

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

API NUMBER: 043 23498

Approval Date: 02/02/2017

Expiration Date: 08/02/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 24 Twp: 19N Rge: 18W

County: DEWEY

SPOT LOCATION: ☐ NW ☐ NE ☐ NE ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 295 525

Lease Name: ELAINE 1213-19-18

Well No: 1H

Well will be 295 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

ELAINE B. KROWS, TTEE OF KROWS FAM REV TRUST
300 E. RICHMOND TERRACE
MUSTANG OK 73064

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	11000	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 647109
647113

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201700304
201700303

Special Orders:

Total Depth: 21200

Ground Elevation: 1883

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 250

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: 17-32057

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 12 Twp 19N Rge 18W County DEWEY

Spot Location of End Point: N2 N2 NE NE

Feet From: NORTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 10450

Radius of Turn: 605

Direction: 359

Total Length: 9800

Measured Total Depth: 21200

True Vertical Depth: 11000

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

Notes:

Category

Description

DEEP SURFACE CASING

1/31/2017 - 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

1/31/2017 - 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/](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

1/31/2017 - 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

1/31/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201700303

2/2/2017 - G64 - (I.O.) 12 & 13-19N-18W
EST MULTIUNIT HORIZONTAL WELL
X647113 MSSP 12-19N-18W
X647109 MSSP 13-19N-18W
50% 13-19N-18W
50% 12-19N-18W
NO OP. NAMED
REC. 1-31-2017 (LEAVITT)

This permit does not address the right of entry or settlement of surface damages.

043 23498 ELAINE 1213-19-18 1H

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 - 201700304	2/2/2017 - G64 - (I.O.) 12 & 13-19N-18W X647113 MSSP 12-19N-18W X647109 MSSP 13-19N-18W COMPL. INT. (13-19N-18W) NCT 165' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (12-19N-18W) NCT 0' FSL, NCT 165' FNL, NCT 330' FEL NO OP. NAMED REC. 1-31-2017 (LEAVITT)
SPACING - 647109	2/2/2017 - G64 - (640)(HOR) 13-19N-18W VAC 82101 MCSTR EST MSSP COMPL. INT. NLT 660' FB
SPACING - 647113	2/2/2017 - G64 - (640)(HOR) 12-19N-18W VAC 82101 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

County, Oklahoma

295'FNL - 525'FEL Section 24 Township 19N Range 18W I.M.

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

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

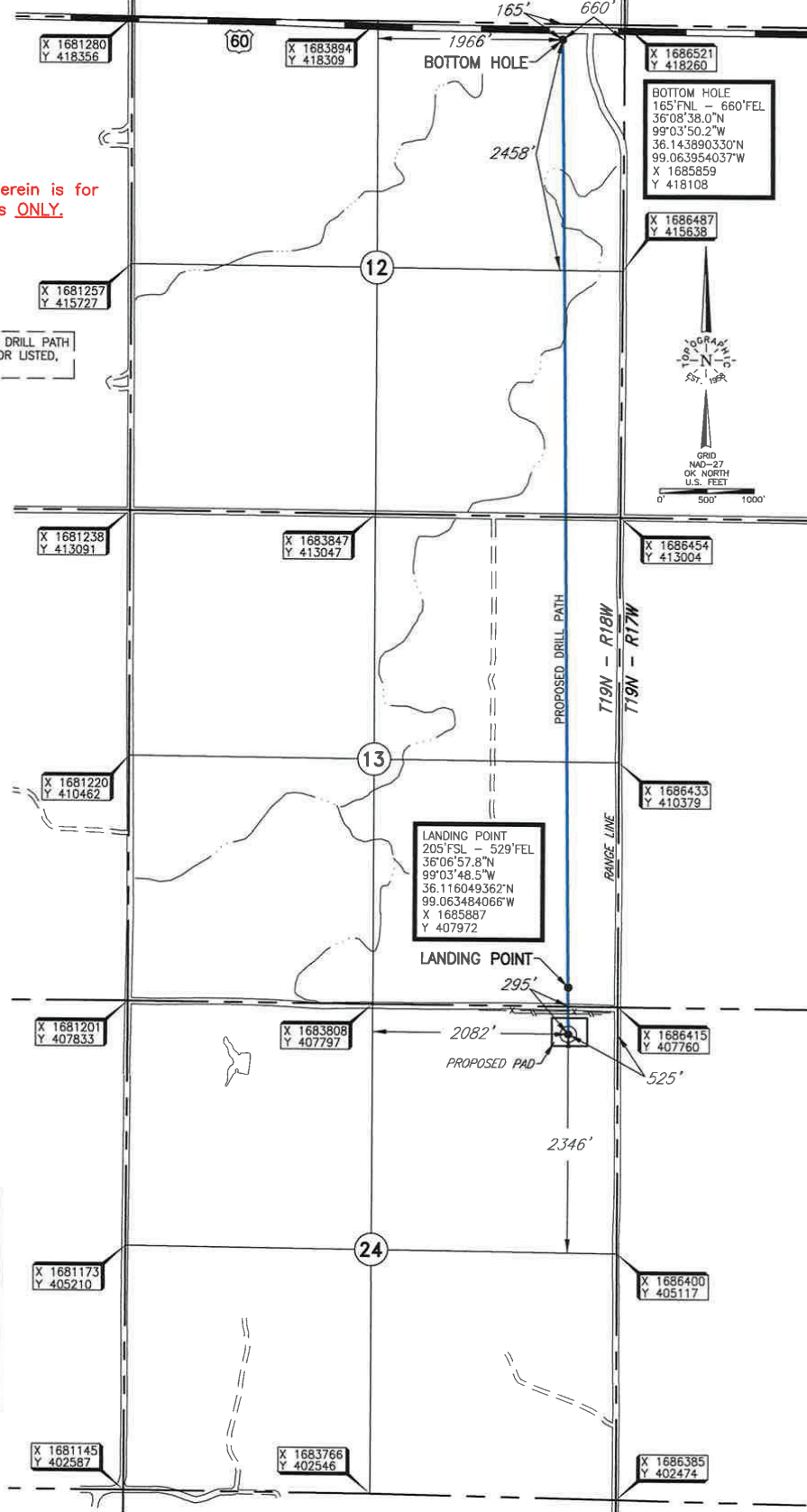
Operator: TAPSTONE ENERGY
Lease Name: ELAINE 1213-19-18
Topography & Vegetation Location fell in tall grass pasture, E-W pipeline ±218' north, R/W fence ±260' north.
Good Drill Site? Yes
Best Accessibility to Location From North off county road
Distance & Direction From jct. of U.S. Hwy. 183 and U.S. Hwy. 60, west of Seiling, Ok., go ±7 miles West on U.S. Hwy. 60, then ±2 miles South, then ±1 mile East to the NE corner of Section 7, T19N - R18W.

Reference Stakes or Alternate Location
Stakes Set None

Well No.: 1H

ELEVATION:

1883' Gr. at Stake



This information was gathered with a GPS receiver with a foot foot accuracy.

DATUM: NAD-27
LAT: 36°06'52.8"N
LONG: 99°03'48.5"W
LAT: 36.114675926°N
LONG: 99.063460891°W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1685888
Y: 407472

Invoice # 269154 Date of Drawing: December 20, 2016
Date Staked: December 16, 2016 RKM

CERTIFICATE:

I, Lee K. Goss an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein

Lee K. Goss
Oklahoma Lic. No. 1778

