API NUMBER: 043 23639

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: 06/26/2018
Expiration Date: 12/26/2018

PERMIT TO DRILL

WELL LOCATION:	Sec:	32	Twp:	19N	Rge:	17V	/	County:	DEWI	ΕY		
SPOT LOCATION:	NE	NE	N۷	N	NW		FEET FROM QUA	RTER:	FROM	NORTH	FROM	WEST
							SECTION LINES:			265		1180

Well will be 265 feet from nearest unit or lease boundary.

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

Well No: 2H

TAPSTONE ENERGY LLC 100 E MAIN ST

Lease Name: DONELL 29/20-19-17

OKLAHOMA CITY, OK 73104-2509

BONNIE JOAN THAXTON
P. O. BOX 131

D. One time land application -- (REQUIRES PERMIT)

H. SEE MEMO

ARDMORE OK 73402

Special Orders:

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

	Name	Depth	Name	Depth	
1	MISSISSIPPIAN	11400	6		
2			7		
3			8		
4			9		
5			10		
Spacing Orders:	132649	Location Exception Orders: 67921	6	Increased Density Orders:	
	647686	· 			

Pending CD Numbers: 201803835

201803833 201803834

Total Depth: 21500 Ground Elevation: 1960 Surface Casing: 470 Depth to base of Treatable Water-Bearing FM: 320

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: CPit Location is BED AQUIFER

Pit Location Formation: RUSH SPRINGS

PERMIT NO: 18-34677

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** NW Spot Location of End Point: NW NW NF Feet From: NORTH 1/4 Section Line: 195 WEST Feet From: 1/4 Section Line: 1350

Depth of Deviation: 10278 Radius of Turn: 750

Direction: 2

Total Length: 10044

Measured Total Depth: 21500

True Vertical Depth: 11400

End Point Location from Lease,
Unit, or Property Line: 195

INTERMEDIATE CASING

Notes:

Category Description

HYDRAULIC FRACTURING 6/8/2018 - G58 - 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

 $\ \, \text{HYDRAULIC FRACTURING OPERATIONS, USING THE FOLLOWING LINK: FRACFOCUS.ORG }$

6/8/2018 - G58 - 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

LOCATION EXCEPTION - 679216 6/8/2018 - G58 - (I.O.) 29 & 20-19N-17W

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

COMPL. INT. (29-19N-17W) NCT 165' FSL, NCT 0' FNL, NCT 660' FWL COMPL. INT. (20-19N-17W) NCT 0' FSL, NCT 165' FNL, NCT 660' FWL

TAPSTONE ENERGY, LLC

6/13/2018

MEMO 6/8/2018 - G58 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

Category Description

PENDING CD - 201803833 6/8/2018 - G58 - 20-19N-17W

X132649 MRMOG

1 WELL

NO OP. NAMED

PENDING CD - 201803834 6/8/2018 - G58 - 29-19N-17W

X647686 MSSP

1 WELL

NO OP. NAMED

REC 6/5/2018 (DENTON)

REC 6/5/2018 (DENTON)

PENDING CD - 201803835 6/8/2018 - G58 - (I.O.) 29 & 20-19N-17W

EST MULTIUNIT HORIZONTAL WELL X647686 MSSP (29-19N-17W) X132649 MRMOG (20-19N-17W)

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

REC 6/12/2018 (FOREMAN)

SPACING - 132649 6/8/2018 - G58 - (640) 20-19N-17W

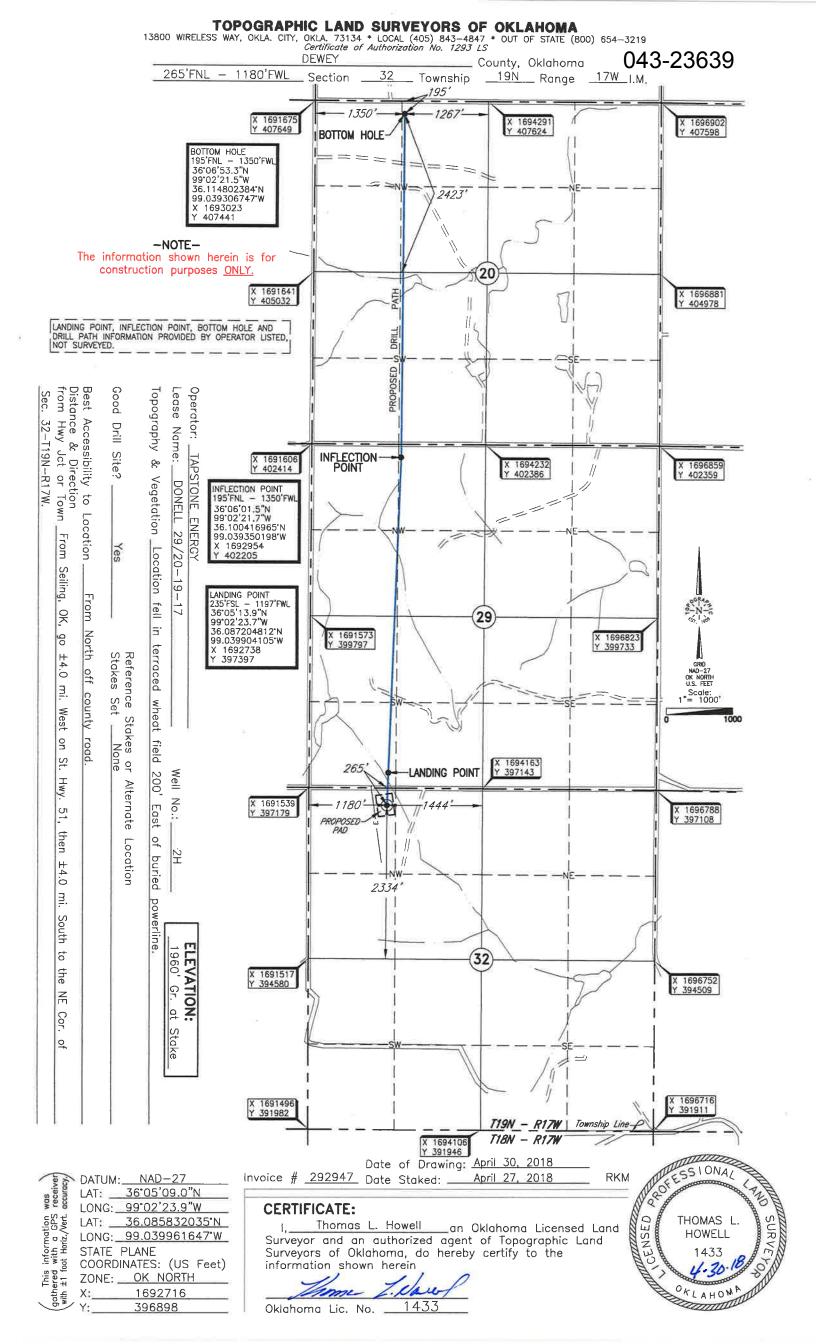
EXT 126186 MRMOG

SPACING - 647686 6/8/2018 - 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 __19N __ Range 265'FNL - 1180'FWL 17W I.M. Section Township Range 1350 X 169696 Y 407598 1696902 BOTTOM HOLE BOTTOM HOLE 195'FNL - 1350'FWL 36'06'53.3"N 99'02'21.5"W 36.114802384'N 99.039306747'W X 1693023 Y 407441 -NOTE-The information shown herein is for construction purposes ONLY. X 1691641 Y 405032 X 1696881 Y 404978 LANDING POINT, INFLECTION POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED. Best Accessibility to Lo Distance & Direction from Hwy Jct or Town Operator: Lease Name: Topography & Vegetation 32-T19N-R17W. X 16916 Y 402414 TAPSTONE INFLECTION POINT 195'FNL - 1350'F 36'06'01.5"N 99'02'21.7"W 36.100416965'N 99.039350198'W X 1692954 Y 402205 Location ENERG) From 29 Location Yes /20-19-LANDING POINT 235'FSL - 1197'FWL 36'05'13.9"N 99'02'23.7'W 36.087204812'N 99.039904105'W X 1692738 Y 397397 From fel 웃, 29 ⊒. North go terraced ±4.0 Reference off county ∄. wheat West Stakes or None road. 9 field St LANDING POINT 200 Well Hwy Alternate No. East 5 then <u></u> Location buried ±4.0 ∄. powerline South **ELEVATION:** ð 960' Gr. at the X 1696752 Y 394509 K Cor 0 1691496 391982 Y 391946 Date of Drawing: April 30, ESSIONAL POF Invoice # 292947 Date Staked: April 27, 2018 NAD-27 DATUM:_ 36°05'09.0"N LONG: 99°02'23.9"W **CERTIFICATE:** THOMAS L 36.085832035*N LAT:

LAT: 36°05'09.0"N
LONG: 99°02'23.9"W
LONG: 99°02'23.9"W
LAT: 36.085832035*N
LONG: 99.039961647*W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1692716
Y: 396898

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

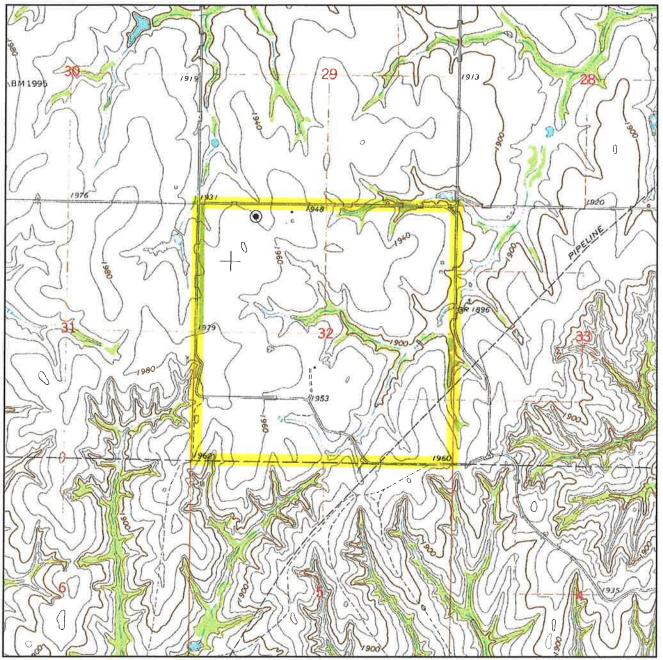
Oklahoma Lic. No. 1433

THOMAS L. HOWELL 1433 18 OF LAHOMA

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 265'FNL - 1180'FWL

Lease DONELL 29/20-19-17 2H

Elevation 1960' 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.



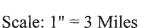
LAND SURVEYORS OF OKLAHOMA

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VICINITY MAP





Sec32	Twp	19N	_ Rng	17W	IM
County	DEWEY	_	State	OK	
Operator	TAPSTONE	ENERG	GY		



