

API NUMBER: 017 25910

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

Approval Date: 02/01/2023

Expiration Date: 08/01/2024

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Section: 04 Township: 12N Range: 9W County: CANADIAN

SPOT LOCATION: ☐ NW ☐ NW ☐ NE ☐ NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 254 1036

Lease Name: MARILYN Well No: 5H-0409X Well will be 254 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

DOUGLAS L. THOMPSON
1121 LAMBETH DR.
EDMOND OK 73003

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

Name	Code	Depth
1 WOODFORD	319WDFD	12225

Spacing Orders: 729595

Location Exception Orders: 731610

Increased Density Orders: 731265

Pending CD Numbers: No Pending

Working interest owners' notified: ***

Special Orders: No Special

Total Depth: 22170

Ground Elevation: 1538

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 240

Deep surface casing has been approved

Under Federal Jurisdiction: No
Fresh Water Supply Well Drilled: No
Surface Water used to Drill: Yes

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 23-38849

H. (Other)

SEE MEMO

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 8000 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

PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: OIL BASED

Chlorides Max: 300000 Average: 200000

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

This permit does not address the right of entry or settlement of surface damages. The duration of this permit is 18 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

Section: 9 Township: 12N Range: 9W Meridian: IM Total Length: 10260
County: CANADIAN Measured Total Depth: 22170
Spot Location of End Point: SW SW SE SE True Vertical Depth: 12325
Feet From: **SOUTH** 1/4 Section Line: 150 End Point Location from
Feet From: **EAST** 1/4 Section Line: 1095 Lease, Unit, or Property Line: 150

NOTES:

Category	Description
DEEP SURFACE CASING	[1/30/2023 - GC2] - APPROVED; (1) NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING. (2) SUBSEQUENT WELLS ON SAME PAD WILL NOT BE ALLOWED DEEP SURFACE CASING IN THE EVENT OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING.
HYDRAULIC FRACTURING	<p>[1/30/2023 - GC2] - OCC 165:10-3-10 REQUIRES:</p> <p>1) NOTICE SHALL BE GIVEN AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS ON A HORIZONTAL WELL TO OPERATORS PRODUCING WELLS WITHIN 1 MILE OF THE COMPLETION INTERVAL OF THE SUBJECT WELL. THE NOTICE TO SUCH OPERATORS SHALL CONTAIN THE INFORMATION IN FORM 6000NOO. IF THE HYDRAULIC FRACTURING OPERATIONS SCHEDULE CHANGES AFTER NOTICE HAS BEEN PROVIDED, RESULTING IN A DELAY OF OPERATIONS OF MORE THAN 5 DAYS FROM THE INITIAL NOTICE, NEW NOTICE IS REQUIRED TO BE GIVEN;</p> <p>2) NOTICE WILL BE GIVEN TO THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS. FORM 6000NHF SHALL BE FOUND HERE: HTTPS://OKLAHOMA.GOV/OCC/DIVISIONS/OIL-GAS/OGCD-FORMS; AND,</p> <p>3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS IS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION OF HYDRAULIC FRACTURING OPERATIONS, FOUND AT FRACFOCUS.ORG</p>
INCREASED DENSITY - 731265	<p>[2/1/2023 - G56] - (I.O.) 4 & 9-12N-9W X729595 WDFD 4 WELLS CIMAREX ENERGY, CO 1/10/2023</p>
LOCATION EXCEPTION - 731610	<p>[2/1/2023 - G56] - (I.O.) 4 & 9-12N-9W X729595 WDFD COMPL INT NCT 150' FNL, NCT 150' FSL, NCT 660' FEL CIMAREX ENERGY, CO 1/24/2023</p>
MEMO	[1/30/2023 - GC2] - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 729595	<p>[2/1/2023 - G56] - (1280)(HOR) 4 & 9-12N-9W EST WDFD, OTHER POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL (COEXIST WITH SP # 597711 4-12N-9W, # 560331 9-12N-9W)</p>

This permit does not address the right of entry or settlement of surface damages. The duration of this permit is 18 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.

017 25910 MARILYN 5H-0409X