API NUMBER: 043 23494

Oil & Gas

Horizontal Hole

100 E MAIN ST

OKLAHOMA CITY.

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

Approval Date: 01/10/2017
Expiration Date: 07/10/2017

300 feet from nearest unit or lease boundary.

23467 0

OTC/OCC Number:

PERMIT TO DRILL

		PERMIT TO DRILL	
WELL LOCATION: Sec: 12 Twp: 19N Rge: SPOT LOCATION: N2 N2 NW NE	18W County: DEW FEET FROM QUARTER: FROM SECTION LINES:	NORTH FROM EAST 300 1980	
Lease Name: RAPP 1-19-18	Well No:	1H	Well will be
Operator TAPSTONE ENERGY LLC Name:		Telephone: 4057021600	
TAPSTONE ENERGY LLC			

73104-2509

OK

MICHAEL A. RAPP & VICKIE L. RAPP

RT. 1. BOX 810

MUTUAL OK 73853

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

I	Name	Depth	Name	Depth
1	MISSISSIPPIAN	10600	6	
2			7	
3			8	
4			9	
5			10	
Spacing Orders:	648233	Location Exception Orders: 65036	63	Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 15600 Ground Elevation: 1809 **Surface Casing: 350** Depth to base of Treatable Water-Bearing FM: 200

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: 17-32001
Chlorides Max: 8000 Average: 5000 H. SEE MEMO

Within 1 mile of municipal water well? N

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

within 1 mile of municipal water well?

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

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 01 Twp 19N Rge 18W County **DEWEY** Spot Location of End Point: N2 N2 NW NF Feet From: NORTH 1/4 Section Line: 165 Feet From: EAST 1/4 Section Line: 1980

Depth of Deviation: 10025
Radius of Turn: 477
Direction: 360
Total Length: 4826

Measured Total Depth: 15600

True Vertical Depth: 10600

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

Notes:

Category Description

HYRAULIC FRACTURING 1/6/2017 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC

FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK HTTP://FRACFOCUS.ORG/ WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME

COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE

INTERMEDIATE CASING 1/6/2017 - 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 - 650363 1/9/2017 - G75 - (I.O.) 1-19N-18W

X648233 MSSP

COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 1220' FEL

TAPSTONE ENERGY, LLC

3-1-2016

MEMO 1/6/2017 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 -

OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

SPACING - 648233 1/9/2017 - G75 - (640)(HOR) 1-19N-18W

VAC 119799 MCSTR EXT 644112 MSSP COMPL. INT. NLT 660' FB

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA
6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
CERTIFICATE of Authorization No. 1293. LS DEWEY DEWEY County, Oklahoma
Section 12 Township 19N Range 18W I.M. 300'FNL-1980'FEL

API 043-23494

