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
MAR 1 1 2011
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

Type of Well: [x] 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
Clair C. Janvrin, 12548 Cox Road, Ludlow, SD 57755

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):
SWSE Sec 33-T23N-R5E, Harding Co., 350' FSL x 1940' FEL, Lat: 45° 54' 27.734" N , Long: 103° 30' 28.209" W

If Directional, top of pay and bottom hole location from nearest lines of section:
North Lateral: Top of pay est @ 9,215' MD = 8,942' TVD; BHL = 570' FSL & 1,940' FEL Sec 28-T23N-R5E

Acres in Spacing (Drilling) Unit
480

Description of Spacing Unit
E/2 Sec 33 and SE/4 Sec 28-T23N-R5E

Well Name and Number	Elevation	Field and Pool, or Wildcat	Proposed Depth and Formation
Janvrin O-33H	2952' Gr 2973' KB	Stateline Field	14,247' MD, 8942' 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" 6.65/sx	23#, 26#, 29#	9,215'MD	1st Stage = 120 sks Lite Tailed w/ 170 sks Premium	6,500' 192.8
3)				2nd Stage = 140 sks Lite Tailed w/ 190 sks Premium	4,200' 219.4
4) 6-1/8"	None		14,247'MD		

4127

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 8,464'. Drill build section with an azimuth of approximately 0 degrees and land in the top of the Red River "B" zone at 9,215' MD = 8,942' TVD with a BHL 477' north 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 14,247' MD = 8,942' TVD at BHL approximately 570' FSL and 1,940' FEL Sec 28-T23N-R5E. 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 4/15/11. Estimated start date for drilling is 5/26/11.

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	Name (Print)	Title	Date
[signature]	Richard D. George	Manager of Engineering	3/10/2011

FOR OFFICE USE ONLY

Approved by: [signature] Title: Oil and Gas Supervisor

Permit No. 1990 API No. 40 063 20722 Date Issued: March 30, 2011

Conditions, if any, on attached page.