

API NUMBER: 043 23563

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

Approval Date: 11/01/2017  
Expiration Date: 05/01/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 27 Twp: 18N Rge: 17W

County: DEWEY

SPOT LOCATION: ☐ SW ☐ NW ☐ NW ☐ NW FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 580 300

Lease Name: BORDEN 22-18-17

Well No: 1H

Well will be 580 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

GARY BORDEN  
RT. 1, BOX 57  
TALOGA OK 73667

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	11700	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 653050

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201706286

Special Orders:

Total Depth: 17000

Ground Elevation: 1769

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 170

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: RUSH SPRINGS

D. One time land application - (REQUIRES PERMIT)

PERMIT NO: 17-33188

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.

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 22 Twp 18N 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: 11045

Radius of Turn: 707

Direction: 4

Total Length: 4845

Measured Total Depth: 17000

True Vertical Depth: 11700

End Point Location from Lease,

Unit, or Property Line: 165

Notes:

Category

Description

DEEP SURFACE CASING

10/17/2017 - G57 - 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

10/17/2017 - G57 - 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](http://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](http://FRACFOCUS.ORG)

INTERMEDIATE CASING

10/17/2017 - G57 - 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 - 201706286

11/1/2017 - G60 - (I.O.) 22-18N-17W  
X653050 MSSP  
COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FWL  
NO OP. NAMED  
REC. 10/16/17 (MINMIER)

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.

043 23563 BORDEN 22-18-17 1H

Category

SPACING - 653050

Description

11/1/2017 - G60 - (640)(HOR) 22-18N-17W  
VAC 66320 CSTR  
VAC 252788 MSSLM  
EST MSSP  
COMPL. INT. NLT 660' FB

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.



API 35043 23563

NOTIFY DISTRICT OFFICE 24 HOURS PRIOR TO CEMENTING SURFACE CASING.

25.2. PIT INFORMATION:

A. TYPE OF MUD SYSTEM: WATER BASED ☒ OIL BASED ☐ GAS BASED (AIR DRILL) ☐  
 B. EXPECTED MUD CHLORIDE CONTENT: maximum: 300,000 ppm; average: 200,000 ppm.  
 C. TYPE OF PIT SYSTEM: on-site ☐ off-site ☒ closed ☐ If off-site, specify location: \_\_\_\_\_  
 D. IS DEPTH TO TOP OF GROUND WATER GREATER THAN 10 FT BELOW BASE OF PIT? ☒ Y ☐ N  
 E. WITHIN 1 MILE OF MUNICIPAL WATER WELL? ☐ Y ☒ N  
 F. WELLHEAD PROTECTION AREA? ☐ Y ☒ N

26.2 OCC USE ONLY A. CATEGORY 1A 1B 2 3 4 ☒ C Fm: Rush Springs  
 B. PIT LOCATION: Alluvial Plain ☐ Terrace Deposit ☐ Bedrock Aquifer ☐ Other H.S.A. ☐ Non-H.S.A.  
 C. Special area or field rule? ☐ D. DEEP SCA? ☒ Y ☐ N E. CBL? ☐ Y ☒ N  
 F. SOIL COMPACTED LINER REQUIRED? ☐ Y ☒ N G. 20 mil GEOMEMBRANE LINER REQUIRED ☐ Y ☒ N

29 Bottom Hole Location for Directional Hole: SEC TWP RGE COUNTY  
 SPOT LOCATION: 1/4 1/4 1/4 1/4 FEET FROM QUARTER SECTION LINES: from NORTH LINE from EAST LINE  
 Measured Total Depth True Vertical Depth BHL from nearest Lease, Unit, Or Property Line:

30. Bottom Hole Location for Horizontal Hole: (LATERALS)  
 LATERAL #1: SEC TWP RGE COUNTY  
 SPOT LOCATION: 1/4 1/4 1/4 1/4 FEET FROM QUARTER SECTION LINES: from NORTH LINE from EAST LINE  
 Depth of Deviation Radius of Turn Direction Total Length  
 Measured Total Depth True Vertical Depth End Point location from nearest lease, unit or property line:

LATERAL #2: SEC TWP RGE COUNTY  
 SPOT LOCATION: 1/4 1/4 1/4 1/4 FEET FROM QUARTER SECTION LINES: from SOUTH LINE from WEST LINE  
 Depth of Deviation Radius of Turn Direction Total Length  
 Measured Total Depth True Vertical Depth End Point location from nearest lease, unit or property line:

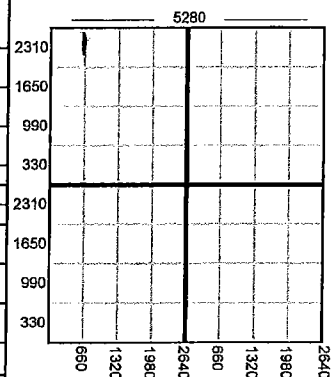
LATERAL #3: SEC TWP RGE COUNTY  
 SPOT LOCATION: 1/4 1/4 1/4 1/4 FEET FROM QUARTER SECTION LINES: from SOUTH LINE from WEST LINE  
 Depth of Deviation Radius of Turn Direction Total Length  
 Measured Total Depth True Vertical Depth End Point location from nearest lease, unit or property line:

31. AFFIDAVIT FOR ALTERNATIVE CASING PROGRAM (Signature on front of this form attests to this affidavit)  
 1. This well WILL ☐ WILL NOT ☒ penetrate any known lost circulation zones.  
 2. During the drilling of this well, withdrawals from any water well within 1/4 mile WILL ☐ WILL NOT ☒ exceed 50 gallons per minute.  
 3. The projected depth of the well IS ☐ IS NOT ☒ less than 100 feet from the top of any enhanced recovery project or gas storage facility.  
 4. List the following for all water wells within 1/4 mile of this well. (Information concerning some water wells may be obtained from the OKLAHOMA WATER RESOURCES BOARD, 3800 N. Classen Blvd., Oklahoma City, OK 73118). IF NO WATER WELLS FOUND, SO STATE. (ATTACH ADDITIONAL SHEET IF NECESSARY)

Name of Owner/Operator	Address of Owner/Operator	Location (Nearest 1/4 1/4 1/4 1/4)	Depth of Well

5. A cement bond log is required to be run and submitted from not less than 100 feet below the base of the treatable water-bearing formation to the surface. OCC USE ONLY  
 6. If casing depth is more than 250 feet deeper than base of the treatable water-bearing formation, operator must submit a letter of request listing reasons and precautions to be taken.

28. Locate Bottom Hole



1. If more than two drainholes are proposed, attach separate sheet indicating the necessary information.
2. Direction must be stated in degrees azimuth.
3. Please note the horizontal drainhole and its end point must be located within the legal boundaries of the lease or spacing unit. Directional surveys are required for all drainholes and directional wells.

INTENT TO DRILL CHECKLIST  
 APPROVED \_\_\_\_\_ REJECTED \_\_\_\_\_

OCC USE ONLY

OCC USE ONLY

1. SURETY

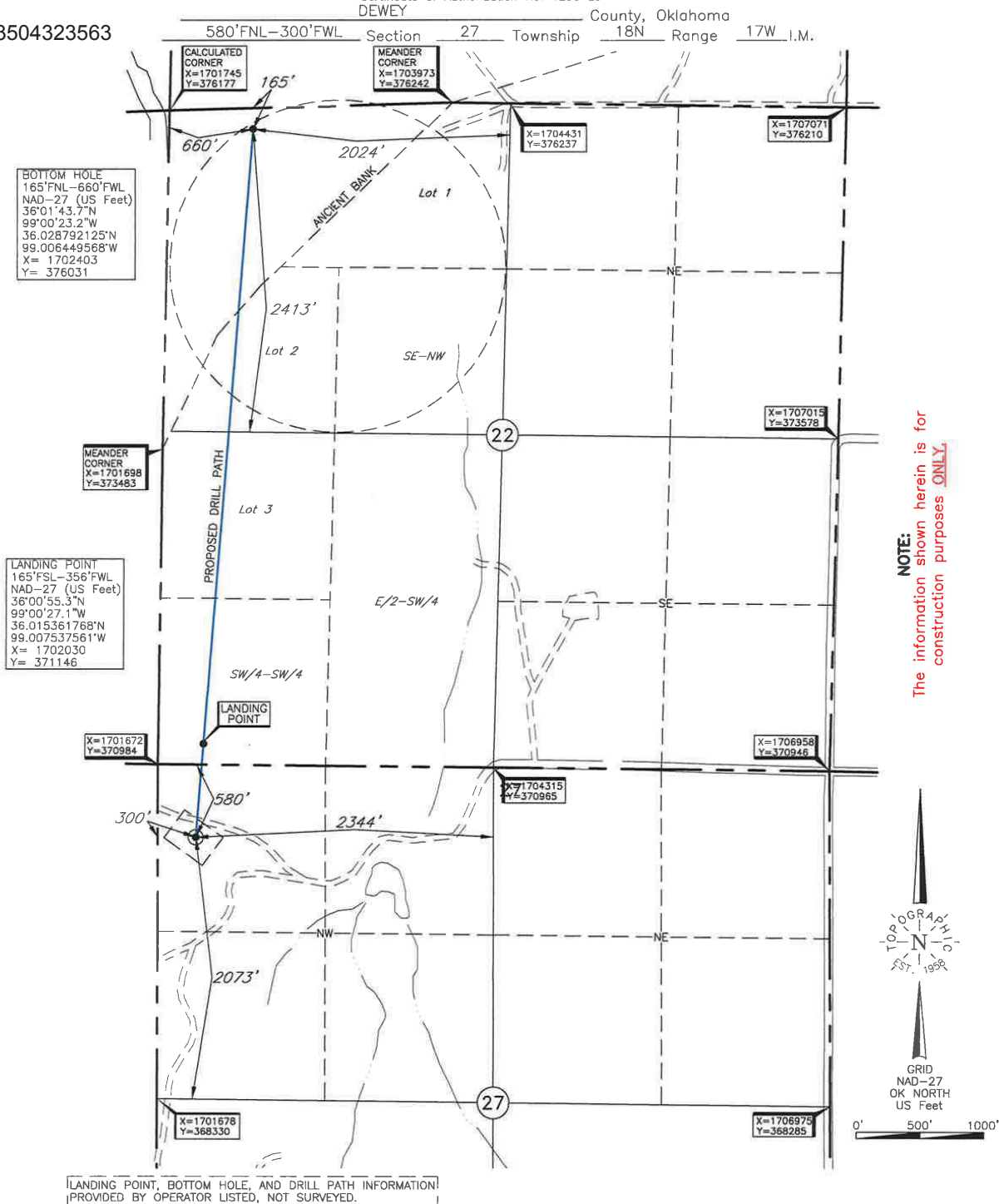
- A. NONE filed.
- B. EXPIRED: Date \_\_\_\_\_
- C. OUTSTANDING CONTEMPT ORDER.

4. GEOLOGY

DO NOT WRITE INSIDE THIS BOX



3504323563



Operator: TAPSTONE ENERGY

Lease Name: BORDEN 22-18-17

Well No.: 1H

ELEVATION:

1769' Gr. at Stake

Topography & Vegetation Loc. fell in rough rolling hills

Good Drill Site? Yes Reference Stakes or Alternate Location  
Stakes Set None

Best Accessibility to Location From SE off trail road

Distance & Direction

from Hwy Jct or Town From Taloga, OK, go ±1.5 mi. South, then ± 2.5 mi. West to  
the NW Cor. of Sec. 27-T18N-R17W

This information was  
gathered with a GPS receiver  
with ±1 foot horiz./vert. accuracy

DATUM: NAD-27  
LAT: 36°00'47.9"N  
LONG: 99°00'27.7"W  
LAT: 36.013314147°N  
LONG: 99.007703406°W  
STATE PLANE  
COORDINATES: (US Feet)  
ZONE: OK NORTH  
X: 1701973  
Y: 370401

Invoice # 281290 Date of Drawing: Sept. 13, 2017  
Date Staked: Aug. 8, 2017 TR

CERTIFICATE:

I, T. Wayne Fisch an Oklahoma Licensed Land  
Surveyor and an authorized agent of Topographic Land  
Surveyors of Oklahoma, do hereby certify to the  
information shown herein.

T. Wayne Fisch  
Oklahoma Lic. No. 1378

