Structural Contour Map, Top of the Madison Aquifer (Pahasapa Formation), Piedmont Quadrangle

By
A.L. Lisenbee, A.D. Davis, M.H. Price, and K.M. Grigg
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EXPLANATION

Geologic Units

Quaternary:
- Floodplain Surficial Deposits
- Alluvium, gravel, sand, and clay
- Increased potential for infiltration of water

Other Surficial Deposits:
- Glacial till
- Terrigenous parent
- Increased potential for infiltration of water
- Discontinuous:

Pahasapa Limestone:
- Recharge Area
- Elongate and oval limestone beds
- Contacts may result in low to moderate level soil salinity and sodicity
- Pahasapa Limestone Present in Subsurface
- Pahasapa Limestone Absent

Structural Contours

Structural contours mark lines of equal elevation of the top of a geological formation. The contours help to define unseen folds and faults present below the land surface. Dashed where projected above surface. Number indicates elevation above sea level.

Structural Contour on top of Pahasapa Limestone

Structural Contour Interval 100 feet

Map was compiled from: D.D. Davis, 1:12,000-scale Piedmont digital terrain model, 1993. Water well data from SD Dept. of Environment & Natural Resources, "Online Oil/Gas/Injection Well Data" database. Other surficial deposits from SD Dept. of Environment & Natural Resources, "Online Oil/Gas/Injection Well Data" database. Floodplain surficial deposits from SD Dept. of Environment & Natural Resources, "Online Oil/Gas/Injection Well Data" database. Geologic units are from SD Dept. of Environment & Natural Resources, "Online Oil/Gas/Injection Well Data" database. A q u i f e r A q u i f e r . 

Piedmont Quadrangle location

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.

Solid where location certain; dashed where approximately located.
Showing troughline and direction of plunge.

R. 6 E. Floodplain Surficial Deposits
- Includes alluvium (Qa), gravel (Qg), and Tertiary gravel (Tg) deposits.
- Increased potential for infiltration of water.

Contact
- Other Surficial Deposits
- Floodplain Surficial Deposits
- Discontinuous:

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