API NUMBER: 153 23641

Oil & Gas

Horizontal Hole

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

Approval Date: 01/30/2019
Expiration Date: 07/30/2020

PERMIT TO DRILL

WELL LOCATION:	Sec:	31	Twp:	20N	Rge:	17W	County:	WOODWARD
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SPOT LOCATION: NW NW NW NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 200 2450

Lease Name: ENGLAND 30-20-17 Well No: 2H Well will be 200 feet from nearest unit or lease boundary.

Operator TAPSTONE ENERGY LLC Telephone: 4057021600 OTC/OCC Number: 23467 0

TAPSTONE ENERGY LLC

100 E MAIN ST

OKLAHOMA CITY, OK 73104-2509

VICKIE RAPP 58365 SCR 222 MUTUAL OK 73853

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

	Name	Depth	Name	Depti	n
1	MISSISSIPPIAN	10700	6		
2			7		
3			8		
4			9		
5			10		
Spacing Orders:	679616	Location Exception Orders: 6879	943	Increased Density Orders:	688523

Pending CD Numbers: Special Orders:

Total Depth: 15700 Ground Elevation: 1817 Surface Casing: 230 Depth to base of Treatable Water-Bearing FM: 80

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 D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-36020
Chlorides Max: 8000 Average: 5000 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: C

Liner not required for Category: CPit Location is BED AQUIFER

Pit Location Formation: RUSH SPRINGS

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: 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: RUSH SPRINGS

HORIZONTAL HOLE 1

Sec 30 Twp 20N Rge 17W County WOODWARD

Spot Location of End Point: NW NW NW NE
Feet From: NORTH 1/4 Section Line: 150
Feet From: EAST 1/4 Section Line: 2420

Depth of Deviation: 10105 Radius of Turn: 499

Direction: 1

Total Length: 4811

Measured Total Depth: 15700

True Vertical Depth: 10700

End Point Location from Lease,
Unit, or Property Line: 150

Notes:

Category Description

HYDRAULIC FRACTURING 12/31/2018 - 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 - 688523 1/30/2019 - G58 - 30-20N-17W

X679616 MSSP 3 WELLS

TAPSTONE ENERGY, LLC

12/18/2018

INTERMEDIATE CASING 12/31/2018 - 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 - 687943 1/30/2019 - G58 - (I.O.) 30-20N-17W

X679616 MSSP

COMPL. INT. NCT 150' FSL, NCT 150' FNL, NCT 330' FEL

TAPSTONE ENERGY, LLC

12/7/2018

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.

153 23641 ENGLAND 30-20-17 2H

Description Category

12/31/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT MEMO

SPACING - 679616 1/30/2019 - G58 - (640)(HOR) 30-20N-17W

VAC 57549/57610 CRLM VAC 562307 MSSLM EXT 657861 MSSP POE TO BHL NLT 660' FB

428556

Oklahoma Lic. No. _