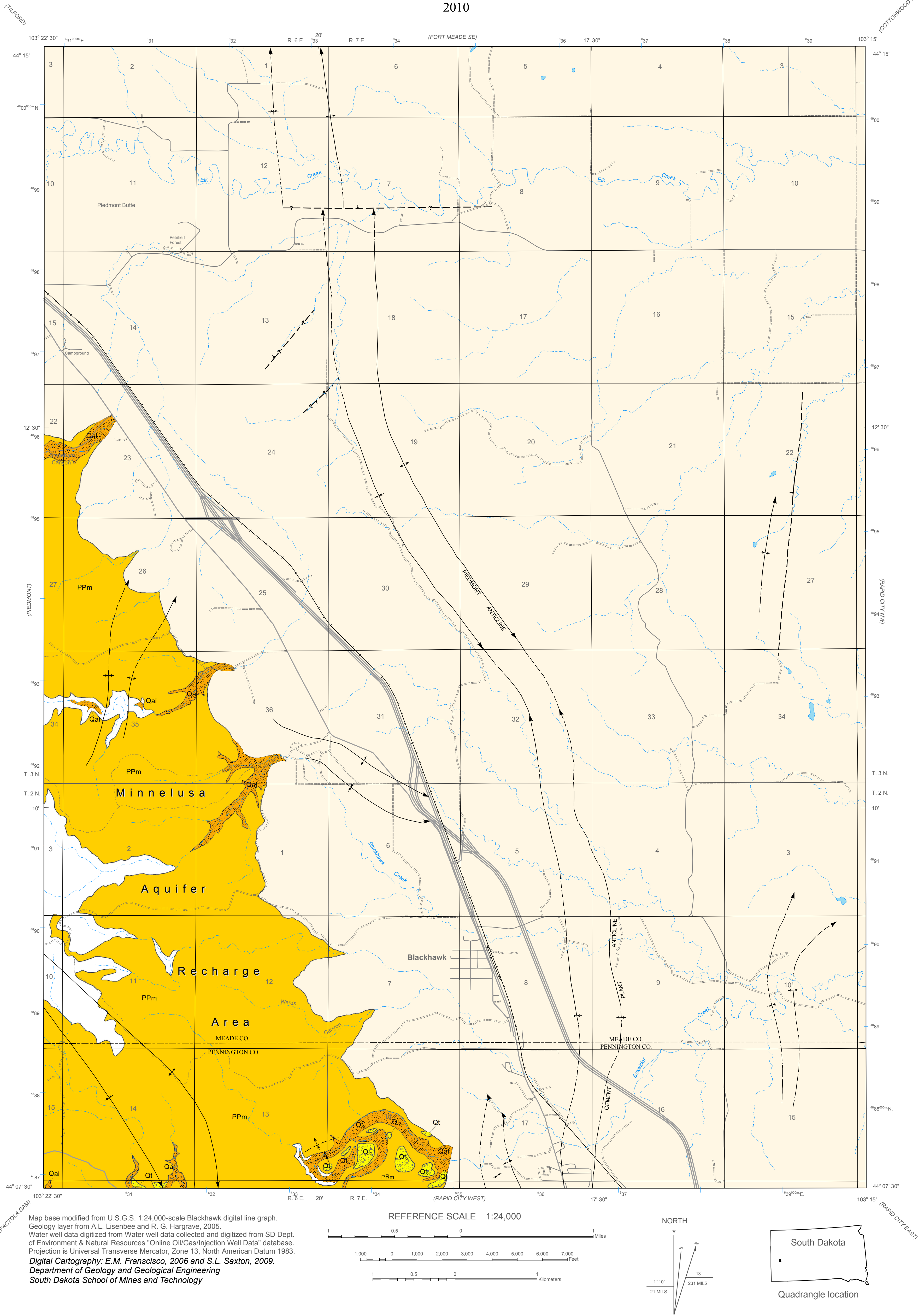


Aquifer Susceptibility Map of the Minnelusa Formation, Blackhawk Quadrangle

By
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Definition of Susceptibility

Aquifer susceptibility is the inherent ability of a formation to accept and transmit liquids (potentially including contaminants).

Susceptibility Ranges for Hydrogeologic Units

Hydrogeologic Units	Susceptibility Rating																		
	Low					Medium					High					Very High			
Minnelusa Recharge Area																			
Terrace (Gravel/Sand/Clay) Deposits over Minnelusa aquifer																			
Alluvium over Minnelusa aquifer																			
	0	5	10	15	20	25	30	35	40	45	50	55	60	65					

Summary of ratings associated with the Minnelusa aquifer. Number falling within the range area indicates the qualitative rating for aquifer susceptibility (adapted from Hargrave, 2005).

Susceptibility Ratings Explanation:
The susceptibility range is the sum of ratings for susceptibility parameters of the aquifer. The parameters used for the Minnelusa aquifer ratings are: Rock Type; 5-8 for sandstone; Overlying Material; 5-10 for alluvium and negative 5-10 for gravel, sand and clay mixture; Joints; 5-7; Minor Karst; 5-8; Breccia; 5-7 and; Minor Faults; 4-6.
The ratings suggested for the parameters are from Allen et al. (1987) and Davis et al., (1994.)

EXPLANATION

- Contact
Solid where location certain; dashed where approximately located.
- Fault
Solid where location certain; dashed where approximately located; queried where uncertain. Bar and ball on downthrown side.
- Anticline
Showing crestline and direction of plunge. Solid where location certain; dashed where approximately located.
- Syncline
Showing troughline and direction of plunge. Solid where location certain; dashed where approximately located.
- Monocline - Anticlinal bend
Axis located on steepest part of structure. Solid where location certain; dashed where approximately located.
- Monocline - Synclinal bend
Axis located on steepest part of structure. Solid where location certain; dashed where approximately located.

Geologic Units

- Quaternary
Alluvium - HIGH SUSCEPTIBILITY
Susceptibility rating ranges between 30 to 46 where alluvium overlies the Minnelusa Formation.
- Quaternary
Terrace Deposit - MEDIUM TO HIGH SUSCEPTIBILITY
Susceptibility rating ranges between 15 to 32 where terrace deposit overlies the Minnelusa Formation.
- Pennsylvanian
Minnelusa Formation - HIGH SUSCEPTIBILITY
Susceptibility rating ranges between 25 to 37. No distinction was made between the upper sandstone and the lower sandstone beds of the formation.
- Minnelusa Formation Present in Subsurface
- Minnelusa Formation Absent