

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

API NUMBER: 093 25175

Approval Date: 11/16/2018

Expiration Date: 05/16/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 08 Twp: 20N Rge: 12W

County: MAJOR

SPOT LOCATION: ☐ NW ☐ NE ☐ NE ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 235 645

Lease Name: RUSCH 5-20-12

Well No: 3H

Well will be 235 feet from nearest unit or lease boundary.

Operator Name: CHESAPEAKE OPERATING LLC

Telephone: 4059357539; 4059358

OTC/OCC Number: 17441 0

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

DOROTHY M. RUSCH
902 CARDINAL RD.
FAIRVIEW OK 73737

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

	Name	Depth	Name	Depth
1	MISSISSIPPI SOLID	7900	6	
2	HUNTON	8600	7	
3			8	
4			9	
5			10	

Spacing Orders: 315479
68130

Location Exception Orders: 683622

Increased Density Orders: 683418

Pending CD Numbers:

Special Orders:

Total Depth: 14000

Ground Elevation: 1385

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 440

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: 50000 Average: 30000

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: FLOWERPOT

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

PERMIT NO: 18-35675

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 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.

HORIZONTAL HOLE 1

Sec 05 Twp 20N Rge 12W County MAJOR

Spot Location of End Point: NE NW NE NE

Feet From: NORTH 1/4 Section Line: 200

Feet From: EAST 1/4 Section Line: 880

Depth of Deviation: 8263

Radius of Turn: 382

Direction: 358

Total Length: 5137

Measured Total Depth: 14000

True Vertical Depth: 8691

End Point Location from Lease,
Unit, or Property Line: 200

Notes:

Category

Description

DEEP SURFACE CASING

11/5/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING

HYDRAULIC FRACTURING

11/5/2018 - 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: OCCEWEB.COM/OG/OGFORMS.HTML; 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: FRACFOCUS.ORG

INCREASED DENSITY - 683418

11/15/2018 - G75 - 5-20N-12W
X68130 HNTN
X315479 MSSSD
1 WELL
CHESAPEAKE OP., L.L.C.
9-20-2018

INTERMEDIATE CASING

11/5/2018 - G71 - 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 - 683622

11/15/2018 - G75 - (I.O.) 5-20N-12W
X68130 HNTN
X315479 MSSSD
COMPL. INT. NCT 165' FSL & NCT 165' FEL, NCT 165' FNL & NCT 660' FEL
CHESAPEAKE OP., L.L.C.
9-24-2018

SPACING - 315479

11/15/2018 - G75 - (640) 5-20N-12W
EXT 118158 MSSSD, OTHERS

SPACING - 68130

11/15/2018 - G75 - (640) 5-20N-12W
EST HNTN

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

093 25175 RUSCH 5-20-12 3H

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