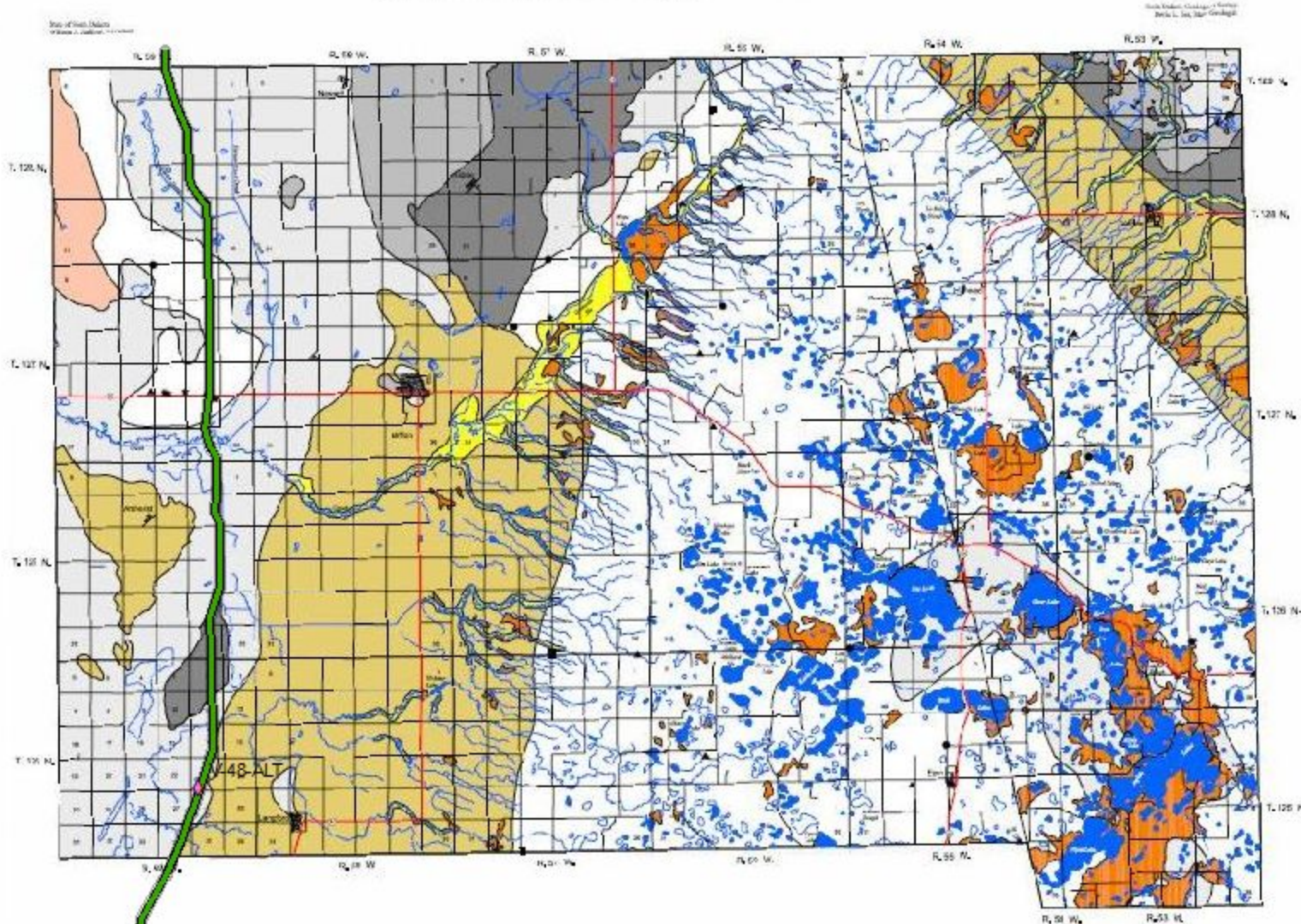


First Occurrence of Aquifer Materials in Marshall County, South Dakota

Department of Environment and Natural Resources
Division of Financial and Technical Assistance
Geological Survey
Aquifer Materials Map 3
Ann R. Jensen, 2001



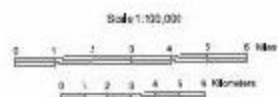
Explanation

Discussions intended for use as a tool to aid in identifying areas specifically by aquifer material. The map illustrates the first occurrence of aquifer materials in Marshall County. This first occurrence is the first time that aquifer materials are identified in the county. This map is intended to provide information on the first occurrence of aquifer materials in Marshall County. The thickness and porosity of aquifer materials may vary significantly. Also, an attempt was made to distinguish between unconsolidated and consolidated materials. Therefore, use of this map should be defined on the map as an aquifer. Specific information should always be obtained when making land use decisions with development decisions.

- Marion:** Coarsest of clay with silty sand, siltstone, sand and gravel.
- Bead and Gravel:** Two occurrences in generally a well-sorted sandstone.
- Bead and gravel:** Two occurrences in generally a well-sorted sandstone.
- Standard Gravelly sand:** May be the substrate in aquifer materials and may be distributed in local areas.
- Standard Clay:** May be the substrate in aquifer materials and may be distributed in local areas.
- Dakota Formation:** Coarsest of unconsolidated, sandstone and shale.
- Area where aquifer materials may be present in glacial deposits:** Areas where aquifer materials may be present in glacial deposits are indicated by a dashed line. Data points have been plotted to show availability of information. Dakota Formation underlies these areas.
- Data points where the first occurrence of aquifer material is generally less than 50 feet below land surface:**
- Data points where the first occurrence of aquifer material is generally greater than 50 feet and less than or equal to 100 feet below land surface:**
- Data points where the first occurrence of aquifer material is generally greater than 100 feet below land surface:**
- Data points where there are aquifer materials between land surface and the bedrock surface:**

Major highway, Road, Township boundary, River or stream, Lake, Drainage contour.

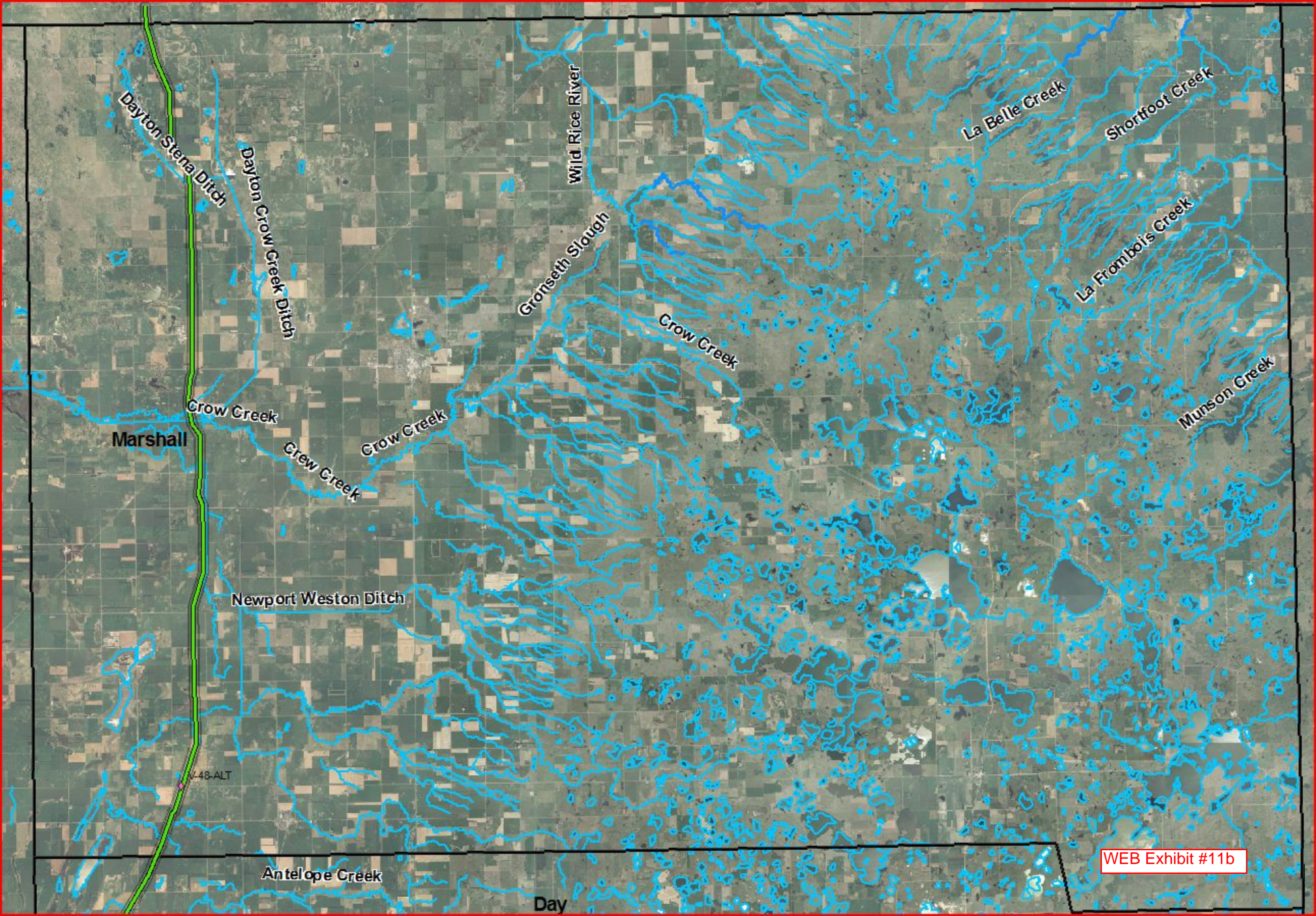
For knowledge on aquifer materials see T. 125 N., R. 53 W.



WEB Exhibit # 11a

South Dakota Department of Environment and Natural Resources
Geological Survey
Map 3
Ann R. Jensen, 2001

The Geological Survey, Department of Environment and Natural Resources, is engaged in a mapping, identification and interpretation project. An objective of this project is to provide data interpretation on a map of the State. This map is the result of an effort to provide information on the first occurrence of aquifer materials in Marshall County. This map is the result of an effort to provide information on the first occurrence of aquifer materials in Marshall County. This map is the result of an effort to provide information on the first occurrence of aquifer materials in Marshall County.



Dayton Stena Ditch

Dayton Crow Creek Ditch

Wild Rice River

Granseth Slough

Crow Creek

La Belle Creek

Shortfoot Creek

La Frombois Creek

Munson Creek

Marshall

Crow Creek

Crew Creek

Crow Creek

Newport Weston Ditch

V-48-ALT

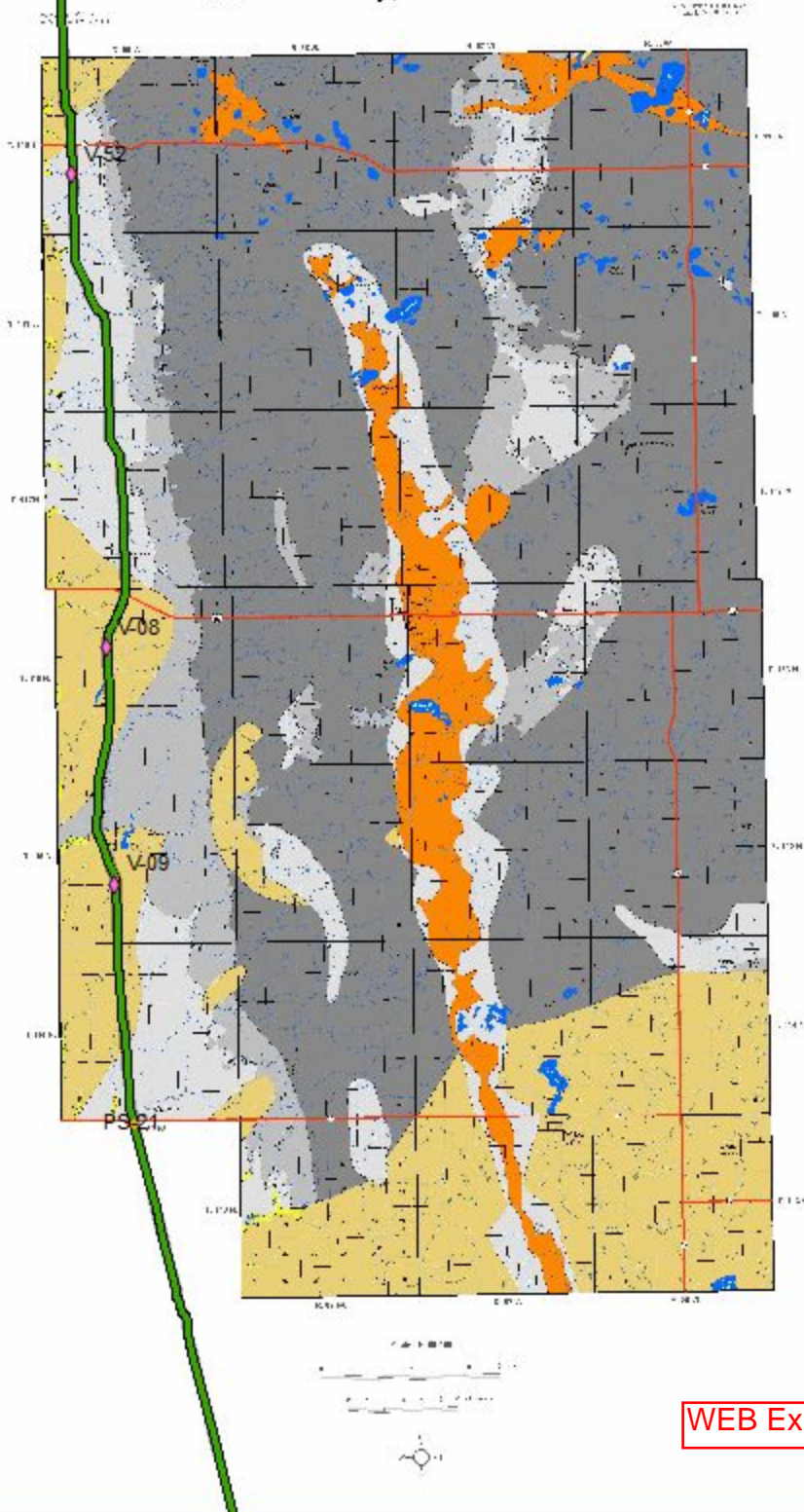
Antelope Creek

Day

WEB Exhibit #11b

First Occurrence of Aquifer Materials in Clark County, South Dakota

Department of Environment and Natural Resources
 Division of Hydraulic and Geological Sciences
 Geological Survey
 Aquifer Materials Map 2
 April 1998, revised 1999



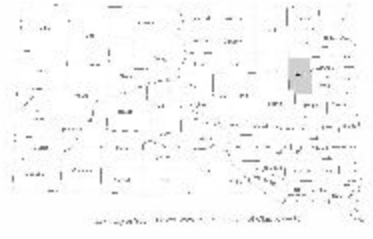
Explanation

This map shows the first occurrence of aquifer materials in Clark County, South Dakota. The map is based on data from the National Water Research Institute (NWRI) and the South Dakota Geological Survey. The map shows the distribution of aquifer materials in Clark County, South Dakota. The map is based on data from the National Water Research Institute (NWRI) and the South Dakota Geological Survey. The map shows the distribution of aquifer materials in Clark County, South Dakota.

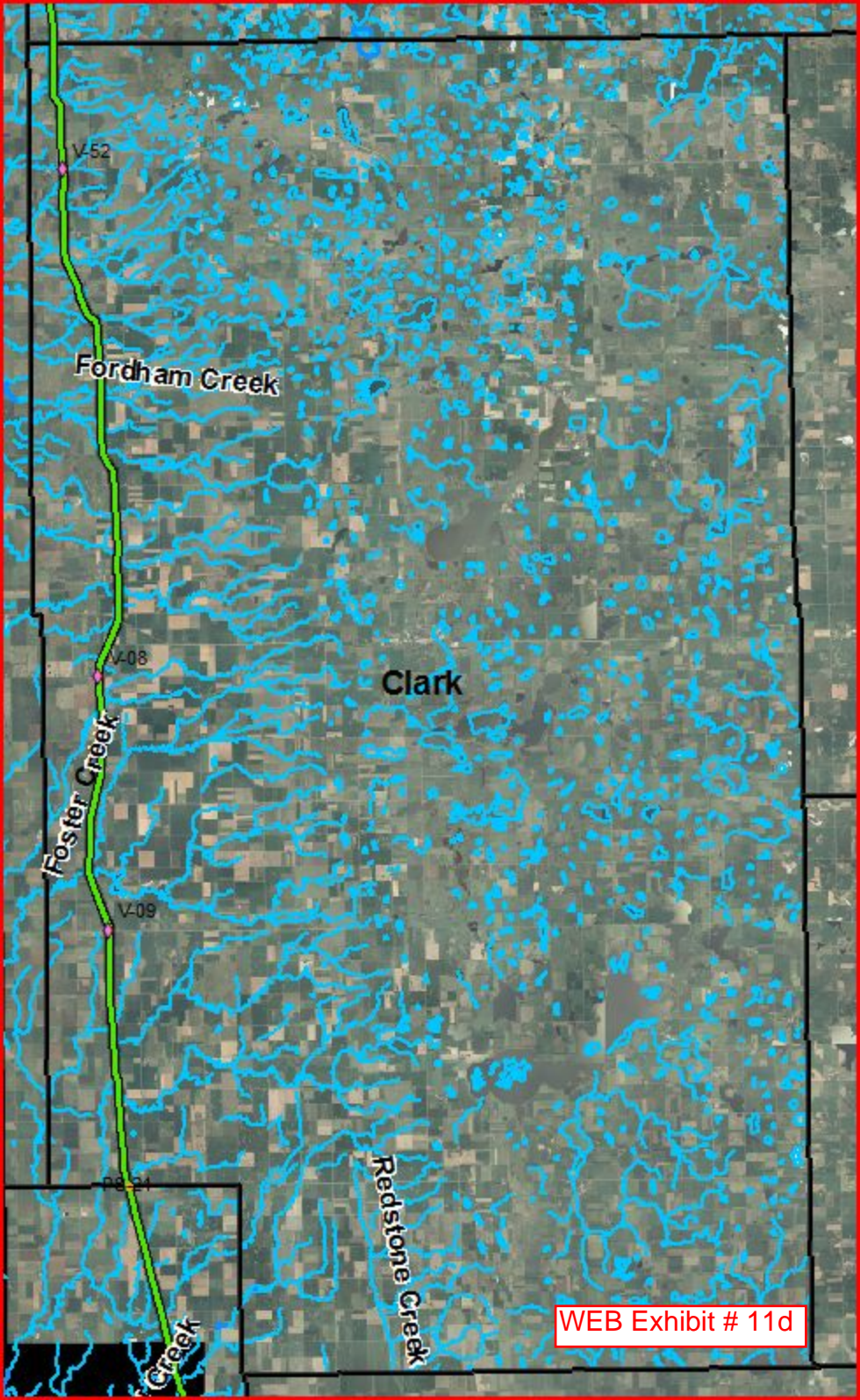
- Alluvial aquifer materials (sand and gravel)
- Alluvial aquifer materials (sand and gravel)
- Alluvial aquifer materials (sand and gravel)
- Alluvial aquifer materials (sand and gravel)
- Alluvial aquifer materials (sand and gravel)
- Alluvial aquifer materials (sand and gravel)

- Interstate
- State
- County
- Lake
- Stream

This map is a generalization of the data and should not be used for detailed engineering or design purposes. The map is based on data from the National Water Research Institute (NWRI) and the South Dakota Geological Survey. The map shows the distribution of aquifer materials in Clark County, South Dakota. The map is based on data from the National Water Research Institute (NWRI) and the South Dakota Geological Survey. The map shows the distribution of aquifer materials in Clark County, South Dakota.



WEB Exhibit # 11c



V-52

Fordham Creek

V-08

Foster Creek

V-09

Clark

Redstone Creek

Creek

WEB Exhibit # 11d

Antelope Creek

Chekepa Creek

Day

Mud Creek

Mud Creek

PS 20

WEB Exhibit # 11e

Coding

