API NUMBER: 043 23708 A

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: 08/14/2019
Expiration Date: 02/14/2021

PERMIT TO DRILL

WELL LOCATION: Sec: 25 Twp: 19N Rge: 14W County: DEWEY

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

SECTION LINES: 200 2055

Lease Name: W. POLLOCK FED 24/13-19-14 Well No: 2H Well will be 200 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

POLLOCK LAND AND CATTLE, LLC

P. O. BOX 667

CANTON OK 73724

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

Depth Name Depth MISSISSIPPIAN (LESS CHESTER) 1 9250 6 2 7 3 8 4 9 10 686480 Spacing Orders: Location Exception Orders: 694674 Increased Density Orders:

Pending CD Numbers: 201901585 Special Orders:

201807697

Total Depth: 20000 Ground Elevation: 1684 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 160

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

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

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 AP/TE DEPOSIT
Pit Location Formation: TERRACE

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36838

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 AP/TE DEPOSIT
Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec. 13 Twp 19N Rge 14W County **DEWEY** NW Spot Location of End Point: NW NF NW Feet From: NORTH 1/4 Section Line: 150 Feet From: WEST 1/4 Section Line: 880

Depth of Deviation: 9012 Radius of Turn: 477 Direction: 350

Total Length: 10238

Measured Total Depth: 20000

True Vertical Depth: 9458

End Point Location from Lease,
Unit, or Property Line: 150

Notes:

Category Description

DEEP SURFACE CASING 7/29/2019 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF

CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR

SURFACE CASING

HYDRAULIC FRACTURING 7/29/2019 - 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 7/29/2019 - 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 - 694674 8/12/2019 - GC0 - (I.O.) 13 & 24-19N-14W

X686480 MSNLC

COMPL. INT. (24-19N-14W) NCT 150' FSL, NCT 0' FNL, NCT 330' FWL COMPL. INT. (13-19N-14W) NCT 0' FSL, NCT 150' FNL, NCT 330' FWL

TAPSTONE ENERGY

4/15/2019

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 23708 W. POLLOCK FED 24/13-19-14 2H

Category Description

MEMO 7/29/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201807697 8/13/2019 - GCO - NPT PARAGRAPH #6B OF 686480 THAT STATED 640 ACRE HOR TO REFLECT

1280 ACRE HOR

PENDING CD - 201901585 8/12/2019 - GC0 - 13 & 24-19N-14W

X686480 MSNLC

3 WELLS

TAPSTONE ENERGY REC 4/02/2019 (MILLER)

SPACING - 686480 8/12/2019 - GC0 - (1280*)(HOR) 13 & 24-19N-14W

VAC #121423 MSSSD

EST MSNLC

COMPL. INT. NCT 660' FB

*NPT TO CORRECT TYPO OF (640) TO (1280) IN SPACING ORDER PER ATTORNEY FOR OP.

AND COPY HAS BEEN REVIEWED BY OCC

X 1806753 Y 412117 Operator: Distance & Direction Good Drill Site? Lease Name: W POLLOCK FED 24/13 from Hwy Jct or Town From the junction of St. Best Accessibility to Location Topography & Vegetation Loc. fell in wheat field, with East slope, ± 175 X 18120 Y 41201 West ±1 mile, then North ±3 miles to the Northwest corner of Section 25, TAPSTONE ENERGY | Landing Point, Battom Hole and Drill Path information | | <u>Provided by operator listed, NOT Surveyed.</u> Yes From North off county road 19-14 Reference Stakes or Alternate Location Stakes Set None Range Line P TION-RIAW Hwy 51 and the Dewey/Blaine TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA
13800 Wireless Way, Okla. City, OK. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
DEWEY Certificate of Authorization No. 1293 LS
County Oklahoma 200'FNL - 2055'FWL Well No.: HING South of E-W fence. 2H County line, T19-R14W. Section **ELEVATION:** 684' Gr. at Stake County Line DEWEY CO. 25 LONG: 98.38,49.8,W LAT: DATUM: NAD-27 COORDINATES: STATE PLANE ZONE: LONG: 98.647175924'W LAT: Township 1808809 36.100863811°N 36.06,03.1,N OK NORTH County, Oklahoma
19N Range (US Feet) FOR Range Revision X Date of Drawing: This information was gathered with a GPS receiver with ±1 foot Horiz./Vert. accuracy. 14W ... of Topographic Land Surveyors of Oklahoma, Oklahoma Lic. No. Licensed Land Surveyor and an authorized agent CERTIFICATE: Dan W. Rogers information shown herein. Jan. an Oklahoma July 18, 2019 25, 2019 do GRID NAD-27 OK NORTH US FEET CENSED 줖 155 10NAL ale: 1000' CKLAHONE ROGERS DAN W. 1000 1812040 SURVELOP

043-23708

X 1806753 Y 412117 Best Accessibility to Location Good Drill Site? Lease Name: Operator: Distance & Direction from Hwy Jct or Town Topography & Vegetation Loc. X 1809402 Y 412065 X 1812053 Y 412017 West ±1 mile, then North PROPOSED BOTTOM HOLE 150'FNL-880'FWL 36'07'47.7" N 98'39'05.0" W 36.129929746' N 98.651397035' W X=1807633 Y=411950 TAPSTONE ENERGY Landing Point, Bottom Hole and provided by operator listed, NOT W POLLOCK FED From Yes the fell in wheat 24/13 From miles to junction d Drill Path in Surveyed. 1 North off county road (1.3)X 1806765 Y 409492 of X 1812053 Y 409436 19 - 14the Northwest Reference Stakes or Stakes Set None field, information St -719N-R14W Hwy 719N-R13N with 5 PROPOSED DRILL PATH East slope, 13800 Wireless Way, Okla. City, OK. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

DEWEY Certificate of Authorization No. 1293 LS

County Oklahomo and corner Ve∷ the g No.: Alternate Location 2055'FWL ±175 TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA Dewey/Blaine Section South 2 25, 으 County T19-R14W. Section X 1806777 Y 406863 E-W X 1812045 Y 406802 X 1809411 Y 406833)] {{ || **ELEVATION:** line, 684' Gr. at Stake fence. County Line P 88 25 STATE PLANE LONG: 98.38,49.8,M COORDINATES: LONG: 98.647175924.W LAT: LAT: DATUM: ZONE: Township 1808809 36.06,03.1,N 36.100863811'N OK NORTH NAD-27 County, Oklahoma
19N Ranae SU) Feet) FOR ₋ Range CONSTRUCTION SHOWN HEREIN IS CONSTRUCTION PURPOSES ONLY

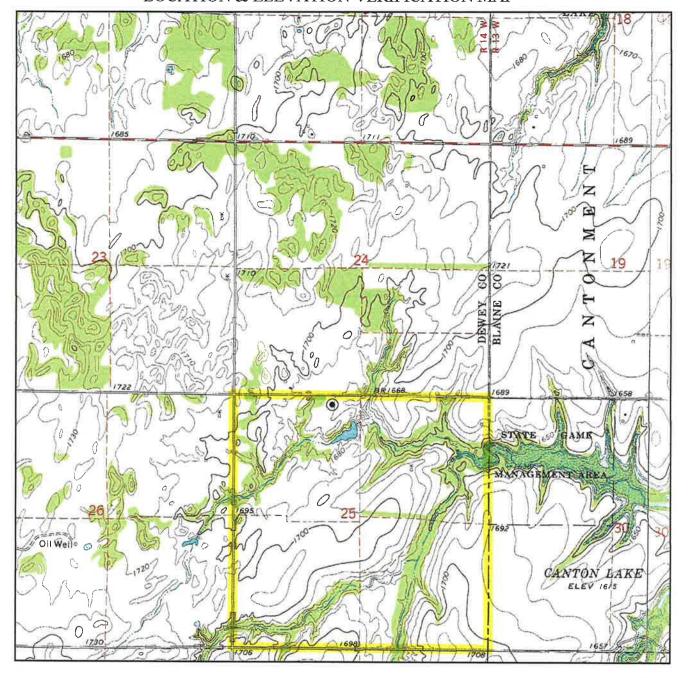
Revision X C Dat

Project # 123400A This information was gathered with a GPS receiver with ±1 foot Horiz./Vert. occuracy. 24 X 1806765 Y 404223 X 1812045 Y 404166 14W I.M. of CERTIFICATE: Oklahoma Lic. Licensed Land Surveyor and an authorized Topographic Land certify Dan W. LANDING POINT 150'FSL-1200'FWL 36'06'06.6" N 98'39'00.3" W 36.101835269' N 98.650073928' W X=1807956 Y=401720 Date of Drawing: ō No. Date Staked: Rogers Surveyors of Oklahoma, information shown herein. Jan. an Oklahoma >200 1809393 401555 July 2055 1812032 401526 1806755 401583 25 X <u>~</u> 584 2019 2019 agent do MACKESS I ONAL GRID NAD-27 OK NORTH US FEET CENSED 2426 Scale: = 1000 1" OKLAHOND 0 1000' 1806750 398955 X 1812040 Y 398905 SURVETOR 25

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. 25 Twp. 19N Rng. 14W I.M.

County DEWEY State OK

Operator TAPSTONE ENERGY

Description 200'FNL-2055'FWL

Lease W POLLOCK FED 24/13 - 19-14 2H

Elevation 1684' Gr. at Stake

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

Contour Interval _____10'

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.



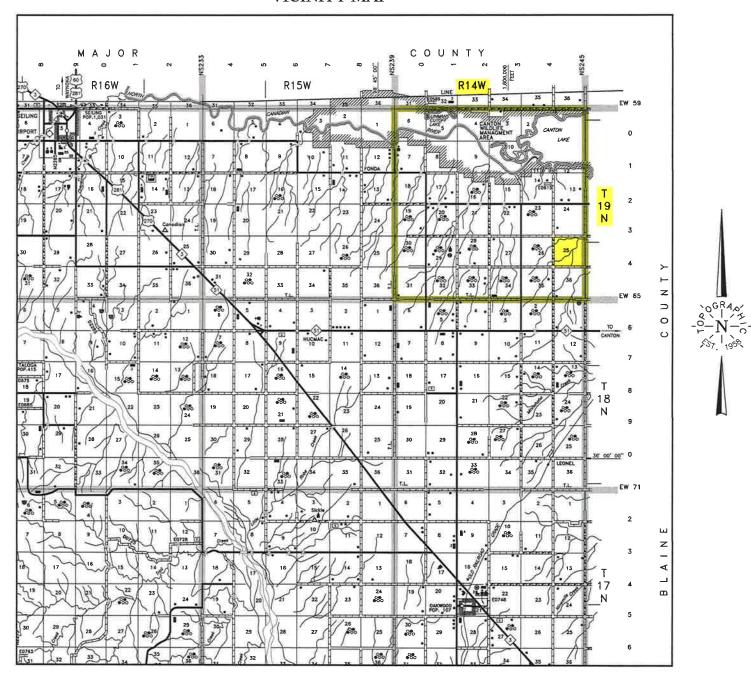
LAND SURVEYORS OF OKLAHOMA

Jan. 25, 2019

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

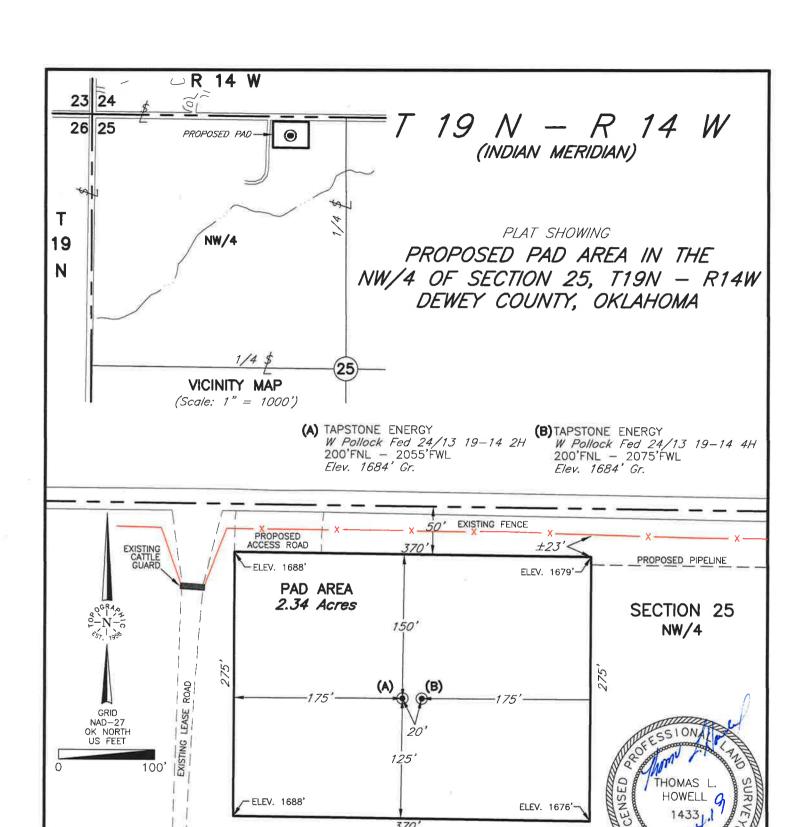
VICINITY MAP



Scale: 1'' = 3 Miles

Sec. 25	Twp19N	Rng	14W	.M.
County	DEWEY	State	OK	
Operator	TAPSTONE EN	ERGY		





	NOTE: le information si for constructio ONLY.	hown her		370	A.	S BOOK	TLAHOMA VIIIII	A SOUTH
				TAPSTONE ENERGY	SCALE: DATE:		1" = 10 $1-31-1$	
NO.	REVISION	DATE	BY	and may not be relied upon by any other entity without the written consent of Topographic Land Surveyors of Oklahoma.	PROJECT	NO.:	123400	
SUR	RV. BY: PJ	1-25-	-19	SURVEYING AND MAPPING BY	FILE N	AME:	L2220A.	DWG
DRA	WN BY:	KH		TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA 13800 Wireless Way, Okla. City, OK. 73134 (405) 843-4847	DRAWING	NO.:	120010-L	2-220-A
APP	ROVED BY:	TH		Certificate of Authorization No. 1293 LS	SHEET	1	OF	1