

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

API NUMBER: 043 23480

Approval Date: 09/20/2016
Expiration Date: 03/20/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 30 Twp: 19N Rge: 17W County: DEWEY
SPOT LOCATION: SW NE NW NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 360 1915

Lease Name: KROWS 19-19-17 Well No: 1H Well will be 360 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

RICKY JEWELS KROWS & KATHY A. KROWS
RT 2, BOX 72
SEILING OK 73663

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: 201603782
201603783

Special Orders:

Total Depth: 16900 Ground Elevation: 1963 **Surface Casing: 440** Depth to base of Treatable Water-Bearing FM: 290

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

PIT 1 INFORMATION

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: RUSH SPRINGS

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 16-31619
H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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.

HORIZONTAL HOLE 1

Sec 19 Twp 19N Rge 17W County DEWEY

Spot Location of End Point: N2 N2 NW NE

Feet From: NORTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 1980

Depth of Deviation: 11205

Radius of Turn: 681

Direction: 359

Total Length: 4625

Measured Total Depth: 16900

True Vertical Depth: 11800

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

Notes:

Category

Description

HYDRAULIC FRACTURING

9/19/2016 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK [HTTP://FRACFOCUS.ORG/](http://fracfocus.org/) WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE.

INTERMEDIATE CASING

9/19/2016 - 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

PENDING CD - 201603782

9/19/2016 - G64 - (640)(HOR) 19-19N-17W
VAC 78413 MCSTR
EXT 647686 MSSP
POE TO BHL NCT 660' FB
REC. 9-19-2016 (DECKER)

PENDING CD - 201603783

9/19/2016 - G64 - (E.O.) 19-19N-17W
X201603782 MSSP
COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 560' FEL
NO OP. NAMED
REC. 9-19-2016 (DECKER)

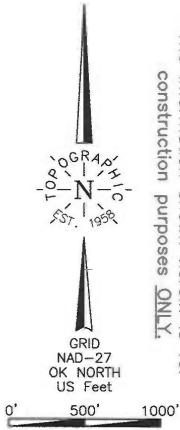
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
 Certificate of Authorization No. 1293 LS

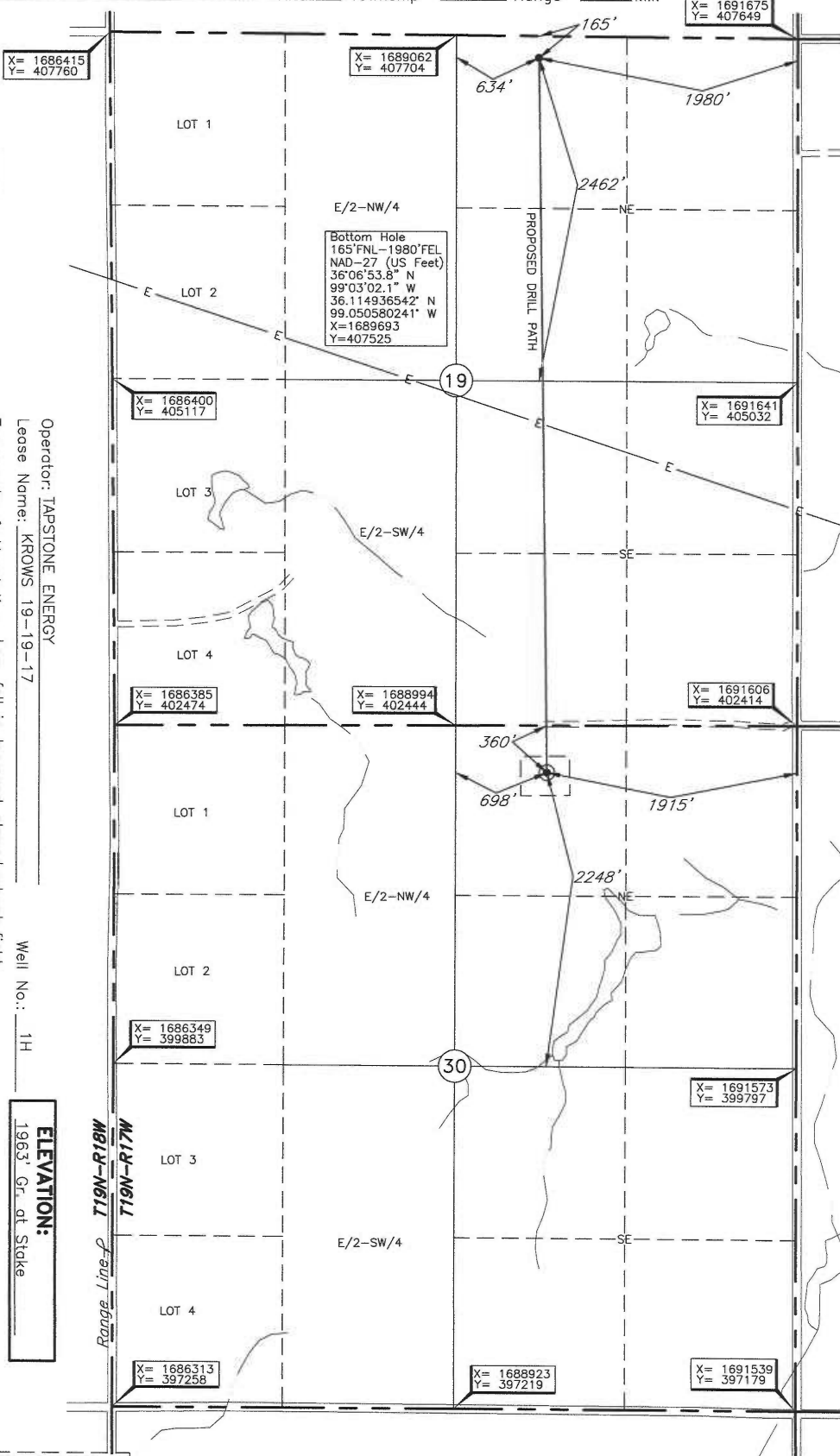
API 043 23480

DEWEY County, Oklahoma

360' FNL - 1915' FEL Section 30 Township 19N Range 17W I.M.



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



Operator: TAPSTONE ENERGY
 Lease Name: KROWS 19-19-17
 Topography & Vegetation: Loc. fell in terraced plowed wheat field
 Good Drill Site? Yes
 Best Accessibility to Location: From East of county road
 Distance & Direction from Hwy Jct or Town: From Jct. US Hwy. 183 North and St. Hwy. 51 E-W, West of Seiling, OK, go ±3.0 mi. West, then ±3.0 mi. South, then ±2.0 mi. West to the NE Cor. of Sec. 30-T19N-R17W
 Well No.: 1H
 ELEVATION: 1965' Gr. at Stake
 Reference Stakes or Alternate Location: Stakes Set None

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

DATUM: NAD-27
 LAT: 36°05'59.9"N
 LONG: 99°03'01.5"W
 LAT: 36.099967013° N
 LONG: 99.050403407° W
 STATE PLANE COORDINATES: (US Feet)
 ZONE: OK NORTH
 X: 1689687
 Y: 402076

Date of Drawing: Sep. 06, 2016
 Invoice # 264208 Date Staked: Sep. 02, 2016 AC

CERTIFICATE:

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

Lee K. Goss
 Oklahoma Lic. No. 1778

