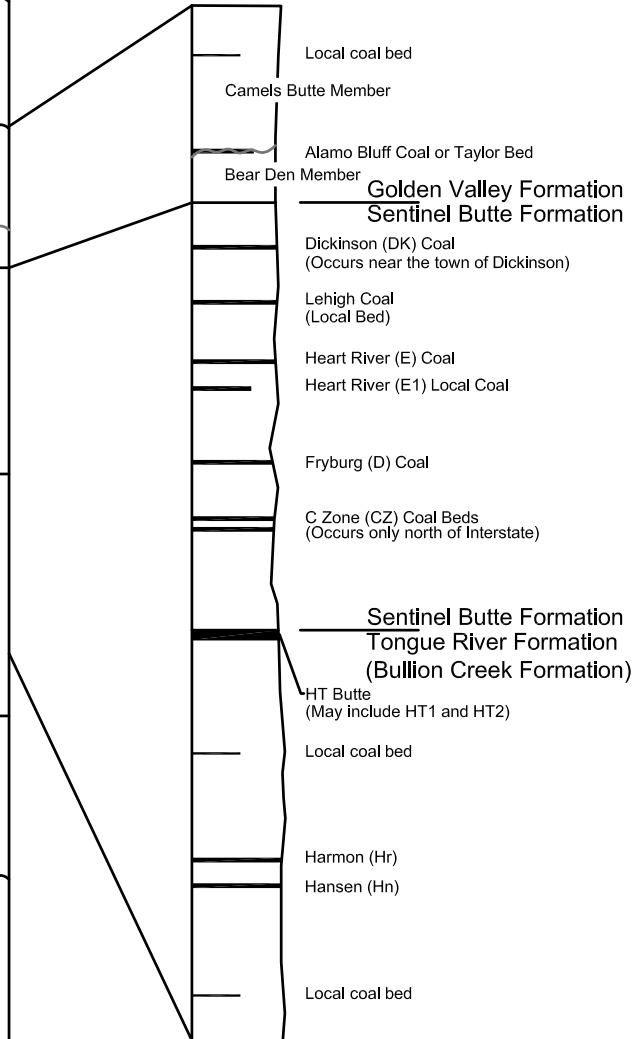


Period	Epoch	Formation and Member	
Quaternary	Holocene and Pleistocene	Modern Alluvium and Older Alluvium	
		Unknown	Clinker
Tertiary	Oligocene	Arikaree Formation	
		White River Group	
	Eocene	Golden Valley Formation	
	Paleocene	Fort Union Group	Sentinel Butte Formation
			Tongue River Formation (Bullion Creek Formation)
		Slope, Ludlow and Cannonball Formations	
	Cretaceous	Late Cretaceous	Hell Creek Formation
Fox Hills Formation			
Pierre Formation			

LEGEND

~~~~~ Unconformity



Drawn: N:\06\063-2212A\B FIGURES\0632212B008.DWG  
 Plot Date: 03/16/2010 14:49  
 Last Update: Feb 25, 2010 14:49  
 Last Plot: Feb 25, 2010 14:49  
 By: MTWorks  
 Mapped By: MTWorks

Summarized from Keim (1961), Trapp and Croft (1975), Menge (1977), Armstrong (1984), Biek and Murphy (1997), and Murphy (2007b)

NOT TO SCALE

|                      |     |                                                                               |       |                      |        |
|----------------------|-----|-------------------------------------------------------------------------------|-------|----------------------|--------|
| PROJECT              |     | SOUTH HEART COAL LLC<br>SOUTH HEART LIGNITE MINE<br>SOUTH HEART, NORTH DAKOTA |       |                      |        |
| TITLE                |     |                                                                               |       |                      |        |
| STRATIGRAPHIC COLUMN |     |                                                                               |       |                      |        |
| PROJECT No.          |     | 063-2212A                                                                     |       | FILE No. 0632212B008 |        |
| DESIGN               | AGV | 02/16/2010                                                                    | SCALE | NOT TO SCALE         | REV. 0 |
| CADD                 | MTM | 11/16/2007                                                                    |       |                      |        |
| CHECK                | SAH | 02/23/2010                                                                    |       |                      |        |
| REVIEW               | EJP | 02/26/2010                                                                    |       |                      |        |



**FIG 2.3-3**