

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

API NUMBER: 153 23596 A

Approval Date: 12/23/2016  
Expiration Date: 06/23/2017

Horizontal Hole Oil & Gas

Amend reason: CHANGE FORMATION DEPTH, TOTAL DEPTH &  
BOTTOM-HOLE INFORMATION; ADD OIL BASED MUD SYSTEM;  
UPDATE ORDERS

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 21 Twp: 20N Rge: 20W County: WOODWARD  
SPOT LOCATION:  NW  NE  NE  NW FEET FROM QUARTER: FROM NORTH FROM WEST  
SECTION LINES: 230 2200

Lease Name: BRUCE 16-20-20 Well No: 1H Well will be 230 feet from nearest unit or lease boundary.  
Operator Name: TAPSTONE ENERGY LLC Telephone: 4057021600 OTC/OCC Number: 23467 0

TAPSTONE ENERGY LLC  
100 E MAIN ST  
OKLAHOMA CITY, OK 73104-2509

REGINA V. STEADMAN  
ROUTE 1, BOX 285  
SHARON OK 73857

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	11100	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: 659411 Location Exception Orders: 659410 Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 16100 Ground Elevation: 2178 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 460

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

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

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? 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: OGALLALA

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 16-31956

H. SEE MEMO

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: OGALLALA

HORIZONTAL HOLE 1

Sec 16 Twp 20N Rge 20W County WOODWARD

Spot Location of End Point: NW NE NE NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 2200

Depth of Deviation: 10510

Radius of Turn: 477

Direction: 360

Total Length: 4841

Measured Total Depth: 16100

True Vertical Depth: 11100

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

Additional Surface Owner	Address	City, State, Zip
RAYMOND A. BRUCE	ROUTE 1, BOX 205	SHARON, OK 73857
JOHN R. BRUCE, JR.	54727 S. COUNTY RD. 205	SHARON, OK 73857
VICKI I. BRADY	1715 GRANGER	BROKEN ARROW, OK 74012

Notes:

Category

Description

DEEP SURFACE CASING

12/21/2016 - 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

12/21/2016 - 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/](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.

LOCATION EXCEPTION - 659410

1/5/2017 - G75 - (E.O.) 16-20N-20W  
X659411 MSSP  
COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 1980' FWL  
TAPSTONE ENERGY, LLC  
12-29-2016

MEMO

1/4/2017 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

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.

Category

Description

SPACING - 659411

1/5/2017 - G75 - (E.O.)(640)(HOR) 16-20N-20W  
EXT 650533 MSSP  
COMPL. INT. NLT 660' FB  
TAPSTONE ENERGY, LLC  
12-29-2016

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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.