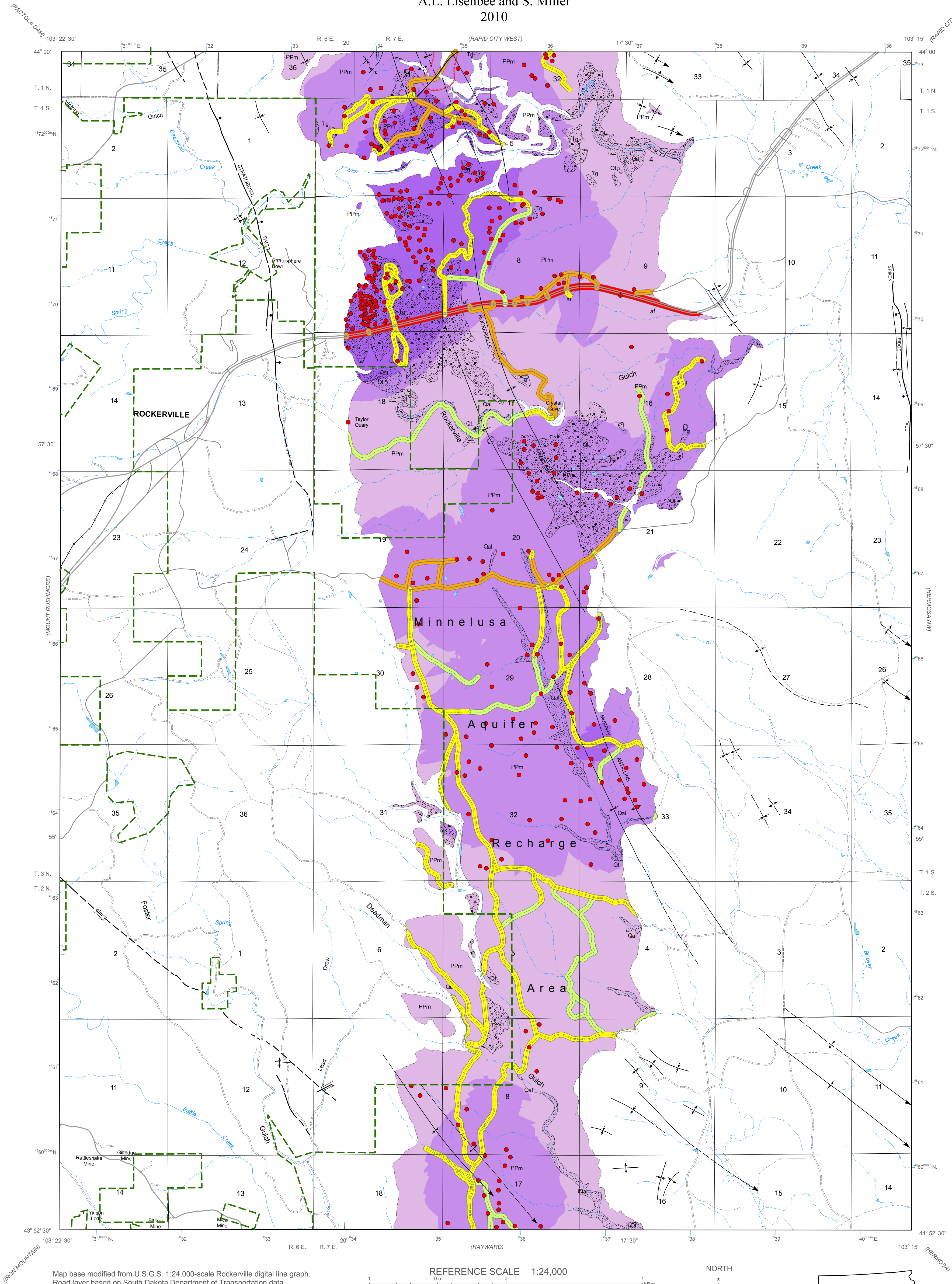
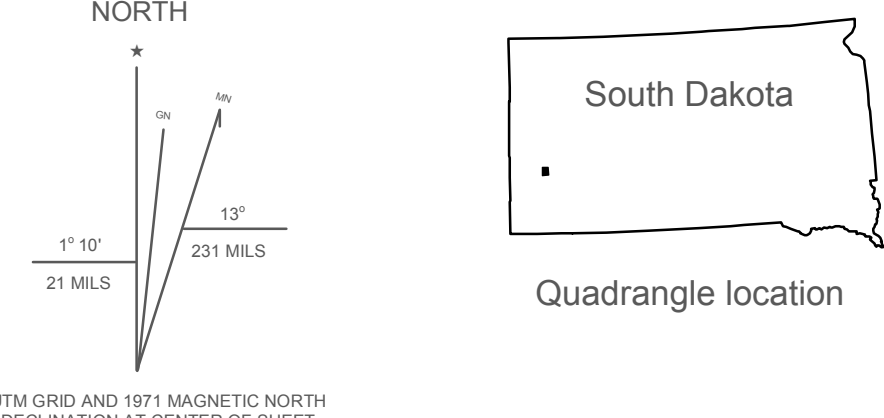
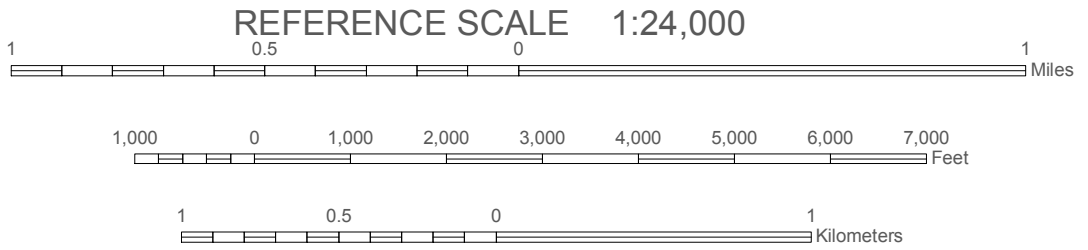


Aquifer Vulnerability Map of the Minnelusa Formation, Rockerville Quadrangle

By
A.L. Lisenbee and S. Miller
2010



Map base modified from U.S.G.S. 1:24,000-scale Rockerville digital line graph.
Road layer based on South Dakota Department of Transportation data.
Geology layer from J.L. Lester and P.H. Rahn, 2001; S.L. Miller, 2005.
Onsite wastewater system layer interpreted from Pennington County 2008 NAIP DOQ.
Projection is Universal Transverse Mercator, Zone 13, North American Datum 1983.
Digital Cartography: E.M. Francisco, 2007 and S.L. Saxton, 2010.
Department of Geology and Geological Engineering
South Dakota School of Mines and Technology



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EXPLANATION

Definition of Vulnerability

Aquifer vulnerability is the potential or likelihood that any contaminant could reach the ground-water supply, based on designated parameters described below.

Areas of increased aquifer vulnerability due to the presence of on-site septic systems in the Minnelusa recharge area

On-Site Septic System (OSS)

Density (number of OSS per sq. mi.)	Rating
0 - 10	Low to Medium
10 - 40	Medium to High
40 - 81	High to Very High

Increased aquifer vulnerability due to the presence of roads (buffered 100 feet on either side) in the Minnelusa recharge area.

Type of Road	Rating
Trail	Low
Dirt Road	Low to Medium
Paved Road	Medium to High
Highway	High to Very High

Trail	Railroad
Unimproved Road	Karst Features
Paved Road	Lake
Highway	Springs
Interstate	Intermittent Stream
	Perennial Stream

Geologic Units

Ql	Recharge Area Units present include alluvium (Qal) with stippled pattern, terrace deposits (Qt, Qt ₂ , Qt ₃) with coarse stippled pattern, Minnelusa Formation (PPm) with no pattern. Color indicates varying degree of vulnerability; see "Definition of Vulnerability".
PPm	
Qal	
	Minnelusa Formation Present in Subsurface
	Minnelusa Formation Absent
	Contact Solid where location certain; dashed where approximately located