

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

<p>IN THE MATTER OF THE PETITION OF LUFF EXPLORATION COMPANY, DENVER, COLORADO, TO AMEND THE APPLICABLE ORDERS FOR THE BUFFALO FIELD, THE SOUTH MEDICINE POLE HILLS FIELD, THE STATE LINE FIELD, AND THE TRAVERS RANCH FIELD TO ESTABLISH A 960-ACRE SPACING UNIT FOR THE BUFFALO FIELD CONSISTING OF THE SW/4 OF SECTION 36 AND THE SE/4 OF SECTION 35, TOWNSHIP 23 NORTH, RANGE 4 EAST, HARDING COUNTY, SOUTH DAKOTA, AND THE W/2 OF SECTION 1 AND THE E/2 OF SECTION 2, TOWNSHIP 22 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 OTHER RELIEF AS THE BOARD DEEMS APPROPRIATE.</p>	<p style="text-align:center">OIL AND GAS CASE NO. 6-2013</p> <p style="text-align:center">ORDER</p>
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SECRETARY’S ORDER UNDER SDCL 45-9-74

A Petition (“Petition”) of Luff Exploration Company (“Luff”) was submitted to the South Dakota Board of Minerals and Environment (“Board”) on February 1, 2013. The Board prepared and published a Notice of Opportunity for Hearing (“Notice”) and Luff caused a copy of the Petition and the Notice to be served by mail or personally on each party affected by the petition. Northwest Christian University (“NCU”) filed a petition to intervene in Case No. 6-13 on March 5, 2013, but then withdrew their petition to intervene on March 7, 2013. Apart from NCU’s petition to intervene, no petition to intervene was filed in accordance with the Notice.

Therefore, pursuant to SDCL 45-9-74, SDCL 45-9-20 through 29, and ARSD 74:12:02:06, and based upon Luff's Petition and the supporting documents filed by Luff, the Secretary makes and enters the following order:

Luff represents the owners of interests in the oil and gas leasehold estate in all or portions of the SW/4 of Section 36 and the SE/4 of Section 35, Township 23 North, Range 4 East, and the W/2 of Section 1 and the E/2 of Section 2, Township 22 North, Range 4 East, all in Harding County, South Dakota.

Pursuant to Order No. 14-97, the SE/4 of Section 35 is included in the South Medicine Pole Hills Field and is currently part of a 640-acre spacing unit consisting of all of Section 35. Pursuant to Order No. 1-73, the SW/4 of Section 36 is included in the State Line Field. Pursuant to Order No. 9-78, the SW/4 of Section 36 is spaced on the basis of 320 acres. Pursuant to Order No. 7-95, the W/2 of Section 1 is included in the Travers Ranch Field and is currently part of a 640-acre spacing unit consisting of all of Section 1. The E/2 of Section 2 is not currently spaced by any order of the Board.

The Red River "B" reservoir underlying all of the lands described above is part of the same common source of supply and that common source of supply extends into the Buffalo Field insofar as that field extends into the SW/4 of Section 2.

No wells have been drilled in the lands described above. Luff desires to drill a horizontal well in the Red River "B" pool with a lateral drilled from a surface location in the SE/4SE/4 of Section 2 in a northerly direction on the west side of the common section line between Sections 1 and 2 in the middle of the proposed spacing unit to a point near the common section line between Section 2 and Section 35, then turned in a northwesterly direction to the middle of the SE/4 of Section 35. As a result of the structure and areal extent of the Red River "B" pool, Luff believes

such a well will maximize the recovery of oil and gas from the common source of supply. To accommodate such a horizontal well, Luff requests that the lands described above be included within the Buffalo Field and be designated as a 960-acre spacing unit for the Buffalo Field with one horizontal well with one or more laterals allowed to be drilled at any location on the spacing unit not closer than 500 feet to the boundary of the spacing unit.

Such a spacing unit is not smaller than the maximum area that can be efficiently and economically drained by the proposed well and the size, shape and location of the spacing unit will result in the efficient and economic development of the pool as a whole.

IT IS THEREFORE ORDERED

A. The SW/4 of Section 36 and the SE/4 of Section 35, Township 23 North, Range 4 East, and the W/2 (aka Lots 3 and 4, S/2NW/4, and SW/4) of Section 1 and the E/2 (aka lots 1 and 2, S/2NE/4, and SE/4) of Section 2, Township 22 North, Range 4 East, Harding County, South Dakota, containing 959.92 acres, more or less, are included within the Buffalo Field and are designated as a 960-acre spacing unit.

B. A horizontal well with one or more laterals is allowed to be drilled in the Red River “B” pool at any location within the spacing unit not closer than 500 feet to the spacing unit boundary.

C. This order amends prior orders of the Board concerning the above described land, including without limitation Order Nos. 2, 2-73b, 14-97, 1-73, 9-78, 3-73b, and 7-95.

D. That all portions of previous orders of the Board, if any, which are not amended by this Order shall remain in full force and effect until further order of the Board or Secretary.

E. That upon filing all required further information and forms with the Department of Environment and Natural Resources, a drilling permit may be issued for a horizontal well on

the spacing unit established above.

Dated and signed this 1st day of April 2013.

A handwritten signature in black ink, appearing to read 'S. Pirner', with a horizontal line extending to the right.

Steven M. Pirner
Secretary
Department of Environment and Natural Resources