API NUMBER: 017 25434

Oil & Gas

Horizontal Hole

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

Approval Date: 04/04/2019
Expiration Date: 10/04/2020

PERMIT TO DRILL

WELL LOCATION: Sec: 09 Twp: 13N Rge: 5W County: CANADIAN

SPOT LOCATION: NE NE NW FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 237 1185

Lease Name: WATERLOO 1305 Well No: 1-9MH Well will be 237 feet from nearest unit or lease boundary.

Operator RED BLUFF RESOURCES OPERATING LLC Telephone: 4052088660 OTC/OCC Number: 23828 0

RED BLUFF RESOURCES OPERATING LLC 3030 NW EXPRESSWAY STE 900

OKLAHOMA CITY. OK 73112-5447

WLW PROPERTIES, LLC 14408 N PIEDMONT RD

PIEDMONT OK 73078

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

Name Depth Name Depth MISSISSIPPIAN 7432 1 6 2 WOODFORD 7638 7 3 8 4 9 10 616608 Spacing Orders: Location Exception Orders: Increased Density Orders:

Pending CD Numbers: 201900718 Special Orders:

Total Depth: 12500 Ground Elevation: 1159 Surface Casing: 1000 Depth to base of Treatable Water-Bearing FM: 780

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: 5000 Average: 3000

Is depth to top of ground water greater than 10ft below base of pit?  $\quad \mbox{Y}$ 

Within 1 mile of municipal water well? N
Wellhead Protection Area? N

Pit is not located in a Hydrologically Sensitive Area.

BISON

Category of Pit: C

Pit Location Formation:

**Liner not required for Category: C**Pit Location is NON HSA

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36390

H. CLOSED SYSTEM=STEEL PITS (REQUIRED - DEER CREEK)

## **HORIZONTAL HOLE 1**

Sec 09 Twp 13N Rge 5W County CANADIAN

Spot Location of End Point: S2 S2 SW SW
Feet From: SOUTH 1/4 Section Line: 165
Feet From: WEST 1/4 Section Line: 330

Depth of Deviation: 6670 Radius of Turn: 559 Direction: 185 Total Length: 4952

Measured Total Depth: 12500

True Vertical Depth: 7638

End Point Location from Lease,
Unit, or Property Line: 165

Notes:

Category Description

HYDRAULIC FRACTURING 3/28/2019 - 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 - 201900718 4/3/2019 - G56 - (I.O.) 9-13N-5W

X616608 MSSP, WDFD, OTHER

COMPL INT NCT 165' FNL, NCT 165' FSL, NCT 330' FEL OR FWL

NO OP NAMED

REC 2/19/2019 (DENTON)

SPACING - 616608 4/3/2019 - G56 - (640)(HOR) 9-13N-5W

EST MSSP, WDFD, OTHER POE TO BHL (MSSP) NLT 660' FB

POE TO BHL (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL

