API NUMBER: 073 26319 Α OKLAHOMA CORPORATION COMMISSION **OIL & GAS CONSERVATION DIVISION** P.O. BOX 52000 **OKLAHOMA CITY, OK 73152-2000** (Rule 165:10-3-1)

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

Horizontal Hole Oil & Gas

Amend reason: OCC CORRECTION TO ADD EXCEPTION TO RULE

AMEND PERMIT TO DRILL

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

> NW NE llnw NE

County: KINGFISHER

Well No:

FEET FROM QUARTER: SECTION LINES:

NORTH FROM EAST 250 1960

4-20H

Well will be

250 feet from nearest unit or lease boundary.

Operator Name:

Lease Name: BILLY

SPOT LOCATION:

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

MISSISSIPPI SOLID 1 2

3 4

Spacing Orders:

139333

9500

Location Exception Orders:

8 9 10

6

7

Name

Pending CD Numbers: 201806990

201806985

Total Depth: 14198

Ground Elevation: 1264

Surface Casing: 1500

Special Orders:

Increased Density Orders:

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill:

Depth to base of Treatable Water-Bearing FM: 440

Depth

PIT 1 INFORMATION

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?

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

Approved Method for disposal of Drilling Fluids:

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

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

PERMIT NO: 18-35467

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 20 Twp 15N Rge 9W County KINGFISHER

Spot Location of End Point: SW SW SE SE
Feet From: SOUTH 1/4 Section Line: 150
Feet From: EAST 1/4 Section Line: 1300

Depth of Deviation: 9069
Radius of Turn: 477
Direction: 175
Total Length: 4980

Measured Total Depth: 14798

True Vertical Depth: 9931

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

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:

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

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

PENDING CD - 201806985 10/16/2018 - G58 - 20-15-9W

X139333 MSSSD 4 WELLS NO OP. NAMED

REC 9/17/2018 (THOMAS)

PENDING CD - 201806990 10/16/2018 - G58 - (I.O.) 20-15N-9W

X139333 MSSSD

COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 330' FEL,

NO OP. NAMED

REC 9/17/2018 (THOMAS)

PENDING CD - 201807955 10/17/2018 - G58 - (E.O.) 20-15N-9W

XX165:10-3-28(C)(2)(B) MSSSD (BILLY 4-20H)
MAY BE CLOSER THAN 600' TO PROPOSED WELL
MAY BE CLOSER THAN 600' TO HERSCHEL 1-20 WELL
MAY BE CLOSER THAN 600' TO PLANCK 1-20 WELL
MAY BE CLOSER THAN 600' TO DISCOVERY 1-20 WELL

REC 10/8/2018 (JACKSON)

SPACING - 139333 10/16/2018 - G58 - (640) 20-15N-9W

EXT OTHERS

EXT 125914/137756 MSSSD, OTHERS