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● EMDENT

# SOIL GUIDE SHEET

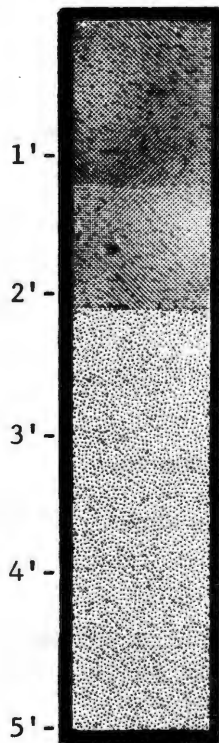
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These are moderately well-drained to somewhat poorly drained, medium textured, saline-alkali soils that formed from volcanic ash and alluvium derived from loess and basalt. They occupy nearly level depressions, basins, or potholes in Adams, Okanogan and Spokane Counties.

Representative Description:

EMDENT silt loam

Water Holding Capacity In/in	Permeability In/hr	Shrink-Swell Potential	Engineering Classification Unified AASHO
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Surface layer: 0-16", very dark gray silt loam; platy, friable; pH 8.5-9.0

.23	0.63-2.0	low	ML A-4
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Subsoil: 16-20", dark grayish brown silt loam; massive, friable; strongly calcareous; pH 7.9-8.4

.23	0.63-2.0	low	ML A-4
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Substratum: 26-60", light brownish gray very fine sandy loam; massive, very friable; calcareous; pH 7.9-8.4

.18	0.63-2.0	low	ML A-4
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Caution: All Emdent 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".

Capability Classification

Eminent soils	(percent slope)	
	0-2	2-5
1. Silt loam <sup>1/</sup> / .....	VI <sub>s</sub>	VI <sub>s</sub>
2. Silt loam, drained <sup>2/</sup> / .....	IV <sub>w</sub>	IV <sub>w</sub>
3. Silt loam, moderately shallow <sup>2/</sup> / .....	IV <sub>w</sub>	IV <sub>w</sub>
4. Silt loam, reclaimed <sup>2/</sup> / .....	IV <sub>w</sub>	IV <sub>w</sub>
5. Loam, poorly drained <sup>1/</sup> / .....	VI <sub>w</sub>	VI <sub>w</sub>
6. Loam, reclaimed <sup>2/</sup> / .....	IV <sub>w</sub>	IV <sub>w</sub>
7. Loam <sup>1/</sup> / .....	VI <sub>w</sub>	VI <sub>w</sub>

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 - Not suitable
- Sand - Not suitable
- Gravel - Not suitable
- Road Fill - Poor

Soil features affecting engineering uses:

- Highway location - High frost action potential, elevated road grade needed because of high water table, drainage essential
- Dikes, Levees, Embankments - Excessive moisture, susceptibility to piping
- Reservoir - Moderately permeable soil, contains layers of volcanic ash.
- Septic disposal systems - Moderate permeability, poor drainage

Suitability for irrigation farming:

- Water holding capacity - High
- Infiltration - Slow
- Permeability - Moderate
- Drainage - Poor
- Salinity and alkali hazard - Severe, very slow run-off, poor natural drainage, outlets require blasting, strongly alkaline in surface soil.
- Erosion hazard - Water erosion, slight; wind erosion, moderate to severe when cultivated

General Evaluation: Eminent soils are not suitable for general irrigation farming unless adequate drainage is provided. Without drainage they are suitable for wetland pasture with salt and alkali tolerant grasses. The soil should be tested to determine the presence of salinity and alkali. Have your soil tested to determine fertilizer needs. Sprinkler irrigation preferred.

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<sup>1/</sup> Deep and very deep soils (40"+) with no inhibiting layers in the profile  
<sup>2/</sup> Moderately deep or moderately shallow soils (20-40") over hardpan, bedrock, claypan, etc.

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