DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES
Minerals & Mining Program - Oil & Gas Section
2050 West Main, Suite #1, Rapid City, SD 57702-2493
Telephone: 605-394-2229, FAX: 605-394-5317

FORM 2

RECEIVED
MAY 2 0 2010
DEPT OF ENVIRONMENT & NATURAL RESOURCES - RAPID CITY

State of South Dakota Department of Environment and Natural Resources

APPLICATION FOR PERMIT TO DRILL

Type of Work:
[x] Drill New Well [ ] Reenter Well [ ] Drill Directional Well
[ ] Other Drill w/ Lateral

Type of Well:
[x] Oil Well [ ] Gas Well [ ] Injection
[ ] Other

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

Name and Address of Surface Owner
Milo A. Downing, HC 63, Box 21 Ludlow, SD 57755

Name and Address of Drilling Contractor and Rig Number:
Ensign Drilling Inc., 1700 Broadway, Suite 777, Denver, CO, 80290, Rig # 71

Surface Location of Well: Qtr-Qtr, Sec, Twp, Rge, County, Feet from Nearest Lines of section, and latitude and longitude (if available):
SESE Sec 30-T23N-R6E, Harding Co., 350' FSL x 1,080'FEL, N45° 55' 20", W103° 25' 20"

If Directional, top of pay and bottom hole location from nearest lines of section:
East Lateral: Top of pay est @ 9,197' MD = 8,924' TVD; BHL @ 300' FSL & 1,320' FEL Sec 29-T23N-R6E

Acres in Spacing (Drilling) Unit
Unit well in East Harding Springs Red River Unit

Description of Spacing Unit
East Harding Spring Red River Unit

Well Name and Number	Elevation	Field and Pool, or Wildcat	Proposed Depth and Formation
EHSRRU P-30H	2,926' Graded 2,942' KB	EHSRRU	13,758' MD, 8,924' 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#	9,197' MD	1st Stage = 110 sks Lite tailed w/ 145 sks Premium	6,500'
3)				2nd Stage = 75 sks Lite Tailed w/ 170 sks Premium	4,200'
4) 6-1/8"	None		13,758'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 approximately 8,447'. Drill build section with an azimuth of approximately 91 degrees and land in the top of the Red River "B" zone at 9,197' MD = 8,924' TVD with a BHL 5' south and 477' east 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 13,758' MD = 8,924' TVD at BHL approximately 300' FSL and 1,320' FEL Sec 29-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. 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 5/25/10. Estimated start date for drilling is 6/18/10.

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

Bill Organ	Bill Organ	Drilling Consultant	5/17/10
Signature	Name (Print)	Title	Date

FOR OFFICE USE ONLY

Approved by: Fred Witten Title: Oil and Gas Supervisor

Permit No. 1974 API No. 40 063 20710 Date Issued: June 7, 2010

Conditions, if any, on attached page.