These are well-drained, medium-textured soils underlain by basalt bedrock at depths of 20 to 40 inches. They are formed under bunchgrass in silty glacial outwash that was derived from basalt rock and loess mixed with some volcanic ash. They occur at elevations of 1500 to 1800 feet on nearly level to strongly sloping outwash plains and terraces in Adams and Grant Counties.

Representative Description:

ANDERS silt loam

Surface layer: 0-12", very dark brown to dark grayish-brown silt loam; granular, friable; small amounts of gravel; pH 6.6-7.3

Subsoil: 12-27", dark brown silt loam; blocky, friable; basalt fragments below 19"; pH 7.4-7.8

Basalt bedrock 27"+

Caution: All Anders soils are not exactly like the one shown above. Differences in characteristics will affect suitability and limitations for uses. See Capability Classification Table.

ABOUT THE SOIL GUIDE SHEETS: Soil Guide Sheets are written primarily to indicate suitability for irrigation farming. In addition, some engineering properties are shown. These will serve as a preliminary guide but on-site investigation will be needed before making final decisions on non-agricultural uses. Certain terms and soil ratings may not be self explanatory. Refer to "Guide to the Use of Soil Guide Sheets".

COOPERATIVE EXTENSION SERVICE • COLLEGE OF AGRICULTURE • WASHINGTON STATE UNIVERSITY • PULLMAN

In cooperation with the United States Department of Agriculture

Issued in furtherance of the Acts of May 8 and June 30, 1914, by the Washington State University

Cooperative Extension Service, John P. Miller, Director
### Capability Classification

**Irrigation Group** | 0-2 | 2-5 | 5-15 | 15-25 | 25-40
---|---|---|---|---|---
1. Gravelly silt loam | J6 | IIIs | IIE | IVe | VIE
2. Silt loam, deep | F | IIIs | IIE | IIIe | IVe
3. Cobbly silt loam | J7 | IVs | IVs | VIE | VIE
4. Stony silt loam | J7 | IVs | IVs | VIE | VIE
5. Silt loam | J | IIIs | IIE | IIIe | IVe | VIE

Note: "F" indicates soils 40"+ deep with medium soil texture, and no inhibiting layers in the profile. "J" indicates soils 20 to 40 inches deep with medium surface texture over hardpan, bedrock, claypan, etc. "6" & "7" indicate a problem of coarse and very coarse fragments in the surface. Determine the depth of your soil. Depth affects use and management. Total water holding capacity is less on shallower soil.

### Suitability as a source of:

- Topsoil - Good
- Sand - Not suitable
- Gravel - Not suitable
- Road Fill - Fair

### Soil features affecting engineering uses:

- Highway location - High frost action potential in upper 20", fractured basalt at depth of 20 to 40 inches.
- Dikes, Levees, Embankments - Upper 18 to 24 inches susceptible to piping and cracking.
- Reservoir - Gravelly material at depth of 18 to 24 inches, moderate permeability.
- Septic disposal systems - Moderate permeability.

### Suitable for irrigation farming:

- Water holding capacity - Moderate, limited by depth
- Infiltration - Slow
- Permeability - Moderate
- Drainage - Well drained
- Salinity and alkali hazard - Slow runoff and shallowness to bedrock; may increase salinity hazard in low areas
- Erosion hazard - Slight

### General Evaluation:

Anders soils will be reasonably productive under irrigation, but certain hazards are apparent. Suitable for sprinkler irrigation but not for rill. Shallower soils will require light, frequent irrigations. Excessive irrigations may result in wetness in low areas and salinity may build up. Have your soil tested to determine fertilizer needs. Anders soils are adapted mostly for grain and forage productions.

---