First Occurrence of Aquifer Materials in Charles Mix County, South Dakota

**Explanation**

The map is intended for use as a tool to aid in identifying areas underlain by aquifer material. It is based on the most recent available information and is updated periodically. The information and interpretation of areas shown may be preliminary. The source data and other factors may vary in reliability and completeness, and the interpretations presented may not be definitive. This map should be used in conjunction with additional information before making land management or water development decisions.

Abbreviations:
- **Road**
- **Lake**
- **Slough or intermittent lake**

First occurrence in generally greater than 50 feet below land surface:
- **Red**
- **Yellow**
- **Orange**
- **Green**

First occurrence in generally greater than 100 feet below land surface:
- **Gray**

First occurrence in generally greater than 100 feet below land surface:
- **Brown**

Water bodies:
- **Rivers and streams**
- **Lakes**
- **Sloughs or intermittent lakes**

For county area boundaries, see T. 95 N. and T. 96 N.

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**Division of Financial and Technical Assistance**

**Geological Survey**

**Aquifer Materials Map 29**

**Ann R. Jensen, 2008**

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**Explanation**

The thickness and permeability of aquifer material may vary significantly. Also, no attempt was made to depict the extent of alluvial deposits in the interpreted aquifer materials. Within the first occurrence zones, geology of the DakotaSandstone east of the Missouri River Geologic Quadrangle, scale 1:62,500.

**Geologic Survey Water-Resources Investigations Report 90-4093, 100 p.**

**South Dakota Geological Survey Bulletin 21, 61 p.**

**Jorgensen, D.G., 1971, Survey Aquifer Materials Map 25, scale 1:100,000.**

**South Dakota Geological Survey Bulletin 22, 43 p.**

**Christensen, C.M., 1974, The thickness and permeability of aquifer material may vary significantly. Also, no attempt was made to depict the extent of alluvial deposits in the interpreted aquifer materials. Within the first occurrence zones, geology of the DakotaSandstone east of the Missouri River Geologic Quadrangle, scale 1:62,500.

**Geologic Survey Circular 42, 6 p.**

**Sand and gravel resources in Charles Mix and Douglas Counties, South Dakota.**

**Areal geology of the Platte quadrangle**

**Wind and Gravel**: A gray, medium- to coarse-grained sand with some gravel and shell, and may be discontinuous in lateral extent.

**Nelson Formation**: A gray, fine-grained sand with shell, and may be discontinuous in lateral extent.

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**First occurrence is generally at land surface**: A gray, medium- to coarse-grained sand with some gravel and shell, and may be discontinuous in lateral extent.

**Nelson Formation**: A gray, fine-grained sand with shell, and may be discontinuous in lateral extent.

**First occurrence is generally 50 feet or less below land surface**: A gray, medium- to coarse-grained sand with some gravel and shell, and may be discontinuous in lateral extent.

**Nelson Formation**: A gray, fine-grained sand with shell, and may be discontinuous in lateral extent.

**First occurrence is generally greater than 50 feet and generally less than 100 feet below land surface**: A gray, medium- to coarse-grained sand with some gravel and shell, and may be discontinuous in lateral extent.

**Nelson Formation**: A gray, fine-grained sand with shell, and may be discontinuous in lateral extent.

**First occurrence is generally greater than 100 feet below land surface**: A gray, medium- to coarse-grained sand with some gravel and shell, and may be discontinuous in lateral extent.

**Nelson Formation**: A gray, fine-grained sand with shell, and may be discontinuous in lateral extent.