

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

API NUMBER: 011 23778

Approval Date: 04/12/2017
Expiration Date: 10/12/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 20 Twp: 16N Rge: 12W County: BLAINE
SPOT LOCATION: NW SW SW SW FEET FROM QUARTER: FROM SOUTH FROM WEST
SECTION LINES: 410 240

Lease Name: TILLMAN BIA Well No: 1H-2017X Well will be 240 feet from nearest unit or lease boundary.
Operator Name: CIMAREX ENERGY CO Telephone: 9185851100 OTC/OCC Number: 21194 0

CIMAREX ENERGY CO
202 S CHEYENNE AVE STE 1000
TULSA, OK 74103-3001

JOYE GADDIS
702 MONETTE DRIVE
CORPUS CHRISTI TX 78412

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	9750	6	
2	MISSISSIPPI SOLID	10800	7	
3	WOODFORD	11350	8	
4			9	
5			10	

Spacing Orders: 655998
656393

Location Exception Orders: 656580

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 20966

Ground Elevation: 1619

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 160

Under Federal Jurisdiction: Yes

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

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: 10000 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: MARLOW

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

PERMIT NO: 17-32368

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 16N Rge 12W County BLAINE

Spot Location of End Point: NE NW NW NW

Feet From: NORTH 1/4 Section Line: 150

Feet From: WEST 1/4 Section Line: 450

Depth of Deviation: 10628

Radius of Turn: 573

Direction: 3

Total Length: 9438

Measured Total Depth: 20966

True Vertical Depth: 11350

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

Additional Surface Owner	Address	City, State, Zip
THOMAS MCCABE	702 MONETTE DR.	CORPUS CHRISTI, TX 78412

Notes:

Category	Description
DEEP SURFACE CASING	4/5/2017 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING
HYDRAULIC FRACTURING	4/5/2017 - 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/ 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	4/5/2017 - 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
LOCATION EXCEPTION - 656580	4/5/2017 - G75 - (I.O.) 17 & 20-16N-12W X655998 MSSP, WDFD 17-16N-12W X655998 MSSSD, WDFD 20-16N-12W SHL (20-16N-12W) NCT 410' FSL, NCT 240' FWL COMPL. INT. (20-16N-12W) NCT 150' FSL, NCT 0' FNL, NCT 330' FWL COMPL. INT. (17-16N-12W) NCT 0' FSL, NCT 150' FNL, NCT 330' FWL CIMAREX ENERGY CO. 10-3-2016
SPACING - 655998	4/5/2017 - G75 - (640)(HOR) 17 & 20-16N-12W EXT 649982 MSSP, WDFD 17-16N-12W EXT 649982 WDFD 20-16N-12W EST MSSSD 20-16N-12W COMPL. INT. (MSSP, MSSSD) NLT 660' FB COMPL. INT. (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL (COEXIST SP. ORDER # 399933 MISS S2 20-16N-12W; ORDER # 508190 CSTR, MISS S2 17 & N2 20-16N-12W; ORDER # 535191 CSTR, MSSLM N2 17-16N-12W)
SPACING - 656393	4/5/2017 - G75 - (I.O.) 17 & 20-16N-12W EST MULTIUNIT HORIZONTAL WELL X655998 MSSP, WDFD 17-16N-12W X655998 MSSSD, WDFD 20-16N-12W (WDFD ASSOCIATED COMMON SOURCE OF SUPPLY TO MSSP, MSSSD) 50% 20-16N-12W 50% 17-16N-12W CIMAREX ENERGY CO. 9-26-2016

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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.

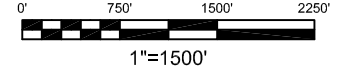


Well Location Plat

S.H.L. Sec. 20-16N-12W I.M.
B.H.L. Sec. 17-16N-12W I.M.

Operator : CIMAREX ENERGY COMPANY
Lease Name and No. : TILLMAN BIA 1H-2017X
Footage : 410' FSL - 240' FWL GR. ELEVATION : 1619' Good Site? YES
Section : 20 Township : 16N Range : 12W I.M.
County : Blaine State of Oklahoma
Terrain at Loc. : Location fell in a pasture, ±198' N. of an E-W fence, ±228' N. of an E-W aerial power line, and ±204' E. of a N-S fence.
Accessibility : From the East.
Directions : From the junction of U.S. Hwy 270/281 & State Hwy 33/3, the town of Watonga, OK, go 5.0 miles West on Hwy 270/281 to the Southwest Corner of Section 20-16N-12W.

API 011-23778



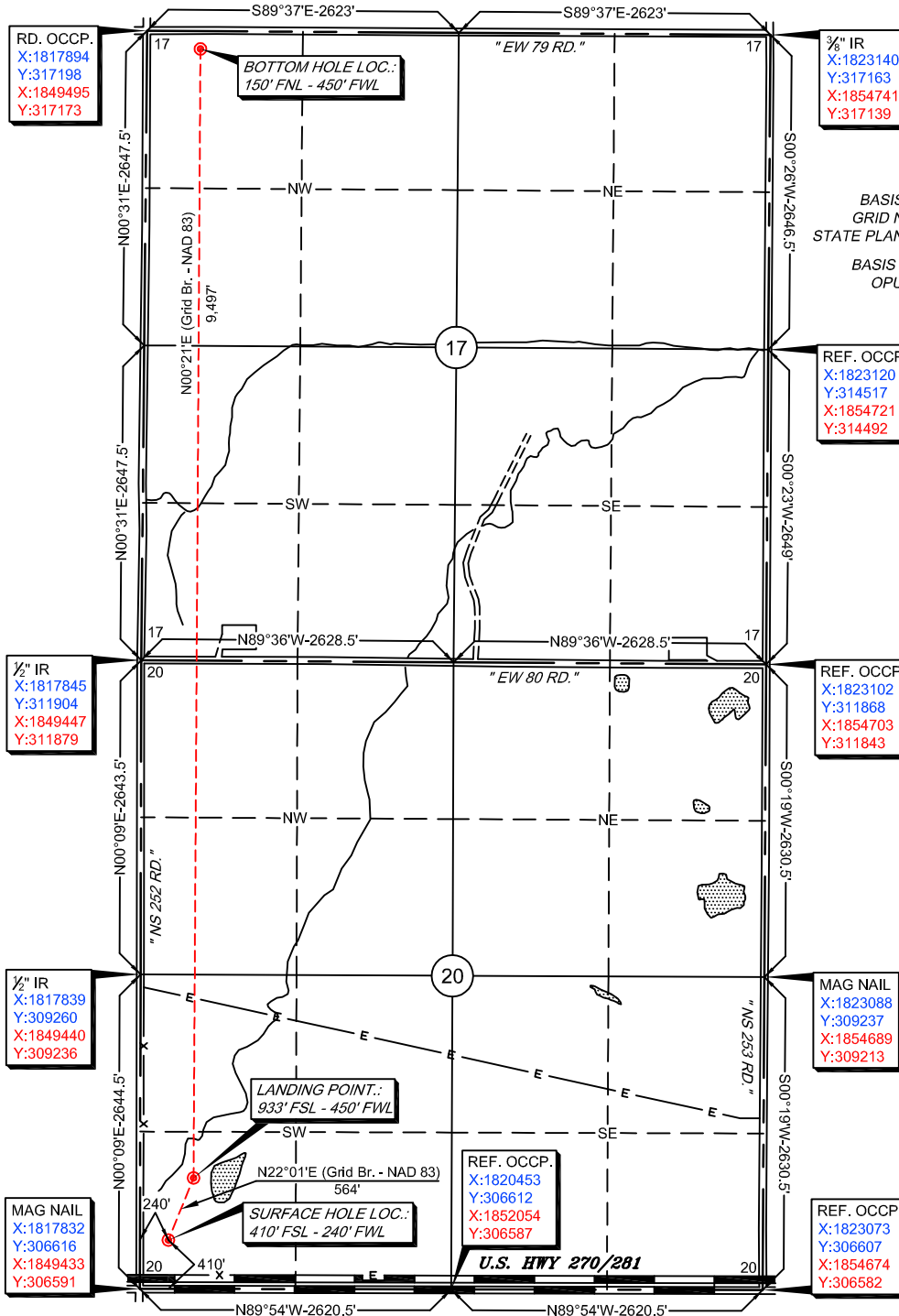
GPS DATUM
NAD 83
NAD 27
OK NORTH ZONE

BASIS OF BEARING:
GRID NORTH - NAD 83
STATE PLANE - OK NORTH ZONE
BASIS OF ELEVATION:
OPUS SOLUTION

Surface Hole Loc.: Lat: 35.84235714 Lon: -98.50753628 X: 1818073 Y: 307025
Surface Hole Loc.: Lat: 35.84231426 Lon: -98.50718204 X: 1849674 Y: 307001
Landing Point: Lat: 35.84379598 Lon: -98.50683242 X: 1818284 Y: 307548
Landing Point: Lat: 35.84375320 Lon: -98.50647926 X: 1849886 Y: 307523
Bottom Hole Loc.: Lat: 35.86988618 Lon: -98.50680354 X: 1818342 Y: 317045
Bottom Hole Loc.: Lat: 35.86984276 Lon: -98.50644810 X: 1849944 Y: 317020

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. Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of this survey is not guaranteed. Please contact Arkoma Surveying and Mapping promptly if any inconsistency is determined. GPS data is observed from RTK - GPS.

Quarter Section distances may be assumed from a Government Survey Plat or assumed at a proportionate distance from opposing section corners, or occupation thereof, and may not have been measured on-the-ground, and further, does not represent a true boundary survey.



survey and plat by,
Arkoma Surveying and Mapping, PLLC
P.O. Box 238 Wilburton, OK 74578
Ph. 918-465-5711 Fax 918-465-5030
Certificate of Authorization No. 5348
Expires June 30, 2016

Certification:
This is to certify that this Well Location Plat represents the results of a survey made on the ground performed under the supervision of the undersigned.

Invoice #6235
Date Staked : 03/04/16 By : J.W.
Date Drawn : 03/08/16 By : K.M.
Add Landing Point : 04/01/16 By : R.S.

LANCE G. MATHIS

06/13/16
OK LPLS 1664

