

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

API NUMBER: 073 26319 B

Approval Date: 10/16/2018
Expiration Date: 04/16/2020

Horizontal Hole Oil & Gas

Amend reason: AMEND LE ORDER, UPDATE ORDERS & BHL

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 20 Twp: 15N Rge: 9W

County: KINGFISHER

SPOT LOCATION: ☐ NW ☐ NE ☐ NW ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 250 1960

Lease Name: BILLY

Well No: 4-20H

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

MERLE BERNHARDT
15051 E 202ND STREET
BIXBT OK 74008

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

	Name	Depth	Name	Depth
1	MISSISSIPPI SOLID	9826	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: 139333

Location Exception Orders: 699674

Increased Density Orders: 691246

Pending CD Numbers:

Special Orders:

Total Depth: 14976

Ground Elevation: 1264

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 440

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

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: 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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: CHICKASHA

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-35467
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 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

Sec 20 Twp 15N Rge 9W County KINGFISHER

Spot Location of End Point: SW SW SE SE

Feet From: SOUTH 1/4 Section Line: 147

Feet From: EAST 1/4 Section Line: 1297

Depth of Deviation: 9657

Radius of Turn: 231

Direction: 179

Total Length: 4956

Measured Total Depth: 14976

True Vertical Depth: 10214

End Point Location from Lease,
Unit, or Property Line: 147

Notes:

Category	Description
DEEP SURFACE CASING	10/15/2018 - GA8 - 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	10/15/2018 - GA8 - 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: OCCWEB.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
INCREASED DENSITY - 691246	9/10/2019 - G56 - 20-15-9W X139333 MSSSD 4 WELLS CIMAREX ENERGY CO. 2/12/2019
INTERMEDIATE CASING	10/15/2018 - GA8 - 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 - 699674	9/10/2019 - G56 - (F.O.) 20-15N-9W X139333 MSSSD COMPL INT (FIRST PERF) 156' FNL, 1288' FEL COMPL INT (LAST PERF) 253' FSL, 1297' FEL CIMAREX ENERGY CO. 7/25/2019
SPACING - 139333	9/10/2019 - G56 - (640) 20-15N-9W EXT OTHERS EXT 125914/137756 MSSSD, OTHERS

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073 26319 BILLY 4-20H