API NUMBER: 043 23592

Oil & Gas

Horizontal Hole

PIT 1 INFORMATION

Type of Mud System: WATER BASED

Within 1 mile of municipal water well? N

Chlorides Max: 8000 Average: 5000

Liner not required for Category: C Pit Location is BED AQUIFER Pit Location Formation: RUSH SPRINGS

Wellhead Protection Area?

Category of Pit: C

Type of Pit System: CLOSED Closed System Means Steel Pits

Is depth to top of ground water greater than 10ft below base of pit? Y

is located in a Hydrologically Sensitive Area.

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

02/01/2018 Approval Date: Expiration Date: 08/01/2018

PERMIT TO DRILL

Lease Name: EARL 30-19-17 Operator TAPSTONE ENERGY LLC Name: TAPSTONE ENERGY LLC 100 E MAIN ST		ORTH FROM I	EAST	
Name: TAPSTONE ENERGY LLC 100 E MAIN ST		30 9 !H	000 We	ell will be 230 feet from nearest unit or lease boundary.
100 E MAIN ST		Telephone: 405	7021600	OTC/OCC Number: 23467 0
OKLAHOMA CITY, OK 73104-250	99		CAROL SCHO P.O. BOX 174 TALOGA	OMP & LOLA SCHOMP OK 73667
Formation(s) (Permit Valid for Listed Formations On Name Dep			Name	Depth
1 MISSISSIPIAN 1215 2 3	50	6 7 8		
4 5		9		
Pending CD Numbers: 201708754 201708753	tion Exception O	rders:		Increased Density Orders: Special Orders:
Total Depth: 17100 Ground Elevation: 1965	Surface Ca	asing: 470		Depth to base of Treatable Water-Bearing FM: 320
Under Federal Jurisdiction: No	Fresh Water S	upply Well Drilled:	No	Surface Water used to Drill: Yes

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

H. SEE MEMO

PERMIT NO: 18-33860

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

Depth of Deviation: 11677 Radius of Turn: 400

Direction: 3

Total Length: 4795

Measured Total Depth: 17100

True Vertical Depth: 12150

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

Notes:

Category Description

HYDRAULIC FRACTURING 1/29/2018 - 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 1/29/2018 - 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 1/29/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201708753 2/1/2018 - G58 - (I.O.) 30-19N-17W

X660424 MSSP 1 WELL

NO OP. NAMED

REC 1/29/2018 (DENTON)

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 23592 EARL 30-19-17 2H

Category Description

PENDING CD - 201708754 2/1/2018 - G58 - (I.O.) 30-19N-17W

X660424 MSSP

COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FEL

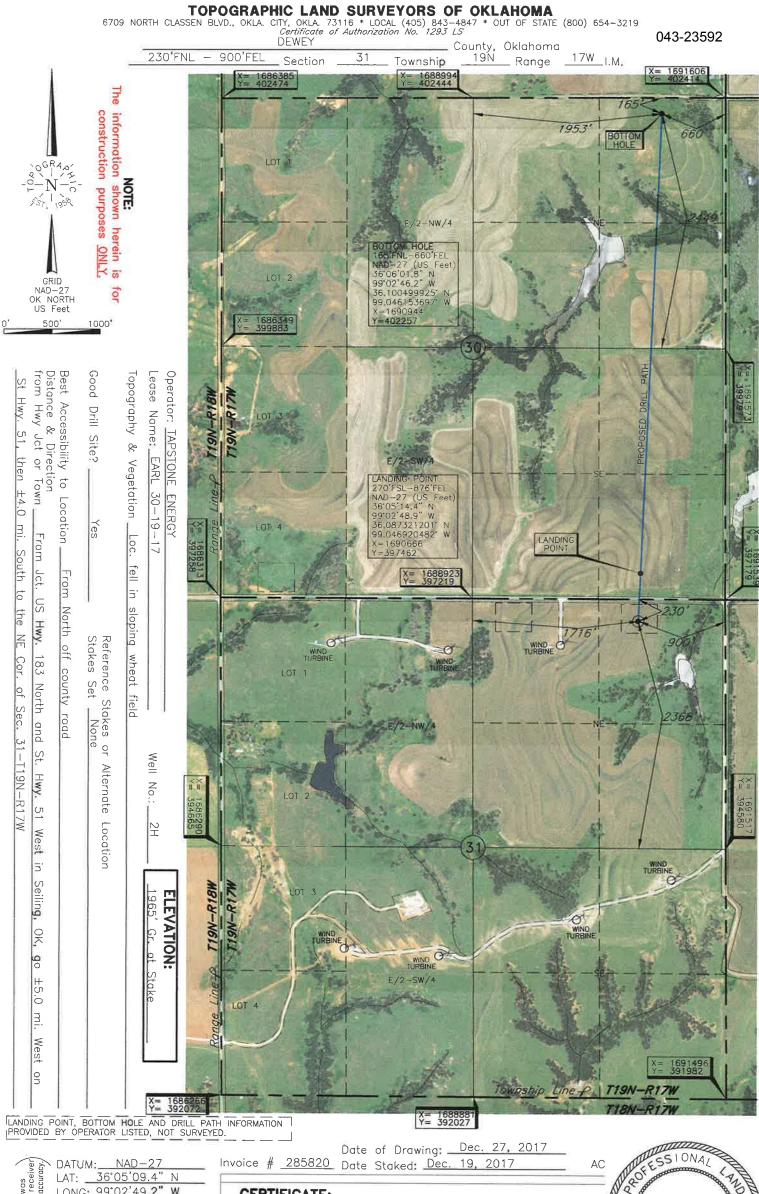
NO OP. NAMED

REC 1/29/2018 (DENTON)

SPACING - 660424 2/1/2018 - G58 - (640)(HOR) 30-19N-17W

VAC 54296 CRLM VAC 217107 MSSLM

EXT 647686 MSSP POE TO BHL NCT 660' FB



LONG: 99°02'49.2" W

LAT: 36.085949159° N LONG: 99.047000297° W

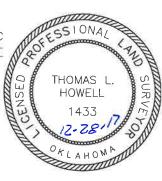
STATE PLANE COORDINATES: ZONE: OK NORTH

1690637 396963

CERTIFICATE:

I, Inomas 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.



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

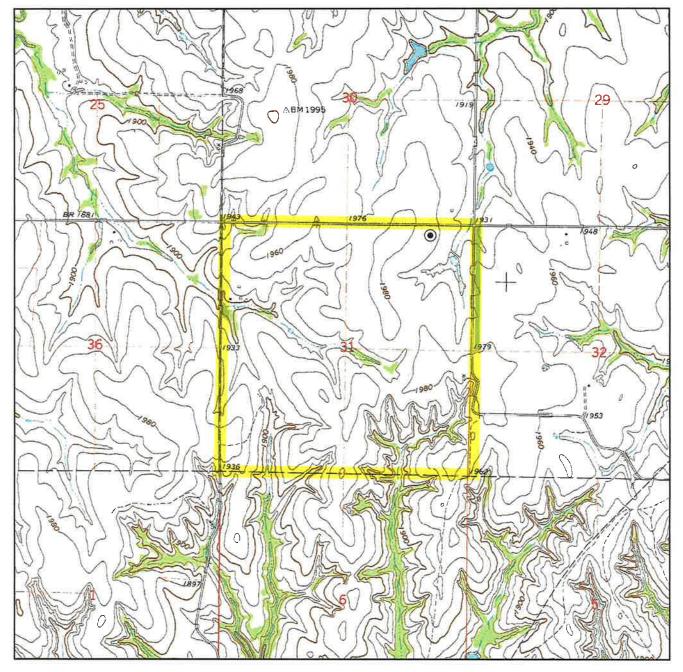
DEWEY

County Oklahoma County, Oklahoma 19N Range <u>17W</u> I.M. 230'FNL 900'FEL Section Township _ Range X= 1691606 Y= 402414 X= 168899 Y= 402444 X= 1686385 Y= 402474 he 165 NOTE: information shown herein construction purposes 1953 660 0GR40/ 30-N-0 557-1958 LOT 1 449 E/2-NW/4 BOTTOM HOLE 165'FNL-660'FEL NAD-27 (US Feet) 36'06'01.8" N 99'02'46.2" W 36.100499925' N 99.046153697' W X=1690944 Y=402257 LOT 2 GRID NAD-27 OK NORTH US Feet ₫ X= 1686349 Y= 399883 Y=402257 500' 1000' PATH Best Acci Distance Good Operator: TAPSTONE ENERGY Lease Name: from Topography & Vegetation St Hwy. 719N-R18W Hwy Accessibility to nce & Direction Drill LOT 3 PROPOSED & Direction Jct or Tow Site? EARL then ±4.0 mi. E/2-SW/4 LANDING POINT 270'FSL-876'FEL NAD-27 (US Feet) 36'05'14.4" N 99'02'48.9" W 36.087321201' N 99.046920482' W X=1690666 Y=397462 Town 30-1 Location 19-17 LOT 4 Yes From Loc. LANDING POINT South to fe X= 1688923 Y= 397219 Jct. From |₹, S >230 sloping North the NE Reference S Stakes Set WIND O 900 0 off 70 wheat Cor. 183 WIND TURBINE county road LOT 1 North field Stakes o Sec. 2368 and E/2-NW/431-T19N-R17W 9 St. WeⅡ Alternate Hwy No:: ĭ× LOT 2 169151 394580 1686290 394665 <u>თ</u> Location 24 West 31 Ξ. Seiling, 19N-R17N 719N-R18N LOT 3 **ELEVATION:** 965' Gr. at Stake 욧 WIND O TURBINE go E/2-SW/4 ±5.0 LOT 4 Range ∄. West 1691496 391982 on N T19N-R17W Township Line-P X= 1686266 Y= 392072 T18N-R17W X= 1688881 Y= 392027 LANDING POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED. PACESSIONAL PACES Date of Drawing: <u>Dec. 27,</u>
Invoice # <u>285820</u> Date Staked: <u>Dec. 19, 2017</u> 2017 DATUM: <u>NAD-27</u> LAT: <u>36°05'09.4" N</u> receiver accuracy. AC LONG: 99'02'49.2" **CERTIFICATE:** is information was with a GPS refoot Horiz./Vert. a 36.085949159° N THOMAS I Thomas L. Howell an Oklahoma Licensed Land HOWELL LONG: 99.047000297* W Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the STATE PLANE 1433 COORDINATES: (US Feet) information shown herein This gathered with ±1 fo ZONE: OK NORTH OKLAHOMA 1690637 396963 Oklahoma Lic. No. .

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry 6709 North Classen Blvd. Oklahoma City, OK 73116 www.topographic.com Telephone Numbers: Local (405) 843-4847 Toll Free (800) 654-3219

LOCATION & ELEVATION VERIFICATION MAP



Sec. 31 Twp. 19N Rng. 17W IM

County DEWEY State OK

Operator TAPSTONE ENERGY

Description 230'FNL - 900'FEL

Lease EARL 30-19-17 2H

Elevation 1965' Gr. at Stake
U.S.G.S. Topographic Quadrangle Map LENORA, OK

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.

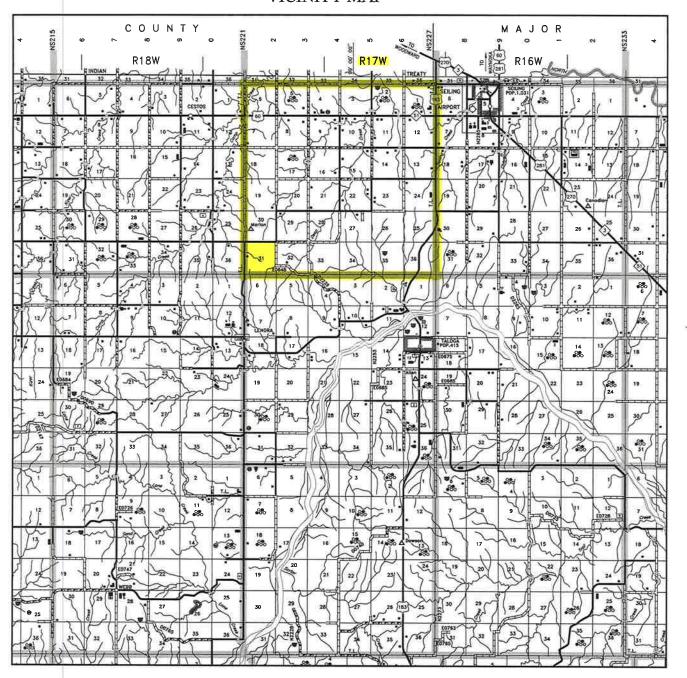


LAND SURVEYORS OF OKLAHOMA

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VICINITY MAP



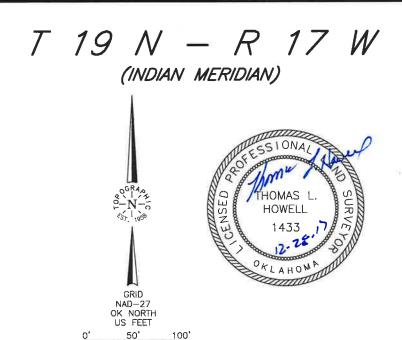
Scale: 1'' = 3 Miles

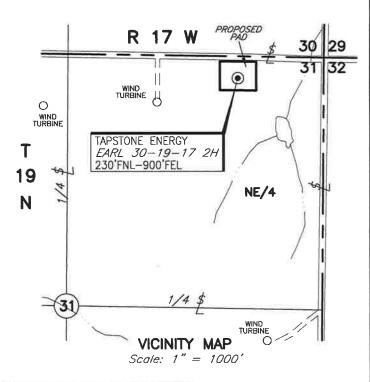
OGRAD'

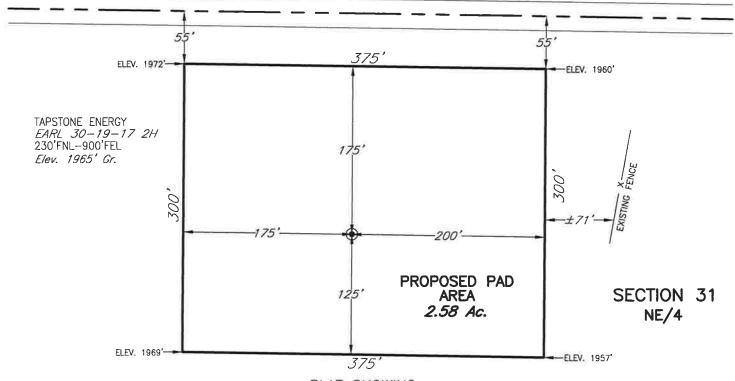
557 1959

Sec	31	Twp	19N	Rng	17W	IM
County_		DEWEY		State	OK	
Operato	r	TAPSTONE	ENER	GY		









PLAT SHOWING PROPOSED PAD AREA IN THE NE/4 OF SECTION 31, T19N - R17W. DEWEY COUNTY, OKLAHOMA

NOTE:

The information shown herein is for construction purposes <u>ONLY.</u>

This plat was prepared exclusively for

TAPSTONE ENERGY

d may not be relied upon by any other entity without the written consent of Topographic Land Surveyors of Oklahoma

SURVEYING AND MAPPING BY
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

6709 N. Classen, Okla. City, OK. 73116 (405) 843-4847 Certificate of Authorization No. 1293 LS

ı	DATE: 12/27/17
٥.	INVOICE NO.: 285820
	FILE NAME: L4140A.DWG
	DWG NO.: 120010-L4-140-A
	SHEET 1 OF 1

1"=100'

SCALE:

NO.	REVISION		DATE	BY	and
SUF	RV. BY:	ES	12/19	/17	Γ
DRAWN BY: AC					
APF	PROVED BY:		TH		