API NUMBER: 043 23638

Oil & Gas

Horizontal Hole

Pit Location Formation:

RUSH SPRINGS

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

Approval Date: 06/25/2018
Expiration Date: 12/25/2018

PERMIT TO DRILL

WELL LOCATION: Sec: 31 Twp: 19N Rge: 17W	County: DEWEY					
SPOT LOCATION: C NW NW FEET FROM Q	11.0 1101	RTH FROM	WEST			
SECTION LINE	660	1	660			
Lease Name: EARL 30-19-17	Well No: 3H			Well will be 660	feet from nearest	unit or lease boundary.
Operator TAPSTONE ENERGY LLC Name:		Telephone: 4	057021600	OTC/0	OCC Number:	23467 0
TAPSTONE ENERGY LLC 100 E MAIN ST	500		CAROL DO	N SCHOMP & LO	DLA F. SCHON	ИР
OKLAHOMA CITY, OK 73104-29	509		TALOGA		OK 73	667
1 MISSISSIPPIAN 11 2 3 4 5	epth 1950 acation Exception Orde	8	Name 6 7 8 9 10	lagraged	Depth Depth	
Spacing Orders.		515.	Increased Density Orders:			
Pending CD Numbers: 201804092 201804091				Special Or	ders:	
Total Depth: 17300 Ground Elevation: 1961	Surface Cas	sing: 450		Depth to base of	of Treatable Water-I	Bearing FM: 300
Under Federal Jurisdiction: No	Fresh Water Sup	pply Well Drilled	I: No		Surface Water use	ed to Drill: Yes
PIT 1 INFORMATION		A	oproved Method for disp	posal of Drilling Fluids:		
Type of Pit System: CLOSED Closed System Means Steel Pits						
Type of Mud System: WATER BASED Chlorides Max: 8000 Average: 5000		D. One time land application (H. SEE MEMO		ation (REQUIRES P	ERMIT)	PERMIT NO: 18-34712
Is depth to top of ground water greater than 10ft below base of pit? Within 1 mile of municipal water well? N Wellhead Protection Area? N	Y	_				
Pit is located in a Hydrologically Sensitive Area.						
Category of Pit: C Liner not required for Category: C						
Pit Location is BED AQUIFER						

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** NW Spot Location of End Point: N2 N2 NW Feet From: NORTH 1/4 Section Line: 165 Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 11340 Radius of Turn: 682

Direction: 1

Total Length: 4889

Measured Total Depth: 17300

True Vertical Depth: 11950

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

Notes:

Category Description

HYDRAULIC FRACTURING 6/13/2018 - 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 - 679456 6/25/2018 - G58 - 30-19N-17W

X660424 MSSP 2 WELLS

TAPSTONE ENERGY, LLC

6/21/2018

INTERMEDIATE CASING 6/13/2018 - 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

LOCATION EXCEPTION - 679411 6/25/2018 - G58 - (I.O.) 30-19N-17W

X660424 MSSP

COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 560' FWL

TAPSTONE ENERGY, LLC

6/20/2018

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 23638 EARL 30-19-17 3H

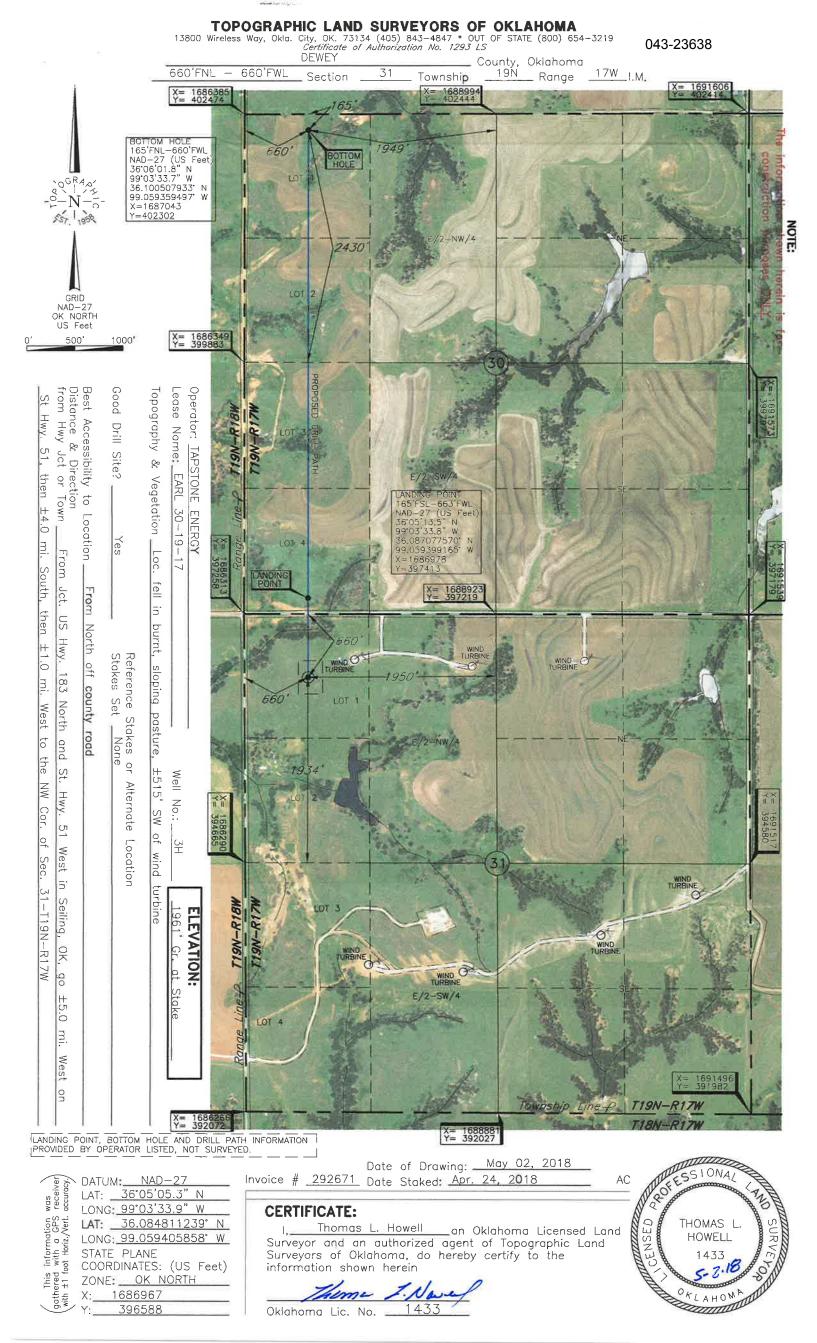
Category Description

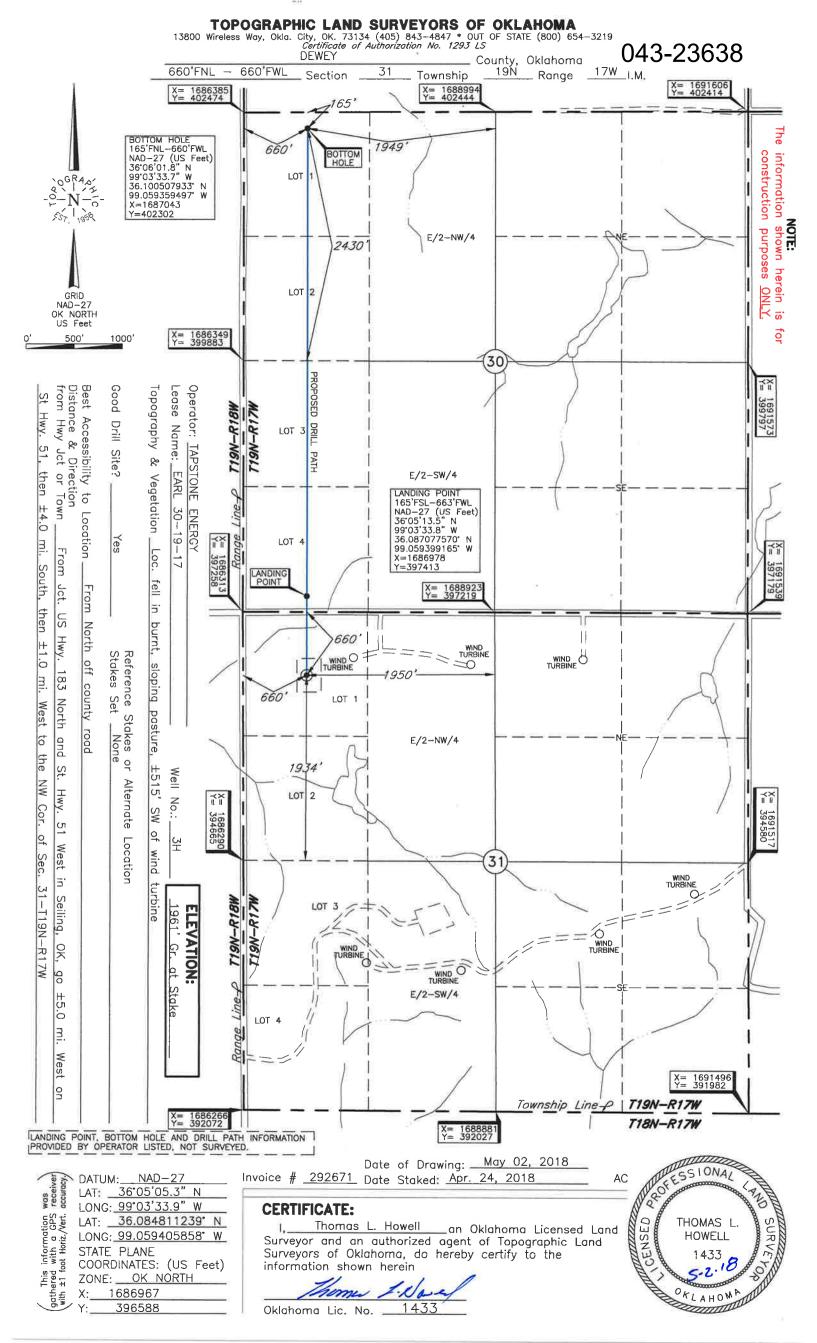
MEMO 6/13/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 660424 6/25/2018 - G58 - (640)(HOR) 30-19N-17W

VAC 54296 CRLM VAC 217107 MSSLM EXT 647686 MSSP POE TO BHL NCT 660' FB

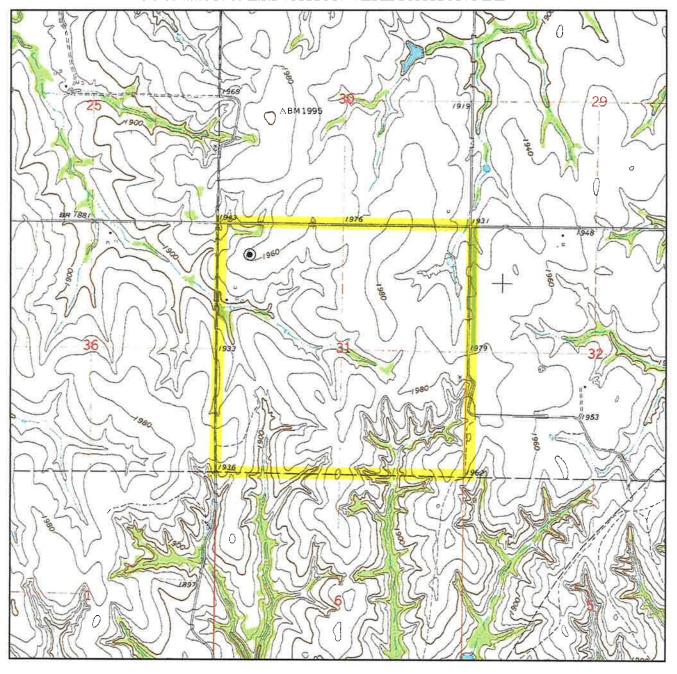




TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry 13800 Wireless Way, Okla. City, OK. 73134 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 660'FNL - 660'FWL

Lease EARL 30-19-17 3H

Elevation 1961' 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

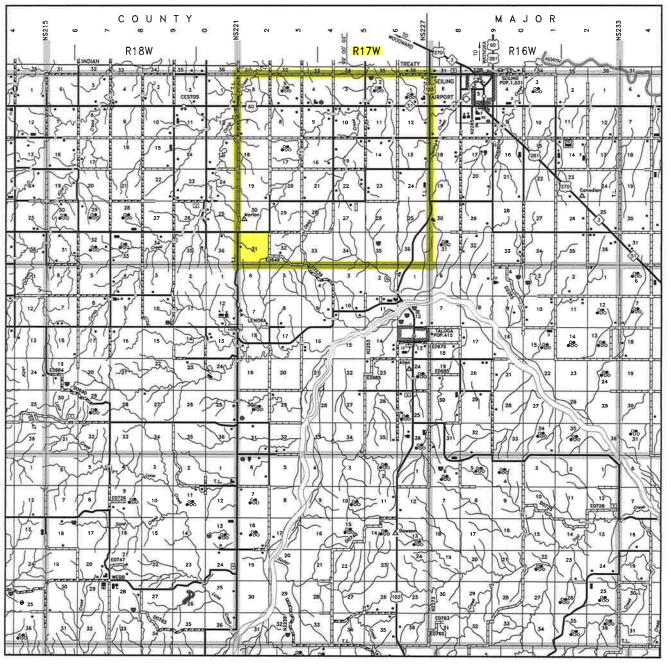
any possible discrepancy.



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VICINITY MAP



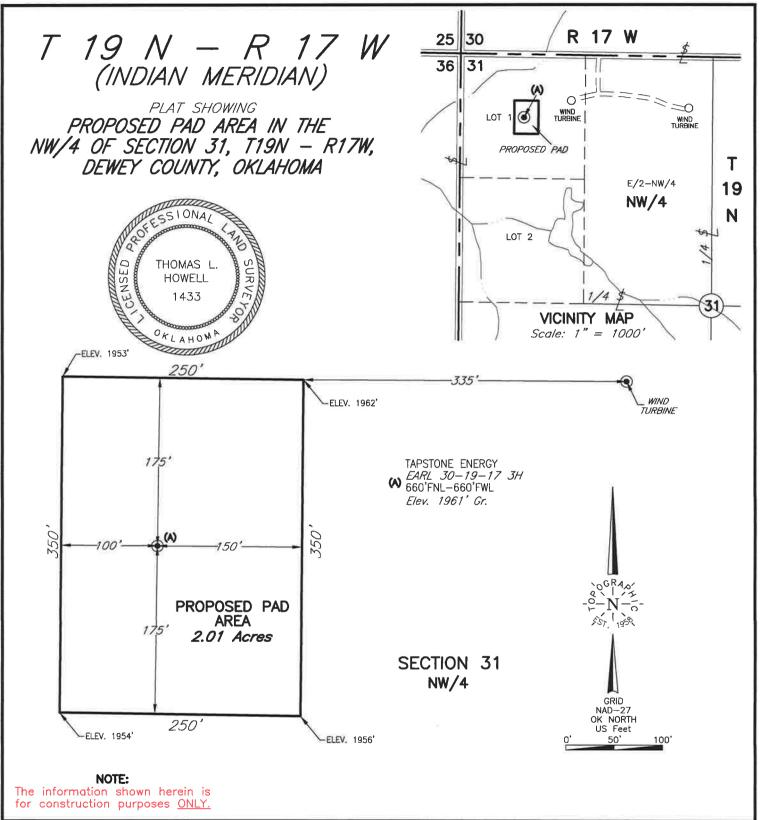
Scale: 1" = 3 Miles

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

 County
 DEWEY
 State
 OK

 Operator
 TAPSTONE ENERGY





NO.	REVISION		DATE	BY	
SURV. BY: ES 4/24/18					
DRAWN BY: AC					
APPROVED BY: TH					

TAPSTONE ENERGY

and 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
13800 Wireless Way, Okla. City, OK. 73134 (405) 843-4847
Certificate of Authorization No. 1293 LS

	SCALE: 1" = 100'	
	DATE: 5/02/18	
	INVOICE NO.: 29267	1
	FILE NAME: L2169A.DWC	}
	DWG NO.: 120010-L2-	169-A
ı	SHFFT 1 OF	1