

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

API NUMBER: 093 25216

Approval Date: 04/10/2019

Expiration Date: 10/10/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 08 Twp: 20N Rge: 11W

County: MAJOR

SPOT LOCATION: ☐ NW ☐ NE ☐ NW ☐ NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 310 675

Lease Name: FAST 5-20-11

Well No: 1H

Well will be 310 feet from nearest unit or lease boundary.

Operator Name: CHESAPEAKE OPERATING LLC

Telephone: 4059357539; 4059358

OTC/OCC Number: 17441 0

CHESAPEAKE OPERATING LLC
PO BOX 18496
OKLAHOMA CITY, OK 73154-0496

KENNETH M. FAST
407 BRIARWOOD LANE
HILLSBORO KS 67063

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

| | Name | Depth | Name | Depth |
|---|---------------|-------|------|-------|
| 1 | MISSISSIPPIAN | 7600 | 6 | |
| 2 | HUNTON | 8250 | 7 | |
| 3 | | | 8 | |
| 4 | | | 9 | |
| 5 | | | 10 | |

Spacing Orders: 693158

Location Exception Orders: 693833

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 13800

Ground Elevation: 1279

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 550

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: 25000 Average: 8000

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: FLOWERPOT

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 19-36289

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 05 Twp 20N Rge 11W County MAJOR

Spot Location of End Point: NW NE NW NW

Feet From: NORTH 1/4 Section Line: 100

Feet From: WEST 1/4 Section Line: 700

Depth of Deviation: 8004

Radius of Turn: 362

Direction: 1

Total Length: 5228

Measured Total Depth: 13800

True Vertical Depth: 8365

End Point Location from Lease,
Unit, or Property Line: 100

Notes:

Category

Description

DEEP SURFACE CASING

2/21/2019 - 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

2/21/2019 - 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

INTERMEDIATE CASING

2/21/2019 - 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

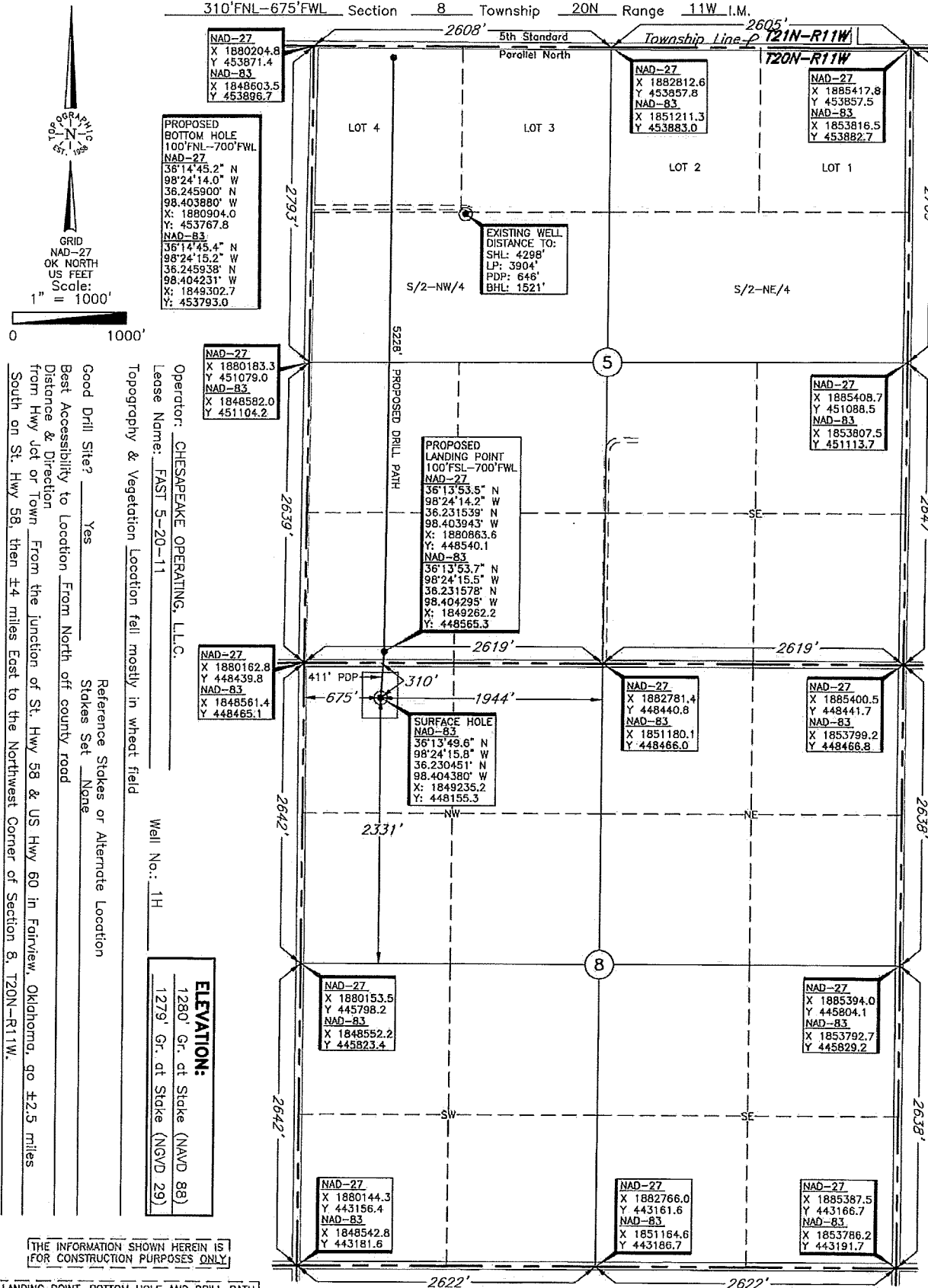
LOCATION EXCEPTION - 693833

4/10/2019 - G58 - (I.O.) 5-20N-11W
X693158 MSSP, HNTN
COMPL. INT. 165' FNL, NCT 165' FSL, NCT 660' FWL
CHESAPEAKE EXPLORATION, L.L.C.
4/1/2019

SPACING - 693158

4/10/2019 - G58 - (640)(HOR) 5-20N-11W
EXT 672245 MSSP, HNTN, OTHER
COMPL. INT. (MSSP, HNTN) NLT 660' FB
(COEXIST SP. ORDER 46580 UNCCR; SP. ORDER 64399 MNNG; SP. ORDER 126658 HNTN; SP. ORDER 308290 MISSG;)

310' FNL-675' FWL Section 8 Township 20N Range 11W I.M.



Good Drill Site? Yes
 Best Accessibility to Location From North off county road
 Distance & Direction From the junction of St. Hwy 58 & US Hwy 60 in Fairview, Oklahoma, go ±2.5 miles South on St. Hwy 58, then ±4 miles East to the Northwest Corner of Section 8, T20N-R11W.

Operator: CHESAPEAKE OPERATING, L.L.C.
 Lease Name: FAST 5-20-11
 Topography & Vegetation Location fell mostly in wheat field
 Reference Stakes or Alternate Location Stakes Set None

Well No.: 1H

ELEVATION:
1280' Gr. at Stake (NAVD 88)
1279' Gr. at Stake (NGVD 29)

THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY

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

DATUM: NAD-27
 LAT: 36°13'49.5" N
 LONG: 98°24'14.5" W
 LAT: 36.230413° N
 LONG: 98.404029° W
 STATE PLANE COORDINATES (US FEET):
 ZONE: OK NORTH
 X: 1880836.6
 Y: 448130.1

Project # 123758 Date of Drawing: Feb. 7, 2019
 Date Staked: Feb. 6, 2019 NB

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

