

## Aitkin County, Minnesota

### 504C—Duluth fine sandy loam, 6 to 12 percent slopes

#### Map Unit Setting

*National map unit symbol:* gjh8

*Elevation:* 980 to 1,640 feet

*Mean annual precipitation:* 25 to 30 inches

*Mean annual air temperature:* 39 to 45 degrees F

*Frost-free period:* 120 to 140 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Duluth and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Duluth

##### Setting

*Landform:* Moraines

*Landform position (two-dimensional):* Backslope

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Loamy till

##### Typical profile

*A - 0 to 3 inches:* fine sandy loam

*E,Bw,2BE,2Bt - 3 to 49 inches:* clay loam

*2C - 49 to 60 inches:* loam

##### Properties and qualities

*Slope:* 6 to 12 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Capacity of the most limiting layer to transmit water*

*(Ksat):* Moderately low to moderately high (0.06 to 0.60 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 5 percent

*Available water supply, 0 to 60 inches:* High (about 10.2 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* C

*Ecological site:* F090AY015WI - Loamy Upland with Carbonates

*Forage suitability group:* Sloping Upland, Acid (G090AN006MN)

*Other vegetative classification:* Sloping Upland, Acid  
(G090AN006MN)

*Hydric soil rating:* No

### **Minor Components**

#### **Blackhoof**

*Percent of map unit:* 3 percent

*Landform:* Depressions

*Hydric soil rating:* Yes

#### **Mahtowa**

*Percent of map unit:* 3 percent

*Landform:* Depressions

*Hydric soil rating:* Yes

#### **Rifle**

*Percent of map unit:* 3 percent

*Landform:* Bogs

*Hydric soil rating:* Yes

#### **Cromwell**

*Percent of map unit:* 2 percent

*Hydric soil rating:* No

#### **Cutaway**

*Percent of map unit:* 2 percent

*Hydric soil rating:* No

#### **Dusler**

*Percent of map unit:* 2 percent

*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Aitkin County, Minnesota

Survey Area Data: Version 24, Sep 9, 2023