

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

API NUMBER: 153 23643

Approval Date: 03/08/2019

Expiration Date: 09/08/2020

Horizontal Hole
Multi Unit

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 36 Twp: 20N Rge: 18W County: WOODWARD

SPOT LOCATION: ☐ NE ☐ SW ☐ SE ☐ NE FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 2100 880

Lease Name: HLC 36/25-20-18

Well No: 2H

Well will be 880 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

STATE OF OKLAHOMA
204 N. ROBINSON, SUITE 900
C/O COMMISSIONERS OF THE LAND OFFICE
OKLAHOMA CITY OK 73102

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	10800	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 684814
684815
690794

Location Exception Orders: 690795

Increased Density Orders: 690792
690793

Pending CD Numbers:

Special Orders:

Total Depth: 17800

Ground Elevation: 1847

Surface Casing: 290

Depth to base of Treatable Water-Bearing FM: 140

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

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: RUSH SPRINGS

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

PERMIT NO: 19-36176

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: RUSH SPRINGS

HORIZONTAL HOLE 1

Sec 25 Twp 20N Rge 18W County WOODWARD

Spot Location of End Point: NE NW NE NE

Feet From: NORTH 1/4 Section Line: 150

Feet From: EAST 1/4 Section Line: 880

Depth of Deviation: 10265

Radius of Turn: 512

Direction: 1

Total Length: 6730

Measured Total Depth: 17800

True Vertical Depth: 10800

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

Notes:

Category

Description

HYDRAULIC FRACTURING

2/5/2019 - 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 - 690792

3/6/2019 - G56 - 36-20N-18W
X684815 MSSP
2 WELLS
TAPSTONE ENERGY, LLC
2/1/2019

INCREASED DENSITY - 690793

3/6/2019 - G56 - 25-20N-18W
X684814 MSSP
2 WELLS
TAPSTONE ENERGY, LLC
2/1/2019

INTERMEDIATE CASING

2/5/2019 - 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.

153 23643 HLC 36/25-20-18 2H

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
LOCATION EXCEPTION - 690795	3/6/2019 - G56 - (I.O.) 25 & 36-20N-18W X684815 MSSP 36-20N-18W X684814 MSSP 25-20N-18W COMPL INT (36-20N-18W) NCT 150' FSL, NCT 0' FNL, NCT 330' FEL COMPL INT (25-20N-18W) NCT 0' FSL, NCT 150' FNL, NCT 330' FEL TAPSTONE ENERGY, LLC 2/1/2019
MEMO	2/5/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 684814	3/6/2019 - G56 - (640)(HOR) 25-20N-18W VAC 57549/57610 CRLM EXT 679616 MSSP COMPL INT NCT 660' FB
SPACING - 684815	3/6/2019 - G56 - (640)(HOR) 36-20N-18W VAC 119799 MSCST EXT 679616 MSSP COMPL INT NCT 660' FB
SPACING - 690794	3/6/2019 - G56 - (I.O.) 36 & 25-20N-18W ESTABLISH MULTIUNIT HORIZONTAL WELL X684815 MSSP 36-20N-18W X684814 MSSP 25-20N-18W 33.33% 36-20N-18W 66.67% 25-20N-18W TAPSTONE ENERGY, LLC 2/1/2019

153-23643

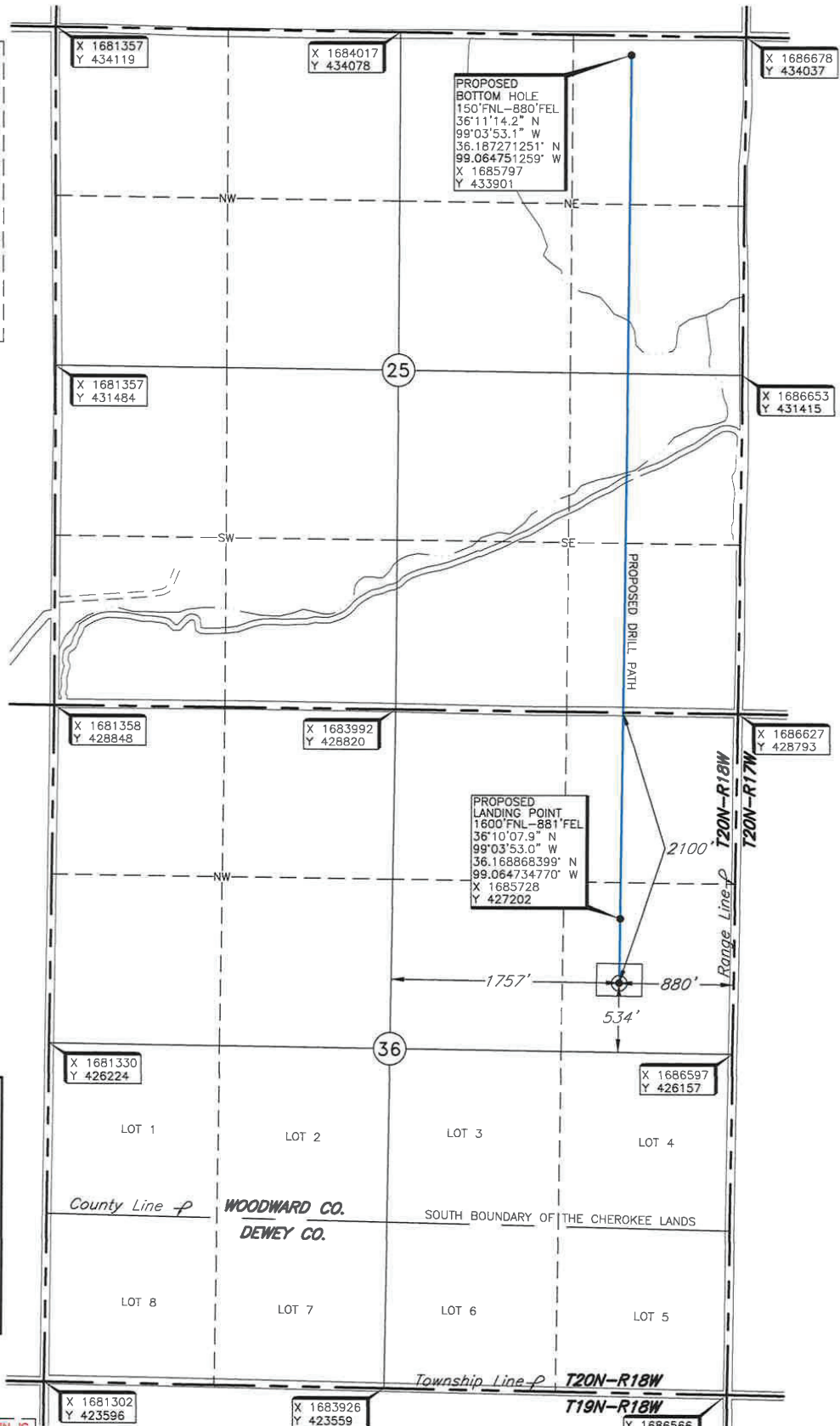
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 Wireless Way, Okla. City, OK. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
Certificate of Authorization No. 1293 LS

WOODWARD

County, Oklahoma

2100' FNL-880' FEL Section 36 Township 20N Range 18W I.M.

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

Operator: TAPSTONE ENERGY
Lease Name: HLC 36/25 20-18
Topography & Vegetation Location fell in rolling slope grass pasture.

Well No.: 2H

ELEVATION:
1847' Gr. at Stake

Good Drill Site? Yes
Best Accessibility to Location From East of county road.
Reference Stakes or Alternate Location
Stakes Set None

From US Hwy 183/US Hwy 270 at the Woodward-Major county line, go ±0.5 mile Northwest, then go ±5.5 miles West to the Northeast corner of Section 36, T20N-R18W.

THE INFORMATION SHOWN HEREIN IS
FOR CONSTRUCTION PURPOSES ONLY.

DATUM: NAD-27
LAT: 36°10'03.0" N
LONG: 99°03'53.0" W
LAT: 36.167494845° N
LONG: 99.064733539° W
STATE PLANE
COORDINATES (US FEET):
ZONE: OK NORTH
X: 1685723
Y: 426702

Revision ☒ A Date of Drawing: Jan. 16, 2019
Invoice # 309390 Date Staked: Jan. 10, 2019 KH

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

