

API NUMBER: 043 23562

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

Approval Date: 11/01/2017  
Expiration Date: 05/01/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 16 Twp: 19N Rge: 17W

County: DEWEY

SPOT LOCATION: NW NE NE NE FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 230 440

Lease Name: REBECCA 9/4-19-17

Well No: 1H

Well will be 230 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

FRED SANDER & REBECCA SANDER  
ROUTE 1, BOX 62  
SEILING OK 73663

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN (LESS UPPER CHESTER)	11500	6	
2 MISSISSIPPIAN	11600	7	
3		8	
4		9	
5		10	

Spacing Orders: 646339  
661124

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201706231  
201706232  
201706233  
201706227

Special Orders:

Total Depth: 21800

Ground Elevation: 1848

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 180

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)  
H. SEE MEMO

PERMIT NO: 17-33246

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 04 Twp 19N Rge 17W County DEWEY

Spot Location of End Point: NW NE NE NE

Feet From: NORTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 440

Depth of Deviation: 10922

Radius of Turn: 477

Direction: 360

Total Length: 10129

Measured Total Depth: 21800

True Vertical Depth: 11600

End Point Location from Lease,

Unit, or Property Line: 165

Notes:

Category

Description

DEEP SURFACE CASING

10/13/2017 - 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

10/13/2017 - 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: [OCCWEB.COM/OG/OGFORMS.HTML](http://OCCWEB.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

10/13/2017 - 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

10/13/2017 - 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 23562 REBECCA 9/4-19-17 1H

Category	Description
PENDING CD - 201706227	11/1/2017 - G75 - (I.O.) 9 & 4-19N-17W EST MULTIUNIT HORIZONTAL WELL X661124 MSSP 9-19N-17W X646339 MSLUC 4-19N-17W 50% 9-19N-17W 50% 4-19N-17W NO OP. NAMED REC 10-9-2017 (MILLER)
PENDING CD - 201706231	11/1/2017 - G75 - (I.O.) 9 & 4-19N-17W X661124 MSSP 9-19N-17W X646339 MSLUC 4-19N-17W COMPL. INT. (9-19N-17W) NCT 165' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (4-19N-17W) NCT 0' FSL, NCT 165' FNL, NCT 330' FEL NO OP. NAMED REC 10-9-2017 (MILLER)
PENDING CD - 201706232	11/1/2017 - G75 - 4-19N-17W X646339 MSLUC 1 WELL NO OP. NAMED REC 10-9-2017 (MILLER)
PENDING CD - 201706233	11/1/2017 - G75 - 9-19N-17W X661124 MSSP 1 WELL NO OP. NAMED REC 10-9-2017 (MILLER)
SPACING - 646339	11/1/2017 - G75 - (640) 4-19N-17W VAC 85657 MCSTR EST (VER) OTHER EST (HOR) MSLUC, OTHER COMPL. INT. NLT 660' FB
SPACING - 661124	11/1/2017 - G75 - (640)(HOR) 9-19N-17W VAC 85657 MCSTR EST MSSP COMPL. INT. NLT 660' FB

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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.



API 043-23562

# TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

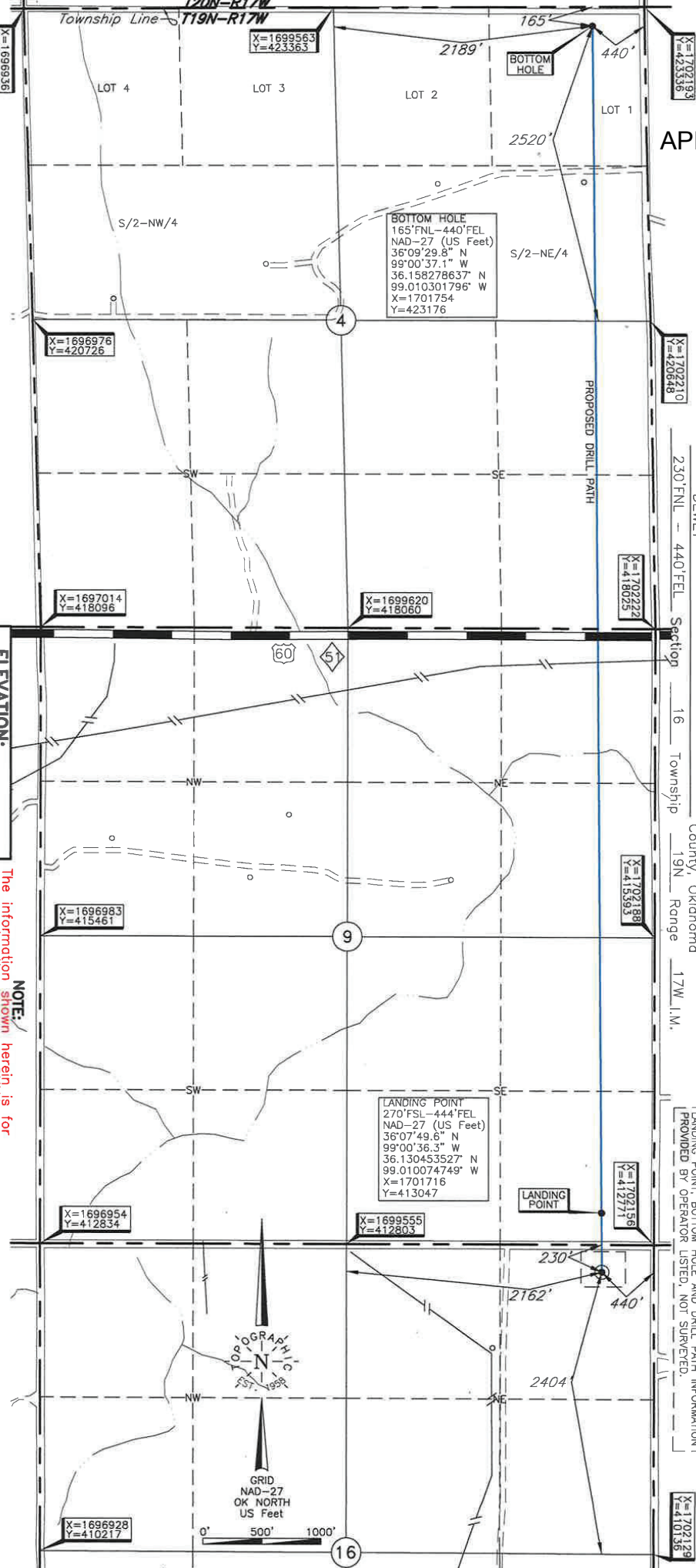
6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219

DEWEY Certificate of Authorization No. 1293 LS

County, Oklahoma

230' FNL - 440' FEL Section 16 Township 19N Range 17W, I.M.

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



## ELEVATION:

1848' Gr. at Stake

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

Date of Drawing: Aug. 28, 2017  
Invoice # 280421 Date Staked: Aug. 25, 2017 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.

Oklahoma Lic. No. 1433



(This information was gathered with a GPS receiver with ±1 foot Horiz./Vert. accuracy)

Operator: TAPSTONE ENERGY  
Lease Name: REBECCA 9/4 19-17  
Topography & Vegetation: Loc. fell in level grass pasture  
Good Drill Site? Yes  
Reference Stakes or Alternate Location: Stakes Set None  
Best Accessibility to Location: From North off county road  
Distance & Direction: From Seiling, OK, go ±4.75 mi. West on US Hwy. 60, then ±1.0 mi. South to the NE Cor. of Sec. 16-T19N-R17W