

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

API NUMBER: 043 23521

Approval Date: 06/01/2017
Expiration Date: 12/01/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 21 Twp: 19N Rge: 17W County: DEWEY
SPOT LOCATION: N2 N2 NW NW FEET FROM QUARTER: FROM NORTH FROM WEST
SECTION LINES: 220 660

Lease Name: HEATH 9/16-19-17 Well No: 1H Well will be 220 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

DAVID LANDON HEATH
2208 BELLAIRE DRIVE
MOORE OK 73160

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	10900	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 661124

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201702903
201702902
201702904

Special Orders:

Total Depth: 21200 Ground Elevation: 1867 **Surface Casing: 390** Depth to base of Treatable Water-Bearing FM: 240

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: 17-32551
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: 200000 Average: 100000

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 09 Twp 19N Rge 17W County DEWEY

Spot Location of End Point: N2 N2 NW NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 10395

Radius of Turn: 477

Direction: 360

Total Length: 10056

Measured Total Depth: 21200

True Vertical Depth: 10900

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

Notes:

Category

Description

HYDRAULIC FRACTURING

6/1/2017 - 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

6/1/2017 - 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

MEMO

6/1/2017 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

PENDING CD - 201702902

6/1/2017 - G75 - (640)(HOR) 16-19N-17W
VAC 78413 MCSTR
EXT 661124 MSSP
COMPL. INT. NLT 660' FB
REC 5-30-2017 (LEAVITT)

PENDING CD - 201702903

6/1/2017 - G75 - (E.O.) 16 & 9-19N-17W
EST MULTIUNIT HORIZONTAL WELL
X201702902 MSSP 16-19N-17W
X661124 MSSP 9-19N-17W
50% 16-19N-17W
50% 9-19N-17W
TAPSTONE ENERGY, LLC
REC 6-1-2017 (M. PORTER)

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.

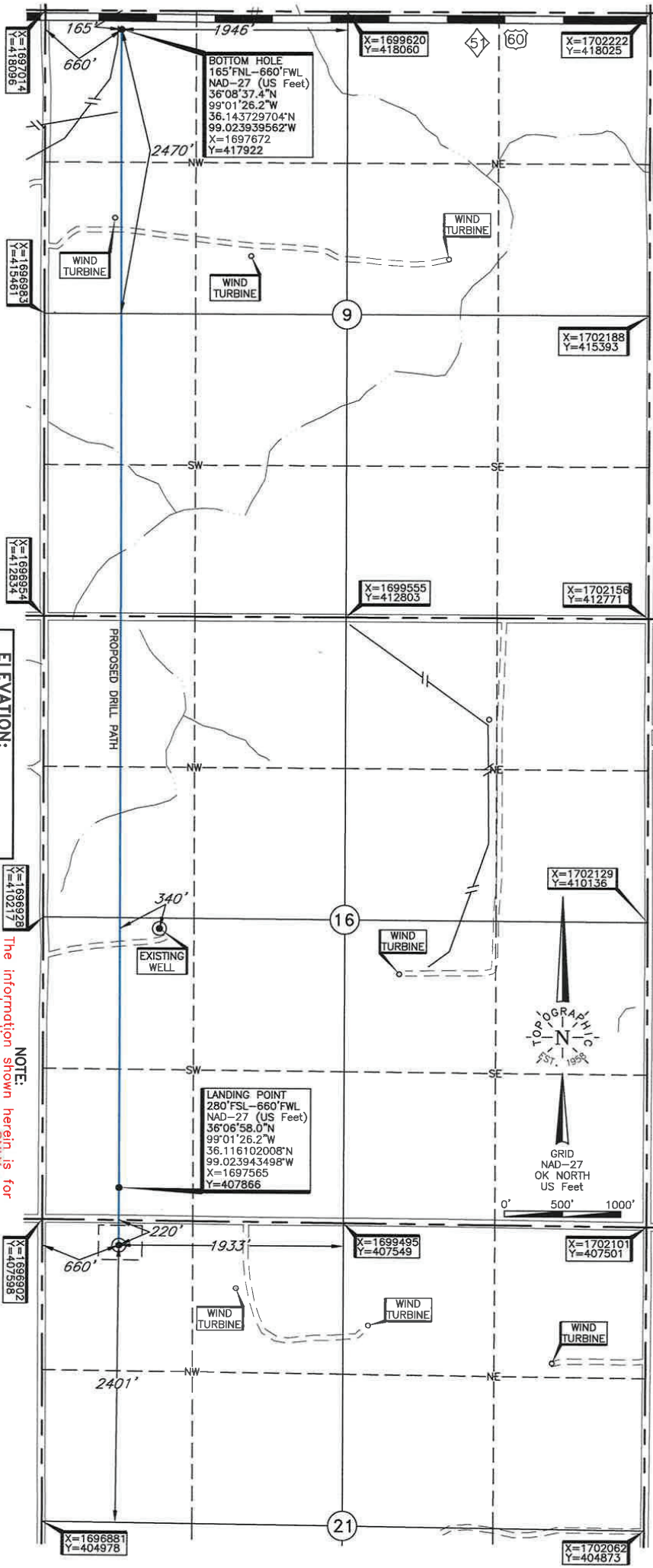
Category	Description
PENDING CD - 201702904	6/1/2017 - G75 - (I.O.) 16 & 9-19N-17W X201702902 MSSP 16-19N-17W X661124 MSSP 9-19N-17W COMPL. INT. (16-19N-17W) NCT 165' FSL, NCT 0' FNL, NCT 330' FWL COMPL. INT. (9-19N-17W) NCT 0' FSL, NCT 165' FNL, NCT 330' FWL NO OP. NAMED REC 5-30-2017 (NORRIS)
SPACING - 661124	6/1/2017 - G75 - (640)(HOR) 9-19N-17W VAC 85657 MCSTR EST MSSP COMPL. INT. NLT 660' FB

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

6709 NORTH CLASSEN BLD., OKLA. CITY, OKLA. 73118 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
DEWEY Certificate of Authorization No. 1293 LS
 County, Oklahoma
 Section 21 Township 19N Range 17W, 1.M.

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA



ELEVATION:
 1867' Gr. at Stake

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

Operator: TAPSTONE ENERGY
 Lease Name: HEATH 9/16-19-17 Well No.: 1H
 Topography & Vegetation Loc. fell in terraced wheat field
 Good Drill Site? Yes Reference Stakes or Alternate Location
 Stakes Set None
 Best Accessibility to Location From North of county road
 Distance & Direction
 from Hwy Jet or Town From Jet. US Hwy. 281 and St. Hwy. 51 in Sealing, OK, go ±5.7 mi.
 West on St. Hwy. 51/US Hwy. 60, then ±2.0 mi. South to the NW Cor. of Sec. 21-119N-17W

DATUM: NAD-27
 LAT: 36°06'53.0"N
 LONG: 99°01'26.2"W
 LAT: 36.114728442° N
 LONG: 99.023943694° W
 STATE PLANE
 COORDINATES: (US Feet)
 ZONE: OK NORTH
 X: 1697560
 Y: 407366

(This information was gathered with a GPS receiver with ±1 foot Horiz./Vert. accuracy.)

Invoice # 275435 Date of Drawing: Apr. 28, 2017
 Date Staked: Apr. 27, 2017

CERTIFICATE:
 I, Thomas L. Howell, on 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

