API NUMBER: 153 23624

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: 06/14/2018 12/14/2018 Expiration Date:

## PERMIT TO DRILL

		ODWARD	/: WO	Count	17W	Rge:	20N	Twp:	25	Sec:	WELL LOCATION:
FROM WEST	FROM	SOUTH	FROM	ET FROM QUARTER:		SW	E	s	SE	NW	SPOT LOCATION:
2020		440		ECTION LINES:							

Lease Name: FORBES 25/24 20-17 Well No: 2H Well will be 440 feet from nearest unit or lease boundary.

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

TAPSTONE ENERGY LLC

100 E MAIN ST

OKLAHOMA CITY. OK 73104-2509

DANIEL R. BRECKENRIDGE 57843 S. COUNTY ROAD 225

**SEILING** OK 73663

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

	Name	Depth		Name	De	pth
1	MISSISSIPPIAN	9800	6			
2			7			
3			8			
4			9			
5			10			
Spacing Orders:	661944	Location Exception Orders:	678823		Increased Density Orders	: 678822
	673655					678821
	678875					

Pending CD Numbers: Special Orders:

Total Depth: 19300 Ground Elevation: 1794 Surface Casing: 190 Depth to base of Treatable Water-Bearing FM: 40

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: Yes

Approved Method for disposal of Drilling Fluids: PIT 1 INFORMATION

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: 18-34609

H. SEE MEMO 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?

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

## 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 24 Twp 20N Rge 17W County WOODWARD

Spot Location of End Point: N2 N2 NE NW
Feet From: NORTH 1/4 Section Line: 165
Feet From: WEST 1/4 Section Line: 1980

Depth of Deviation: 9023
Radius of Turn: 573
Direction: 359
Total Length: 9376

Measured Total Depth: 19300

True Vertical Depth: 9800

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

Notes:

Category Description

HYDRAULIC FRACTURING 6/13/2018 - 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 - 678821 6/13/2018 - G57 - 24-20N-17W

X661944 MSSP 2 WELLS

TAPSTONE ENERGY, LLC.

6-6-2018

INCREASED DENSITY - 678822 6/13/2018 - G57 - 25-20N-17W

X673655 MSSP 3 WELLS

TAPSTONE ENERGY, LLC.

6-6-2018

INTERMEDIATE CASING 6/13/2018 - 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

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 23624 FORBES 25/24 20-17 2H

Category Description

LOCATION EXCEPTION - 678823 6/13/2018 - G57 - (I.O.) 25 & 24-20N-17W

X673655 25-20N-17W

X661944 24-20N-17W

COMPL. INT. (25-20N-17W) NCT 165' FSL, NCT 0' FNL, NCT 1320' FWL COMPL. INT. (24-20N-17W) NCT 0' FSL, NCT 165' FNL, NCT 1320' FWL

TAPSTONE ENERGY, LLC.

6-6-2018

MEMO 6/13/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 661944 6/13/2018 - G57 - (640)(HOR) 24-20N-17W

VAC OTHER

VAC 55987 CSTR

VAC 129845 STGV, STLS, SPWR, OSGE

EXT 658187 MSSP POE TO BHL NLT 660' FB

SPACING - 673655 6/13/2018 - G57 - (640)(HOR) 25-20N-17W

**VAC 55987 CSTR** 

VAC 129845 STGV, STLS, SPWR, OSGE

EXT 661944 MSSP POE TO BHL NLT 660' FB

SPACING - 678875 6/13/2018 - G57 - (I.O.) 25 & 24-20N-17W

EST MULTIUNIT HORÍZONTAL WELL

X673655 MSSP 25-20N-17W X661944 MSSP 24-20N-17W

50% 25-20N-17W 50% 24-20N-17W

TAPSTONE ENERGY, LLC.

6-7-2018

428885

Oklahoma Lic. No. \_

1433