

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

API NUMBER: 153 23600

Approval Date: 02/13/2017
Expiration Date: 08/13/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 30 Twp: 20N Rge: 17W County: WOODWARD
SPOT LOCATION: SW SE SE SE FEET FROM QUARTER: FROM SOUTH FROM EAST
SECTION LINES: 300 620

Lease Name: BROWN TRUST 31-20-17 Well No: 1H Well will be 300 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

PHYLLIS J. BROWN, TTEE OF PHYLLIS JEAN BROWN TRUST
57215 SOUTH COUNTY ROAD 222
MUTUAL OK 73853

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN (LESS UPPER CHESTER)	10200	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201601544
201700165

Special Orders:

Total Depth: 15850 Ground Elevation: 1805 Surface Casing: 600 Depth to base of Treatable Water-Bearing FM: 60

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

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: 17-32147
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 31 Twp 20N Rge 17W County DEWEY

Spot Location of End Point: S2 S2 SE SE

Feet From: SOUTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 9555

Radius of Turn: 888

Direction: 181

Total Length: 4900

Measured Total Depth: 15850

True Vertical Depth: 10200

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

Additional Surface Owner	Address	City, State, Zip
PHYLLIS J. BROWN, TTEE OF PHYL	57215 SOUTH COUNTY ROAD 222	MUTUAL, OK 73853

Notes:

Category	Description
DEEP SURFACE CASING	2/9/2017 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING
HYDRAULIC FRACTURING	2/9/2017 - 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	2/9/2017 - 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
MEMO	2/9/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
PENDING CD - 201601544	2/13/2017 - G64 - (640) 31-20N-17W VAC 119799 MCSTR EXT 646393 MSLUC EXT OTHER EST OTHER COMPL. INT. NCT 660' FB REC. 1-10-2017 (M. PORTER)

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 23600 BROWN TRUST 31-20-17 1H

Category

Description

PENDING CD - 201700165

2/13/2017 - G64 - (I.O.) 31-20N-17W
X201601544 MSLUC
COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 500' FEL
NO OP. NAMED
REC. 2-7-2017 (NORRIS)

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.

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

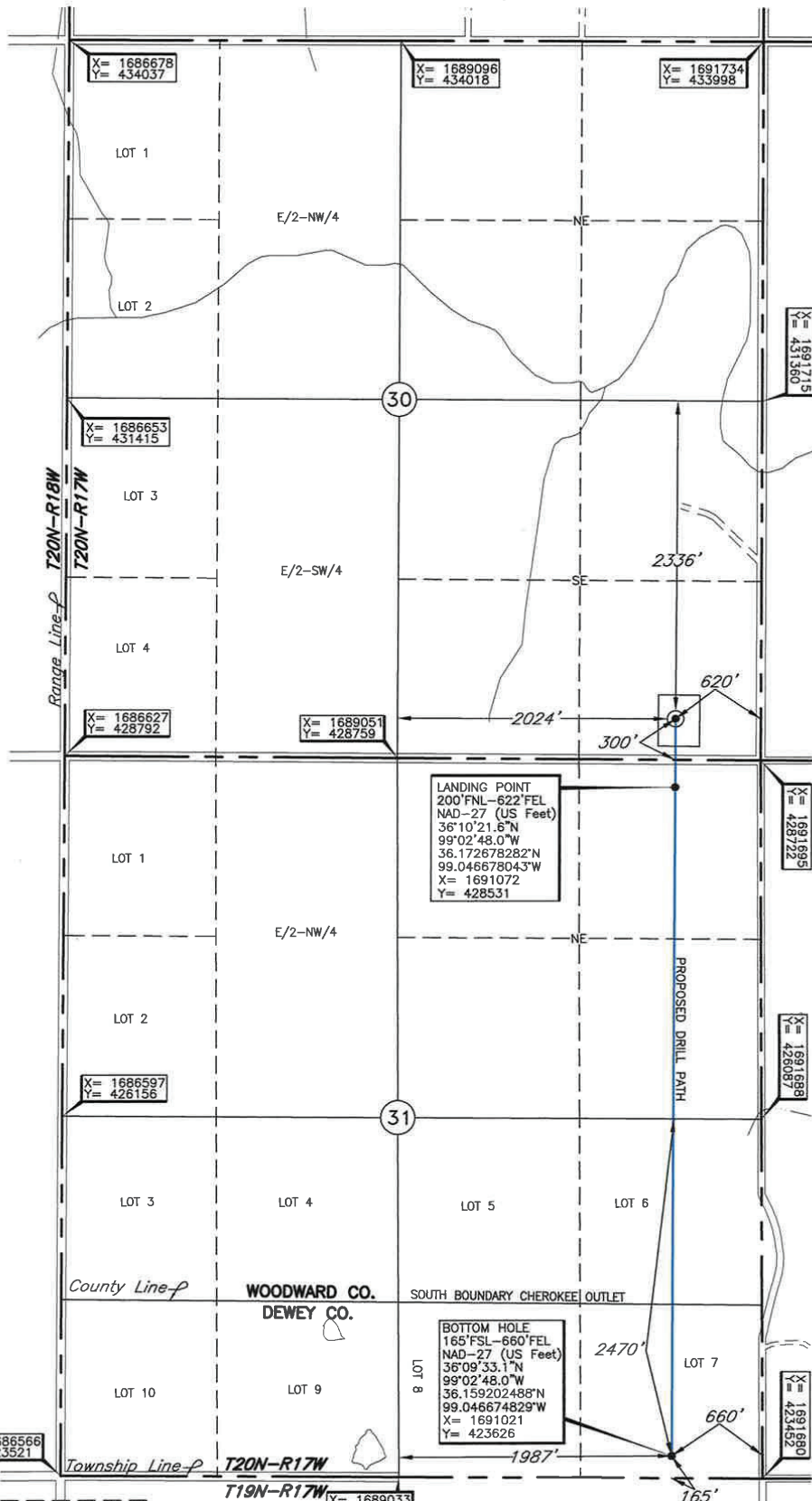
WOODWARD/DEWEY

County, Oklahoma

300'FSL-620'FEL Section 30 Township 20N Range 17W I.M.



NOTE:
 The information shown herein is for construction purposes ONLY.



Operator: TAPSTONE ENERGY
 Lease Name: BROWNE TRUST 31-20-17
 Topography & Vegetation: Loc. fell on pad being built in wheat field, NW-SE pipeline in area
 Good Drill Site? Yes
 Reference Stakes or Alternate Location: Stakes Set
 Well No.: 1H
ELEVATION:
1805' Gr. at Stake

Best Accessibility to Location: From South of county road
 Distance & Direction from Hwy Jct or Town: From the jct. of U.S. Hwy. 270 and St. Hwy. 183 South, go ±0.5 mile NW on U.S. Hwy. 270, then ±4.5 miles West to the SE corner of Sec. 30-T20N-R17W.

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

DATUM: NAD-27
 LAT: 36°10'26.6"N
 LONG: 99°02'48.0"W
 STATE PLANE COORDINATES: (US Feet)
 ZONE: OK NORTH
 X: 1691078
 Y: 429031

Invoice # 269299 Date of Drawing: Jan. 31, 2017
 Date Staked: Jan. 30, 2017 TR

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

