

TABLE 2.5-1

REGIONAL AND LOCAL HYDROGEOLOGY
SOUTH HEART LIGNITE MINE

Period	Epoch	Formation	Stratigraphic Unit	Aquifer System			Local Hydrostratigraphic Unit	Interpreted Local Aquifer
				Whitehead (1996)	Trapp and Croft (1975)	Armstrong (1984)		
Quaternary	Holocene and Pleistocene	Alluvium	Alluvium	not included	Alluvium	Alluvium	Alluvium	Overburden - D Coal aquifer
Tertiary	Eocene	Golden Valley	sandstone, siltstone, claystone		Golden Valley	Golden Valley	not widely present	
	Paleocene	Fort Union Group	Sentinel Butte	overburden	Sentinel Butte	Upper Tongue River - Sentinel Butte	Overburden	
				D Coal			D Coal	
			underburden	Underburden				
			HT Butte	HT Butte				
			Tongue River (Bullion Creek)	underburden	Underburden - HT Butte aquifer			
				sandstone				
	Ludlow and Cannonball	thin sandstone lenses	Upper Ludlow - Lower Tongue River					
sandstone lenses with some silt and clay		Upper Hell Creek - Lower Ludlow						
	Cretaceous		Late Cretaceous	Hell Creek	Upper Cretaceous Aquifers	Fox Hills and Basal Hell Creek	Fox Hills - Lower Hell Creek	
Fox Hills Sandstone		confining unit						
Pierre Shale				shale				

Note:
For detailed information on stratigraphy see Section 2.3