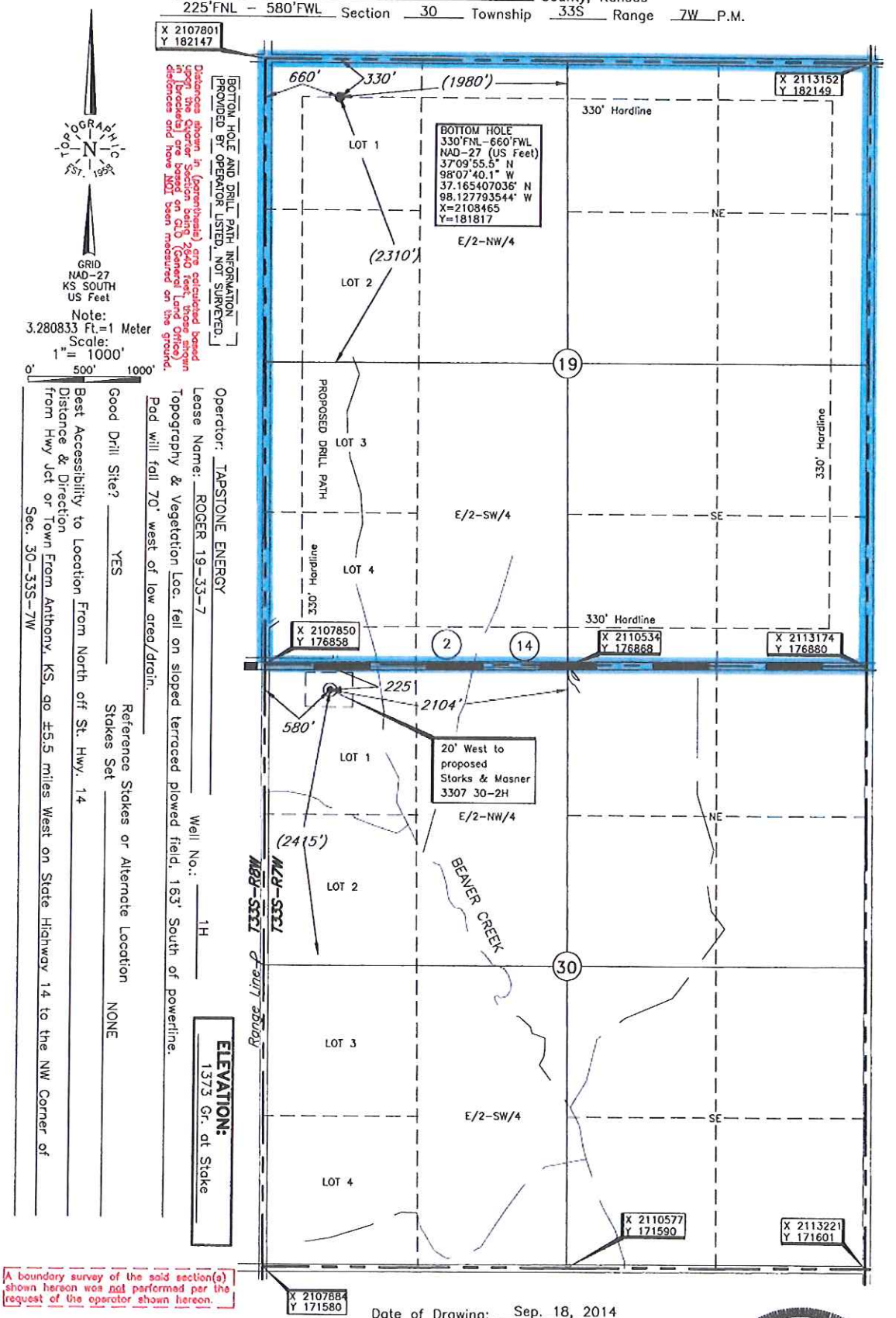
TOPOGRAPHIC LAND SURVEYORS

6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 • LOCAL (405) 843-4847 • OUT OF STATE (800) 654-3219

Certificate of Authorization No. LS-99, Exp. Dec. 31, 2015

HARPER County, Kansas

225'FNL - 580'FWL Section 30 Township 33S Range 7W P.M.



BOTTOM HOLE AND DRILL PATH INFORMATION [PROVIDED BY OPERATOR LISTED. NOT SURVEYED.]

Distances shown in (parenthesis) are calculated based upon the Quarter Section being 2640 feet, those shown in [brackets] are based on GLO (General Land Office) distances and have NOT been measured on the ground.

GRID NAD-27 KS SOUTH US Feet

Note: 3.280833 Ft.=1 Meter

Scale: 1"= 1000'

0' 500' 1000'

Operator: TAPSTONE ENERGY

Lease Name: ROGER 19-33-7 Well No.: 1H

Topography & Vegetation Loc. fell on sloped terraced plowed field, 163' South of powerline.

Pad will fall 70' west of low area/drain.

Good Drill Site? YES

Best Accessibility to Location From North off St. Hwy. 14

Distance & Direction from Hwy Jct or Town From Anthony, KS, go ±5.5 miles West on State Highway 14 to the NW Corner of Sec. 30-33S-7W

Reference Stakes or Alternate Location

Stakes Set NONE

ELEVATION: 1373 Gr. at Stake

A boundary survey of the said section(s) shown hereon was not performed per the request of the operator shown hereon.

This information was previously surveyed and prepared with a GPS a with an Horiz. accuracy of ± 1 foot

DATUM: NAD-27
LAT: 37°09'04.2"N
LONG: 98°07'40.7"W
LAT: 37.151174534°N
LONG: 98.127977643°W
STATE PLANE COORDINATES: (US Feet)
ZONE: KS SOUTH
X: 2108432
Y: 176635

Date of Drawing: Sep. 18, 2014

Invoice # 230463A Date Staked: Sep. 11, 2014 DP

CERTIFICATE:

I, Lee K. Goss a Kansas Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors, do hereby certify to the information shown herein

LEE K. GOSS LICENSED 06-18-2014 LS-1594 KANSAS LAND SURVEYOR