

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

API NUMBER: 011 23955 A

Approval Date: 03/13/2018

Expiration Date: 09/13/2018

Horizontal Hole Oil & Gas

Amend reason: AMEND SHL

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 22 Twp: 16N Rge: 12W

County: BLAINE

SPOT LOCATION: ☐ NE ☐ SW ☐ SE ☐ SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 645 905

Lease Name: DUPREE BIA

Well No: 5H-2215X

Well will be 645 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

RUTH ANN & ROBERT SWAIN  
256017 E. 800TH ROAD  
WATONGA OK 73772

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	9800	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 656735  
677178

Location Exception Orders: 676288

Increased Density Orders: 676139  
676140

Pending CD Numbers:

Special Orders:

Total Depth: 20940

Ground Elevation: 1482

**Surface Casing: 1500**

Depth to base of Treatable Water-Bearing FM: 120

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-33736  
H. CLOSED SYSTEM=STEEL PITS (REQUIRED - NORTH CANADIAN RIVER)

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 15 Twp 16N Rge 12W County BLAINE

Spot Location of End Point: NW NE NE NE

Feet From: NORTH 1/4 Section Line: 150

Feet From: EAST 1/4 Section Line: 450

Depth of Deviation: 9463

Radius of Turn: 875

Direction: 8

Total Length: 10102

Measured Total Depth: 20940

True Vertical Depth: 10861

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

## Notes:

### Category

### Description

DEEP SURFACE CASING

3/8/2018 - 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

3/8/2018 - 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](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)

INCREASED DENSITY - 676139

3/13/2018 - G57 - 15-16N-12W  
X656735 MSSP  
4 WELLS  
NO OP. NAMED  
4-11-2018

INCREASED DENSITY - 676140

3/13/2018 - G57 - 22-16N-12W  
X656735 MSSP  
4 WELLS  
NO OP. NAMED  
4-11-2018

INTERMEDIATE CASING

3/8/2018 - 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

LOCATION EXCEPTION - 676288

3/9/2018 - G57 - (I.O.) 22 & 15-16N-12W  
X656735 MSSP  
COMPL. INT. (22-16N-12W) NCT 150' FSL, NCT 0' FNL, NCT 350' FEL  
COMPL. INT. (15-16N-12W) NCT 0' FSL, NCT 150' FNL, NCT 350' FEL  
CIMAREX ENERGY CO.  
4-13-2018

SPACING - 656735

3/9/2018 - G57 - (640)(HOR) 15 & 22-16N-12W  
EXT 649982 MSSP, OTHERS  
COMPL. INT. (MSSP) NLT 660' FB  
(COEXIST SP. ORDER 188303 CSTR, OTHER; ORDER 531029 CSTR)

This permit does not address the right of entry or settlement of surface damages.

011 23955 DUPREE BIA 5H-2215X

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.

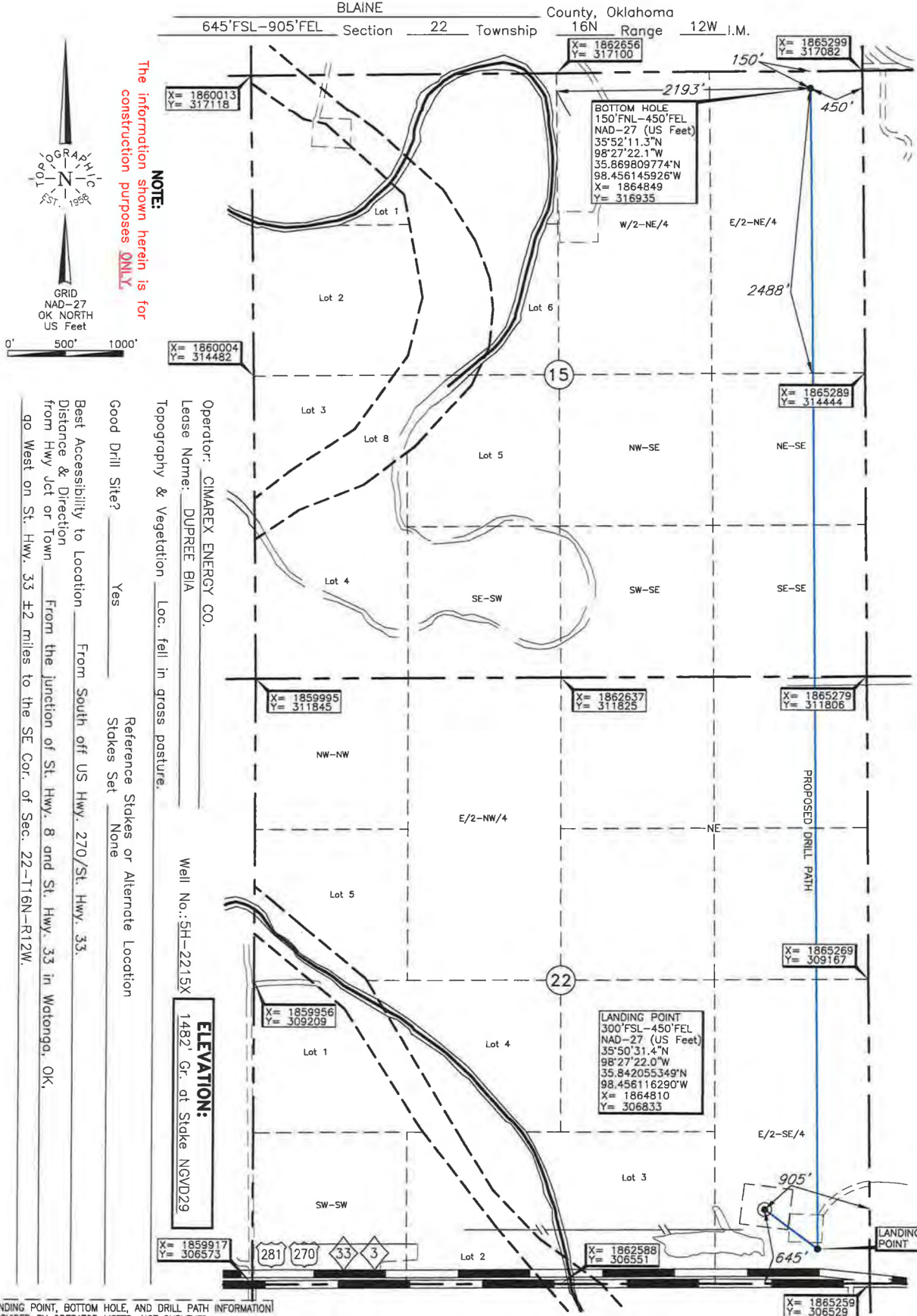
Category	Description
SPACING - 677178	3/9/2018 - G57 - (I.O.) 15 & 22-16N-12W EST MULTIUNIT HORIZONTAL WELL X656735 MSSP 50% 22-16N-12W 50% 15-16N-12W CIMAREX ENERGY CO. 5-2-2018

# TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS  
BLAINE

API: 011 23955



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

DATUM: NAD-27  
LAT: 35°50'34.8"N  
LONG: 98°27'27.5"W  
LAT: 35.843007903°N  
LONG: 98.457652624°W  
STATE PLANE  
COORDINATES: (US Feet)  
ZONE: OK NORTH  
X: 1864356  
Y: 307182

Date of Drawing: Apr. 30, 2018  
Invoice # 292685A Date Staked: Apr. 24, 2018

## 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

