

OIL AND GAS INVESTIGATION 2
Cross Sections Showing Geophysical Logs of Phanerozoic Rocks in South Dakota
Plate 2. Structural Cross Section B-B'
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Prepared in cooperation with the Department of Geology and Geological Engineering, South Dakota School of Mines and Technology

Explanation

The strongest geologic contact interpreted in areas west of the Missouri River is the contact between the Neobrian Formation and the Pierre Shale. It is recognized that younger geologic units often occur above the Pierre Shale, but they are not interpreted for this cross section.

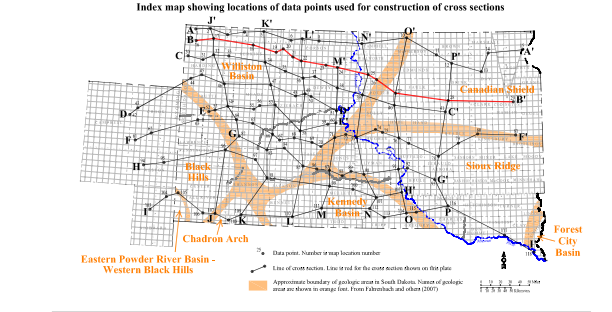
Correlation lines are drawn between geophysical logs to show structural relationships. Correlation lines are not intended to show structural relations or actual elevations of a geologic unit. Correlation lines are drawn between geophysical logs to show structural relationships. Correlation lines are not intended to show structural relations or actual elevations of a geologic unit. Correlation lines are drawn between geophysical logs to show structural relationships. Correlation lines are not intended to show structural relations or actual elevations of a geologic unit.

Profile of land surface derived from U.S. Geological Survey digital elevation models. Note the location of the cross section, including, where appropriate, the river or other features. Modified from Tompkins and Schaef (2004).

Depth of well, in feet, or ground surface. Note the location of the cross section, including, where appropriate, the river or other features. Modified from Tompkins and Schaef (2004).

Horizontal and vertical scales of cross section.

Vertical exaggeration = 52.8X



Geologic unit

| Geologic unit | Map location number (MLN) and depth, in feet, to top of geologic unit* | | | | | | | | | | | | | | | |
|----------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|--|
| | MLN 16 | MLN 17 | MLN 18 | MLN 19 | MLN 20 | MLN 21 | MLN 22 | MLN 23 | MLN 24 | MLN 25 | MLN 26 | MLN 27 | MLN 28 | MLN 29 | | |
| Burdick Formation | 2080 | 2080 | 2100 | 2100 | 2100 | 2100 | 2100 | 2100 | 2100 | 2100 | 2100 | 2100 | 2100 | 2100 | | |
| Cretaceous Limestone | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Neobrian Formation | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Pierre Shale | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |