

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

API NUMBER: 043 23625

Approval Date: 05/09/2018

Expiration Date: 11/09/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 10 Twp: 19N Rge: 17W

County: DEWEY

SPOT LOCATION: ☐ SE ☐ NE ☐ NW ☐ NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 525 1145

Lease Name: LOUTHAN 3-19-17

Well No: 1H

Well will be 525 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

RALPH LOUTHAN & DEENA LOUTHAN
224420 U.S. HWY. 60
SEILING OK 73663

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN (EX CHESTER)	11200	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 664977

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201802360
201803106

Special Orders:

Total Depth: 16700

Ground Elevation: 1804

Surface Casing: 1500

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: 18-34346

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 03 Twp 19N Rge 17W County DEWEY

Spot Location of End Point: N2 N2 N2 NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 1320

Depth of Deviation: 10985

Radius of Turn: 477

Direction: 2

Total Length: 4966

Measured Total Depth: 16700

True Vertical Depth: 11200

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

Notes:

Category

Description

DEEP SURFACE CASING

5/8/2018 - 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

5/8/2018 - 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; 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

INTERMEDIATE CASING

5/8/2018 - 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

5/8/2018 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

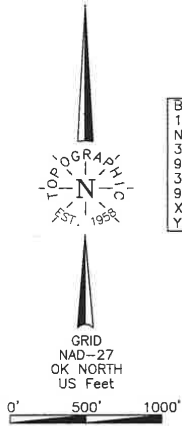
This permit does not address the right of entry or settlement of surface damages.

The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.

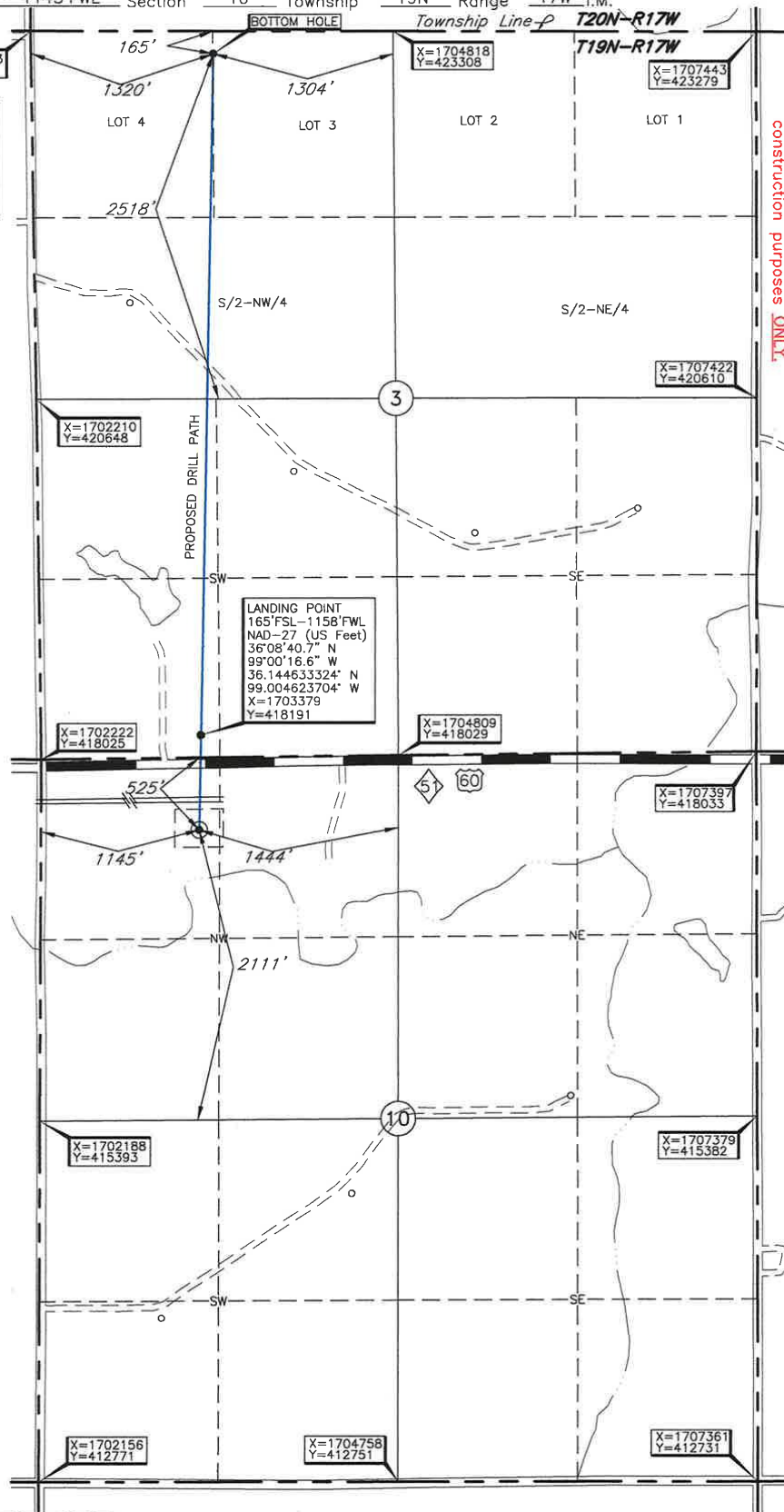
Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

043 23625 LOUTHAN 3-19-17 1H

Category	Description
PENDING CD - 201802360	5/9/2018 - G75 - (I.O.) 3-19N-17W X664977 MSNLC COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 1000' FWL NO OP. NAMED REC 5-7-2018 (M. PORTER)
PENDING CD - 201803106	5/9/2018 - G75 - 3-19N-17W X664977 MSNLC 1 WELL NO OP. NAMED HEARING 5-14-2018
SPACING - 664977	5/9/2018 - G75 - (640)(HOR) 3-19N-17W EXT OTHER EST MSNLC COMPL. INT. NLT 660' FB



BOTTOM HOLE
165°FNL-1320°FNL
NAD-27 (US Feet)
36°09'29.8" N
99°00'15.6" W
36.158277226° N
99.004339103° W
X=1703514
Y=423157



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

Operator: TAPSTONE ENERGY
Lease Name: LOUTHAN 3-19-17
Topography & Vegetation: Loc. fell in sloping pasture, North side of pad is ±51' South of pipeline
Good Drill Site? Yes
Reference Stakes or Alternate Location: Stakes Set None
Best Accessibility to Location: From North off US Hwy. 60
Distance & Direction: From Jct. St. Hwy. 51 and US Hwy. 183, West of Seiling, OK,
go ±3.0 mi. West on St. Hwy. 51 to the NW Cor. of Sec. 10-T19N-R17W

Well No.: 1H
ELEVATION:
1804' Gr. at Stake

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

DATUM: NAD-27
LAT: 36°08'33.9"N
LONG: 99°00'16.8"W
LAT: 36.142737294° N
LONG: 99.004663245° W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1703360
Y: 417501

Date of Drawing: Mar. 21, 2018
Invoice # 290741 Date Staked: Mar. 20, 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

