



LEGEND

SURFICIAL ROCKS

(Areas of Surficial rocks are shown by patterns of dots and circles)

- Pds**  
Dune sand
- Pal**  
Recent alluvium (only the larger deposits represented)
- Pug**  
Upland gravel and sand (on older terraces and slopes limits very indistinct)

PLEISTOCENE

SEDIMENTARY ROCKS

(Areas of Sedimentary rocks are shown by patterns of parallel lines)

- No**  
Ogallala formation (sand and gravel cemented by lime)
- Nar**  
Arikaree formation (red sandstone with pipe-like concretions)
- Nac**  
Conglomerate lenses in Arikaree formation
- Ng**  
Gering formation (soft sandstone, sandy clay, and conglomerate)

NEOCENE

- Eb**  
Brule clay (hard sandy, pinkish clay with thin lenses of sandstone and limestone mostly covered by talus and wash)
- Ec**  
Chadron formation (gray sand and clay)

Eocene



104° 00' R. 57 W. R. 56 W. R. 55 W.  
 Henry Gannett, Chief Topographer.  
 Jno. H. Renshaw, Topographer in charge.  
 Control by E. M. Douglas, U.S. Engineer Corps,  
 and General Land Office.  
 Topography by H. B. Blair.  
 Surveyed in 1895.



Scale 1:250,000  
 Contour interval 20 feet.  
 Datum is mean sea level.  
 Edition of Aug. 1902.

R. 54 W. R. 55 W. R. 56 W. R. 57 W.  
 Geology by N. H. Darton.  
 Assisted by C. A. Fisher.  
 Surveyed in 1897 and 1902.