

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

API NUMBER: 149 21701

Approval Date: 06/10/2014
Expiration Date: 12/10/2014

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 17 Twp: 11N Rge: 20W County: WASHITA
SPOT LOCATION: SW SE SE SW FEET FROM QUARTER: FROM SOUTH FROM WEST
SECTION LINES: 300 2115

Lease Name: HANNAH ROY TRUST 17-11-20 Well No: 2H Well will be 300 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

RACHEL PENN HANNAH FIELDS
712 HILTON ROAD
WALNUT CREEK CA 94595

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

Name	Depth	Name	Depth
1 HOXBAR	11039	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 152744

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201403450
201403595

Special Orders:

Total Depth: 16133 Ground Elevation: 1996 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 330

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: ELK CITY

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-27456
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 17 Twp 11N Rge 20W County WASHITA

Spot Location of End Point: NE NE NE NW

Feet From: NORTH 1/4 Section Line: 200

Feet From: WEST 1/4 Section Line: 2440

Depth of Deviation: 10619

Radius of Turn: 749

Direction: 5

Total Length: 4337

Measured Total Depth: 16133

True Vertical Depth: 11096

End Point Location from Lease,
Unit, or Property Line: 200

Additional Surface Owner	Address	City, State, Zip
JAN BLACKBURN HANNAH	1385 MISSION ST., STE. 220	SAN FRANCISCO, CA 94103
ANNE B. HANNAH-ROY	1328 JOSEPHINE STREET	BERKLEY, CA 94703

Notes:

Category	Description
DEEP SURFACE CASING	6/10/2014 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING
PENDING CD - 201403450	6/10/2014 - G75 - (I.O.) 17-11N-20W X152744 HXBR SHL NCT 200 FSL, NCT 2115 FWL COMPL. INT. NCT 300 FSL, NCT 300 FNL, NCT 1320 FWL NO OP. NAMED REC 6-2-2014 (JOHNSON)
PENDING CD - 201403595	6/10/2014 - G75 - 17-11N-20W X152744 HXBR 1 WELL NO OP. NAMED REC 6-9-2014 (MCKEOWN)
SPACING - 152744	6/10/2014 - G75 - (640) 17-11N-20W EXT 130975 HXBR, 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.