

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

API NUMBER: 017 24710

Approval Date: 10/13/2014
Expiration Date: 04/13/2015

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 34 Twp: 14N Rge: 10W County: CANADIAN
SPOT LOCATION: SW SW SE SW FEET FROM QUARTER: FROM SOUTH FROM WEST
SECTION LINES: 245 1497

Lease Name: PHILLIPS Well No: 5-34H Well will be 245 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

TERRY PHILLIPS - TRUSTEE
27450 164TH ST. 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:

Increased Density Orders:

Pending CD Numbers: 201406833
201406839

Special Orders:

Total Depth: 17480

Ground Elevation: 1453

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 140

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

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: 100000 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: DOG CREEK

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-28591
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: NE NW NE NW

Feet From: NORTH 1/4 Section Line: 1

Feet From: WEST 1/4 Section Line: 1800

Depth of Deviation: 12250

Radius of Turn: 478

Direction: 1

Total Length: 4479

Measured Total Depth: 17480

True Vertical Depth: 12800

End Point Location from Lease,
Unit, or Property Line: 1

Notes:

Category	Description
DEEP SURFACE CASING	10/13/2014 - G76 - 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
PENDING CD - 201406833	10/13/2014 - G91 - 34-14N-10W X 542123 WDFD 11 WELLS NO OP. NAMED REC. 10-6-2014 (JOHNSON)
PENDING CD - 201406839	10/13/2014 - G91 - (I.O.) 34-14N-10W X 542123 MSSP, WDFD, HNTN SHL 245 FSL, 1527 FWL ** COMPL. INT. NCT 150 FSL, NCT 150 FNL, NCT 1700 FWL NO OP. NAMED REC. 10-6-2014 (MCKEOWN)
	** SHL TO BE CORRECTED IN INTERIM ORDER PER OPERATOR**
SPACING - 542123	10/13/2014 - G91 - (640) 34-14N-10W EXT VARIOUS OTHERS EXT 437583 WDFD, OTHER EST OTHERS