

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

API NUMBER: 017 25404

Approval Date: 02/27/2019
Expiration Date: 08/27/2020

Horizontal Hole Oil & Gas
Multi Unit

PERMIT TO DRILL

WELL LOCATION: Sec: 22 Twp: 11N Rge: 8W County: CANADIAN
SPOT LOCATION: SW SW NW NW FEET FROM QUARTER: FROM NORTH FROM WEST
SECTION LINES: 1000 250

Lease Name: BLTW COM Well No: 1H-2227X Well will be 250 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

JOHANNA M. BOLLINGER LIVING TRUST
516 SOUTH ELLISON
EL RENO OK 73036

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

Name	Depth	Name	Depth
1 WOODFORD	11690	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 654422
563394

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201900651
201900652
201900653

Special Orders:

Total Depth: 21075 Ground Elevation: 1317 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 460

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: 5000 Average: 3000

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: 19-36092
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 27 Twp 11N Rge 8W County CANADIAN

Spot Location of End Point: SE SW SW SW

Feet From: SOUTH 1/4 Section Line: 150

Feet From: WEST 1/4 Section Line: 380

Depth of Deviation: 11134

Radius of Turn: 750

Direction: 179

Total Length: 8763

Measured Total Depth: 21075

True Vertical Depth: 11830

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

Notes:

Category

Description

DEEP SURFACE CASING

2/12/2019 - 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

2/12/2019 - 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

PENDING CD - 201900651

2/27/2019 - G75 - (I.O.) 22 & 27-11N-8W
EST MULTIUNIT HORIZONTAL WELL
X654422 WDFD 22-11N-8W
X563394 WDFD 27-11N-8W
50% 22-11N-8W
50% 27-11N-8W
NO OP. NAMED
REC 2-19-2019 (JOHNSON)

PENDING CD - 201900652

2/27/2019 - G75 - (I.O.) 22 & 27-11N-8W
X654422 WDFD 22-11N-8W
X563394 WDFD 27-11N-8W
COMPL. INT. (22-11N-8W) NCT 150' FNL, NCT 0' FSL, NCT 250' FWL
COMPL. INT. (27-11N-8W) NCT 0' FNL, NCT 150' FSL, NCT 250' FWL
NO OP. NAMED
REC 2-19-2019 (JOHNSON)

PENDING CD - 201900653

2/27/2019 - G75 - 27-11N-8W
X563394 WDFD
1 WELL
NO OP. NAMED
REC 2-19-2019 (JOHNSON)

SPACING - 563394

2/27/2019 - G75 - (640) 27-11N-8W
VAC OTHERS
EXT OTHERS
EST OTHER
EXT 144223 WDFD, OTHERS

SPACING - 654422

2/27/2019 - G75 - (640)(HOR) 22-11N-8W
EST WDFD
POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL

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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.

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

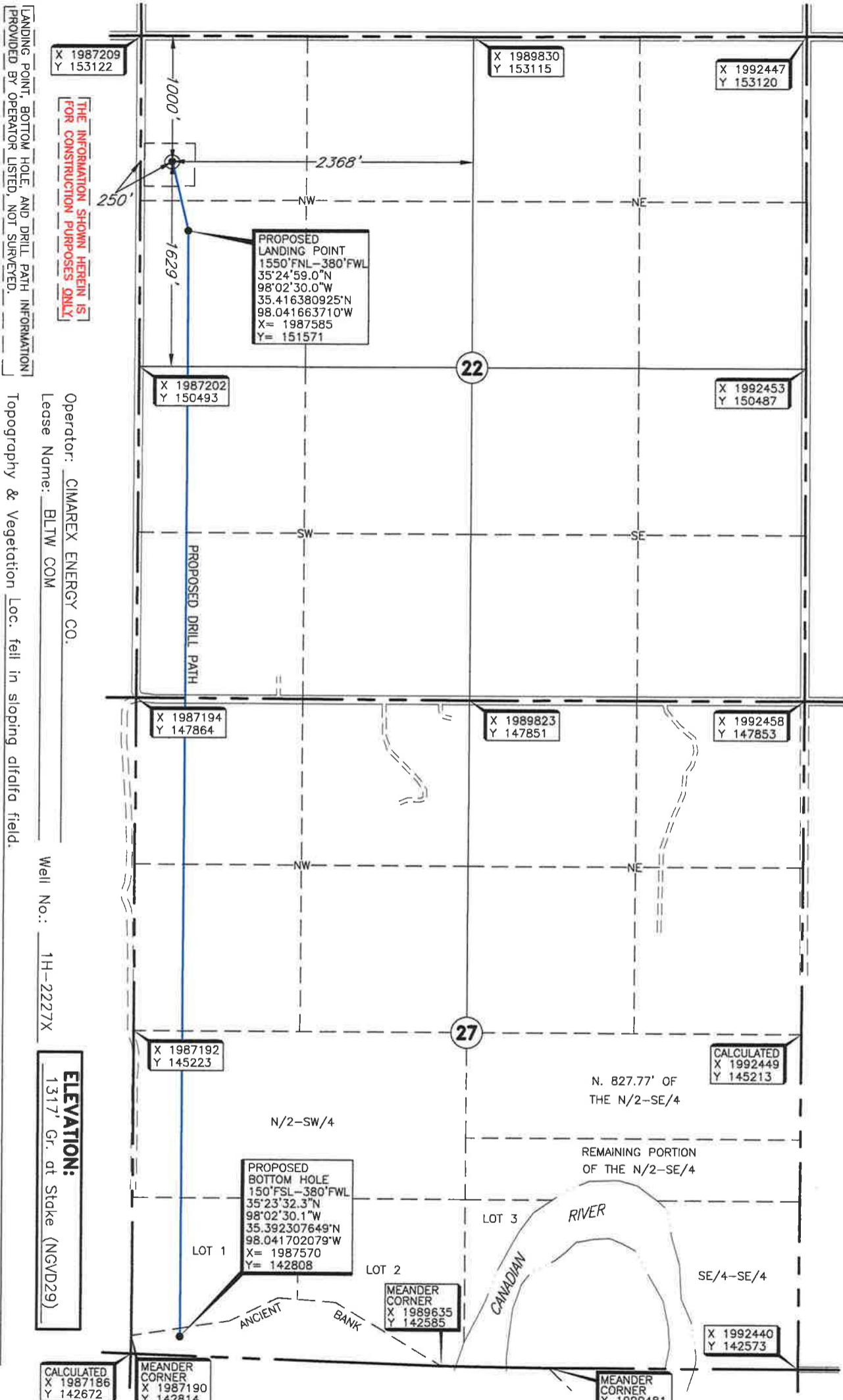
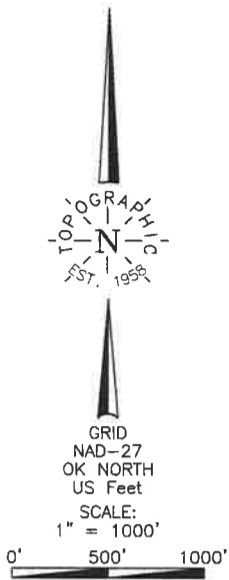
13800 Wireless Way, Okla. City, OK. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
 Certificate of Authorization No. 1293 LS

API 017-25404

CANADIAN

County, Oklahoma

1000' FNL-250' FWL Section 22 Township 11N Range 8W I.M.



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

THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY.

Operator: CIMAREX ENERGY CO.
 Lease Name: BLTW COM

Well No.: 1H-2227X

ELEVATION: 1317' Gr. at Stake (NGVD29)

Good Drill Site? Yes Reference Stakes Set None
 Best Accessibility to Location From West off county road
 Distance & Direction From Union City, Ok., go ±4 miles West, then ±2 miles North, then ±2 miles West to the NW corner of Section 22, T11N - R8W.

Topography & Vegetation Loc. fell in sloping alfalfa field.

CALCULATED X 1987186 Y 142672
 MEANDER CORNER X 1987190 Y 142814

CALCULATED X 1987194 Y 147864
 MEANDER CORNER X 1989635 Y 142585

CALCULATED X 1987202 Y 150493
 MEANDER CORNER X 1990481 Y 142574

CALCULATED X 1989823 Y 147851
 MEANDER CORNER X 1992440 Y 142573

CALCULATED X 1987209 Y 153122
 MEANDER CORNER X 1992447 Y 153120

CALCULATED X 1989830 Y 153115
 MEANDER CORNER X 1992453 Y 150487

CALCULATED X 1992447 Y 153120
 MEANDER CORNER X 1992458 Y 147853

CALCULATED X 1992449 Y 145213

Revision A

Date of Drawing: Jan. 8, 2019

Invoice # 308098

Date Staked: Dec. 17, 2018 TR

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



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

DATUM: NAD-27
 LAT: 35°25'04.4"N
 LONG: 98°02'31.5"W
 LAT: 35.417891745°N
 LONG: 98.042095635°W
 STATE PLANE COORDINATES (US FEET):
 ZONE: OK NORTH
 X: 1987457
 Y: 152121