N2 & ORDER # 62116//124683 OSWG S2)
SPACING - 694101 (201901326)	1/15/2020 - G56 - (I.O.) 15 & 10-16N-6W EST MULTIUNIT HORIZONTAL WELL X672942 OSWG 15-16N-6W X654841 OSWG 10-16N-6W 50% 15-16N-6W 50% 10-16N-6W CHESAPEAKE OPERATING, LLC 4/4/2019

# CHESAPEAKE ENERGY

073-26661

OPERATOR: CHESAPEAKE OPERATING, LLC  
LEASE NAME: RUTH 10-16-6  
WELL NO. 4HC  
STAKED DATE: 12/4/19  
GROUND ELEVATION: 1103.12 GR. AT STAKE  
SURFACE HOLE FOOTAGE: 282' FNL - 210' FEL  
SECTION: 10 TOWNSHIP: 16N RANGE: 6W  
KINGFISHER COUNTY, STATE: OK  
BOTTOM HOLE: 15-16N-6W 1.M.  
BOTTOM HOLE FOOTAGE: 715' FSL - 330' FEL  
LANDING POINT FOOTAGE: 550' FNL - 330' FEL

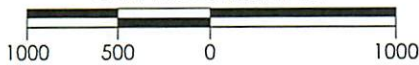
BASIS OF BEARING:  
GRID NORTH (NAD 83)  
OKLAHOMA - NORTH ZONE



ACCESSIBILITY TO LOCATION: FROM NORTH LINE  
TOPOGRAPHY & VEGETATION: LOCATION FELL ON THE EAST EDGE OF A FIELD.

DISTANCE & DIRECTION FROM HWY JCT OR TOWN:  
FROM THE INTERSECTION OF HWY 81 & HWY 3 IN  
KINGFISHER, GO E ALONG HWY 33.5 MI. TO N2900 RD.  
GO N 2 MI. TO E780 RD. GO E 1 MI. PAD IS ON S SIDE  
OF RD.

GRAPHIC SCALE IN FEET



## SURFACE HOLE DATA

### STATE PLANE COORDINATES:

ZONE: OK-NORTH NAD27

X: 2054295.6

Y: 322108.8

GPS DATUM: NAD27

LAT: 35.88475595

LONG: -97.81671505

### STATE PLANE COORDINATES:

ZONE: OK-NORTH NAD83

X: 2022696.9

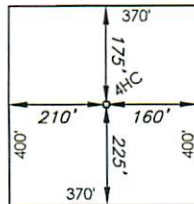
Y: 322132.9

GPS DATUM: NAD83

LAT: 35.88479925

LONG: -97.81704399

## PAD DIAGRAM (NOT TO SCALE)



## BOTTOM HOLE DATA

### STATE PLANE COORDINATES:

ZONE: OK-NORTH NAD27

X: 2054226.4

Y: 312526.8

GPS DATUM: NAD27

LAT: 35.85843258

LONG: -97.81700978

### STATE PLANE COORDINATES:

ZONE: OK-NORTH NAD83

X: 2022627.7

Y: 312550.9

GPS DATUM: NAD83

LAT: 35.85847656

LONG: -97.81733826

## LANDING POINT DATA

### STATE PLANE COORDINATES:

ZONE: OK-NORTH NAD27

X: 2054175.4

Y: 321841.1

GPS DATUM: NAD27

LAT: 35.88402100

LONG: -97.81712239

### STATE PLANE COORDINATES:

ZONE: OK-NORTH NAD83

X: 2022576.7

Y: 321865.1

GPS DATUM: NAD83

LAT: 35.88406431

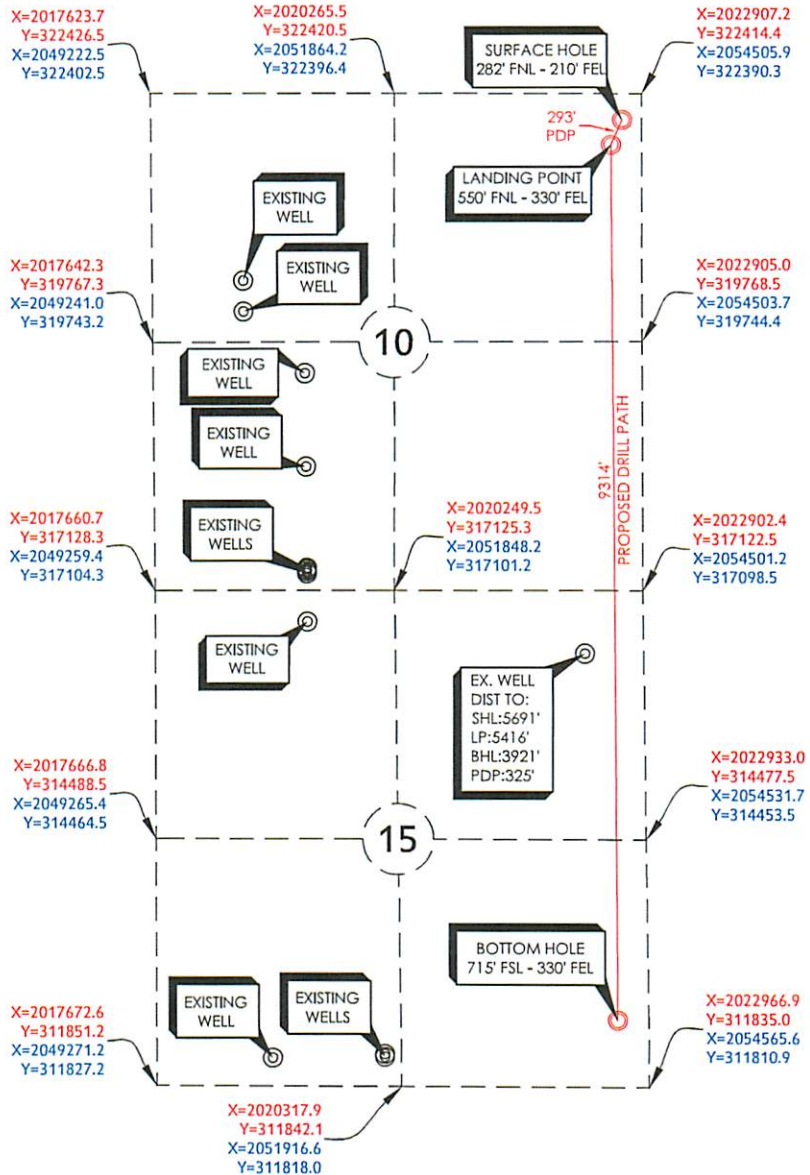
LONG: -97.81745133

PLEASE NOTE THAT THIS LOCATION WAS STAKED ON THE GROUND UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL LAND SURVEYOR, BUT ACCURACY OF THIS EXHIBIT IS NOT GUARANTEED. PLEASE CONTACT CRAFTON TULL PROMPTLY IF ANY INCONSISTENCY IS DETERMINED. GPS DATA IS OBSERVED FROM RTK-GPS. NOTE: X AND Y DATA SHOWN HEREON FOR SECTION CORNERS MAY NOT HAVE BEEN SURVEYED ON THE GROUND, AND FURTHER, DOES NOT REPRESENT A TRUE BOUNDARY SURVEY. LANDING POINT, BOTTOM HOLE, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED.

CERTIFICATION:  
THIS IS TO CERTIFY THAT THIS WELL LOCATION EXHIBIT WAS COMPILED AND PREPARED UNDER MY SUPERVISION.

*[Signature]*  
DENVER WINCHESTER

PLS 1952



RUTH 10-16-6 4HC

## REVISION DATE:

R1 5.21.19

R2 12.06.19

PART OF THE NE/4 OF  
SECTION 10, 16N, 6W  
WELL LOCATION EXHIBIT  
KINGFISHER COUNTY, OKLAHOMA

SCALE: 1"=1000'

PLOT DATE: 12-06-2019

DRAWING: 17601133-WELL-P

DRAWN BY: JJ

SHEET NO.: 2 OF 3



300 Pointe Parkway Blvd  
Yukon, OK 73099  
405.787.6270 t 405.787.6276 f  
www.craftontull.com  
Crafton Tull  
SURVEYING  
CERTIFICATE OF AUTHORIZATION:  
CA 973 (PE/LS) EXPIRES 6/30/2020