API NUMBER: 043 23601

Oil & Gas

Horizontal Hole

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

Approval Date: 03/06/2018
Expiration Date: 09/06/2018

PERMIT TO DRILL

WELL LOCATION: Sec: 32 Twp: 19N Rge: 17W County: DEWEY

SPOT LOCATION: S2 NE NE NE FEET FROM QUARTER: FROM NORTH FROM EAST SECTION LINES: 350 330

Lease Name: DONELL 2920-19-17 Well No: 1H Well will be 350 feet from nearest unit or lease boundary.

Operator TAPSTONE ENERGY LLC Telephone: 4057021600 OTC/OCC Number: 23467 0

TAPSTONE ENERGY LLC

100 E MAIN ST

OKLAHOMA CITY, OK 73104-2509

RUSSELL & DAVA CARTER, CO-TRUSTEES

59095 US HWY 183

SEILING OK 73663

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

Name Depth Name Depth MISSISSIPPIAN 1 9765 6 2 MERAMEC-OSAGE 10868 7 3 8 4 9 5 10 132649 Spacing Orders: Location Exception Orders: Increased Density Orders: 673652

Pending CD Numbers: 201801113 Special Orders:

201801114 201801112

647686

Total Depth: 21500 Ground Elevation: 1922 Surface Casing: 450 Depth to base of Treatable Water-Bearing FM: 310

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

One time land emplication (DEOLUDES DEDMIT)

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-33984

H. SEE MEMO

#### 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 20 Twp 19N Rge 17W County **DEWEY** Spot Location of End Point: N2 N2 ΝE NF Feet From: NORTH 1/4 Section Line: 165 EAST Feet From: 1/4 Section Line: 660

Depth of Deviation: 10600 Radius of Turn: 469 Direction: 359

Total Length: 10163

Measured Total Depth: 21500

True Vertical Depth: 11100

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

Notes:

Category Description

HYDRAULIC FRACTURING 2/28/2018 - 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

INCREASED DENSITY - 673652 3/5/2018 - G58 - 29-19N-17W

X647686 MSSP 2 WELLS

TAPSTONE ENERGY, LLC

2/14/2018

INTERMEDIATE CASING 2/28/2018 - 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 2/28/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

Category Description

PENDING CD - 201801112 3/5/2018 - G58 - (I.O.) 20-19N-17W

X132649 MRMOG

1 WELL

NO OP. NAMED HEARING 3/5/2018

PENDING CD - 201801113 3/5/2018 - G58 - (E.O.) 29 & 20-19N-17W

X647686 MSSP (29-19N-17W) X132649 MRMOG (20-19N-17W)

50% 29-19N-17W 50% 20-19N-17W NO OP. NAMED

REC 2/26/2018 (M. PORTER)

3/5/2018 - G58 - (E.O.) 29 & 20-19N-17W X647686 MSSP (29-19N-17W) PENDING CD - 201801114

X132649 MRMOG (20-19N-17W)

COMPL. INT. (29-19N-17W) NCT 165' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (20-19N-17W) NCT 0' FSL, NCT 165' FNL, NCT 330' FEL

REC 2/26/2018 (M. PORTER)

**SPACING - 132649** 3/5/2018 - G58 - (640) 20-19N-17W

EXT 126186 MRMOG

**SPACING - 647686** 3/5/2018 - G58 - (640)(HOR) 29-19N-17W

VAC 54296 CRLM VAC 217107 MSSLM

**EST MSSP** 

COMPL. INT NLT 660' FB

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS

DEWEY

County, Oklahoma 043-23601 County, Oklahoma 350'FNL - 330'FEL 32 17W IM Section Township Range X 1691675 Y 407649 BOTTOM HOLE X 1696902 Y 407598 -NOTE-The information shown herein is construction purposes ONL LANDING POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED. X 1696881 Y 404978 Distance & Direction from Hwy Jct or Tov Best Accessibility to Operator: Topography & Vegetation \_ease Name: Drill Site? . T19N TAPSTONE ENERGY Town R17W Location 29/20-From Location Seiling, 19fell Q ... |∃. 1696823 399733 go terraced Reference ! Stakes Set ±4 miles wheat West Stakes or road field 9 St. LANDING POINT Well Hwy. Alternate 20 51 then Location ±4 miles South ELEVATION: đ the Gr. at K Corner 9 X 1691496 Y 391982 THE PARTY OF THE P Date of Drawing: January 31. ESSIONAL Invoice # <u>287459</u> Date Staked: \_ January 25, 2018 RKM DATUM: NAD-27 LAT: 36'05'08.0"N LONG: 99°01'38.3"W **CERTIFICATE:** THOMAS L 36.085568780°N Thomas L. Howell \_an Oklahoma Licensed Land I, Thomas L. Howell an Oklahoma Licensed La Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the HOWELL LONG: 99.027310537°W STATE PLANE COORDINATES: (US Feet) information shown herein ZONE: \_ OK NORTH \*LAHOMA Momen 1696453

396762

Oklahoma Lic. No. \_

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

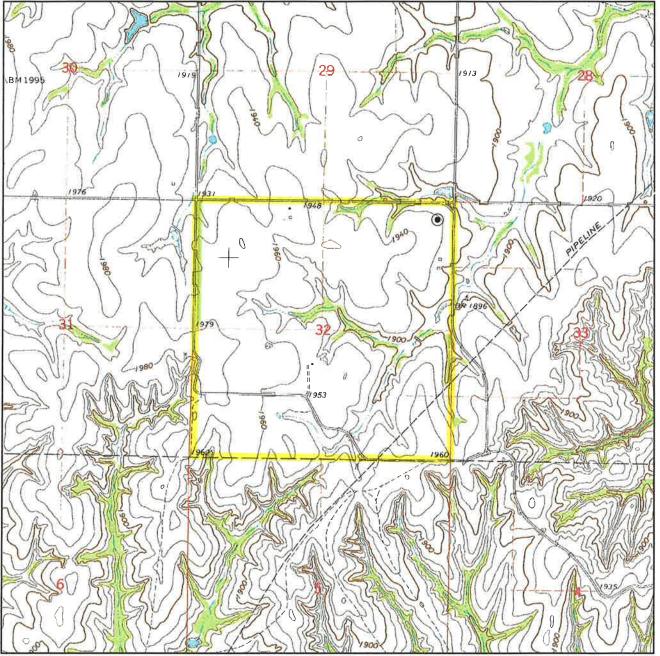
13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS DEWEY County, Oklahoma 350'FNL - 330'FEL <u>17W</u>I.M. Section 19N\_Range Township 165 - 1951 X 1694291 Y 407624 X 1696902 Y 407598 BOTTOM HOLE 660 BOTTOM HOLE 165'FNL - 660'FEL 36'06'53.6"N 99'01'42.3"W 36.114893109'N 99.028412576'W X 1696241 Y 407440 -NOTE-The information shown herein is for 2455 construction purposes ONLY. LANDING POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED. 20 X 1691641 Y 405032 X 1696881 Y 404978 PATH 11 DRILL 11 PROPOSED Best Accessibility to Lo Distance & Direction from Hwy Jct or Town Lease Name: Section Topography & Vegetation 32. T19N -TAPSTONE ENERGY DONELL R17W. Location 29/20-19-From Location fell Yes Seiling, From 오., 29 ⊇. North 1691573 399797 go terraced Reference ±4 off county LANDING POINT 165'FSL - 347'FEL 36'05'13.1"N 99'01'38.5"W 36.086983550'N 99.027363686'W X 1696443 Y 397277 miles wheat West Stakes road field 9 St. 악 LANDING POINT Hwy. Alternate 350 No. X 1691539 Y 397179 X 1694163 Y 397143 X 1696788 Y 397108 2294 5 PROPOSEU PAD 330 then Location 1 11  $\pm 4$ 2249 miles South 1922' Gr. at 32 ó the Gr. at 黑 Corner Stake of X 1696716 391911 T19N - R17W | X 1694106 Y 391946 T18N - R17W Des I ONA Date of Drawing: January 31, 2018 ESSIONAL No OF Invoice # <u>287459</u> Date Staked: \_ January 25, 2018 NAD-27 DATUM:\_ LAT: 36'05'08.0"N LONG: 99'01'38.3"W **CERTIFICATE:** SURVE THOMAS L LAT: 36.085568780°N Thomas L. Howell \_an Oklahoma Licensed Land HOWELL LONG: 99.027310537'W Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the 1433 STATE PLANE COORDINATES: (US Feet) information shown herein ZONE: OK NORTH TLAHOMA Thomas I. Nav. X:\_ 1696453 Oklahoma Lic. No. \_ 396762

## TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry
13800 Wireless Way, Oklahoma City, OK 73134 www.topographic.com
Telephone Numbers: Local (405) 843-4847 Toll Free (800) 654-3219

## LOCATION & ELEVATION VERIFICATION MAP



Sec. 32 Twp. 19N Rng. 17W IM

County\_\_\_\_\_\_ DEWEY \_\_\_\_ State\_\_\_\_ OK\_\_\_\_

Operator TAPSTONE ENERGY

Description 350'FNL - 330'FEL

Lease \_\_\_\_\_\_DONELL\_29/20-19-17\_1H

Elevation 1922' Gr. at Stake

Above Background Data from U.S.G.S. Topographic Map Scale: 1"=2000'

Contour Interval 20'

When elevation is shown hereon it is the ground elevation of the location stake. Review this plat and inform us immediately of any possible discrepancy.

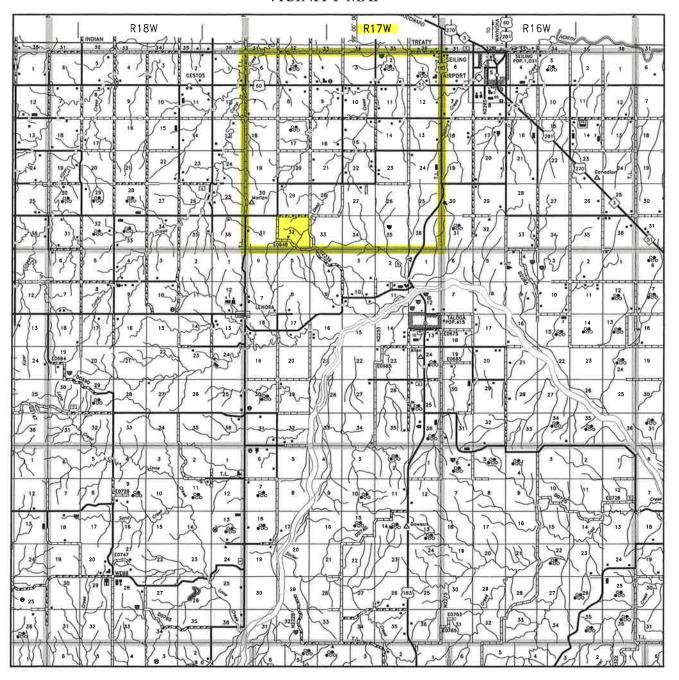


LAND SURVEYORS OF OKLAHOMA

# TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry 13800 Wireless Way, Oklahoma City, OK 73134 www.topographic.com Telephone Numbers: Local (405) 843-4847 Toll Free (800) 654-3219

## VICINITY MAP



Scale: 1'' = 3 Miles

0GR46 0-N-5 57. 1958

Sec32	Twp	19N <b>Rn</b> g	s17W	IM
County	DEWEY	State_	OK	_
Operator	TAPSTONE	ENERGY		



