

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

API NUMBER: 017 24736

Approval Date: 01/02/2015

Expiration Date: 07/02/2015

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 34 Twp: 14N Rge: 10W County: CANADIAN  
SPOT LOCATION: SE SE SE SE FEET FROM QUARTER: FROM SOUTH FROM EAST  
SECTION LINES: 250 240

Lease Name: PHILLIPS Well No: 9-34H Well will be 240 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

LYNDON JAMESON  
26500 EDMOND ROAD NW  
GEARY OK 73040

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

Name	Depth	Name	Depth
1 WOODFORD	12600	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 542123 Location Exception Orders: 631974 Increased Density Orders: 631972  
631979

Pending CD Numbers:

Special Orders:

Total Depth: 17859 Ground Elevation: 1433 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 150

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

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 100000 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 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: DOG CREEK

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-29175  
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 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 34 Twp 14N Rge 10W County CANADIAN

Spot Location of End Point: NW NW NE NE

Feet From: NORTH 1/4 Section Line: 1

Feet From: EAST 1/4 Section Line: 1170

Depth of Deviation: 12138

Radius of Turn: 599

Direction: 357

Total Length: 4780

Measured Total Depth: 17859

True Vertical Depth: 12616

End Point Location from Lease,

Unit, or Property Line: 1

Notes:

Category	Description
DEEP SURFACE CASING	1/2/2015 - G71 - APPROVED CONTINGENT ON NOTIFYING OCC FIELD STAFF IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING
EXCEPTION TO RULE - 631974	1/2/2015 - G91 - (I.O.) 34-14N-10W X165:10-3-28(C)(2)(B) WDFD (PHILLIPS 9-34H) LESS THAN 600' FROM PROPOSED/EXISTING WELLS CIMAREX ENERGY, CO. 10-17-2014
INCREASED DENSITY - 631972	1/2/2015 - G91 - 34-14N-10W X542123 WDFD 11 WELLS CIMAREX ENERGY, CO. 10-17-2014
LOCATION EXCEPTION - 631979	1/2/2015 - G91 - (I.O.) 34-14N-10W X542123 WDFD, OTHERS SHL 250 FSL, 240 FEL COMPL. INT. NCT 150 FSL, NCT 150 FNL, NCT 1070 FEL CIMAREX ENERGY CO. 10-17-2014
SPACING - 542123	1/2/2015 - G91 - (640) 34-14N-10W EXT VARIOUS OTHERS EXT 437583 WDFD, OTHER EST OTHERS