

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

API NUMBER: 093 25137

Approval Date: 04/24/2018
Expiration Date: 10/24/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 20 Twp: 20N Rge: 11W County: MAJOR
SPOT LOCATION: NE NE NE NW FEET FROM QUARTER: FROM NORTH FROM WEST
SECTION LINES: 260 2458

Lease Name: EITZEN 17-20-11 Well No: 2H Well will be 260 feet from nearest unit or lease boundary.

Operator Name: CHESAPEAKE OPERATING LLC Telephone: 4059353425; 4059358 OTC/OCC Number: 17441 0

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

ROBERT & ALETHA EITZEN
321 S. 9TH AVE
FAIRVIEW OK 73737

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN (EX CHESTER)	7791	6	
2	WOODFORD	8445	7	
3	HUNTON	8476	8	
4			9	
5			10	

Spacing Orders: 676056

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201802001

Special Orders:

Total Depth: 13750

Ground Elevation: 1252

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 730

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

PIT 1 INFORMATION

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 18-34212

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 17 Twp 20N Rge 11W County MAJOR

Spot Location of End Point: NE NE NE NW

Feet From: NORTH 1/4 Section Line: 150

Feet From: WEST 1/4 Section Line: 2635

Depth of Deviation: 8022

Radius of Turn: 477

Direction: 2

Total Length: 4978

Measured Total Depth: 13750

True Vertical Depth: 8510

End Point Location from Lease,
Unit, or Property Line: 150

Notes:

Category	Description
DEEP SURFACE CASING	4/18/2018 - 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	4/18/2018 - 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	4/18/2018 - 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 - 201802001	4/23/2018 - G57 - (I.O.) 17-20N-11W X676056 MSNLC, WDFD, HNTN COMPL. INT. NCT 150' FSL, NCT 150' FNL, NCT 1980' FWL CHESAPEAKE EXPLORATION, LLC. REC 4-2-2018 (DENTON)
SPACING - 676056	4/23/2018 - G57 - (640)(HOR) 17-20N-11W EST MSNLC, WDFD, HNTN POE TO BHL (MSNLC, HNTN) NCT 660' FB POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL (COEXIST WITH SP. ORDER 197779 MISS, MSSSD, HNTN)

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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.

CHESAPEAKE ENERGY

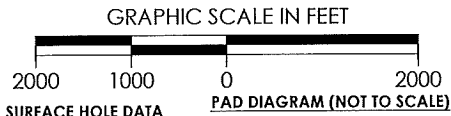
API: 093 25137

OPERATOR: CHESAPEAKE OPERATING, LLC.
 LEASE NAME: EITZEN 17-20-11
 WELL NO. 2H
 STAKED DATE: 2/8/2018

GROUND ELEVATION: 1252.14 GR. AT STAKE
 SURFACE HOLE FOOTAGE: 260' FNL - 2458' FWL
 SECTION: 20 TOWNSHIP: T20N RANGE: R11W
 MAJOR COUNTY, STATE: OK
 BOTTOM HOLE: 17-T20N-R11W-L.M.
 BOTTOM HOLE FOOTAGE: 150' FNL - 2635' FWL
 LANDING POINT FOOTAGE: 150' FSL - 2635' FWL

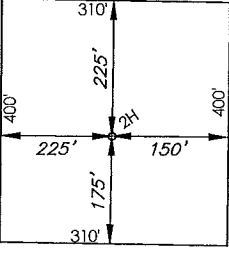
ACCESSIBILITY TO LOCATION: FROM NORTH LINE
 TOPOGRAPHY & VEGETATION: LOCATION FELL ON THE NORTH EDGE OF A FIELD.

DISTANCE & DIRECTION FROM HWY JCT OR TOWN:
 FROM THE TOWN OF FAIRVIEW HEAD SOUTH ON OK-58 ±2.5MI TO E0540RD, HEAD EAST ±5.0MI TO N2590RD, HEAD SOUTH ±2.0MI TO E0560RD, HEAD WEST ±0.5MI, PAD SITE IS SOUTH OF THE ROAD.



SURFACE HOLE DATA

STATE PLANE COORDINATES:
 ZONE: OK-NORTH NAD27
 X: 1882576.0
 Y: 437619.6
 GPS DATUM: NAD27
 LAT: 36.20156164
 LONG: -98.39798332
 STATE PLANE COORDINATES:
 ZONE: OK-NORTH NAD83
 X: 1850974.6
 Y: 437644.6
 GPS DATUM: NAD83
 LAT: 36.20159799
 LONG: -98.39833649



BOTTOM HOLE DATA

STATE PLANE COORDINATES:
 ZONE: OK-NORTH NAD27
 X: 1882762.2
 Y: 443007.0
 GPS DATUM: NAD27
 LAT: 36.21636325
 LONG: -98.39742695
 STATE PLANE COORDINATES:
 ZONE: OK-NORTH NAD83
 X: 1851160.9
 Y: 443032.1
 GPS DATUM: NAD83
 LAT: 36.21639942
 LONG: -98.39778010

LANDING POINT DATA

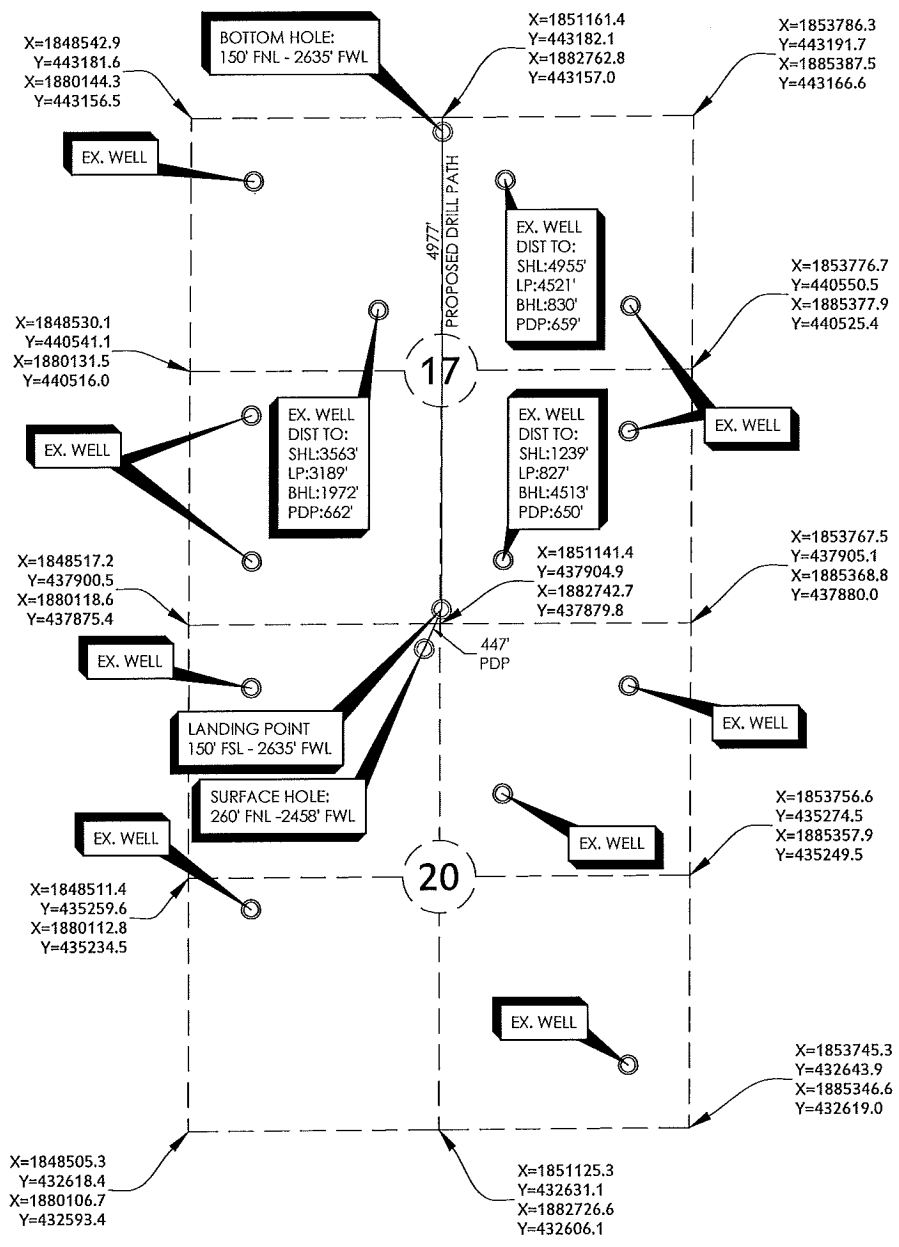
STATE PLANE COORDINATES:
 ZONE: OK-NORTH NAD27
 X: 1882754.3
 Y: 438029.8
 GPS DATUM: NAD27
 LAT: 36.20269063
 LONG: -98.39738460
 STATE PLANE COORDINATES:
 ZONE: OK-NORTH NAD83
 X: 1851153.0
 Y: 438054.9
 GPS DATUM: NAD83
 LAT: 36.20272697
 LONG: -98.39773775

PLEASE NOTE THAT THIS LOCATION WAS STAKED ON THE GROUND UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL LAND SURVEYOR, BUT ACCURACY OF THIS EXHIBIT IS NOT GUARANTEED. PLEASE CONTACT CRAFTON TULL PROMPTLY IF ANY INCONSISTENCY IS DETERMINED. GPS DATA IS OBSERVED FROM RTK-GPS. NOTE: X AND Y DATA SHOWN HEREON FOR SECTION CORNERS MAY NOT HAVE BEEN SURVEYED ON THE GROUND, AND FURTHER, DOES NOT REPRESENT A TRUE BOUNDARY SURVEY. LANDING POINT, BOTTOM HOLE, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED.

CERTIFICATION:
 THIS IS TO CERTIFY THAT THIS WELL LOCATION EXHIBIT WAS COMPILED AND PREPARED UNDER MY SUPERVISION.

2018.02.28 09:41:03-06'00"

[Signature]
 DENVER WINCHESTER PLS 1952



EITZEN 17-20-11 2H	
REVISION DATE:	PART OF THE NW/4 OF SECTION 20, T20N, R11W WELL LOCATION EXHIBIT MAJOR COUNTY, OKLAHOMA
SCALE: 1" = 2000'	DRAWING: 17601119-WELL-P
PLOT DATE: 02-28-2018	DRAWN BY: SQ SHEET NO.: 2 OF 3

300 Pointe Parkway Blvd
 Yukon, OK 73099
 405.787.6270 | 405.787.6276 f
 www.craftontull.com

Crafton Tull
 SURVEYING
 CERTIFICATE OF AUTHORIZATION:
 CA 973 (PE/LS) EXPIRES 6/30/2018