

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

API NUMBER: 153 23619

Approval Date: 04/16/2018

Expiration Date: 10/16/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 24 Twp: 20N Rge: 17W County: WOODWARD  
SPOT LOCATION:  NE  NW  NW  NE FEET FROM QUARTER: FROM NORTH FROM EAST  
SECTION LINES: 200 2200

Lease Name: PATSY 13/12-20-17 Well No: 2H Well will be 200 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

JAMES & PATSY SMART  
57041 S. COUNTY ROAD 2265  
SEILING OK 73663

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN (EX CHESTER)	8790	6	
2	MISSISSIPPIAN	9400	7	
3			8	
4			9	
5			10	

Spacing Orders: 672107  
661944

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201801968  
201801969  
201801967  
201801966

Special Orders:

Total Depth: 19650 Ground Elevation: 1705 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 300

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-34263  
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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 12 Twp 20N Rge 17W County WOODWARD

Spot Location of End Point: N2 N2 NW NE

Feet From: NORTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 1980

Depth of Deviation: 8851

Radius of Turn: 477

Direction: 2

Total Length: 10050

Measured Total Depth: 19650

True Vertical Depth: 9400

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

Notes:

Category

Description

DEEP SURFACE CASING

4/6/2018 - 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

4/6/2018 - 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](http://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](http://FRACFOCUS.ORG)

INTERMEDIATE CASING

4/6/2018 - 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

MEMO

4/6/2018 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS (REQUIRED - NORTH CANADIAN RIVER); 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.

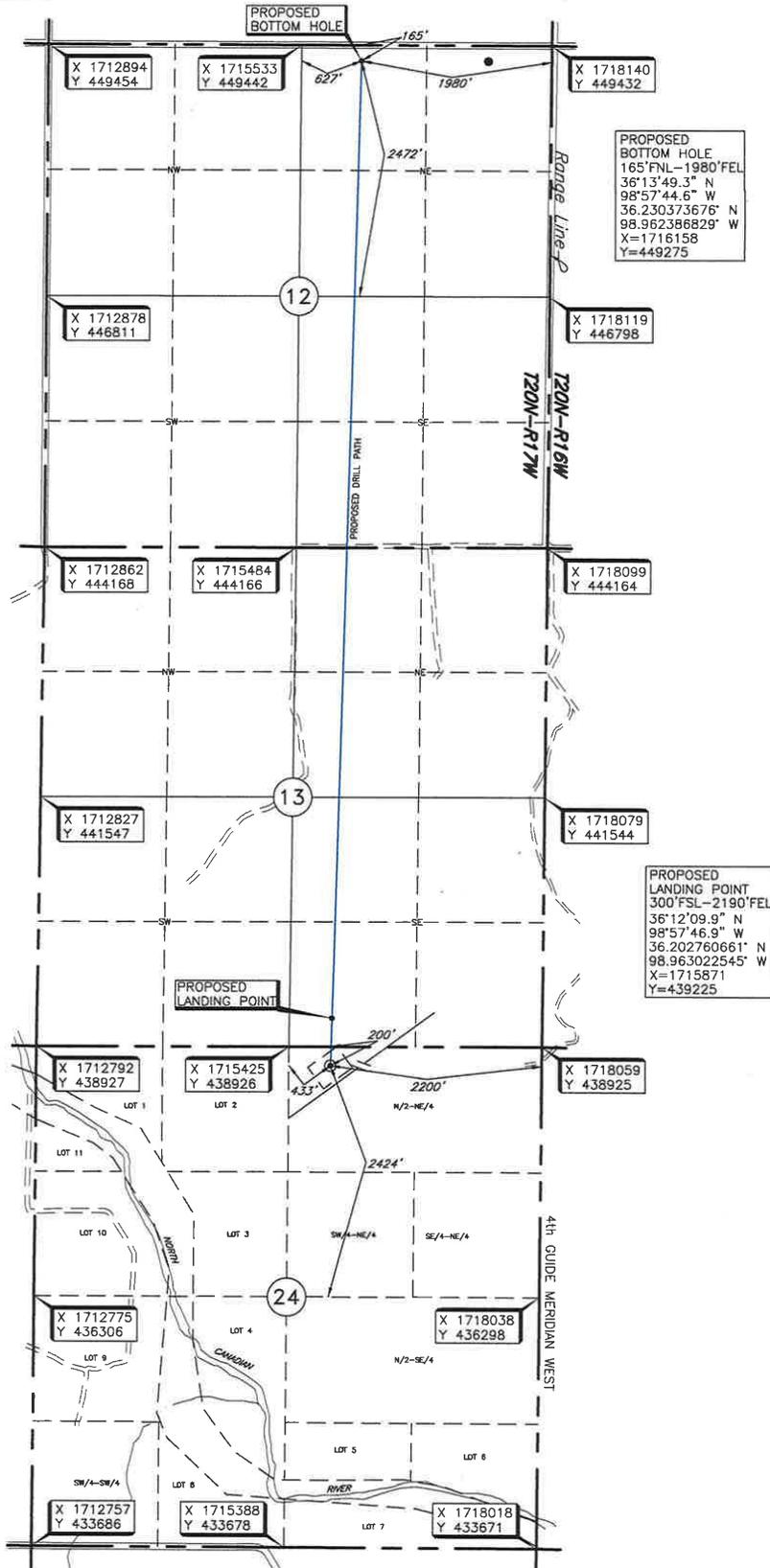
Category	Description
PENDING CD - 201801966	4/13/2018 - G75 - 13-20N-17W X661944 MSSP 3 WELLS TAPSTONE ENERGY, LLC REC 4-3-2018 (THOMAS)
PENDING CD - 201801967	4/13/2018 - G75 - 12-20N-17W X672107 MSNLC 3 WELLS TAPSTONE ENERGY, LLC REC 4-3-2018 (THOMAS)
PENDING CD - 201801968	4/13/2018 - G75 - (I.O.) 13 & 12-20N-17W EST MULTIUNIT HORIZONTAL WELL X661944 MSSP 13-20N-17W X672107 MSNLC 12-20N-17W 50% 13-20N-17W 50% 12-20N-17W TAPSTONE ENERGY, LLC REC 4-3-2018 (THOMAS)
PENDING CD - 201801969	4/13/2018 - G75 - (I.O.) 13 & 12-20N-17W X661944 MSSP 13-20N-17W X672107 MSNLC 12-20N-17W COMPL. INT. (13-20N-17W) NCT 165' FSL, NCT 0' FNL, NCT 1000' FEL COMPL. INT. (12-20N-17W) NCT 0' FSL, NCT 165' FNL, NCT 1000' FEL TAPSTONE ENERGY, LLC REC 4-3-2018 (THOMAS)
SPACING - 661944	4/13/2018 - G75 - (640)(HOR) 13-20N-17W VAC OTHER VAC 129845 STGV, STLS, SPWR, OSGE VAC 142459 CSTR EXT 658187 MSSP COMPL. INT. NLT 660' FB
SPACING - 672107	4/13/2018 - G75 - (640)(HOR) 12-20N-17W VAC 129845 STGV, STLS, SPWR, OSGE EST MSNLC COMPL. INT. NLT 660' FB

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WOODWARD County, Oklahoma  
 200' FNL - 2200' FEL Section 24 Township 20N Range 17W I.M.



LANDING POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.



Operator: TAPSTONE ENERGY  
 Lease Name: PATSY 13/12-20-17  
 Well No.: 2H  
 ELEVATION: 1705' Gr. at Stake

Topography & Vegetation Loc. fell in rolling sandy hills, ±186' NW of NE-SW pipeline

Reference Stakes or Alternate Location  
 Stakes Set Name None

Good Drill Site?  Yes  
 Best Accessibility to Location From North off lease road  
 Distance & Direction from Hwy Jct or Town From Richmond, OK, go ±0.4 mi. East, then ±3.0 mi. North, then ±5.0 mi. East, then ±2.0 mi. South to the NE Cor. of Sec 24-T20N-R17W.

THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY

DATUM: NAD-27  
 LAT: 36°12'05.0" N  
 LONG: 98°57'47.0" W  
 LAT: 36.201387354° N  
 LONG: 98.963054150° W  
 STATE PLANE  
 COORDINATES (US FEET):  
 ZONE: OK NORTH  
 X: 1715857  
 Y: 438726

Date of Drawing: Mar. 07, 2018  
 Invoice # 289830 Date Staked: Mar. 05, 2018 AC

**CERTIFICATE:**

I, Thomas L. Howell, an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein.

*Thomas L. Howell*  
 Oklahoma Lic. No. 1433

