



DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES  
 Minerals & Mining Program - Oil & Gas Section  
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FORM 2

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DEPT OF ENVIRONMENT & NATURAL  
 RESOURCES - RAPID CITY

APPLICATION FOR PERMIT TO DRILL

Type of Work:  Drill New Well  Re-enter Well  Drill Directional Well  Other

Type of Well:  Oil Well  Gas Well  Injection  Other

Name and Address of Operator: LUFF EXPLORATION COMPANY, 1580 LINCOLN STREET, SUITE 850, DENVER, CO 80203  
 Telephone: (303) 861-2468

Name and Address of Surface Owner: Greg & Heidi Miller, 10151 U.S. Highway 85, Bowman, ND 58623

Name and Address of Drilling Contractor and Rig Number: Ensign Drilling Inc., 1700 Broadway, Suite 777, Denver, CO, 80290, Rig 24

Surface Location of Well: Qtr-Qtr, Sec, Twp, Rge, County, Feet from Nearest Lines of section, and latitude and longitude (if available):  
 NENE, Section 27-T23N-R6E, Harding Cty, 1305' FNL x 945' FEL, Lat:45° 55' 55.829" , Long:-103° 21' 34.980"

If Directional, top of pay and bottom hole location from nearest lines of section:  
 Northwest Lateral: Top of pay est @ 9,353' MD = 9,080' TVD; BHL = 530' FNL & 2,400' FWL Sec 22-T23N-R6E

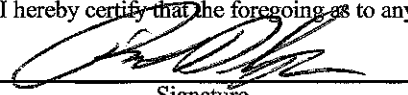
Acres in Spacing (Drilling) Unit: Total Unitized area: approx. ± 4836 acres  
 Description of Spacing Unit: Pete's Creek Red River Unit

Well Name and Number		Elevation	Field and Pool, or Wildcat		Proposed Depth and Formation
PCRRU A-27H		2,889' Gr 2,910' KB	Pete's Creek Red River Unit Red River B		13,521' MD, 9,080' TVD Red River B
Size of Hole	Size of Casing	Weight per Foot	Depth	Cementing Program (amount, type, additives)	Depth
1) 13-1/2"	9-5/8"	36#	2,000'	435 sks Lite Tailed w/ 200 sks Premium	Surface
2) 8-3/4"	7"	23#, 26#, 29#	9,353' MD	1st Stage = 120 sks Lite Tailed w/ 170 sks Premium	6,500'
3)				2nd Stage = 140 sks Lite Tailed w/ 190 sks Premium	4,200'
4) 6-1/8"	None		13,521' MD		


Describe Proposed Operations (Clearly State all Pertinent Details, and Give Pertinent Dates, Including Estimated Date of Starting any Proposed Work). Use Additional Page(s) if appropriate.

Drill a medium radius horizontal well in the Red River "B" formation. Drill 13-1/2" surface hole to 2,000' with fresh water. Run 9-5/8" casing and cement to surface. Drill 8-3/4" vertical hole to KOP at approximate 8,602'. Drill build section with an azimuth of approximately 335 degrees and land in the top of the Red River "B" zone at 9,353' MD = 9,080' TVD with a BHL 434' north and 200' west of surface location. Vertical and build sections to be drilled with invert oil mud. Run 7" casing and cement to 4,200'. Drill one 6-1/8" horizontal lateral in the Red River "B" zone to approximately 13,521' MD = 9,080' TVD at BHL approximately 530' FNL and 2,400' FWL Sec 22-T23N-R6E. Fresh water/polymer will be used for the horizontal section. All drilling fluids and cuttings will be contained in a pit lined with a 12 mil plastic liner. All liquids will be disposed of in an approved method, the liner and cuttings will be buried in place. The estimated start date for location construction is 4/1/11. Estimated start date for drilling is 4/26/11.

I hereby certify that the foregoing as to any work or operation performed is a true and correct report of such work or operation.

 Signature  
 Richard George Name (Print)  
 Manager of Engineering Title  
 3/16/2011 Date

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Approved by:  Title: Oil and Gas Supervisor  
 Permit No. 1991 API No. 40 063 20723 Date Issued: March 30, 2011  
 Conditions, if any, on attached page.