

STATE OF SOUTH DAKOTA  
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
BOARD OF MINERALS AND ENVIRONMENT

RECEIVED  
MAY 15 2012

DEPT OF ENVIRONMENT & NATURAL  
RESOURCES - RAPID CITY

IN THE MATTER OF THE PETITION OF )  
LUFF EXPLORATION COMPANY TO )  
AMEND THE APPLICABLE ORDERS FOR )  
THE SOUTH MEDICINE POLE HILLS FIELD )  
TO ESTABLISH A 960-ACRE SPACING )  
UNIT CONSISTING OF THE SW/4 OF )  
SECTION 27, THE SE/4 OF SECTION 28, )  
THE E/2 OF SECTION 33 AND THE W/2 OF )  
SECTION 34, ALL IN TOWNSHIP 23 )  
NORTH, RANGE 4 EAST, HARDING )  
COUNTY, SOUTH DAKOTA AND )  
AUTHORIZE THE DRILLING OF A )  
HORIZONTAL WELL WITH ONE OR MORE )  
LATERALS IN THE RED RIVER "B" ZONE )  
AT ANY LOCATION NOT CLOSER THAN )  
500 FEET TO THE BOUNDARY OF SAID )  
SPACING UNIT; TO AUTHORIZE THE )  
ISSUANCE OF A PERMIT FOR SUCH )  
HORIZONTAL WELL; AND FOR SUCH )  
OTHER RELIEF AS THE BOARD DEEMS )  
APPROPRIATE. )

**PETITION**

Case No. 7-2012

COMES NOW the petitioner, Luff Exploration Company ("Luff"), and respectfully alleges as follows:

1. Luff represents the owners of interests in the oil and gas leasehold estate underlying all or portions of the SW/4 of Section 27, the SE/4 of Section 28, the E/2 of Section 33, and the W/2 of Section 34, all in Township 23 North, Range 4 East of the Black Hills Meridian, Harding County, South Dakota.

2. In Order No. 2-73b, the Board established 320-acre spacing for the South Medicine Pole Hills field and included all of the lands described above within the field. In Order No. 14-97, the Board established 640-acre spacing for horizontal Red River "B" wells in various lands within the field, including Section 34.

4. Two wells have been drilled in the lands described above. The Stearns 1-34 well was drilled in the NESW of Section 34 in 1979 and produced approximately 47,000 barrels of oil from the Red River "D" formation before being plugged and abandoned. The Buckley 33-28 well was drilled in the NWSE of Section 28 in 1973 and produced approximately 119,000 barrels of oil from the Red River "B" formation before being abandoned in the Red River pool. Luff desires to drill a horizontal well in the Red River "B" zone with a NW/SE azimuth lying between the Buckley 33-28 location in the NWSE of Section 28 and the Stearns 1-34 location in the NESW of Section 34. Due to the structure and areal extent of the Red River accumulation in this area, such a well will, in applicant's opinion, maximize the recovery of oil and gas.

5. Luff respectfully requests that the Board amend its prior orders, including without limitation Order Nos. 2-73b and 14-97 so as to establish a 960-acre spacing unit for the South Medicine Pole Hills Field consisting of the SW/4 of Section 27, the SE/4 of Section 28, the E/2 of Section 33, and the W/2 of Section 34, all in Township 23 North, Range 4 East, and to allow a horizontal well with one or more laterals to be drilled in the Red River "B" pool at any location thereon not closer than 500 feet to the boundary of such spacing unit.

6. In Luff's opinion, forming the requested spacing unit and drilling the well described above will optimize primary recovery, prevent waste, avoid the drilling of unnecessary wells, and protect correlative rights.

7. The spacing unit requested to be created is not smaller than the maximum area that can be efficiently and economically drained by the proposed wells and the size, shape and location thereof will result in the efficient and economic development of the pool as a whole.

8. The Board is authorized to grant the requested spacing unit by SDCL 45-9-20 through 45-9-29 and ARSD 74:12:02:06. Luff further requests that the order authorize the issuance of a permit for the drilling of horizontal wells in accordance with this application.

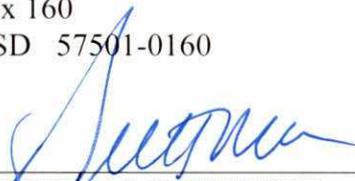
WHEREFORE, applicant respectfully requests that this matter be set for hearing at the regularly scheduled hearings in July, 2012, or such other date as may be established by the Board and that thereafter the Board enter its order granting the relief requested.

Dated this 14 day of May, 2012.

LUFF EXPLORATION COMPANY

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Bismarck, ND 58502

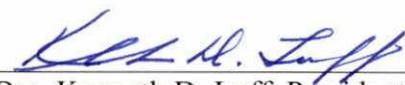
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P.O. Box 160  
Pierre, SD 57501-0160

By:   
BRETT M. KOENECKE

State of Colorado            )  
  )ss.  
County of Denver            )

Luff Exploration Company, applicant in the captioned matter, hereby grants permission to the secretary for the performance of inspections required or authorized by SDCL Chapter 45-9 or ARSD Article 74:12.



LUFF EXPLORATION COMPANY  
  
By: Kenneth D. Luff, President

Subscribed and sworn to this 11th day of May, 2012.

  
Notary Public – Gloria Ramirez  
Denver, Colorado  
My Commission Expires: 8/21/2014