

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

API NUMBER: 153 23617

Approval Date: 04/04/2018

Expiration Date: 10/04/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 15 Twp: 20N Rge: 20W

County: WOODWARD

SPOT LOCATION: ☐ NE ☐ NE ☐ NE ☐ NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 230 2440

Lease Name: PURCELL 10-20-20

Well No: 1H

Well will be 230 feet from nearest unit or lease boundary.

Operator Name: TAPSTONE ENERGY LLC

Telephone: 4057021600

OTC/OCC Number: 23467 0

TAPSTONE ENERGY LLC
100 E MAIN ST
OKLAHOMA CITY, OK 73104-2509

JACK PURCELL
3319 HIDDEN RIDGE RD
WOODWARD OK 73801

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	11800	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201802280
201802282

Special Orders:

Total Depth: 16900

Ground Elevation: 2113

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 420

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: C

Pit Location is BED AQUIFER

Pit Location Formation: OGALLALA

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-34210
H. SEE MEMO

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.

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: OGALLALA

HORIZONTAL HOLE 1

Sec 10 Twp 20N Rge 20W County WOODWARD

Spot Location of End Point: NE NE NE NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 2600

Depth of Deviation: 11204

Radius of Turn: 548

Direction: 3

Total Length: 4835

Measured Total Depth: 16900

True Vertical Depth: 11900

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

Notes:

Category

Description

DEEP SURFACE CASING

3/28/2018 - 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

3/28/2018 - 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

MEMO

3/28/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201802280

4/3/2018 - G58 - (E.O.) 10-20N-20W
VAC 99556 CRLM
VAC 149224 MISS
EXT 650533 MSSP
COMPL. INT. NLT 660' FB
REC 3/27/2018 (JACKSON)

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.

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153 23617 PURCELL 10-20-20 1H

Category	Description
PENDING CD - 201802282	4/3/2018 - G58 - (E.O.) 10-20N-20W X201802280 MSSP NCT 165' FNL, NCT 165' FSL, NCT 1000' FWL NO OP. NAMED REC 3/27/2018 (JACKSON)

This permit does not address the right of entry or settlement of surface damages.
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Office of the Conservation Division as to when Surface Casing will be run.

WOODWARD

County, Oklahoma

230'FNL - 2440'FWL Section 15 Township 20N Range 20W I.M.

X=1613523
Y=451040

X=1608249
Y=451080

X=1610897
Y=451061

BOTTOM HOLE

BOTTOM HOLE
165'FNL-2600'FWL
NAD-27 (US Feet)
36°13'53.1" N
99°19'10.2" W
36.231427002° N
99.319492171° W
X=1610846
Y=450896

X=1608206
Y=448451

LANDING POINT
270'FSL-2454'FWL
NAD-27 (US Feet)
36°13'05.3" N
99°19'12.1" W
36.218138909° N
99.320033914° W
X=1610621
Y=446061

X=1613471
Y=448403

X=1613419
Y=445754

X=1608162
Y=445824

X=1610790
Y=445789

LANDING POINT

X=1608111
Y=443180

X=1613399
Y=443132

X=1610729
Y=440536

X=1613379
Y=440504

NOTE:
The information shown herein is for
construction purposes ONLY.



GRID
NAD-27
OK NORTH
US Feet
0' 500' 1000'

Operator: TAPSTONE ENERGY
Lease Name: PURCELL 10-20-20
Topography & Vegetation: Loc. fell in rolling rough sandy pasture
Good Drill Site? Yes
Reference Stakes or Alternate Location
Stakes Set None
Best Accessibility to Location: From North off county road
Distance & Direction: From Sharon, OK, go ±3.8 mi. South on St. Hwy. 34, then ±1.0 mi. East to the NE Cor. of Sec. 15-T20N-R20W

ELEVATION:
2113' Gr. at Stake

LANDING POINT, BOTTOM HOLE AND DRILL PATH INFORMATION
PROVIDED BY OPERATOR LISTED, NOT SURVEYED.

Revision ☒ A

Date of Drawing: Mar. 19, 2018

Invoice # 290192

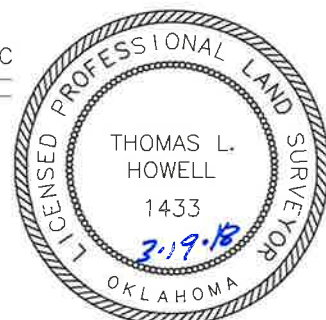
Date Staked: Mar. 14, 2018

AC

CERTIFICATE:

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

Thomas L. Howell
Oklahoma Lic. No. 1433



DATUM: NAD-27
LAT: 36°13'00.4"N
LONG: 99°19'12.3"W
LAT: 36.216766116° N
LONG: 99.320089871° W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1610597
Y: 445562

This information was gathered with a GPS receiver with a horizontal accuracy of 1 ft or better.

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

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190'

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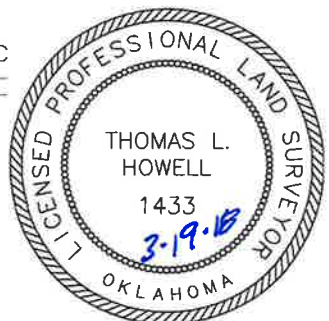
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Surveyors of Oklahoma, do hereby certify to the
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Thomas L. Howell
Oklahoma Lic. No. 1433

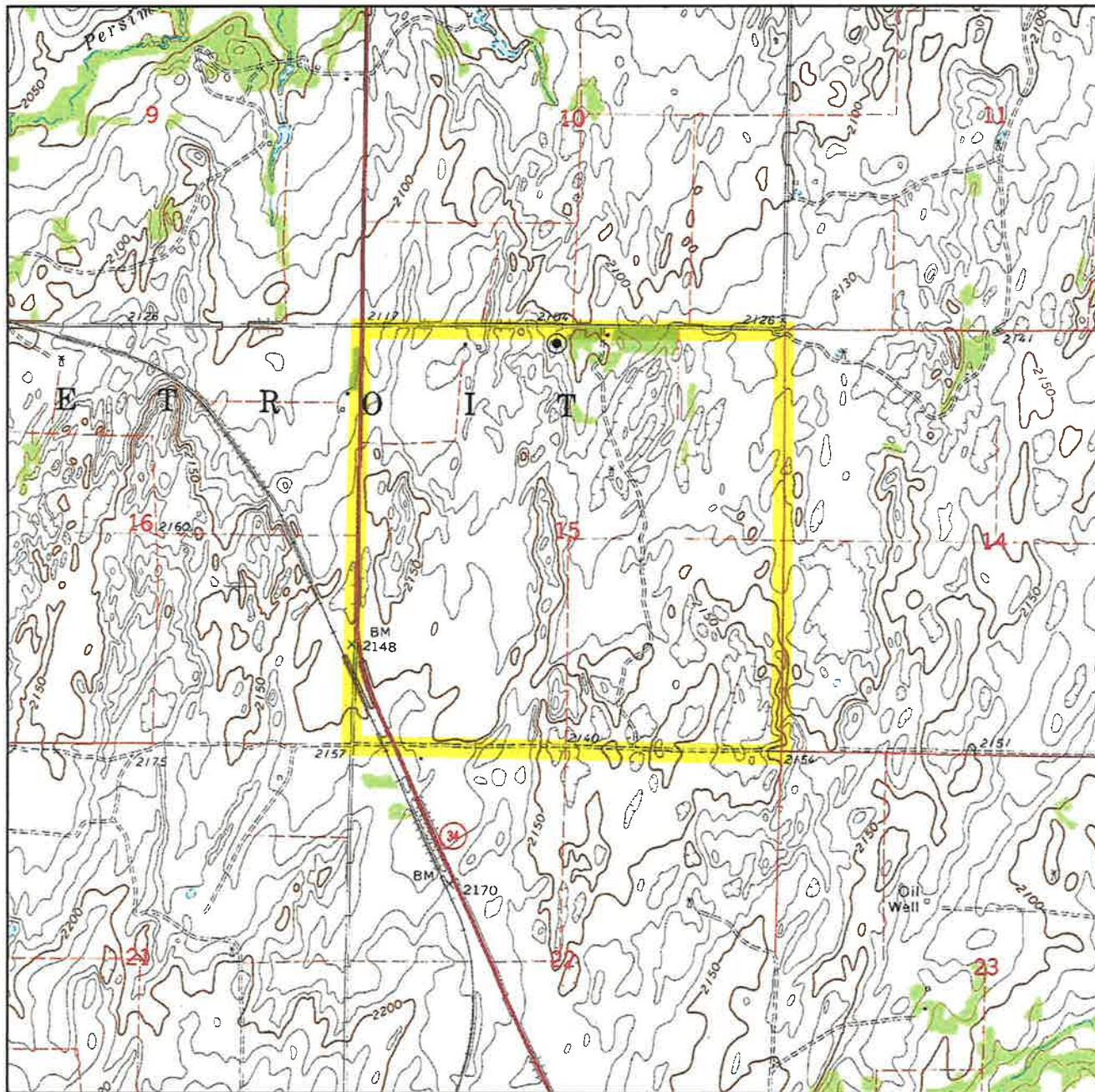


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TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

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. 15 Twp. 20N Rng. 20W IM

County WOODWARD State OK

Operator TAPSTONE ENERGY

Description 230'FNL - 2440'FWL

Lease PURCELL 10-20-20 1H

Elevation 2113' Gr. at Stake

U.S.G.S. Topographic
Quadrangle Map VICI, OK

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.



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

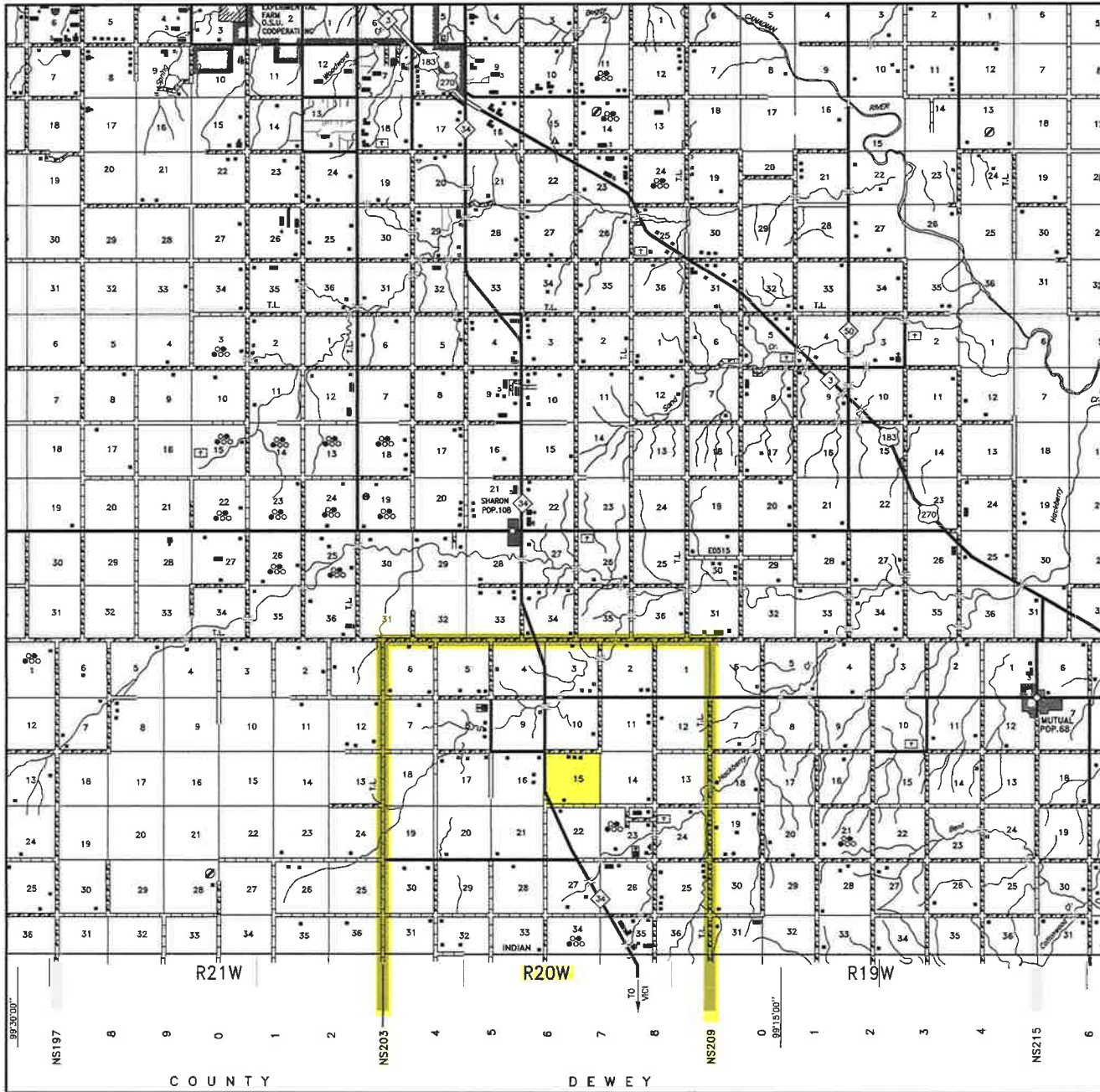
LAND SURVEYORS OF OKLAHOMA

Mar. 14, 2018

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VICINITY MAP



Scale: 1" = 3 Miles

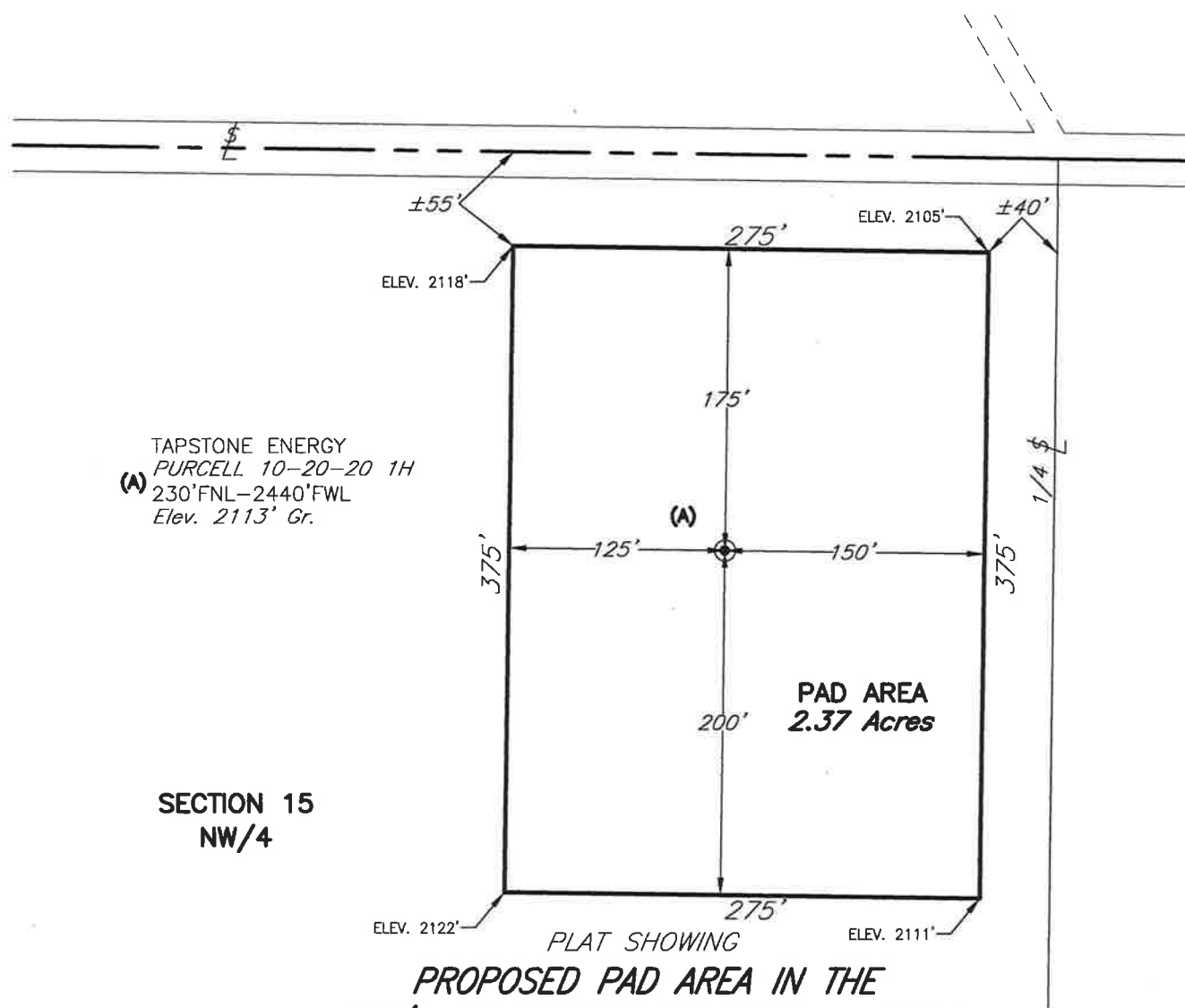
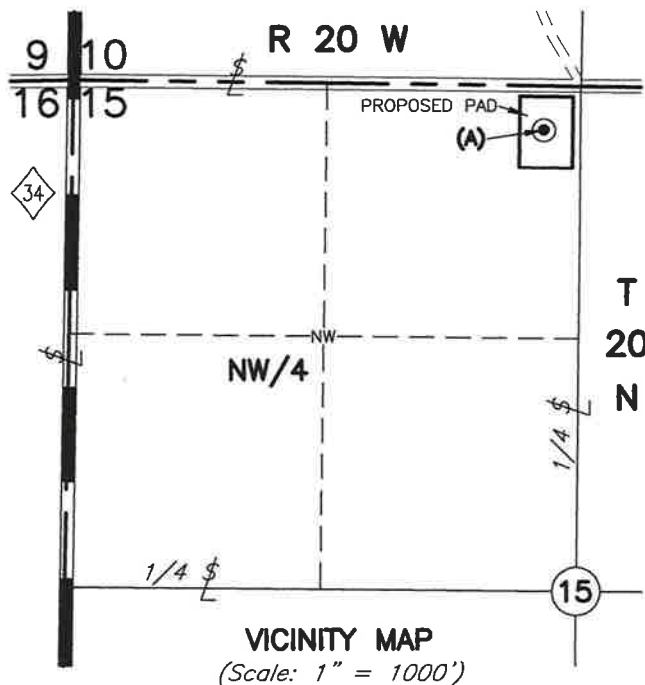
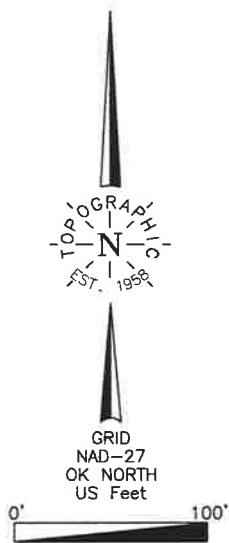
Sec. 15 Twp. 20N Rng. 20W IM

County WOODWARD State OK

Operator TAPSTONE ENERGY

 **TOPOGRAPHIC**
LOYALTY INNOVATION LEGACY
LAND SURVEYORS OF OKLAHOMA

T 20 N - R 20 W
(INDIAN MERIDIAN)



NOTE:

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PLAT SHOWING
PROPOSED PAD AREA IN THE
NW/4 OF SECTION 15, T20N - R20W
WOODWARD COUNTY, OKLAHOMA

1	LEASE NAME CHANGE	3/19/18	AC
NO.	REVISION	DATE	BY
SUR. BY:	DJ	03-14-18	
DRAWN BY:	AC		
APPROVED BY:	TH		

This plat was prepared exclusively for
TAPSTONE ENERGY
and may not be relied upon by any other entity without the written consent of Topographic Land Surveyors of Oklahoma
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:	03-16-18
INVOICE NO.:	290192
FILE NAME:	L2152B.DWG
DWG NO.:	120010-L2-152-B
SHEET	1 OF 1