API NUMBER: 043 23690

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

Approval Date: 02/05/2019
Expiration Date: 08/05/2020

23467 0

Well will be 325 feet from nearest unit or lease boundary.

OTC/OCC Number:

Horizontal Hole Multi Unit Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec:	15 Twp: 19N Rge:	17W County:	DEV	/EY		
SPOT LOCATION: SE	SW SE SW	FEET FROM QUARTER:	FROM	SOUTH	FROM	WEST
		SECTION LINES:		325		1815
Lease Name: DEEN	We	II No:	1H			
Operator TA Name:	PSTONE ENERGY LLC			Teleph	none:	4057021600

DEENA LOUTHAN & RALPH LOUTHAN

RR 2, BOX 65

SEILING OK 73663

TAPSTONE ENERGY LLC

100 E MAIN ST

OKLAHOMA CITY, OK 73104-2509

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

	Name	Depth	Nai	me	Depth
1	MISSISSIPPIAN	10800	6		
2			7		
3			8		
4			9		
5			10		
Spacing Orders:	664843	Location Exception Orders:	690799	Increased Density Ord	ers: 690796
	686803				690797
	690798				

Pending CD Numbers: Special Orders:

Total Depth: 20600 Ground Elevation: 1828 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 210

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 D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-36047
Chlorides Max: 8000 Average: 5000 H. SEE MEMO

Milotides Max. 6000 Average. 5000

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

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

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 10 Twp 19N Rge 17W County DEWEY NW Spot Location of End Point: ΝE NE NF Feet From: NORTH 1/4 Section Line: 150 Feet From: WEST 1/4 Section Line: 2600

Depth of Deviation: 10210 Radius of Turn: 522

Direction: 5

Total Length: 9570

Measured Total Depth: 20600

True Vertical Depth: 10800

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

Notes:

Category Description

DEEP SURFACE CASING 1/23/2019 - 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 1/23/2019 - 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

INCREASED DENSITY - 690796 2/5/2019 - G56 - 15-19N-17W

X686803 MSSP

3 WELLS

TAPSTONE ENERGY, LLC

2/1/2019

INCREASED DENSITY - 690797 2/5/2019 - G56 - 10-19N-17W

X664843 MSSP

2 WELLS

TAPSTONE ENERGY, LLC

2/1/2019

Category Description

INTERMEDIATE CASING 1/23/2019 - 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 - 690799 2/5/2019 - G56 - (I.O.) 15 & 10-19N-17W

X686803 MSSP 15-19N-17W X664843 MSSP 10-19N-17W

COMPL INT (15-19N-17W) NCT 150' FSL, NCT 0' FNL, NCT 1320' FWL COMPL INT (10-19N-17W) NCT 0' FSL, NCT 150' FNL, NCT 1320' FWL

TAPSTONE ÈNERGY, LLC

2/1/2019

MEMO 1/23/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS (DEEP CREEK), PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 664843 2/5/2019 - G56 - (640)(HOR) 10-19N-17W

VAC 151390 MSCST EXT 661124 MSSP COMPL INT NLT 660' FB

2/5/2019 - G56 - (640)(HOR) 15-19N-17W **SPACING - 686803**

EXT OTHER VAC 85657 MSCST EXT 667857 MSSP COMPL INT NCT 660' FB

SPACING - 690798 2/5/2019 - G56 - (I.O.) 15 & 10-19N-17W

ESTABLISH MULIUNIT HORIZONTAL WELL

X686803 MSSP 15-19N-17W X664843 MSSP 10-19N-17W

50% 15-19N-17W 50% 10-19N-17W TAPSTONE ENERGY, LLC

2/1/2019

OGRADA O-N-O 1958

GRID NAD-27 OK NORTH US Feet

Best Accessibility to Location From SDistance & Direction From US Hw from Hwy Jet or Town From US Hw then ±2.0 mi. South to the SW Cor.

⊢wy. of Sec.

183

and

Hwy.

S

₹

90

±3.0

3.

West on

S Hwy. Ú

road St.

15-T19N-R17W

1000'

Site?

Yes

Reference Stakes Set

Stakes o

9

Alternate

Location

Set

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA 13800 Wireless Way, Okla. City, OK. 73134 (405) 843-4847 * OUT OF STATE (800) 654-3219 Certificate of Authorization No. 1293 LS DEWEY County, Oklahoma 325'FSL 1815'FWL _17W_I.M. __ Township 19N Range X 1707397 Y 418033 The construction ((60) (5) X 1702222 Y 418025 // 11 BOTTOM HOLE 150'FNL-2600'FWL NAD-27 (US Feet) 36'08'37.7" N 98'59'59.0" W 36.143815126 N 98.999731769' W X=1704820 Y=417879 X 1702188 Y 415393 (10) X 1707379 Y 415382 Topography & Vegetation DEENA 15/10-19-17 PATH PROPOSED DRILL Loc. fell X 1704758 Y 412751 X 1707361 Y 412731 X 1702156 Y 412771 on level 11 11 pad 11 11 11 We∥ 61 No. Ī X 1707329 Y 410101 15 DEEP X 1702129 Y 410136 CREEK LANDING POINT 823 FSL - 1854 FWL NAD - 27 (US Feet) 36 '07 '03.1" N 99 :00 '08.3" W 36.11751 4009 N 99.002296125 W X=1703964 Y=408313 **ELEVATION:** 2309 X 170210 Y 407501 X 1707296 Y 407470 325

LANDING POINT, BOTTOM HOLE AND DRILL PATH INFORMATION Revision X A PROVIDED BY OPERATOR LISTED, NOT SURVEYED. Date of Drawing: _ Invoice # 305355 Date Staked: Oct. 22,

DATUM: NAD-27 LAT: 36°06'58.1" N LONG: 99°00'08.7" W LAT: 36.116144719° N LONG: 99.002429583° W STATE PLANE COORDINATES: (US Feet) ZONE: _ OK NORTH

1703919

407815

CERTIFICATE:

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

Thomas Oklahoma Lic. No. _

