

## Engineering Interpretations

### **Chemical Soil Properties**

This table shows estimates of some characteristics and features that affect soil behavior. These estimates are given for the major layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

#### **Properties**

**DEPTH** to the upper and lower boundaries of each layer is indicated.

**CATION EXCHANGE CAPACITY** is a measure of the ability of a soil to retain cations, some of which are plant nutrients. Soils that have a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils that have a high cation-exchange capacity. Soils that have high cation-exchange capacity have the potential to retain cations, which reduces the risk of the pollution of ground water.

**SOIL REACTION** is a measure of acidity or alkalinity and is expressed as a range in pH values. The range in pH of each major horizon is based on many field tests. For many soils, values have been verified by laboratory.

**SALINITY** is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at typical sites of nonirrigated soils.

*This subsection includes:*

- **(a) Chemical Soil Properties**