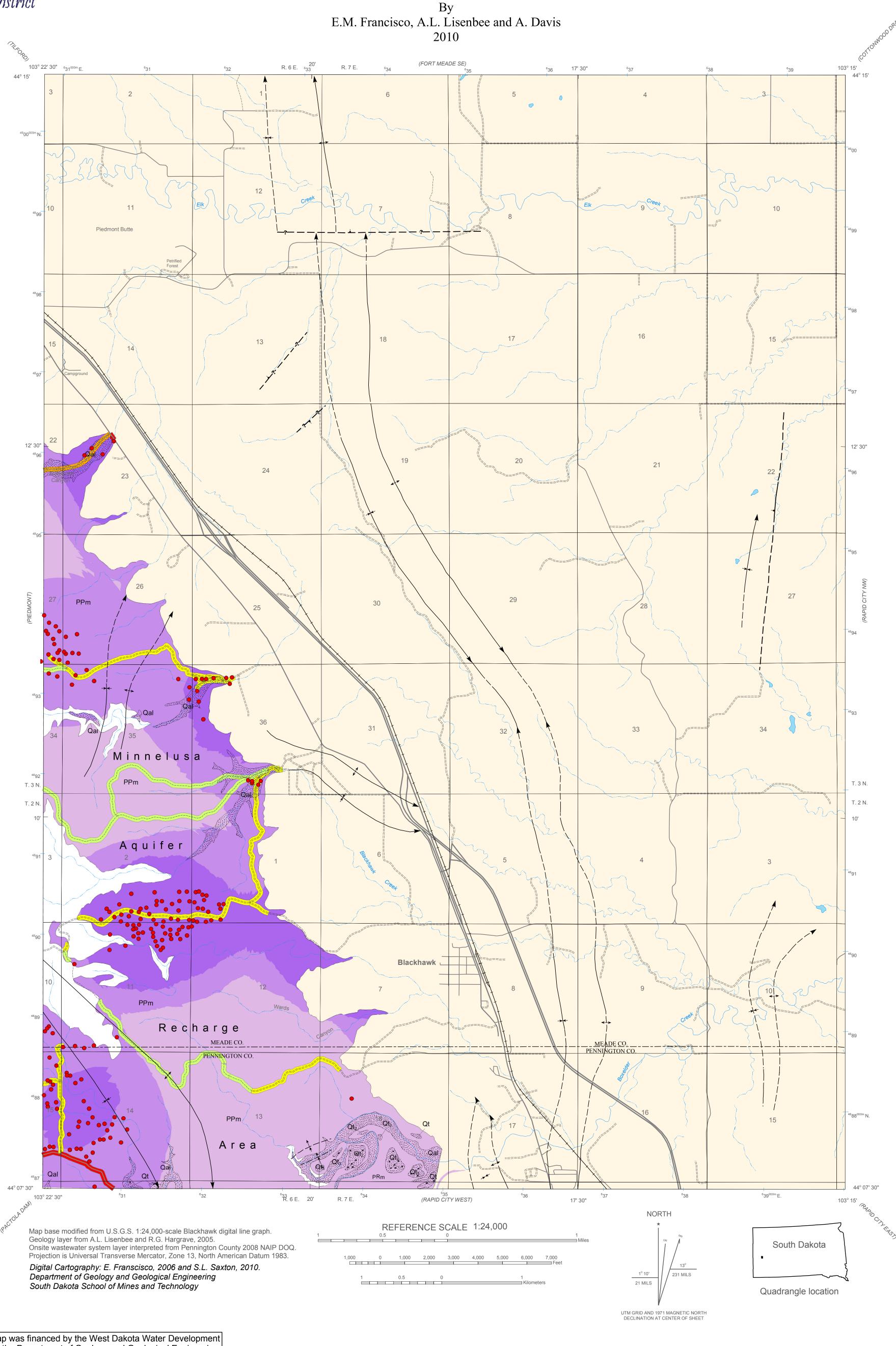


Aquifer Vulnerability Map of the Minnelusa Formation, Blackhawk Quadrangle





The preparation of this map was financed by the West Dakota Water Development District in association with the Department of Geology and Geological Engineering South Dakota School of Mines and Technology

## 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 Wastewater Disposal System (OSWDS) Density (number of OSWDS per sq. mi.) Rating

0 - 10 Low to Medium Medium to High 10 - 40 High to Very High 40 - 81

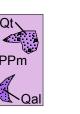
Definition of Vulnerability

## Increased aquifer vulnerability due to the presence of roads

**EXPLANATION** 

(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** Lake Paved Road Intermittent Stream Perennial Stream Highway Contact Interstate

## Geologic Units



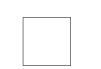
Recharge Area Units present include alluvium (Qal) with stippled pattern, terrace deposits (Qt, Qt<sub>2</sub>, Qt<sub>3</sub>) with coarse stippled pattern, Minnelusa Formation (PPm) with no pattern. Color indicates varying degree of vulnerability; see "Definition of Vulnerability".



**Minnelusa Formation Present in Subsurface** 



Solid where location certain;



**Minnelusa Formation Absent**