

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

API NUMBER: 017 24718

Approval Date: 11/14/2014
Expiration Date: 05/14/2015

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 09 Twp: 13N Rge: 9W County: CANADIAN
SPOT LOCATION: SE SE SW SW FEET FROM QUARTER: FROM SOUTH FROM WEST
SECTION LINES: 235 1075

Lease Name: HALEY 9-13-9 Well No: 2H Well will be 235 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

CHRISTINA KNOEPFEL
PO BOX 31
THOMPSON OK 77481

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

Name	Depth	Name	Depth
1 WOODFORD	11700	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 455168 Location Exception Orders: Increased Density Orders: 629331

Pending CD Numbers: 201408178 Special Orders:
201404557

Total Depth: 16860 Ground Elevation: 1403 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

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: 14-28690
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 09 Twp 13N Rge 9W County CANADIAN

Spot Location of End Point: NW NE NW NW

Feet From: NORTH 1/4 Section Line: 150

Feet From: WEST 1/4 Section Line: 850

Depth of Deviation: 11657

Radius of Turn: 478

Direction: 359

Total Length: 4452

Measured Total Depth: 16860

True Vertical Depth: 12032

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

Notes:

Category	Description
DEEP SURFACE CASING	11/14/2014 - 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
INCREASED DENSITY - 629331	11/14/2014 - G91 - 9-13N-9W X 455168 WDFD 4 WELLS CIMAREX ENERGY, CO. 8-18-2014
PENDING CD - 201404557	11/14/2014 - G91 - (I.O.) 9-13N-9W X 455168 WDFD, OTHERS SHL NCT 170 FSL, NCT 955 FWL COMPL. INT. NCT 150 FSL, NCT 150 FNL, NCT 770 FWL CIMAREX ENERGY, CO. REC. 11-3-2014 (JOHNSON)
PENDING CD - 201408178	11/14/2014 - G91 - (E.O.) 9-13N-9W X165:10-3-28(C) WDFD, OTHERS (HALEY 9-13-9 2H) MAY BE LESS THAN 600' FROM EXISTING AND/OR PROPOSED WELLS CIMAREX ENERGY CO. REC 11-14-2014 (MCKEOWN)
SPACING - 455168	11/14/2014 - G91 - (640) 9-13N-9W EXT 437237 WDFD, OTHERS EXT OTHERS

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.

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

API NUMBER: **017-34718**

Approval Date:
 Expiration Date:

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 09 Twp: 13N Rge: 9W County: CANADIAN

SPOT LOCATION: **SE** SE SW SW FEET FROM QUARTER FROM SOUTH FROM WEST
 SECTION LINES 205 075

Lease Name: HALEY 9-13-9 Well No: 2H Well will be 235 feet from nearest unit or lease boundary.

Operator Name: CIMAREX ENERGY CO Telephone: 9185851100 OTC/OCC Number: 21194 0

Application for Intent to Drill

CIMAREX ENERGY CO
 202 S CHEYENNE AVE STE 1000
 TULSA, OK 74103-3001

CHRISTINA KNOEPFEL
 PO BOX 31
 THOMPSON OK 77481

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

Name	Depth	Name	Depth
1		6	
2	WOODFORD	7	11700
3		8	
4		9	
5		10	

Spacing Orders: 455168 Location Exception Orders: Increased Density Orders: **629331**

Pending CD Numbers: 201404557 **rec. 11-3-2014 (Johnson)**
201409178 (E.O.) Hearing 11-14-2014 Special Orders:

Total Depth: 16880 Ground Elevation: 1403 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

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-28690

closed system = steel pits per operator request

PTL
 Water Based, 100000-50000ppm Chlorides
 Keep Surface Casing 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.

TEMPORARY AUTHORIZATION TO DRILL
 Expiration Date: **11/17/2014**
 Signature: *Virginia Hullinger*
 165:10-3-1-1

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 09 Twp 13N Rge 9W County CANADIAN

Spot Location of End Point: NW NE NW NW

Feet From: NORTH 1/4 Section Line: 150

Feet From: WEST 1/4 Section Line: 350

Depth of Deviation: 11657

Radius of Turn: 478

Direction: 360

Total Length: 4452

Measured Total Depth: 16860

True Vertical Depth: 12032

End Point Location from Lease,

Unit, or Property Line: 150

Application for Intent to Drill

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.

000 00000 HALEY 9-13-9 2H

Page 2 of 2