United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with the Department of the Army, Fort Wainwright; Alaska Agricultural and Forestry Experiment Station; Fairbanks Soil and Water Conservation District; and the Alaska Soil and Water Conservation District

Soil Survey of Fort Wainwright Area, Alaska

How To Use This Soil Survey

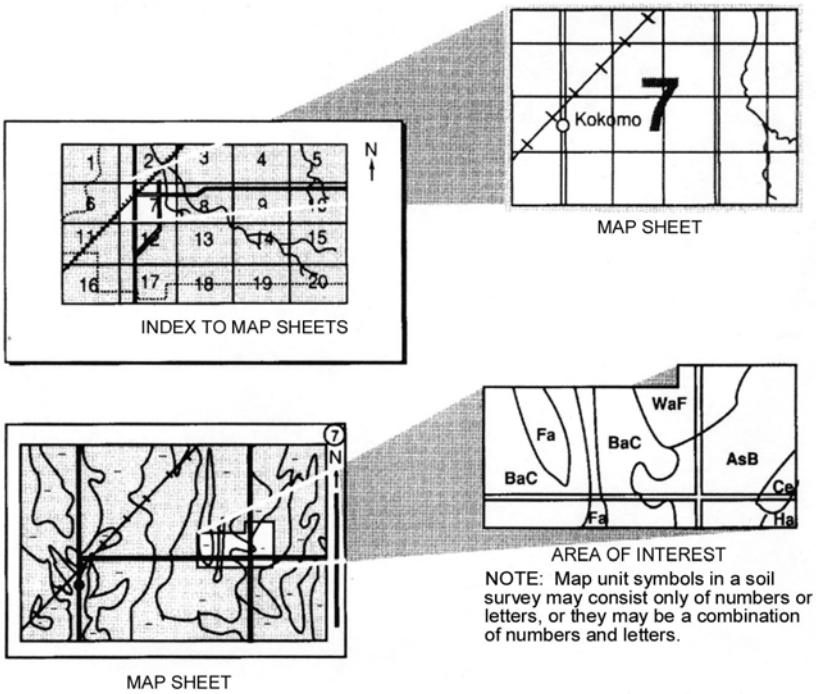
Detailed Soil Maps

The detailed soil maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture (USDA) and other Federal agencies, State agencies and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey.

Major fieldwork for this soil survey was completed in 1997 and 1999. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 1999. This survey was made cooperatively by the Natural Resources Conservation Service, Fort Wainwright; Alaska Agricultural and Forestry Experiment Station; and the Alaska Soil and Water Conservation District. It is part of the technical assistance furnished to the Fairbanks Soil and Water Conservation District.

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Issued: December 2006

Foreword

This soil survey contains information that can be used in land-planning programs on Fort Wainwright, Alaska. This survey includes the area of Eielson Air Force Base, however, the contonement area for Ft. Wainwright is included in the Greater Fairbanks Area soil survey. It contains predictions of soil behavior for selected land uses and highlights limitations and hazards inherent in the soil, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

Many soil properties that affect land use are described in this soil survey. The location of each soil is shown on the soil maps. Each soil in the survey area is described. Information on specific uses is given for each soil. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Alaska Cooperative Extension.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Help in using this publication and additional information are available at the Fairbanks office of the Natural Resources Conservation Service.

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Soil Survey of
Fort Wainwright, Alaska

By David K. Swanson and Michael Mungoven, Natural Resources Conservation Service

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United States Department of Agriculture, Natural Resources Conservation Service
In cooperation with the United States Army, Fort Wainwright, Alaska

General Nature of the Survey Area

Fort Wainwright lies on the Tanana lowland, a nearly flat alluvial plain located north of the Alaska Range, and the Yukon-Tanana upland (Wahrhaftig 1965). Elevations on the plain of the Tanana lowland range from about 400 to 475 feet (121 to 144 m). Geologic materials in the Tanana lowland are river deposits consisting of sand and gravel with a mantle of finer material. These river deposits are saturated with water, in most places below the depth of observation for this survey (6 feet, or 2 m), but occasionally within a foot or two of the surface. Permafrost is present in the lowland and covers approximately one-third to one-half of the area. In the Yukon-Tanana upland elevations range from about 450 feet (136 m) on lower slopes to 3,265 feet (995 m) on the highest hilltop in the Yukon Maneuver Area. Geologic materials consist of weathered bedrock with a mantle of windblown silt (loess). This mantle is only a foot or two thick (<1 m) on most hilltops and upper slopes. It may be many feet thick on hills nearest the Tanana River and on the lower slopes of hills. Permafrost is present on lower slopes and north-facing slopes. Large bodies of ground ice are present in the thick silty deposits on the lower slopes of these uplands.

Fort Wainwright has a continental subarctic climate, with long, cold winters and short, warm summers. Summer (June, July, and August) temperatures average 58°F (15°C) and winter (November through March) temperatures average -2°F (-19°C). The average annual precipitation is 13 inches (33 cm), with July and August, on average, the wettest months and April the driest. Snow covers the ground continuously from October to late April or early May. A detailed climatic data summary is given in tables 1, 2 and 3.

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas on Fort Wainwright. The information includes a description of the soils and miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Before beginning the fieldwork for this survey, relevant information on the climate, geology, geomorphology, hydrology, and vegetation of the survey area was assembled. Aerial photography of the survey area was acquired and prepared for field use and mapping. The aerial photography used included 1996 USDA panchromatic (1:40,000 scale) for northwest Tanana Flats and the contonement area, and 1986 high-altitude color-infrared (scale 1:60,000) for Blair Lakes, and 1996 commercial true-color (scale 1:24,000). The former two photograph sets were enlarged to scales of approximately 1:25,000 for use during the survey.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept or model of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. *Soil Taxonomy* (USDA 1999), the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Those areas of Fort Wainwright that were not mapped due to restricted access or insufficient funding are labeled as "NOTCOM" on the maps.

Detailed Soil Map Units

The map units delineated on the detailed soil maps in this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The contrasting components are mentioned in the map unit descriptions. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives the principal hazards and limitations to be considered in planning for specific uses.

Soils that have profiles that are almost alike make up a soil series. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer or of the underlying layers. They also can differ in slope, stoniness, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into soil phases. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, “Fairbanks silt loam, 7 to 12 percent slopes” is a phase of the Fairbanks series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A complex consists of two or more soils or miscellaneous areas in such an intricate pattern, or in such small areas, that they cannot be shown separately on the maps. The pattern and proportion of the soils or

miscellaneous areas are somewhat similar in all areas. Map unit 363 “Jarvis-Salchaket complex” is an example of a complex in this Survey Area.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. There are no associations mapped on Fort Wainwright.

An undifferentiated group is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Map unit WAH “Typic Cryaquent, Terric Cryofibrist, and Histic Cryaquept soils” is an example of an undifferentiated group in this Survey Area.

This survey includes miscellaneous areas. Such areas have little or no soil material and support little or no vegetation. Map unit Lf “Landfills” is an example.

The tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The glossary defines many of the terms used in describing the soils or miscellaneous areas.

9—Histels

Elevation: 423 to 1,201 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Histels and similar soils

Extent: 85 to 90 percent of the map unit
Landform: flats on terraces, depressions on terraces, valleys
Slope shape: concave, linear
Slope range: 0 to 3 percent, north to north aspects
Parent material: organic material over alluvium and/or loess
Depth to permafrost: 16 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 3.9 inches
Vegetation: black spruce woodland
Representative Profile:

Oi—0 to 12 inches; black peat, high saturated hydraulic conductivity
Oe—12 to 17 inches; very dark gray mucky peat, moderately high saturated hydraulic conductivity
Oef—17 to 26 inches; brown permanently frozen mucky peat, very slow saturated hydraulic conductivity
Cfg—26 to 72 inches; black permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Goldstream and similar soils: 10 to 15 percent of the map unit

13—Terric Cryofibrists-Liscum complex

Elevation: 397 to 1,201 feet

Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Terric Cryofibrists and similar soils

Extent: 45 to 75 percent of the map unit
Landform: depressions on flood plains
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: organic material over lacustrine deposits and/or loess
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 15 inches
Vegetation: sedges
Representative Profile:
Oi—0 to 28 inches; very dark brown peat, high saturated hydraulic conductivity
Oa—28 to 40 inches; black muck, moderately low saturated hydraulic conductivity
Cg—40 to 72 inches; very dark brown silty clay loam, moderately high saturated hydraulic conductivity

Liscum and similar soils

Extent: 25 to 35 percent of the map unit
Landform: alluvial flats
Slope shape: linear
Slope range: 0 to 1 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): 0 to 4 inches
Ponding: frequent
Available water capacity (approximate): 11.9 inches
Vegetation: sedges and grasses
Representative Profile:
Oi—0 to 3 inches; very dark grayish brown peat, high saturated hydraulic conductivity
Oa—3 to 11 inches; black muck, moderately low saturated hydraulic conductivity
A—11 to 15 inches; dark brown mucky silt loam, moderately high saturated hydraulic conductivity
Bg—15 to 70 inches; olive brown stratified silt loam to loamy fine sand, moderately high saturated hydraulic conductivity
C—70 to 72 inches; olive brown and gray very gravelly sandy loam, high saturated hydraulic conductivity

Minor Components

Histels and similar soils: 0 to 10 percent of the map unit
Typic Cryaquents, occasional long flooding, and similar soils: 0 to 10 percent of the map unit

14—Histels-Terric Cryofibrists complex

Elevation: 397 to 1,201 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Histels and similar soils

Extent: 55 to 65 percent of the map unit
Landform: depressions on terraces, flats on terraces, valleys
Slope shape: concave, linear
Slope range: 0 to 5 percent, north to north aspects
Parent material: organic material over alluvium and/or loess
Depth to permafrost: 16 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 3.9 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 12 inches; brown peat, high saturated hydraulic conductivity
Oe—12 to 17 inches; black mucky peat, moderately high saturated hydraulic conductivity
Oef—17 to 26 inches; very dark gray permanently frozen mucky peat, very slow saturated hydraulic conductivity
Cfg—26 to 72 inches; brown permanently frozen material, very slow saturated hydraulic conductivity

Terric Cryofibrists and similar soils

Extent: 25 to 30 percent of the map unit
Landform: depressions on flood plains
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: organic material over lacustrine deposits and/or loess
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 15 inches
Vegetation: sedges
Representative Profile:
Oi—0 to 28 inches; black peat, high saturated hydraulic conductivity
Oa—28 to 40 inches; very dark brown muck, moderately low saturated hydraulic conductivity
Cg—40 to 72 inches; black silty clay loam, moderately high saturated hydraulic conductivity

Minor Components

Tanacross and similar soils: 5 to 15 percent of the map unit
Water: 2 to 5 percent of the map unit

20—Mosquito peat

Elevation: 397 to 951 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Mosquito and similar soils

Extent: 70 to 90 percent of the map unit
Landform: depressions on alluvial flats
Slope shape: concave
Slope range: 0 to 2 percent
Parent material: organic material over alluvium
Depth to permafrost: 14 to 31 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 4.1 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 18 inches; dark grayish brown peat, high saturated hydraulic conductivity
Cg—18 to 24 inches; black very fine sandy loam, moderately high saturated hydraulic conductivity
Cfg—24 to 72 inches; dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Bolio and similar soils: 0 to 10 percent of the map unit
Bradway, frequent long ponding, and similar soils: 0 to 10 percent of the map unit
Liscum and similar soils: 0 to 5 percent of the map unit
Water: 0 to 5 percent of the map unit

21A—Goldstream peat, 0 to 3 percent slopes

Elevation: 397 to 1,201 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Goldstream and similar soils

Extent: 70 to 85 percent of the map unit
Landform: flood plains, valleys
Slope shape: concave, linear
Slope range: 0 to 3 percent
Parent material: organic material over loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches

Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; very dark grayish brown peat, high saturated hydraulic conductivity
A—9 to 12 inches; dark brown mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—12 to 20 inches; gray silt loam, moderately high saturated hydraulic conductivity
Cfg—20 to 72 inches; very dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 5 to 15 percent of the map unit
Histels and similar soils: 0 to 5 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit
Typic Cryaquents, frequent long ponding, and similar soils: 0 to 5 percent of the map unit

21B—Goldstream peat, 3 to 7 percent slopes

Elevation: 397 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Goldstream and similar soils

Extent: 80 to 85 percent of the map unit
Landform: valleys, flood plains
Slope shape: concave, linear
Slope range: 3 to 7 percent
Parent material: organic material over loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; gray peat, high saturated hydraulic conductivity
A—9 to 12 inches; very dark grayish brown mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—12 to 20 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
Cfg—20 to 72 inches; gray permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 15 percent of the map unit
Histels and similar soils: 0 to 7 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit
Typic Cryaquents, frequent long ponding, and similar soils: 0 to 5 percent of the map unit

22—Tanacross peat

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Tanacross and similar soils

Extent: 85 to 95 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: organic material over alluvium
Depth to permafrost: 10 to 28 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 3 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; dark brown peat, high saturated hydraulic conductivity
A—9 to 11 inches; black mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—11 to 17 inches; dark gray and dark yellowish brown stratified fine sandy loam to silt loam, moderately high saturated hydraulic conductivity
Bjjfg—17 to 72 inches; dark brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Tanana, rare brief flooding, and similar soils: 5 to 15 percent of the map unit

25—Tanana silt loam

Elevation: 397 to 951 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Tanana, rare brief flooding, and similar soils

Extent: 60 to 85 percent of the map unit
Landform: terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium and/or loess over alluvium
Depth to permafrost: 16 to 47 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): 0 to 12 inches

Ponding: frequent
Available water capacity (approximate): 5.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 3 inches; very dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; dark grayish brown mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—6 to 25 inches; very dark brown very fine sandy loam, moderately high saturated hydraulic conductivity
Cjjfg—25 to 72 inches; very dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Bolio and similar soils: 0 to 5 percent of the map unit
Jarvis and similar soils: 2 to 5 percent of the map unit
Noonku and similar soils: 3 to 5 percent of the map unit
Salchaket and similar soils: 5 to 10 percent of the map unit
Tanacross and similar soils: 5 to 15 percent of the map unit

26—Histel and Mosquito soils

Elevation: 397 to 1,299 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Histels and similar soils

Extent: 30 to 80 percent of the map unit
Landform: depressions on terraces, flats on terraces, valleys
Slope shape: concave, linear
Slope range: 0 to 2 percent, north to north aspects
Parent material: organic material over alluvium and/or loess
Depth to permafrost: 16 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 3.9 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 12 inches; brown peat, high saturated hydraulic conductivity
Oe—12 to 17 inches; very dark gray mucky peat, moderately high saturated hydraulic conductivity
Oef—17 to 26 inches; black permanently frozen mucky peat, very slow saturated hydraulic conductivity
Cfg—26 to 72 inches; brown permanently frozen material, very slow saturated hydraulic conductivity

Mosquito and similar soils

Extent: 20 to 50 percent of the map unit
Landform: depressions on alluvial flats
Slope shape: concave
Slope range: 0 to 2 percent

Parent material: organic material over alluvium
Depth to permafrost: 14 to 31 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 4.1 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
- Oi—0 to 18 inches; black peat, high saturated hydraulic conductivity
- Cg—18 to 24 inches; dark grayish brown very fine sandy loam, moderately high saturated hydraulic conductivity
- Cfg—24 to 72 inches; black permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Terric Cryofibrists and similar soils: 0 to 15 percent of the map unit
Peede and similar soils: 0 to 10 percent of the map unit
Salchaket and similar soils: 0 to 7 percent of the map unit

31—Eielson-Piledriver complex, occasionally flooded

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Eielson and similar soils

Extent: 50 to 70 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: occasional
Depth to high water table (approximate): 0 to 47 inches
Ponding: frequent
Available water capacity (approximate): 12.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
- Oi—0 to 2 inches; very dark brown slightly decomposed plant material, high saturated hydraulic conductivity
- O/C—2 to 49 inches; olive brown and dark gray very fine sandy loam, moderately high saturated hydraulic conductivity
- C1—49 to 71 inches; dark grayish brown stratified silt loam to fine sand, moderately high saturated hydraulic conductivity
- 2C2—71 to 72 inches; very dark brown very gravelly sand, high saturated hydraulic conductivity

Piledriver and similar soils

Extent: 25 to 40 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: rare
Depth to high water table (approximate): 0 to 47 inches
Ponding: frequent
Available water capacity (approximate): 7.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:

Oi—0 to 3 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
C1—3 to 15 inches; dark olive brown very fine sandy loam, moderately high saturated hydraulic conductivity
C2—15 to 33 inches; grayish brown stratified sand to fine sand to very fine sandy loam, moderately high saturated hydraulic conductivity
2C3—33 to 72 inches; light olive brown and grayish brown very gravelly sand, high saturated hydraulic conductivity

Minor Components

Fubar and similar soils: 0 to 5 percent of the map unit
Noonku and similar soils: 0 to 5 percent of the map unit
Salchaket and similar soils: 0 to 5 percent of the map unit

32—Salchaket very fine sandy loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Salchaket and similar soils

Extent: 80 to 90 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): 0 to more than 72 inches
Ponding: frequent
Available water capacity (approximate): 9.7 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:

Oi—0 to 3 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity

C1—3 to 24 inches; dark grayish brown very fine sandy loam, moderately high saturated hydraulic conductivity
C2—24 to 45 inches; variegated stratified silt loam to fine sand, moderately high saturated hydraulic conductivity
2C3—45 to 72 inches; olive brown very gravelly sand, high saturated hydraulic conductivity

Minor Components

Jarvis and similar soils: 5 to 10 percent of the map unit
Tanana, rare brief flooding, and similar soils: 5 to 10 percent of the map unit

35—North Pole very fine sandy loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

North Pole and similar soils

Extent: 75 to 90 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 8.2 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 2 inches; grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
Oa—2 to 4 inches; dark yellowish brown and dark gray highly decomposed plant material, moderately low saturated hydraulic conductivity
Bg—4 to 39 inches; black stratified fine sand to silt loam, moderately high saturated hydraulic conductivity
2C—39 to 72 inches; dark brown very gravelly sand, high saturated hydraulic conductivity

Minor Components

Tanana, rare brief flooding, and similar soils: 0 to 10 percent of the map unit
Mosquito and similar soils: 0 to 10 percent of the map unit
Noonku and similar soils: 0 to 5 percent of the map unit
Eielson and similar soils: 0 to 5 percent of the map unit
Liscum and similar soils: 0 to 5 percent of the map unit

36—Jarvis very fine sandy loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Jarvis and similar soils

Extent: 70 to 80 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): 0 to more than 72 inches
Ponding: occasional
Available water capacity (approximate): 5.9 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:

Oe—0 to 3 inches; olive brown moderately decomposed plant material, high saturated hydraulic conductivity
C1—3 to 6 inches; black very fine sandy loam, moderately high saturated hydraulic conductivity
C2—6 to 24 inches; grayish brown stratified sand to fine sand to very fine sandy loam, moderately high saturated hydraulic conductivity
2C3—24 to 72 inches; gray very gravelly sand, high saturated hydraulic conductivity

Minor Components

Salchaket and similar soils: 0 to 15 percent of the map unit
Chena and similar soils: 0 to 5 percent of the map unit
Noonku and similar soils: 0 to 10 percent of the map unit
Tanana, rare brief flooding, and similar soils: 0 to 5 percent of the map unit

37—Chena very fine sandy loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chena and similar soils

Extent: 80 to 95 percent of the map unit
Landform: stream terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: excessively drained
Flooding: rare
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 3.5 inches
Vegetation: white spruce and balsam poplar forest

Representative Profile:
Oi—0 to 4 inches; grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
C1—4 to 9 inches; olive brown stratified fine sand to silt loam, high saturated hydraulic conductivity
2C2—9 to 72 inches; very dark gray very gravelly sand, high saturated hydraulic conductivity

Minor Components

Jarvis and similar soils: 0 to 10 percent of the map unit
Noonku and similar soils: 0 to 10 percent of the map unit

39A—Nenana silt loam, 0 to 3 percent slopes

Elevation: 499 to 1,201 feet
Mean annual precipitation: 10 to 15 inches
Frost-free period: 80 to 120 days

Nenana and similar soils

Extent: 85 to 95 percent of the map unit
Landform: stream terraces
Slope shape: linear
Slope range: 0 to 3 percent
Parent material: loess over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—moderate
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: occasional
Available water capacity (approximate): 5.9 inches
Vegetation: white spruce, quaking aspen, and paper birch forest
Representative Profile:
Oe—0 to 2 inches; dark brown moderately decomposed plant material, moderately high saturated hydraulic conductivity
Bw—2 to 15 inches; brown silt loam, moderately high saturated hydraulic conductivity
BC—15 to 21 inches; strong brown gravelly silt loam, moderately high saturated hydraulic conductivity
2C—21 to 72 inches; dark yellowish brown extremely gravelly sand, high saturated hydraulic conductivity

Minor Components

Richardson and similar soils: 0 to 5 percent of the map unit
Salchaket and similar soils: 0 to 10 percent of the map unit

40A—Chatanika silt loam, 0 to 3 percent slopes

Elevation: 423 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and similar soils

Extent: 70 to 80 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 0 to 3 percent, north to north aspects
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:

Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity

A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high saturated hydraulic conductivity

C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity

Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Goldstream and similar soils: 5 to 15 percent of the map unit
Chatanika and similar soils: 5 to 10 percent of the map unit
Minto and similar soils: 3 to 7 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit
Histels and similar soils: 0 to 5 percent of the map unit
Water: 0 to 5 percent of the map unit

40B—Chatanika silt loam, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and similar soils

Extent: 70 to 80 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 3 to 7 percent, north to north aspects
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: very high
Drainage class: poorly drained

Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
- Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
- A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high saturated hydraulic conductivity
- C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity
- Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 5 percent of the map unit
Goldstream and similar soils: 0 to 10 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit

40C—Chatanika silt loam, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and similar soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 7 to 12 percent, north to north aspects
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
- Oi—0 to 4 inches; grayish brown mottled slightly decomposed plant material, high saturated hydraulic conductivity
- A—4 to 6 inches; very dark grayish brown mucky silt loam, moderately high saturated hydraulic conductivity
- C/Ag—6 to 21 inches; grayish brown mottled silt loam, moderately high saturated hydraulic conductivity
- Cfg—21 to 72 inches; grayish brown mottled permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 5 percent of the map unit
Goldstream and similar soils: 0 to 10 percent of the map unit
Minto and similar soils: 0 to 10 percent of the map unit

40D—Chatanika silt loam, 12 to 20 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and similar soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 12 to 20 percent, north to north aspects
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:

- Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
- A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high saturated hydraulic conductivity
- C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity
- Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 10 percent of the map unit
Goldstream and similar soils: 0 to 10 percent of the map unit
Minto and similar soils: 0 to 10 percent of the map unit

41A—Minto silt loam, 0 to 3 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 0 to 3 percent, north to north aspects
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 4 to more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; dark brown silt loam, moderately high saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 5 to 10 percent of the map unit
Fairbanks and similar soils: 0 to 10 percent of the map unit
Minto and similar soils: 2 to 10 percent of the map unit

41B—Minto silt loam, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 60 to 80 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 3 to 7 percent, north to north aspects
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 4 to more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity

Bw—9 to 16 inches; grayish brown silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 10 to 15 percent of the map unit
Minto and similar soils: 5 to 10 percent of the map unit
Fairbanks and similar soils: 0 to 10 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit

41C—Minto silt loam, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 50 to 70 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 7 to 12 percent, north to north aspects
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 4 to more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; very dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; grayish brown silt loam, moderately high saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 5 to 15 percent of the map unit
Minto and similar soils: 5 to 15 percent of the map unit
Fairbanks and similar soils: 5 to 15 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit

41D—Minto silt loam, 12 to 20 percent slopes

Elevation: 400 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 80 to 90 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 12 to 20 percent, north to north aspects
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 4 to more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:

Oi—0 to 5 inches; very dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; grayish brown silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 15 percent of the map unit
Fairbanks and similar soils: 0 to 10 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit

42B—Fairbanks silt loam, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 3 to 7 percent, north to north aspects
Parent material: loess
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest

Representative Profile:
Oi—0 to 3 inches; light olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; grayish brown or light olive brown silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity

Minor Components

Minto and similar soils: 5 to 12 percent of the map unit
Fairbanks and similar soils: 2 to 10 percent of the map unit

42C—Fairbanks silt loam, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 75 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 7 to 12 percent, north to north aspects
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; light olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; grayish brown or light olive brown silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 0 to 15 percent of the map unit
Fairbanks and similar soils: 0 to 5 percent of the map unit
Minto and similar soils: 0 to 10 percent of the map unit

42CG—Fairbanks silt loams, strongly sloping and steep

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 55 to 65 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 7 to 15 percent, north to north aspects
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:

Oi—0 to 3 inches; light olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; grayish brown or light olive brown silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity

Fairbanks and similar soils

Extent: 25 to 65 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 30 to 55 percent, north to north aspects
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:

Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high saturated hydraulic conductivity

Minor Components

Minto and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit

42D—Fairbanks silt loam, 12 to 20 percent slopes

Elevation: 499 to 1,998 feet

Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 65 to 80 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent, north to north aspects
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:

Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 0 to 15 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit

42E—Fairbanks silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 75 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 20 to 30 percent, north to north aspects
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest

Representative Profile:
Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 0 to 15 percent of the map unit
Fairbanks and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit

44B—Steese silt loam, 3 to 7 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 3 to 7 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; brown very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Steese and similar soils: 2 to 10 percent of the map unit
Fairbanks and similar soils: 2 to 10 percent of the map unit
Gilmore and similar soils: 2 to 10 percent of the map unit

44C—Steese silt loam, 7 to 12 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 70 to 80 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 7 to 12 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:

Oi—0 to 2 inches; brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; brown very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Steese and similar soils: 2 to 10 percent of the map unit
Fairbanks and similar soils: 2 to 10 percent of the map unit
Gilmore and similar soils: 2 to 10 percent of the map unit

44D—Steese silt loam, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 60 to 75 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:
Oi—0 to 2 inches; light olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; brown silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; light olive brown very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; light olive brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Steese and similar soils: 2 to 10 percent of the map unit
Fairbanks and similar soils: 2 to 10 percent of the map unit
Gilmore and similar soils: 2 to 10 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit

44E—Steese silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 70 to 85 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 20 to 30 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; brown silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; dark brown very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; dark brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Steese and similar soils: 2 to 10 percent of the map unit
Gilmore and similar soils: 2 to 10 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit
Fairbanks and similar soils: 2 to 10 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit

44F—Steese silt loam, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 80 to 95 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 30 to 45 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:

Oi—0 to 2 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; brown silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; dark brown very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; dark brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Steese and similar soils: 5 to 15 percent of the map unit
Gilmore and similar soils: 0 to 10 percent of the map unit

45C—Gilmore silt loam, 7 to 12 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 65 to 75 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 7 to 12 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none

Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; yellowish brown silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; dark brown extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; dark brown weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 10 to 15 percent of the map unit
Gilmore and similar soils: 5 to 10 percent of the map unit
Steese and similar soils: 5 to 10 percent of the map unit

45D—Gilmore silt loam, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 70 to 80 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 12 to 20 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; yellowish brown silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; dark brown extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; dark brown weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 10 to 15 percent of the map unit
Gilmore and similar soils: 5 to 12 percent of the map unit
Steese and similar soils: 5 to 10 percent of the map unit

45E—Gilmore silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 65 to 80 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 20 to 30 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:

Oi—0 to 3 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; yellowish brown silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; dark brown extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; dark brown weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 5 to 15 percent of the map unit
Steese and similar soils: 5 to 15 percent of the map unit
Gilmore and similar soils: 0 to 5 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit

45F—Gilmore silt loam, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 80 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 30 to 45 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high

Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; yellowish brown silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; olive brown extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; olive brown weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 5 to 10 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit
Rock outcrop: 0 to 5 percent of the map unit

45G—Gilmore silt loam, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 80 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 45 to 70 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; yellowish brown silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; olive brown extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; olive brown weathered bedrock, high saturated hydraulic conductivity

Minor Components

Ester and similar soils: 0 to 10 percent of the map unit
Gilmore and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit

Rock outcrop: 0 to 5 percent of the map unit

46C—Eutrocryepts, 7 to 12 percent slopes

Elevation: 696 to 1,398 feet
Mean annual precipitation: 12 to 14 inches
Frost-free period: 80 to 120 days

Eutrocryepts, hills, and similar soils

Extent: 85 to 95 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear, concave, convex
Slope range: 7 to 12 percent, north to north aspects
Parent material: loess over colluvium
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 9.8 inches
Vegetation: paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 2 inches; black peat, high saturated hydraulic conductivity
Bw—2 to 31 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
2C—31 to 72 inches; light olive brown stratified silt loam to fine sand, moderately high saturated hydraulic conductivity

Minor Components

Eutrocryepts, hills, and similar soils: 5 to 15 percent of the map unit

46D—Eutrocryepts, 12 to 20 percent slopes

Elevation: 696 to 1,398 feet
Mean annual precipitation: 12 to 14 inches
Frost-free period: 80 to 120 days

Eutrocryepts, hills, and similar soils

Extent: 85 to 95 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear, concave, convex
Slope range: 15 to 20 percent, north to north aspects
Parent material: loess over colluvium
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches

Ponding: none
Available water capacity (approximate): 9.8 inches
Vegetation: paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 2 inches; light olive brown peat, high saturated hydraulic conductivity
Bw—2 to 31 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
2C—31 to 72 inches; black stratified silt loam to fine sand, moderately high saturated hydraulic conductivity

Minor Components

Eutrocryepts, hills, and similar soils: 5 to 15 percent of the map unit

48D—McCloud silt loam, 12 to 20 percent slopes

Elevation: 574 to 2,500 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

McCloud and similar soils

Extent: 75 to 95 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 12 to 20 percent, north to north aspects
Parent material: loess over residuum weathered from granite
Depth to bedrock (paralithic): 21 to 35 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.4 inches
Vegetation: black spruce, paper birch, quaking aspen and white spruce forest
Representative Profile:
Oi—0 to 3 inches; olive brown peat, high saturated hydraulic conductivity
Bw—3 to 20 inches; dark yellowish brown silt loam, moderately high saturated hydraulic conductivity
C—20 to 29 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2Cr—29 to 72 inches; olive brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Angel and similar soils: 5 to 15 percent of the map unit
McCloud and similar soils: 0 to 5 percent of the map unit
McCloud and similar soils: 0 to 5 percent of the map unit

48E—McCloud silt loam, 20 to 30 percent slopes

Elevation: 574 to 2,500 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

McCloud and similar soils

Extent: 75 to 95 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 20 to 30 percent, north to north aspects
Parent material: loess over residuum weathered from granite
Depth to bedrock (paralithic): 21 to 35 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.4 inches
Vegetation: black spruce, paper birch, quaking aspen and white spruce forest
Representative Profile:
Oi—0 to 3 inches; olive brown peat, high saturated hydraulic conductivity
Bw—3 to 20 inches; dark yellowish brown silt loam, moderately high saturated hydraulic conductivity
C—20 to 29 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2Cr—29 to 72 inches; olive brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Angel and similar soils: 5 to 15 percent of the map unit
McCloud and similar soils: 0 to 5 percent of the map unit
McCloud and similar soils: 0 to 5 percent of the map unit

48F—McCloud silt loam, 30 to 45 percent slopes

Elevation: 574 to 2,500 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

McCloud and similar soils

Extent: 75 to 95 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 30 to 45 percent, north to north aspects
Parent material: loess over residuum weathered from granite
Depth to bedrock (paralithic): 21 to 35 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.4 inches
Vegetation: black spruce, paper birch, quaking aspen and white spruce forest
Representative Profile:
Oi—0 to 3 inches; dark brown peat, high saturated hydraulic conductivity

Bw—3 to 20 inches; dark yellowish brown silt loam, moderately high saturated hydraulic conductivity
C—20 to 29 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
2Cr—29 to 72 inches; dark brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Angel and similar soils: 5 to 15 percent of the map unit
McCloud and similar soils: 0 to 5 percent of the map unit
McCloud and similar soils: 0 to 5 percent of the map unit

49D—Angel silt loam, 12 to 20 percent slopes

Elevation: 574 to 2,500 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Angel and similar soils

Extent: 70 to 85 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 12 to 20 percent, north to north aspects
Parent material: loess over residuum weathered from granite
Depth to bedrock (paralithic): 9 to 28 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 3 inches
Vegetation: black spruce, paper birch, quaking aspen and white spruce forest
Representative Profile:
Oi—0 to 2 inches; brown peat, high saturated hydraulic conductivity
AE—2 to 4 inches; dark yellowish brown silt loam, moderately high saturated hydraulic conductivity
Bw—4 to 8 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2BCr—8 to 22 inches; brown very cobbly sandy loam, high saturated hydraulic conductivity
2Cr—22 to 72 inches; brown weathered bedrock, high saturated hydraulic conductivity

Minor Components

McCloud and similar soils: 12 to 15 percent of the map unit
Angel and similar soils: 0 to 5 percent of the map unit
Angel and similar soils: 5 to 10 percent of the map unit

49E—Angel silt loam, 20 to 30 percent slopes

Elevation: 574 to 2,500 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Angel and similar soils

Extent: 65 to 95 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 20 to 30 percent, north to north aspects
Parent material: loess over residuum weathered from granite
Depth to bedrock (paralithic): 9 to 28 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 3 inches
Vegetation: black spruce, paper birch, quaking aspen and white spruce forest
Representative Profile:
Oi—0 to 2 inches; dark brown peat, high saturated hydraulic conductivity
AE—2 to 4 inches; brown silt loam, moderately high saturated hydraulic conductivity
Bw—4 to 8 inches; dark yellowish brown silt loam, moderately high saturated hydraulic conductivity
2BCr—8 to 22 inches; dark brown very cobbly sandy loam, high saturated hydraulic conductivity
2Cr—22 to 72 inches; dark brown weathered bedrock, high saturated hydraulic conductivity

Minor Components

McCloud and similar soils: 5 to 15 percent of the map unit
Angel and similar soils: 0 to 10 percent of the map unit

49F—Angel silt loam, 30 to 45 percent slopes

Elevation: 574 to 2,500 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Angel and similar soils

Extent: 65 to 95 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 30 to 45 percent, north to north aspects
Parent material: loess over residuum weathered from granite
Depth to bedrock (paralithic): 9 to 28 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 3 inches
Vegetation: black spruce, paper birch, quaking aspen and white spruce forest
Representative Profile:
Oi—0 to 2 inches; brown peat, high saturated hydraulic conductivity

AE—2 to 4 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
Bw—4 to 8 inches; dark yellowish brown silt loam, moderately high saturated hydraulic conductivity
2BCr—8 to 22 inches; brown very cobbly sandy loam, high saturated hydraulic conductivity
2Cr—22 to 72 inches; brown weathered bedrock, high saturated hydraulic conductivity

Minor Components

McCloud and similar soils: 5 to 15 percent of the map unit
Angel and similar soils: 0 to 10 percent of the map unit

50G—Ester peat, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Ester and similar soils

Extent: 70 to 80 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear
Slope range: 45 to 70 percent, north to north aspects
Parent material: mossy organic material over colluvium and/or loess over residuum weathered from schist
Depth to permafrost: 7 to 30 inches
Depth to bedrock (paralithic): 14 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 4 inches
Ponding: none
Available water capacity (approximate): 2.1 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; dark reddish brown peat, high saturated hydraulic conductivity
ABjj—9 to 12 inches; black mucky silt loam, moderately high saturated hydraulic conductivity
2Cjjf—12 to 21 inches; olive brown permanently frozen very channery silt loam, very slow saturated hydraulic conductivity
2Crf—21 to 72 inches; dark reddish brown permanently frozen weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Brigadier and similar soils: 5 to 10 percent of the map unit
Ester and similar soils: 5 to 10 percent of the map unit
Gilmore and similar soils: 0 to 10 percent of the map unit

50X—Ester peat, 20 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Ester and similar soils

Extent: 65 to 75 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear
Slope range: 20 to 45 percent, north to north aspects
Parent material: mossy organic material over colluvium and/or loess over residuum weathered from schist
Depth to permafrost: 7 to 30 inches
Depth to bedrock (paralithic): 14 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 4 inches
Ponding: none
Available water capacity (approximate): 2.1 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; olive brown peat, high saturated hydraulic conductivity
ABjj—9 to 12 inches; black mucky silt loam, moderately high saturated hydraulic conductivity
2Cjjf—12 to 21 inches; dark reddish brown permanently frozen very channery silt loam, very slow saturated hydraulic conductivity
2Crf—21 to 72 inches; olive brown permanently frozen weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Brigadier and similar soils: 0 to 5 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit
Ester and similar soils: 0 to 10 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 0 to 5 percent of the map unit

51B—Saulich peat, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Saulich and similar soils

Extent: 70 to 85 percent of the map unit
Landform: valley sides
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 3 to 7 percent, north to north aspects
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches

Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:
Oi—0 to 16 inches; very dark brown peat, high saturated hydraulic conductivity
Bg/A—16 to 21 inches; black and dark brown mucky silt loam, moderately high saturated hydraulic conductivity
Cfg—21 to 72 inches; dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Goldstream and similar soils: 3 to 10 percent of the map unit
Saulich and similar soils: 3 to 10 percent of the map unit
Chatanika and similar soils: 0 to 5 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit

51C—Saulich peat, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Saulich and similar soils

Extent: 75 to 85 percent of the map unit
Landform: valley sides
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 7 to 12 percent, north to north aspects
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:
Oi—0 to 16 inches; very dark brown peat, high saturated hydraulic conductivity
Bg/A—16 to 21 inches; dark grayish brown mucky silt loam, moderately high saturated hydraulic conductivity
Cfg—21 to 72 inches; black and dark brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Goldstream and similar soils: 3 to 10 percent of the map unit
Saulich and similar soils: 3 to 5 percent of the map unit
Chatanika and similar soils: 0 to 5 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit

61—Piledriver very fine sandy loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Piledriver and similar soils

Extent: 70 to 90 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: rare
Depth to high water table (approximate): 0 to 47 inches
Ponding: frequent
Available water capacity (approximate): 7.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:

Oi—0 to 3 inches; light olive brown and grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
C1—3 to 15 inches; grayish brown very fine sandy loam, moderately high saturated hydraulic conductivity
C2—15 to 33 inches; dark olive brown stratified sand to fine sand to very fine sandy loam, moderately high saturated hydraulic conductivity
2C3—33 to 72 inches; dark brown very gravelly sand, high saturated hydraulic conductivity

Minor Components

Eielson and similar soils: 5 to 15 percent of the map unit
Fubar and similar soils: 5 to 10 percent of the map unit
Tanana, rare brief flooding, and similar soils: 0 to 5 percent of the map unit
North Pole and similar soils: 0 to 5 percent of the map unit

62—Peede-Mosquito complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Peede and similar soils

Extent: 60 to 80 percent of the map unit
Landform: depressions on flood plains
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—*; by wind—severe
Runoff: negligible
Drainage class: very poorly drained

Flooding: occasional
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 14.6 inches
Vegetation: grasses and sedges
Representative Profile:
Oe—0 to 2 inches; very dark brown moderately decomposed plant material, moderately high saturated hydraulic conductivity
Cg—2 to 72 inches; dark gray silt loam, moderately high saturated hydraulic conductivity

Mosquito and similar soils

Extent: 20 to 30 percent of the map unit
Landform: depressions on alluvial flats
Slope shape: concave
Slope range: 0 to 2 percent
Parent material: organic material over alluvium
Depth to permafrost: 14 to 31 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 4.1 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 18 inches; black peat, high saturated hydraulic conductivity
Cg—18 to 24 inches; dark grayish brown very fine sandy loam, moderately high saturated hydraulic conductivity
Cfg—24 to 72 inches; black permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Liscum and similar soils: 0 to 10 percent of the map unit

63—Typic Cryaquents-Tanana complex

Elevation: 397 to 1,299 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Typic Cryaquents, occasional long flooding, and similar soils

Extent: 40 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: low
Drainage class: poorly drained
Flooding: occasional
Depth to high water table (approximate): 0 inches

Ponding: frequent
Available water capacity (approximate): 13.9 inches
Vegetation: white spruce and paper birch forest
Representative Profile:
Oe—0 to 6 inches; dark yellowish brown moderately decomposed plant material, moderately high saturated hydraulic conductivity
Cg—6 to 72 inches; dark gray and dark grayish brown silt loam, moderately high saturated hydraulic conductivity

Tanana, rare brief flooding, and similar soils

Extent: 30 to 40 percent of the map unit
Landform: terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium and/or loess over alluvium
Depth to permafrost: 16 to 47 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): 0 to 12 inches
Ponding: frequent
Available water capacity (approximate): 5.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 3 inches; dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; very dark brown mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—6 to 25 inches; very dark grayish brown very fine sandy loam, moderately high saturated hydraulic conductivity
Cjjfg—25 to 72 inches; dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Eielson and similar soils: 5 to 15 percent of the map unit
Histels and similar soils: 5 to 15 percent of the map unit

64—Eielson-Tanana complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Eielson and similar soils

Extent: 30 to 60 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low

Drainage class: moderately well drained
Flooding: occasional
Depth to high water table (approximate): 0 to 47 inches
Ponding: frequent
Available water capacity (approximate): 12.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 2 inches; dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
O/C—2 to 49 inches; olive brown and dark gray very fine sandy loam, moderately high saturated hydraulic conductivity
C1—49 to 71 inches; very dark brown stratified silt loam to fine sand, moderately high saturated hydraulic conductivity
2C2—71 to 72 inches; dark grayish brown very gravelly sand, high saturated hydraulic conductivity

Tanana, rare brief flooding, and similar soils

Extent: 20 to 50 percent of the map unit
Landform: terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium and/or loess over alluvium
Depth to permafrost: 16 to 47 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): 0 to 12 inches
Ponding: frequent
Available water capacity (approximate): 5.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 3 inches; very dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; dark grayish brown mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—6 to 25 inches; very dark brown very fine sandy loam, moderately high saturated hydraulic conductivity
Cjjfg—25 to 72 inches; very dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Peede and similar soils: 10 to 15 percent of the map unit
Tanacross and similar soils: 0 to 5 percent of the map unit

65—Typic Cryaquent and Fluvaquentic Aquorthel soils

Elevation: 397 to 1,299 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fluvaquentic aquorthels and similar soils

Extent: 15 to 85 percent of the map unit

Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Depth to permafrost: 14 to 28 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: occasional
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 5.9 inches
Vegetation: alder scrub
Representative Profile:

Oe—0 to 4 inches; very dark gray moderately decomposed plant material, high saturated hydraulic conductivity

Cg—4 to 24 inches; olive gray and dark yellowish brown stratified silt loam to very fine sandy loam to highly decomposed plant material, moderately high saturated hydraulic conductivity

Cfg—24 to 72 inches; very dark gray permanently frozen stratified silt loam to very fine sandy loam to moderately decomposed plant material, very slow saturated hydraulic conductivity

Typic Cryaquents, occasional long flooding, and similar soils

Extent: 15 to 85 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: low
Drainage class: poorly drained
Flooding: occasional
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 13.9 inches
Vegetation: white spruce and paper birch forest
Representative Profile:

Oe—0 to 6 inches; dark gray and dark grayish brown moderately decomposed plant material, moderately high saturated hydraulic conductivity

Cg—6 to 72 inches; dark yellowish brown silt loam, moderately high saturated hydraulic conductivity

Minor Components

Eielson and similar soils: 5 to 10 percent of the map unit
Terric Cryofibrists and similar soils: 5 to 10 percent of the map unit

66—Eielson fine sandy loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Eielson and similar soils

Extent: 70 to 90 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: occasional
Depth to high water table (approximate): 0 to 47 inches
Ponding: frequent
Available water capacity (approximate): 12.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:

Oi—0 to 2 inches; dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
O/C—2 to 49 inches; olive brown and dark gray very fine sandy loam, moderately high saturated hydraulic conductivity
C1—49 to 71 inches; very dark brown stratified silt loam to fine sand, moderately high saturated hydraulic conductivity
2C2—71 to 72 inches; dark grayish brown very gravelly sand, high saturated hydraulic conductivity

Minor Components

Peede and similar soils: 10 to 15 percent of the map unit
Tanana, rare brief flooding, and similar soils: 0 to 15 percent of the map unit

69—Typic Cryaquents-Eielson complex

Elevation: 397 to 1,299 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 75 to 120 days

Typic Cryaquents, occasional long flooding, and similar soils

Extent: 0 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: low
Drainage class: poorly drained
Flooding: occasional
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 13.9 inches
Vegetation: white spruce and paper birch forest
Representative Profile:

Oe—0 to 6 inches; dark gray and dark grayish brown moderately decomposed plant material, moderately high saturated hydraulic conductivity
Cg—6 to 72 inches; dark yellowish brown silt loam, moderately high saturated hydraulic conductivity

Eielson and similar soils

Extent: 0 to 35 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: occasional
Depth to high water table (approximate): 0 to 47 inches
Ponding: frequent
Available water capacity (approximate): 12.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:

Oi—0 to 2 inches; dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity

O/C—2 to 49 inches; olive brown and dark gray very fine sandy loam, moderately high saturated hydraulic conductivity

C1—49 to 71 inches; very dark brown stratified silt loam to fine sand, moderately high saturated hydraulic conductivity

2C2—71 to 72 inches; dark grayish brown very gravelly sand, high saturated hydraulic conductivity

Minor Components

Jarvis and similar soils: 0 to 10 percent of the map unit
Riverwash: 5 to 10 percent of the map unit
Tanana, rare brief flooding, and similar soils: 0 to 5 percent of the map unit

70A—Volkmar-Richardson complex, 0 to 3 percent slopes

Elevation: 397 to 1,299 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Volkmar and similar soils

Extent: 20 to 60 percent of the map unit
Landform: stream terraces
Slope shape: linear
Slope range: 0 to 3 percent
Parent material: loess over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—moderate
Runoff: low
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 0 to more than 72 inches
Ponding: frequent
Available water capacity (approximate): 8.7 inches
Vegetation: white spruce, paper birch, or quaking aspen forest
Representative Profile:

Oi—0 to 3 inches; brown with light gray mottles slightly decomposed plant material, high saturated hydraulic conductivity

Bw—3 to 10 inches; light yellowish brown very fine sandy loam, moderately high saturated hydraulic conductivity
C1—10 to 30 inches; variegated very fine sandy loam, moderately high saturated hydraulic conductivity
2C2—30 to 72 inches; very dark gray very gravelly coarse sand, high saturated hydraulic conductivity

Richardson and similar soils

Extent: 35 to 50 percent of the map unit
Landform: stream terraces
Slope shape: linear
Slope range: 0 to 3 percent
Parent material: loess over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—moderate
Runoff: low
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 0 to more than 72 inches
Ponding: frequent
Available water capacity (approximate): 12.5 inches
Vegetation: white spruce, black spruce, and paper birch forest
Representative Profile:
Oi—0 to 1 inch; very dark brown slightly decomposed plant material, high saturated hydraulic conductivity
Bw—1 to 20 inches; gray silt loam, moderately high saturated hydraulic conductivity
BC—20 to 59 inches; olive gray silt loam, moderately high saturated hydraulic conductivity
2C—59 to 72 inches; olive brown and olive gray loamy sand, very high saturated hydraulic conductivity

Minor Components

Mosquito and similar soils: 0 to 10 percent of the map unit
Tanacross and similar soils: 0 to 10 percent of the map unit
Tanana, rare brief flooding, and similar soils: 0 to 10 percent of the map unit

70B—Volkmar-Richardson complex, 3 to 7 percent slopes

Elevation: 397 to 1,299 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Richardson and similar soils

Extent: 30 to 45 percent of the map unit
Landform: stream terraces
Slope shape: linear
Slope range: 3 to 7 percent
Parent material: loess over alluvium
Hazard of erosion (organic mat removed): by water—moderate; by wind—moderate
Runoff: low
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 0 to more than 72 inches
Ponding: frequent
Available water capacity (approximate): 12.5 inches
Vegetation: white spruce, black spruce, and paper birch forest

Representative Profile:
Oi—0 to 1 inch; olive brown and olive gray slightly decomposed plant material, high saturated hydraulic conductivity
Bw—1 to 20 inches; olive gray silt loam, moderately high saturated hydraulic conductivity
BC—20 to 59 inches; very dark brown silt loam, moderately high saturated hydraulic conductivity
2C—59 to 72 inches; gray loamy sand, very high saturated hydraulic conductivity

Volkmar and similar soils

Extent: 30 to 60 percent of the map unit
Landform: stream terraces
Slope shape: linear
Slope range: 3 to 7 percent
Parent material: loess over alluvium
Hazard of erosion (organic mat removed): by water—moderate; by wind—moderate
Runoff: low
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 0 to more than 72 inches
Ponding: frequent
Available water capacity (approximate): 8.7 inches
Vegetation: white spruce, paper birch, or quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; very dark gray slightly decomposed plant material, high saturated hydraulic conductivity
Bw—3 to 10 inches; light yellowish brown very fine sandy loam, moderately high saturated hydraulic conductivity
C1—10 to 30 inches; variegated very fine sandy loam, moderately high saturated hydraulic conductivity
2C2—30 to 72 inches; brown with light gray mottles very gravelly coarse sand, high saturated hydraulic conductivity

Minor Components

Eutrocryepts, escarpments, and similar soils: 5 to 15 percent of the map unit
Tanana, rare brief flooding, and similar soils: 0 to 15 percent of the map unit
Typic Cryaquents, occasional brief ponding, and similar soils: 5 to 15 percent of the map unit

71—North Pole-Mosquito-Liscum complex

Elevation: 397 to 1,201 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

North Pole and similar soils

Extent: 20 to 55 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: very poorly drained
Flooding: rare

Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 8.2 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 2 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
Oa—2 to 4 inches; black highly decomposed plant material, moderately low saturated hydraulic conductivity
Bg—4 to 39 inches; dark yellowish brown and dark gray stratified fine sand to silt loam, moderately high saturated hydraulic conductivity
2C—39 to 72 inches; grayish brown very gravelly sand, high saturated hydraulic conductivity

Mosquito and similar soils

Extent: 20 to 40 percent of the map unit
Landform: depressions on alluvial flats
Slope shape: concave
Slope range: 0 to 2 percent
Parent material: organic material over alluvium
Depth to permafrost: 14 to 31 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 4.1 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 18 inches; black peat, high saturated hydraulic conductivity
Cg—18 to 24 inches; dark grayish brown very fine sandy loam, moderately high saturated hydraulic conductivity
Cfg—24 to 72 inches; black permanently frozen material, very slow saturated hydraulic conductivity

Liscum and similar soils

Extent: 15 to 25 percent of the map unit
Landform: alluvial flats
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): 0 to 4 inches
Ponding: frequent
Available water capacity (approximate): 11.9 inches
Vegetation: sedges and grasses
Representative Profile:
Oi—0 to 3 inches; dark brown peat, high saturated hydraulic conductivity
Oa—3 to 11 inches; olive brown muck, moderately low saturated hydraulic conductivity
A—11 to 15 inches; olive brown and gray mucky silt loam, moderately high saturated hydraulic conductivity
Bg—15 to 70 inches; black stratified silt loam to loamy fine sand, moderately high saturated hydraulic conductivity

C—70 to 72 inches; very dark grayish brown very gravelly sandy loam, high saturated hydraulic conductivity

Minor Components

Histels and similar soils: 0 to 10 percent of the map unit
Typic Cryaquents, occasional long flooding, and similar soils: 0 to 10 percent of the map unit

72F—Eutrocryepts, 7 to 45 percent slopes

Elevation: 600 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Eutrocryepts, escarpments, and similar soils

Extent: 85 to 95 percent of the map unit
Landform: escarpments on terraces
Slope shape: linear
Slope range: 7 to 45 percent, north to north aspects
Parent material: colluvium
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 9.8 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; light olive brown peat, high saturated hydraulic conductivity
Bw—2 to 31 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
2C—31 to 72 inches; black stratified silt loam to fine sand, moderately high saturated hydraulic conductivity

Minor Components

Ester and similar soils: 0 to 15 percent of the map unit

81V—Saulich and Chatanika soils, 3 to 15 percent slopes

Elevation: 400 to 1,640 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and similar soils

Extent: 0 to 95 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 3 to 15 percent, north to north aspects
Parent material: colluvium and/or loess

Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; grayish brown mottled slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; very dark grayish brown mucky silt loam, moderately high saturated hydraulic conductivity
C/Ag—6 to 21 inches; grayish brown mottled silt loam, moderately high saturated hydraulic conductivity
Cfg—21 to 72 inches; grayish brown mottled permanently frozen material, very slow saturated hydraulic conductivity

Saulich and similar soils

Extent: 0 to 95 percent of the map unit
Landform: valley sides
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 7 to 12 percent, north to north aspects
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:
Oi—0 to 16 inches; dark grayish brown peat, high saturated hydraulic conductivity
Bg/A—16 to 21 inches; very dark brown mucky silt loam, moderately high saturated hydraulic conductivity
Cfg—21 to 72 inches; black and dark brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Minto and similar soils: 0 to 2 percent of the map unit
Saulich and similar soils: 0 to 2 percent of the map unit

81X—Saulich and Chatanika soils, 15 to 20 percent slopes

Elevation: 499 to 1,299 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 90 to 120 days

Chatanika and similar soils

Extent: 0 to 95 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 15 to 20 percent, north to north aspects
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:

Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity

A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high saturated hydraulic conductivity

C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity

Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Saulich and similar soils

Extent: 0 to 95 percent of the map unit
Landform: valley sides
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 15 to 20 percent, north to north aspects
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:

Oi—0 to 16 inches; black and dark brown peat, high saturated hydraulic conductivity

Bg/A—16 to 21 inches; very dark brown mucky silt loam, moderately high saturated hydraulic conductivity

Cfg—21 to 72 inches; dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 3 percent of the map unit
Saulich and similar soils: 0 to 2 percent of the map unit

82V—Gilmore and Steese silt loams, 3 to 15 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 0 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 3 to 15 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:

Oi—0 to 3 inches; olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; yellowish brown silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; olive brown extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; olive brown weathered bedrock, high saturated hydraulic conductivity

Steese and similar soils

Extent: 0 to 95 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 3 to 15 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:

Oi—0 to 2 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; brown silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; dark brown very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; dark brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 0 to 10 percent of the map unit

82X—Gilmore and Steese silt loams, 15 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 0 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 15 to 45 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:

Oi—0 to 3 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; yellowish brown silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; dark brown extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; dark brown weathered bedrock, high saturated hydraulic conductivity

Steese and similar soils

Extent: 15 to 75 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 15 to 45 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:

Oi—0 to 2 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; brown silt loam, moderately high saturated hydraulic conductivity

Bw—5 to 27 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; dark brown very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; dark brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Angel and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 0 to 5 percent of the map unit

85—Eutrocryept and Minto silt loams, 3 to 20 percent slopes

Elevation: 400 to 1,804 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Eutrocryepts, hills, and similar soils

Extent: 10 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear, concave, convex
Slope range: 3 to 20 percent, north to north aspects
Parent material: loess over colluvium
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 9.8 inches
Vegetation: paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 2 inches; black peat, high saturated hydraulic conductivity
Bw—2 to 31 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
2C—31 to 72 inches; olive brown stratified silt loam to fine sand, moderately high saturated hydraulic conductivity

Minto and similar soils

Extent: 10 to 90 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 3 to 10 percent, north to north aspects
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 4 to more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest

Representative Profile:
Oi—0 to 5 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; grayish brown silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity

Minor Components

Aquic Cryofluvents and similar soils: 2 to 5 percent of the map unit
Saulich and similar soils: 0 to 10 percent of the map unit

86G—Brigadier silt loam, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Brigadier and similar soils

Extent: 60 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 45 to 70 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 12 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 3.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 6 inches; black slightly decomposed plant material, high saturated hydraulic conductivity
A—6 to 11 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—11 to 16 inches; brown silt loam, moderately high saturated hydraulic conductivity
2BC—16 to 20 inches; black very channery sandy loam, high saturated hydraulic conductivity
2Cr—20 to 72 inches; black weathered bedrock, high saturated hydraulic conductivity

Minor Components

Brigadier and similar soils: 0 to 15 percent of the map unit
Gilmore and similar soils: 0 to 15 percent of the map unit
Manchu and similar soils: 0 to 15 percent of the map unit

86V—Brigadier and Manchu silt loams, 3 to 15 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Brigadier and similar soils

Extent: 10 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 3 to 15 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 12 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 3.2 inches
Vegetation: black spruce forest
Representative Profile:

Oi—0 to 6 inches; olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A—6 to 11 inches; brown silt loam, moderately high saturated hydraulic conductivity
Bw—11 to 16 inches; black silt loam, moderately high saturated hydraulic conductivity
2BC—16 to 20 inches; olive brown very channery sandy loam, high saturated hydraulic conductivity
2Cr—20 to 72 inches; olive brown weathered bedrock, high saturated hydraulic conductivity

Manchu and similar soils

Extent: 10 to 90 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 3 to 15 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 24 to 47 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 7 to more than 72 inches
Ponding: none
Available water capacity (approximate): 6.7 inches
Vegetation: black spruce forest
Representative Profile:

Oi—0 to 7 inches; dark yellowish brown and dark gray peat, high saturated hydraulic conductivity
A—7 to 9 inches; very dark brown silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 28 inches; black silt loam, moderately high saturated hydraulic conductivity
2BC—28 to 39 inches; dark yellowish brown very channery silt loam, high saturated hydraulic conductivity
2Cr—39 to 72 inches; dark yellowish brown and dark gray weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 0 to 15 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit

86X—Brigadier and Manchu silt loams, 3 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Brigadier and similar soils

Extent: 40 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 15 to 45 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 12 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 3.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 6 inches; black slightly decomposed plant material, high saturated hydraulic conductivity
A—6 to 11 inches; brown silt loam, moderately high saturated hydraulic conductivity
Bw—11 to 16 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
2BC—16 to 20 inches; black very channery sandy loam, high saturated hydraulic conductivity
2Cr—20 to 72 inches; black weathered bedrock, high saturated hydraulic conductivity

Manchu and similar soils

Extent: 0 to 50 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 3 to 15 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 24 to 47 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 7 to more than 72 inches
Ponding: none
Available water capacity (approximate): 6.7 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 7 inches; very dark brown peat, high saturated hydraulic conductivity
A—7 to 9 inches; black silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 28 inches; dark yellowish brown silt loam, moderately high saturated hydraulic conductivity
2BC—28 to 39 inches; dark yellowish brown and dark gray very channery silt loam, high saturated hydraulic conductivity
2Cr—39 to 72 inches; very dark brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 0 to 15 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit

87V—Gilmore, subalpine and Manchu soils, 0 to 15 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 0 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 0 to 15 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; yellowish brown silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; dark brown extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; dark brown weathered bedrock, high saturated hydraulic conductivity

Manchu and similar soils

Extent: 0 to 90 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 3 to 15 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 24 to 47 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 7 to more than 72 inches
Ponding: none
Available water capacity (approximate): 6.7 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 7 inches; dark yellowish brown and dark gray peat, high saturated hydraulic conductivity

A—7 to 9 inches; black silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 28 inches; dark yellowish brown silt loam, moderately high saturated hydraulic conductivity
2BC—28 to 39 inches; very dark brown very channery silt loam, high saturated hydraulic conductivity
2Cr—39 to 72 inches; dark yellowish brown and dark gray weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Ester and similar soils: 0 to 5 percent of the map unit

87X—Gilmore silt loam, subalpine, 15 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 80 to 100 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 15 to 45 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; yellowish brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; yellowish brown extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; yellowish brown weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 0 to 5 percent of the map unit
Manchu and similar soils: 0 to 5 percent of the map unit

88—Dystrogelepts-Turbels complex, 8 to 30 percent slopes

Elevation: 2,789 to 3,281 feet
Mean annual precipitation: 14 to 18 inches
Frost-free period: 80 to 120 days

Dystrogelepts and similar soils

Extent: 50 to 70 percent of the map unit
Landform: hills
Position on slope: shoulders, summits
Slope shape: linear, convex
Slope range: 8 to 30 percent, north to north aspects
Parent material: colluvium over residuum
Depth to bedrock (lithic): 14 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 3.2 inches
Vegetation: cottonsedge and low shrub tundra
Representative Profile:

Oe—0 to 2 inches; black mucky peat, high saturated hydraulic conductivity
A—2 to 7 inches; dark brown gravelly sandy loam, moderately high saturated hydraulic conductivity
Bw—7 to 14 inches; brown cobbly sandy loam, moderately high saturated hydraulic conductivity
BC—14 to 24 inches; black extremely channery silt loam, high saturated hydraulic conductivity
2R—24 to 72 inches; black bedrock, very slow saturated hydraulic conductivity

Turbels and similar soils

Extent: 25 to 50 percent of the map unit
Landform: depressions on hills
Position on slope: backslopes
Slope shape: concave
Slope range: 8 to 30 percent, north to north aspects
Parent material: organic material over colluvium over residuum
Depth to permafrost: 16 to 28 inches
Depth to bedrock (paralithic): 72 to 72 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 12 inches
Ponding: none
Available water capacity (approximate): 3.5 inches
Vegetation: cottonsedge, moss, and low shrub tundra
Representative Profile:

Oi—0 to 2 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 13 inches; black cobbly silt loam, high saturated hydraulic conductivity
BCjj—13 to 24 inches; dark reddish brown very gravelly silt loam, high saturated hydraulic conductivity
BCf—24 to 31 inches; dark brown permanently frozen very gravelly silt loam, very slow saturated hydraulic conductivity
Cf—31 to 72 inches; dark brown permanently frozen material, very slow saturated hydraulic conductivity
Crf—>72 inches; dark brown permanently frozen bedrock, very slow saturated hydraulic conductivity

Minor Components

Rock outcrops: 0 to 5 percent of the map unit

89X—Fairbanks and Steese silt loams, 15 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 0 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 15 to 45 percent, north to north aspects
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:

Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high saturated hydraulic conductivity

Steese and similar soils

Extent: 0 to 90 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 15 to 45 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:

Oi—0 to 2 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; brown silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; dark brown very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; dark brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Steese and similar soils: 0 to 10 percent of the map unit

90—Fubar-Tanana complex, 0 to 2 percent slopes

Elevation: 397 to 1,299 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fubar and similar soils

Extent: 35 to 60 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: rare
Depth to high water table (approximate): 54 inches
Ponding: none
Available water capacity (approximate): 3.4 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:
- Oi—0 to 2 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
- C1—2 to 10 inches; dark gray stratified fine sand to silt loam, moderately high saturated hydraulic conductivity
- 2C2—10 to 72 inches; dark grayish brown very gravelly coarse sand, high saturated hydraulic conductivity

Tanana, rare brief flooding, and similar soils

Extent: 30 to 55 percent of the map unit
Landform: terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium and/or loess over alluvium
Depth to permafrost: 16 to 47 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): 0 to 12 inches
Ponding: frequent
Available water capacity (approximate): 5.2 inches
Vegetation: black spruce forest
Representative Profile:
- Oi—0 to 3 inches; dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
- A—3 to 6 inches; very dark grayish brown mucky silt loam, moderately high saturated hydraulic conductivity

Bjjg—6 to 25 inches; very dark brown very fine sandy loam, moderately high saturated hydraulic conductivity
Cjjfg—25 to 72 inches; dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Mosquito and similar soils: 0 to 5 percent of the map unit
Piledriver and similar soils: 0 to 5 percent of the map unit

91—Aquic Cryofluvents-Typic Cryaquents-Fluvaquentic Aquorthels complex, 2 to 10 percent slopes

Elevation: 499 to 1,299 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Aquic Cryofluvents and similar soils

Extent: 20 to 40 percent of the map unit
Landform: flood plains
Position on slope: toeslopes
Slope shape: linear
Slope range: 2 to 10 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—moderate; by wind—moderate
Runoff: medium
Drainage class: moderately well drained
Flooding: occasional
Depth to high water table (approximate): 4 to 51 inches
Ponding: frequent
Available water capacity (approximate): 13.3 inches
Vegetation: willow and birch scrub
Representative Profile:
Oe—0 to 3 inches; dark brown mucky peat, moderately high saturated hydraulic conductivity
A—3 to 10 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity
C—10 to 72 inches; dark yellowish brown stratified silt loam to loamy sand to gravel, moderately high saturated hydraulic conductivity

Fluvaquentic aquorthels and similar soils

Extent: 25 to 35 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 2 to 10 percent
Parent material: alluvium
Depth to permafrost: 14 to 28 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: occasional
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 5.9 inches

Vegetation: alder scrub
Representative Profile:
Oe—0 to 4 inches; very dark gray moderately decomposed plant material, high saturated hydraulic conductivity
Cg—4 to 24 inches; olive gray and dark yellowish brown stratified silt loam to very fine sandy loam to highly decomposed plant material, moderately high saturated hydraulic conductivity
Cfg—24 to 72 inches; very dark gray permanently frozen stratified silt loam to very fine sandy loam to moderately decomposed plant material, very slow saturated hydraulic conductivity

Typic Cryaquents, frequent flooding, and similar soils

Extent: 25 to 35 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 2 to 10 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—moderate; by wind—slight
Runoff: low
Drainage class: poorly drained
Flooding: frequent
Depth to high water table (approximate): 0 inches
Ponding: none
Available water capacity (approximate): 13.9 inches
Vegetation: white spruce and paper birch forest
Representative Profile:
Oe—0 to 6 inches; dark gray and dark grayish brown moderately decomposed plant material, moderately high saturated hydraulic conductivity
Cg—6 to 72 inches; dark yellowish brown silt loam, moderately high saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 5 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit

211—Chatanika-Goldstream complex, 0 to 5 percent slopes

Elevation: 423 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and similar soils

Extent: 50 to 60 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 0 to 5 percent, north to north aspects
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches

Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high saturated hydraulic conductivity
C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity
Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Goldstream and similar soils

Extent: 30 to 40 percent of the map unit
Landform: flood plains, valleys
Slope shape: concave, linear
Slope range: 0 to 5 percent
Parent material: organic material over loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; gray mucky peat, high saturated hydraulic conductivity
A—9 to 12 inches; dark brown mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—12 to 20 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity
Cfg—20 to 72 inches; gray permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Minto and similar soils: 0 to 5 percent of the map unit
Chatanika and similar soils: 0 to 5 percent of the map unit
Histels and similar soils: 0 to 5 percent of the map unit
Water: 0 to 5 percent of the map unit

212—Goldstream-Histels complex, 0 to 3 percent slopes

Elevation: 397 to 1,201 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Goldstream and similar soils

Extent: 40 to 60 percent of the map unit
Landform: flood plains, valleys
Slope shape: concave, linear

Slope range: 0 to 3 percent
Parent material: organic material over loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; very dark grayish brown peat, high saturated hydraulic conductivity
A—9 to 12 inches; gray mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—12 to 20 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
Cfg—20 to 72 inches; very dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Histels and similar soils

Extent: 45 to 50 percent of the map unit
Landform: flats on terraces, depressions on terraces, valleys
Slope shape: concave, linear
Slope range: 0 to 3 percent, north to north aspects
Parent material: organic material over alluvium and/or loess
Depth to permafrost: 16 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 3.9 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 12 inches; brown peat, high saturated hydraulic conductivity
Oe—12 to 17 inches; black mucky peat, moderately high saturated hydraulic conductivity
Oef—17 to 26 inches; very dark gray permanently frozen mucky peat, very slow saturated hydraulic conductivity
Cfg—26 to 72 inches; brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Terric Cryofibrists and similar soils: 0 to 10 percent of the map unit

251—Tanana-Mosquito complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Tanana, rare brief flooding, and similar soils

Extent: 50 to 70 percent of the map unit

Landform: terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium and/or loess over alluvium
Depth to permafrost: 16 to 47 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): 0 to 12 inches
Ponding: frequent
Available water capacity (approximate): 5.2 inches
Vegetation: black spruce forest
Representative Profile:

Oi—0 to 3 inches; dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; very dark grayish brown mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—6 to 25 inches; very dark brown very fine sandy loam, moderately high saturated hydraulic conductivity
Cjjfg—25 to 72 inches; dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Mosquito and similar soils

Extent: 20 to 25 percent of the map unit
Landform: depressions on alluvial flats
Slope shape: concave
Slope range: 0 to 2 percent
Parent material: organic material over alluvium
Depth to permafrost: 14 to 31 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 4.1 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:

Oi—0 to 18 inches; dark grayish brown peat, high saturated hydraulic conductivity
Cg—18 to 24 inches; black very fine sandy loam, moderately high saturated hydraulic conductivity
Cfg—24 to 72 inches; dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Jarvis and similar soils: 5 to 15 percent of the map unit
Liscum and similar soils: 0 to 5 percent of the map unit
Noonku and similar soils: 0 to 5 percent of the map unit

361—Jarvis-Chena complex

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Jarvis and similar soils

Extent: 50 to 60 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): 0 to more than 72 inches
Ponding: occasional
Available water capacity (approximate): 5.9 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:
Oe—0 to 3 inches; black moderately decomposed plant material, high saturated hydraulic conductivity
C1—3 to 6 inches; olive brown very fine sandy loam, moderately high saturated hydraulic conductivity
C2—6 to 24 inches; grayish brown stratified sand to fine sand to very fine sandy loam, moderately high saturated hydraulic conductivity
2C3—24 to 72 inches; gray very gravelly sand, high saturated hydraulic conductivity

Chena and similar soils

Extent: 30 to 40 percent of the map unit
Landform: stream terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: excessively drained
Flooding: rare
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 3.5 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 4 inches; grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
C1—4 to 9 inches; olive brown stratified fine sand to silt loam, high saturated hydraulic conductivity
2C2—9 to 72 inches; very dark gray very gravelly sand, high saturated hydraulic conductivity

Minor Components

Noonku and similar soils: 0 to 10 percent of the map unit
Salchaket and similar soils: 0 to 10 percent of the map unit

362—Piledriver-Fubar complex

Elevation: 397 to 650 feet

Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Piledriver and similar soils

Extent: 40 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: rare
Depth to high water table (approximate): 0 to 47 inches
Ponding: frequent
Available water capacity (approximate): 7.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:

Oi—0 to 3 inches; dark olive brown slightly decomposed plant material, high saturated hydraulic conductivity
C1—3 to 15 inches; grayish brown very fine sandy loam, moderately high saturated hydraulic conductivity
C2—15 to 33 inches; dark brown stratified sand to fine sand to very fine sandy loam, moderately high saturated hydraulic conductivity
2C3—33 to 72 inches; light olive brown and grayish brown very gravelly sand, high saturated hydraulic conductivity

Fubar and similar soils

Extent: 40 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: rare
Depth to high water table (approximate): 54 inches
Ponding: none
Available water capacity (approximate): 3.4 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:

Oi—0 to 2 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
C1—2 to 10 inches; dark grayish brown stratified fine sand to silt loam, moderately high saturated hydraulic conductivity
2C2—10 to 72 inches; dark gray very gravelly coarse sand, high saturated hydraulic conductivity

Minor Components

Eielson and similar soils: 0 to 10 percent of the map unit
Noonku and similar soils: 0 to 5 percent of the map unit

363—Jarvis-Salchaket complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Jarvis and similar soils

Extent: 40 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): 0 to more than 72 inches
Ponding: occasional
Available water capacity (approximate): 5.9 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:

Oe—0 to 3 inches; black moderately decomposed plant material, high saturated hydraulic conductivity
C1—3 to 6 inches; grayish brown very fine sandy loam, moderately high saturated hydraulic conductivity
C2—6 to 24 inches; olive brown stratified sand to fine sand to very fine sandy loam, moderately high saturated hydraulic conductivity
2C3—24 to 72 inches; gray very gravelly sand, high saturated hydraulic conductivity

Salchaket and similar soils

Extent: 40 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): 0 to more than 72 inches
Ponding: frequent
Available water capacity (approximate): 9.7 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:

Oi—0 to 3 inches; variegated slightly decomposed plant material, high saturated hydraulic conductivity
C1—3 to 24 inches; dark grayish brown very fine sandy loam, moderately high saturated hydraulic conductivity
C2—24 to 45 inches; dark brown stratified silt loam to fine sand, moderately high saturated hydraulic conductivity
2C3—45 to 72 inches; olive brown very gravelly sand, high saturated hydraulic conductivity

Minor Components

Tanana, rare brief flooding, and similar soils: 0 to 5 percent of the map unit

Chena and similar soils: 0 to 2 percent of the map unit
Noonku and similar soils: 0 to 5 percent of the map unit
North Pole and similar soils: 0 to 5 percent of the map unit

411A—Minto-Chatanika complex, 0 to 3 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 35 to 50 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 0 to 3 percent, north to north aspects
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 4 to more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; dark brown silt loam, moderately high saturated hydraulic conductivity

Chatanika and similar soils

Extent: 35 to 50 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 0 to 3 percent, north to north aspects
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity

A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high saturated hydraulic conductivity
C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity
Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 2 to 10 percent of the map unit
Goldstream and similar soils: 2 to 10 percent of the map unit
Minto and similar soils: 2 to 10 percent of the map unit

411B—Minto-Chatanika complex, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 30 to 40 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 3 to 7 percent, north to north aspects
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 4 to more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; grayish brown silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity

Chatanika and similar soils

Extent: 30 to 40 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 3 to 7 percent, north to north aspects
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none

Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high saturated hydraulic conductivity
C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity
Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Minto and similar soils: 5 to 10 percent of the map unit
Saulich and similar soils: 0 to 10 percent of the map unit
Chatanika and similar soils: 0 to 5 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit

411C—Minto-Chatanika complex, 7 to 12 percent slopes

Elevation: 397 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 40 to 50 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 7 to 12 percent, north to north aspects
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 4 to more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; grayish brown silt loam, moderately high saturated hydraulic conductivity

Chatanika and similar soils

Extent: 40 to 50 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes

Slope shape: linear, concave
Slope range: 7 to 12 percent, north to north aspects
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:

Oi—0 to 4 inches; grayish brown mottled slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; very dark grayish brown mucky silt loam, moderately high saturated hydraulic conductivity
C/Ag—6 to 21 inches; grayish brown mottled silt loam, moderately high saturated hydraulic conductivity
Cfg—21 to 72 inches; grayish brown mottled permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Minto and similar soils: 5 to 15 percent of the map unit
Chatanika and similar soils: 2 to 10 percent of the map unit
Typic Cryaquents, frequent long ponding, and similar soils: 0 to 5 percent of the map unit

411D—Minto-Chatanika complex, 12 to 20 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 40 to 50 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 12 to 20 percent, north to north aspects
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): 4 to more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:

Oi—0 to 5 inches; very dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; dark brown silt loam, moderately high saturated hydraulic conductivity

C—16 to 72 inches; grayish brown silt loam, moderately high saturated hydraulic conductivity

Chatanika and similar soils

Extent: 40 to 50 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 12 to 20 percent, north to north aspects
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high saturated hydraulic conductivity
C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high saturated hydraulic conductivity
Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, very slow saturated hydraulic conductivity

Minor Components

Minto and similar soils: 5 to 15 percent of the map unit
Chatanika and similar soils: 2 to 10 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit

421D—Fairbanks-Steese complex, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 50 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent, north to north aspects
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches

Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; light olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; grayish brown or light olive brown silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity

Steese and similar soils

Extent: 25 to 40 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; light olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; brown silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; light olive brown very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; light olive brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 2 to 7 percent of the map unit
Fairbanks and similar soils: 2 to 7 percent of the map unit
Steese and similar soils: 2 to 5 percent of the map unit
Gilmore and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 2 to 5 percent of the map unit

441D—Steese-Gilmore complex, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 30 to 60 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes

Slope shape: convex, linear
Slope range: 12 to 20 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; brown very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; brown weathered bedrock, very slow saturated hydraulic conductivity

Gilmore and similar soils

Extent: 20 to 40 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 12 to 20 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; yellowish brown silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; olive brown extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; olive brown weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 5 to 15 percent of the map unit
Steese and similar soils: 5 to 15 percent of the map unit

441E—Steese-Gilmore complex, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 30 to 60 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 20 to 30 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:

Oi—0 to 2 inches; brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; brown very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; brown weathered bedrock, very slow saturated hydraulic conductivity

Gilmore and similar soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 20 to 30 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:

Oi—0 to 3 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; yellowish brown silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; dark brown extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; dark brown weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 2 to 15 percent of the map unit
Steese and similar soils: 2 to 12 percent of the map unit

441F—Steese-Gilmore complex, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 0 to 50 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 30 to 45 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:

Oi—0 to 3 inches; olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; yellowish brown silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; olive brown extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; olive brown weathered bedrock, high saturated hydraulic conductivity

Steese and similar soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 30 to 45 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:

Oi—0 to 2 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; brown silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; dark brown very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; dark brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 5 to 15 percent of the map unit
Steese and similar soils: 5 to 15 percent of the map unit

441G—Steese-Gilmore complex, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 40 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 45 to 70 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:

- Oi—0 to 3 inches; yellowish brown slightly decomposed plant material, high saturated hydraulic conductivity
- A—3 to 6 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
- Bw—6 to 12 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
- 2BC—12 to 19 inches; yellowish brown extremely channery silt loam, high saturated hydraulic conductivity
- 2Cr—19 to 72 inches; yellowish brown weathered bedrock, high saturated hydraulic conductivity

Steese and similar soils

Extent: 40 to 60 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 45 to 70 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:
Oi—0 to 2 inches; brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; brown very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 2 to 10 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit

451G—Brigadier-Ester Complex, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Brigadier and similar soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 45 to 70 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 12 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 3.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 6 inches; black slightly decomposed plant material, high saturated hydraulic conductivity
A—6 to 11 inches; brown silt loam, moderately high saturated hydraulic conductivity
Bw—11 to 16 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
2BC—16 to 20 inches; black very channery sandy loam, high saturated hydraulic conductivity
2Cr—20 to 72 inches; black weathered bedrock, high saturated hydraulic conductivity

Ester and similar soils

Extent: 25 to 35 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear
Slope range: 45 to 70 percent, north to north aspects
Parent material: mossy organic material over colluvium and/or loess over residuum weathered from schist
Depth to permafrost: 7 to 30 inches
Depth to bedrock (paralithic): 14 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—slight
Runoff: very high

Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 4 inches
Ponding: none
Available water capacity (approximate): 2.1 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; olive brown peat, high saturated hydraulic conductivity
ABjj—9 to 12 inches; dark reddish brown mucky silt loam, moderately high saturated hydraulic conductivity
2Cjjf—12 to 21 inches; black permanently frozen very channery silt loam, very slow saturated hydraulic conductivity
2Crf—21 to 72 inches; olive brown permanently frozen weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Ester and similar soils: 5 to 15 percent of the map unit
Gilmore and similar soils: 10 to 15 percent of the map unit
Steese and similar soils: 5 to 15 percent of the map unit

451X—Brigadier-Ester complex, 15 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Brigadier and similar soils

Extent: 40 to 55 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 15 to 45 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 12 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 3.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 6 inches; olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A—6 to 11 inches; brown silt loam, moderately high saturated hydraulic conductivity
Bw—11 to 16 inches; black silt loam, moderately high saturated hydraulic conductivity
2BC—16 to 20 inches; olive brown very channery sandy loam, high saturated hydraulic conductivity
2Cr—20 to 72 inches; olive brown weathered bedrock, high saturated hydraulic conductivity

Ester and similar soils

Extent: 30 to 45 percent of the map unit

Landform: hills
Position on slope: backslopes
Slope shape: linear
Slope range: 15 to 45 percent, north to north aspects
Parent material: mossy organic material over colluvium and/or loess over residuum weathered from schist
Depth to permafrost: 7 to 30 inches
Depth to bedrock (paralithic): 14 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 4 inches
Ponding: none
Available water capacity (approximate): 2.1 inches
Vegetation: black spruce woodland
Representative Profile:

Oi—0 to 9 inches; olive brown peat, high saturated hydraulic conductivity
ABjj—9 to 12 inches; dark reddish brown mucky silt loam, moderately high saturated hydraulic conductivity
2Cjjf—12 to 21 inches; black permanently frozen very channery silt loam, very slow saturated hydraulic conductivity
2Crf—21 to 72 inches; olive brown permanently frozen weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Ester and similar soils: 0 to 10 percent of the map unit
Gilmore and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit

452—Gilmore-Steese complex, 3 to 15 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 60 to 70 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 3 to 15 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest

Representative Profile:
Oi—0 to 3 inches; olive brown slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; yellowish brown silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; olive brown extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; olive brown weathered bedrock, high saturated hydraulic conductivity

Steese and similar soils

Extent: 30 to 40 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 3 to 15 percent, north to north aspects
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; brown slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; light olive brown silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; dark brown silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; brown very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Steese and similar soils: 0 to 5 percent of the map unit

492—Angel-McCloud complex, 3 to 15 percent slopes

Elevation: 574 to 2,500 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Angel and similar soils

Extent: 40 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 3 to 15 percent, north to north aspects
Parent material: loess over residuum weathered from granite
Depth to bedrock (paralithic): 9 to 28 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: none

Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 3 inches
Vegetation: black spruce, paper birch, quaking aspen and white spruce forest
Representative Profile:
Oi—0 to 2 inches; dark brown peat, high saturated hydraulic conductivity
AE—2 to 4 inches; dark yellowish brown silt loam, moderately high saturated hydraulic conductivity
Bw—4 to 8 inches; brown silt loam, moderately high saturated hydraulic conductivity
2BCr—8 to 22 inches; dark brown very cobbly sandy loam, high saturated hydraulic conductivity
2Cr—22 to 72 inches; dark brown weathered bedrock, high saturated hydraulic conductivity

McCloud and similar soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 3 to 15 percent, north to north aspects
Parent material: loess over residuum weathered from granite
Depth to bedrock (paralithic): 21 to 35 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 6.4 inches
Vegetation: black spruce, paper birch, quaking aspen and white spruce forest
Representative Profile:
Oi—0 to 3 inches; dark brown peat, high saturated hydraulic conductivity
Bw—3 to 20 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
C—20 to 29 inches; dark yellowish brown silt loam, moderately high saturated hydraulic conductivity
2Cr—29 to 72 inches; dark brown weathered bedrock, very slow saturated hydraulic conductivity

Minor Components

Angel and similar soils: 0 to 5 percent of the map unit
McCloud and similar soils: 0 to 5 percent of the map unit

611—Piledriver-Eielson complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 75 to 120 days

Piledriver and similar soils

Extent: 45 to 60 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible

Drainage class: somewhat poorly drained
Flooding: rare
Depth to high water table (approximate): 0 to 47 inches
Ponding: frequent
Available water capacity (approximate): 7.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 3 inches; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
C1—3 to 15 inches; grayish brown very fine sandy loam, moderately high saturated hydraulic conductivity
C2—15 to 33 inches; light olive brown and grayish brown stratified sand to fine sand to very fine sandy loam, moderately high saturated hydraulic conductivity
2C3—33 to 72 inches; dark olive brown very gravelly sand, high saturated hydraulic conductivity

Eielson and similar soils

Extent: 30 to 40 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: occasional
Depth to high water table (approximate): 0 to 47 inches
Ponding: frequent
Available water capacity (approximate): 12.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 2 inches; olive brown and dark gray slightly decomposed plant material, high saturated hydraulic conductivity
O/C—2 to 49 inches; dark grayish brown very fine sandy loam, moderately high saturated hydraulic conductivity
C1—49 to 71 inches; very dark brown stratified silt loam to fine sand, moderately high saturated hydraulic conductivity
2C2—71 to 72 inches; olive brown and dark gray very gravelly sand, high saturated hydraulic conductivity

Minor Components

Fubar and similar soils: 0 to 10 percent of the map unit
Noonku and similar soils: 0 to 10 percent of the map unit
Riverwash: 0 to 5 percent of the map unit

CL—Typic Cryorthents, pit spoil

Elevation: 397 to 1,299 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Typic Cryorthents and similar soils

Extent: 3 to 95 percent of the map unit

Landform: terraces, flood plains
Slope shape: linear
Slope range: 0 to 7 percent
Parent material: mine spoil or earthy fill over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): more than 72 inches
Ponding: none
Available water capacity (approximate): 10.9 inches
Vegetation: paper birch and balsam poplar forest and alder scrub
Representative Profile:

Oi—0 to 1 inch; dark brown slightly decomposed plant material, high saturated hydraulic conductivity
C1—1 to 49 inches; light olive brown mottled stratified fine sand to silt loam, moderately high saturated hydraulic conductivity
2C2—49 to 72 inches; grayish brown very gravelly sand, high saturated hydraulic conductivity

Minor Components

Fubar and similar soils: 0 to 10 percent of the map unit
Jarvis and similar soils: 0 to 10 percent of the map unit
Piledriver and similar soils: 0 to 10 percent of the map unit
Salchaket and similar soils: 0 to 10 percent of the map unit

Gv—Pits, gravel

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Pits, gravel

Extent: 100 percent of the map unit
Landform: gravel pits
Slope range: 0 to 60 percent

Lf—Dumps, landfill

Elevation: 397 to 1,968 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Dumps, landfill

Extent: 100 percent of the map unit
Landform: sanitary landfills
Slope range: 0 to 5 percent

ME—Dumps, mine

Elevation: 397 to 1,968 feet

Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Dumps, mine

Extent: 100 percent of the map unit
Landform: spoil piles
Slope range: 0 to 70 percent

Qu—Pits, quarry

Elevation: 1,476 to 3,264 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Pits, quarry

Extent: 100 percent of the map unit
Landform: quarries
Slope range: 0 to 100 percent
Vegetation: none, or sparse herbaceous vegetation and willows

Rv—Riverwash

Mean annual precipitation: 10 to 14 inches
Frost-free period: 75 to 104 days

Riverwash

Extent: 100 percent of the map unit
Landform: flood plains
Slope range: 0 to 2 percent

UC—Urban land-Typic Cryorthents complex, 0 to 2 percent slopes

Elevation: 397 to 1,299 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Typic Cryorthents, fill, and similar soils

Extent: 40 to 60 percent of the map unit
Landform: flood plains, terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: mine spoil or earthy fill over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): more than 72 inches
Ponding: none

Available water capacity (approximate): 10 inches
Vegetation: seeded or planted grasses, shrubs, or trees
Representative Profile:
C—0 to 30 inches; light olive brown stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam, moderately high saturated hydraulic conductivity
2C1—30 to 63 inches; light brownish gray stratified fine sand to silt loam, moderately high saturated hydraulic conductivity
2C2—63 to 72 inches; light olive brown mottled very gravelly sand, high saturated hydraulic conductivity

Urban land

Extent: 30 to 60 percent of the map unit
Landform: urban land
Slope range: 0 to 2 percent

Minor Components

Salchaket and similar soils: 0 to 15 percent of the map unit
Jarvis and similar soils: 0 to 10 percent of the map unit
Fubar and similar soils: 0 to 10 percent of the map unit

W—Water

Extent: 100 percent of the map unit
Landform: lakes

WAH—Typic Cryaquent, Terric Cryofibrist, and Histic Cryaquept soils

Elevation: 397 to 1,201 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Typic Cryaquents, frequent long ponding, and similar soils

Extent: 0 to 90 percent of the map unit
Landform: flood plains
Slope shape: concave
Slope range: 0 to 5 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: low
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 13.9 inches
Vegetation: white spruce and paper birch forest
Representative Profile:
Oe—0 to 6 inches; dark gray and dark grayish brown moderately decomposed plant material, moderately high saturated hydraulic conductivity
Cg—6 to 72 inches; dark yellowish brown silt loam, moderately high saturated hydraulic conductivity

Histic Cryaquepts and similar soils

Extent: 20 to 50 percent of the map unit
Landform: depressions on terraces
Slope shape: concave
Slope range: 0 to 3 percent
Parent material: organic material over loess
Hazard of erosion (organic mat removed): by water–slight; by wind–slight
Runoff: negligible
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): 0 to 16 inches
Ponding: frequent
Available water capacity (approximate): 11.8 inches
Vegetation: sedges, grasses, and low shrubs
Representative Profile:
Oa–0 to 13 inches; very dark brown muck, high saturated hydraulic conductivity
C–13 to 30 inches; olive brown silt loam, moderately high saturated hydraulic conductivity
Cg–30 to 72 inches; dark grayish brown silt loam, moderately high saturated hydraulic conductivity

Terric Cryofibrists and similar soils

Extent: 0 to 80 percent of the map unit
Landform: thermokarst depressions
Position on slope: toeslopes
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: organic material over lacustrine deposits and/or loess
Hazard of erosion (organic mat removed): by water–slight; by wind–slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): 0 inches
Ponding: frequent
Available water capacity (approximate): 15 inches
Vegetation: sedges
Representative Profile:
Oi–0 to 28 inches; black peat, high saturated hydraulic conductivity
Oa–28 to 40 inches; very dark brown muck, moderately low saturated hydraulic conductivity
Cg–40 to 72 inches; black silty clay loam, moderately high saturated hydraulic conductivity

Minor Components

Histels and similar soils: 0 to 50 percent of the map unit
Water: 0 to 20 percent of the map unit

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, foresters, botanists, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as rangeland and forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreation facilities; and for wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, permafrost, or unstable soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, and trails.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. Other tables indicate the suitability of the soils for use as source materials. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited, slightly limited, somewhat limited,* and *very limited*. The suitability ratings are expressed as *source, probable source*, and *improbable source* or as *good, fair,* and *poor*.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. The numerical ratings, as they relate to each specific interpretation, are explained in the sections that follow.

Forestland Management and Productivity

In table 4, the *potential productivity* of *common trees* on a soil is expressed as a site index. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. The site index is determined from height and age measurements of selected trees from stands throughout the survey area and in nearby areas with similar soils and climate. Tables and equations for determining site index are given in the appropriate publication for each major tree species (Farr, 1967; Gregory and Haack, 1965; Quenet and Manning, 1990). Site index should be used as a comparative index between soils and an approximate measure of height growth, not an absolute or expected value. The most rapid tree growth and greatest yields of a particular tree species can be expected on soils with the highest site indices.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Recreation

The soils of the survey area are rated in table 5 according to limitations that affect their suitability for primitive camp areas and foot and ATV trails. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicates the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00). If the soil is *not limited* (value = 0.00), no entry appears for the numerical value.
The ratings in the table are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality and vegetation.

Primitive camp areas are recreational areas that are used for tent camping by small groups of people. These areas are typically in undeveloped or minimally developed, remote locations off the road system. Primitive camp areas are subject to intermittent light to heavy foot traffic. The soils are rated as *not limited, somewhat limited,* and *very limited* to indicate the extent to which soil and site properties limit the use and performance for the intended use. The critical properties are slope, the texture of the soil surface, the amount of small and large stones on the soil surface, permeability, and flooding and ponding hazards. Ratings for primitive camp areas can help land management agencies direct use to soils favorable for remote camping and thereby increase user satisfaction and minimize site damage. *Not limited* indicates that the soil has few features that limits its use as a primitive camp site. Intermittent use should not cause significant site degradation. *Somewhat limited* indicates that the soil has moderate limitations. Some moderate limitations are seasonal, such as wet ground, flooding, and dustiness during dry conditions. *Very limited* indicates that the soil has one or more features that are unfavorable during all seasons, such as steep slopes or poor soil drainage and a shallow water table.

Foot and ATV trails for hiking, horseback riding, and ATV use should require little or no slope modification and site preparation through cutting and filling. These trails are not covered with surfacing material or vegetation. The ratings are based on the soil properties that affect trafficability, erodibility,

dustiness, and the ease of revegetation. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the estimates given under the heading "Soil Properties".

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet (1.5 to 2.1 m). Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet (1.5 to 2.1 m) of the surface, soil wetness, depth to a water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 6 and 7 show the degree and kind of soil limitations that affect structures and site improvements, including dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Slightly limited* indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited*

indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical values in the tables indicate the severity of individual limitations. The values are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00). If the soil is *not limited* (value = 0.00), no entry appears for the numerical value.

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet (0.6 m) or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet (2.1 m). The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock, permafrost, or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet (0.6 m) or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock, permafrost, or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet (1.5 or 1.8 m) for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock, permafrost, or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Sanitary Facilities

Tables 8 and 9 show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Slightly limited* indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. *Somewhat limited* indicates that the soil has

features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical values in the tables indicate the severity of individual limitations. The values are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00). If the soil is *not limited* (value = 0.00), no entry appears for the numerical value.

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 4 and 6 feet (1.2 and 1.8 m) is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock, permafrost, or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet (1.2 m) below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock, permafrost, or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches (5 cm) per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches (101 cm), if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet (0.6 m) thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock, permafrost, or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet (1.8 m). For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet (0.6 m) thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock, permafrost, or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Construction Materials

Tables 10 and 11 give information about the soils as potential sources of gravel, sand, topsoil, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

The soils are rated *good, fair,* or *poor* as potential sources of topsoil, and roadfill. The features that limit the soils as sources of these materials are specified in the tables. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of topsoil or roadfill. The lower the number, the greater the limitation.

The soils are rated as a *probable* or *improbable* source of sand and gravel. A rating of *probable* means that the source material is likely to be in or below the soil. The numerical ratings in these columns indicate the degree of probability. The number 0.00 indicates that the soil is an improbable source. A number between 0.00 and 1.00 indicates the degree to which the soil is a probable source of sand or gravel.

Sand and *gravel* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 10, only the probability of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the lowest layer of the soil contains sand or gravel, the soil is rated as a probable source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

In table 11, only material in suitable quantity is evaluated. *Topsoil* is used to cover an area so that vegetation can be established and maintained. The upper 40 inches (102 cm) of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material;

and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet (1.8 m) high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet (1.5 m). It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential). Susceptibility to frost action is also considered. The soils are rated based on the most limiting layers. Often a soil will have finer textured upper layers that are affected by frost action, while coarser textured lower layers in the same soil may not be affected.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey.

Soil properties are ascertained by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

Engineering Index Properties

Tables 12 and 13 give the engineering index properties and particle size data for the layers of each soil in the survey area.

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

Texture is given in the standard terms used by the USDA. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. “Loam,” for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, “gravelly.” Textural terms are defined in the Glossary.

Table 12 shows the engineering classifications and the range of index properties for the layers of each soil in the survey area.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2001) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2000).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle size distribution of the fraction less than 3 inches (75 mm) in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, SP-SM.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches (75 mm) in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

Table 13 gives particle size data for each soil in the survey area.

Rock fragments larger than 10 inches (250 mm) in diameter and 3 to 10 inches (75 to 250 mm) in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches (75 mm) in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. The estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. The estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. The estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

The estimates of particle-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is generally omitted in the table.

Physical Properties

Table 14 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

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

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability (K_{sat}) refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity (K_{sat}). The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In table 14, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in table 14 as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of several factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are as follows:

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. Soils are grouped according to the amount of stable aggregates more than 0.84 millimeter in size. Soils containing rock fragments can occur in any group. The groups are as follows:

1. 1 to 9 percent dry soil aggregates. These soils are very highly erodible. Crops can be grown if intensive measures to control wind erosion are used.
2. 10 to 24 percent dry soil aggregates. These soils are highly erodible. Crops can be grown if intensive measures to control wind erosion are used.
3. 25 to 39 percent dry soil aggregates. These soils are erodible. Crops can be grown if intensive measures to control wind erosion are used.
4. 25 to 39 percent dry soil aggregates with > 35 percent clay or > 5 percent calcium carbonate. These soils are moderately erodible. Crops can be grown if measures to control wind erosion are used.
5. 40 to 44 percent dry soil aggregates. These soils are slightly erodible. Crops can be grown if measures to control wind erosion are used.
6. 45 to 49 percent dry soil aggregates. These soils are very slightly erodible. Crops can easily be grown.
7. 50 percent or more dry soil aggregates. These soils are very slightly erodible. Crops can easily be grown.
8. Stony, gravelly, or wet soils and other soils not subject to wind erosion.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation

between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Properties

Table 15 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

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

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Water Features

Table 16 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Wet soil refers to a saturated zone in the soil. Table 16 indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. Table 16 indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible

under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as *none, very rare, rare, occasional, frequent*, and *very frequent*. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Hydric Soils

In this section, hydric soils are defined and described and the hydric soils in the survey area are listed.

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others 1979; U.S. Army Corps of Engineers 1987; National Research Council 1995; Tiner 1985). Criteria for each of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register 1995). These criteria are used to identify a phase of a soil series that normally is associated with wetlands. The criteria used are selected estimated soil properties that are described in *Soil Taxonomy* (USDA 1999) and *Keys to Soil Taxonomy* (USDA 1998) and in the *Soil Survey Manual* (USDA 1993).

If soils are wet enough for a long enough period to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils in this survey area are specified in *Field Indicators of Hydric Soils in the United States* (USDA 1996).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches (50 centimeters). This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the

conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Those soils that meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators, are listed in table 17. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council 1995; USDA 1996).

Some map units consist almost entirely of hydric soils, such as map unit (insert symbol and name) (in which all listed components are hydric). Other map units consist primarily of nonhydric soils, such as map unit (insert symbol and name) (in which all listed components are nonhydric), or map unit (insert symbol and name) (in which hydric soils are present only as minor components). Hydric soils may occur as minor inclusions even in map units listed without any hydric soils in table 17.

Table 17 also lists the local landform on which each soil occurs, the hydric criteria code, and whether or not each soil meets the saturation, flooding, or ponding criteria for hydric soils. Codes for hydric soil criteria are explained in the following key:

Key To Hydric Soil Criteria

1. All Histosols except Folists, or

2. Soils in Aquic suborders, Aquic subgroups, Albolls suborder, Salorthids great group, Pell great groups of Vertisols, Pachic subgroups, or cumulic subgroups that are:

a. Somewhat poorly drained and have a frequently occurring water table at less than 0.5 foot (ft) from the surface for a significant period (usually more than 2 weeks) during the growing season, or

b. poorly drained or very poorly drained and have either:

(1) a frequently occurring water table at less than 0.5 ft from the surface for a significant period (usually more than 2 weeks) during the growing season if textures are coarse sand, sand, or fine sand in all layers within 20 inches (in), or for other soils

(2) a frequently occurring water table at less than 1 ft from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is equal to or greater than 6 in/hour (h) in all layers within 20 in, or

(3) a frequently occurring water table at less than 1.5 ft from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is less than 6 in/h in any layer within 20 in, or

3. Soils that are frequently ponded for long duration or very long duration during the growing season, or

4. Soils that are frequently flooded for long duration or very long duration during the growing season.

Soil Features

Table 18 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation.

Depth to top is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil.

Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate,* or *high,* is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate,* or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (USDA 1998 and 1999). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 19 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Inceptisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Cryept (*Cry*, meaning cold, plus *ept*, from Inceptisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Eutrocryepts (*Eutro* meaning high base saturation, plus cryept, the suborder of the Inceptisols that has a cryic temperature regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *Typic* identifies the subgroup that typifies the great group. An example is Typic Eutrocryepts.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle size, mineral content, soil temperature regime, soil depth, and reaction. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is coarse-silty, mixed, superactive, Typic Eutrocryepts.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. An example from this survey area is the Fairbanks series.

Taxonomic Units and Their Morphology

The Official Series Descriptions (OSDs) provide the most current information about the series mapped in this survey area. These descriptions are available on the Web at http://soils.usda.gov.

Descriptions for higher level taxonomic units recognized in this survey area are provided below. Characteristics of the soil and the material in which it formed are identified for each taxonomic unit. A pedon, a small three-dimensional area of soil, typical of the taxonomic unit in the survey area is described. The detailed description of each soil horizon follows standards in the *Soil Survey Manual* (USDA 1993). Many of the technical terms used in the descriptions are defined in *Soil Taxonomy* (USDA 1999) and in *Keys to Soil Taxonomy* (USDA 1998). Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the taxonomic unit.

Aquic Cryofluvents

Taxonomic Classification

- Aquic Cryofluvents

Setting

Depth class: very deep—more than 60 inches (more than 152 cm)
Drainage class: moderately well drained
Permeability: moderate
Landforms and positions: floodplains in narrow mountain valleys
Parent material: alluvium
Slope range: 0 to 10 percent
Elevation: 400 to 1,800 feet (122 to 549 m)
Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)
Growing degree days—1,800 degree days (40°F base temperature)

Representative Pedon Description

Aquic Cryofluvent—on a level slope at 1,100 feet (335 m) elevation, under bog birch scrub

Oe—0 to 2 inches (0 to 6 cm); dark brown (7.5YR 3/2) partially decomposed forest litter; common very fine and few fine roots; very strongly acid (pH 4.6); clear smooth boundary
A—2 to 9 inches (6 to 22 cm); very dark grayish brown (10YR 3/2) silt loam; weak fine platy structure; friable, nonsticky and nonplastic; few very fine and fine roots; 15 percent gravel; strongly acid (pH 5.2); clear smooth boundary
C1—9 to 15 inches (22 to 39 cm); dark olive brown (2.5Y 3/3) and dark brown (10YR 3/3) silt loam; few medium distinct dark grayish brown (10YR 4/2) mottles; structureless; friable, nonsticky and nonplastic; few very fine roots; 10 percent gravel; strongly acid (pH 5.2); clear smooth boundary
C2—15 to 30 inches (39 to 75 cm); dark yellowish brown (10YR 4/4) stratified gravelly loam and gravelly sandy loam; structureless; very friable, nonsticky and nonplastic; 30 percent gravel and 3 percent cobbles; moderately acid (pH 5.8)

Representative Pedon Location

Map unit in which located: 91—Aquic Cryofluvents, Typic Cryaquents, Typic Aquorthels complex
Location in survey area: Ft. Wainwright Soil Survey Area, UTM zone 6, 514600N, 7160650E; south of Johnson Road in the Yukon Maneuver Area; transect 97MM177, stop 5

Range in Characteristics

Organic layer thickness: 2 to 5 inches (4 to 12 cm)
Note: particle size class is coarse-loamy

O Horizon:
Color—hue of 7.5YR or 10YR; value moist of 2 or 3; chroma moist from 1 to 3
Texture—peat, or mucky peat
Coarse fragments—0 percent
Reaction—very strongly acid to strongly acid

A horizon:
Color— hue of 7.5YR or 10YR; value moist of 2 or 3; chroma moist from 1 to 3
Texture—silt loam, or stratified silt loam, loamy sand, and gravel
Coarse fragments—0 to 30 percent
Reaction—strongly acid to slightly acid

C horizon:
Color—hue of 5Y, 2.5Y, or 10YR; value moist of 3 or 4; chroma moist of 1 to 4
Texture—stratified silt loam, loam, sandy loam, loamy sand, and gravel
Coarse fragments—10 to 30 percent
Gravel content—10 to 30 percent
Reaction—strongly acid to slightly acid

Dystrogelepts

Taxonomic Classification

- Dystrogelepts

Setting

Depth class: shallow over fragmental material
Drainage class: well drained
Permeability: moderate
Landforms and positions: summits, shoulders and upper slopes of bedrock-cored hills, above tree line
Parent material: colluvium over bedrock.
Slope range: 0 to 30 percent
Elevation: 2,500 to 3,300 feet (762 to 1,006 m)
Climatic data (average annual):
Precipitation—12 to 16 inches (30 to 40 cm)
Air temperature—24° to 28°F (-4° to -2°C)
Growing degree days—1,000 degree days (40°F base temperature)

Representative Pedon Description

Dystrocryept—on a 15 percent slope at 2,700 feet (823 m) elevation under alpine tundra
Oe—0 to 3 inches (0 to 7 cm); slightly decomposed organic matter; common fine roots; 25 percent cobbles; strongly acid (pH 5.4); clear smooth boundary.
A—3 to 7 inches (7 to 17 cm); black (7.5YR 2.5/1) cobbly silt loam; weak fine subangular blocky structure; friable, slightly sticky and slightly plastic; few fine roots; 10 percent gravel and 35 percent cobbles; strongly acid (pH 5.4); clear smooth boundary.
AB—7 to 14 inches (17 to 35 cm); dark brown (7.5YR 3/2) very cobbly silt loam; weak medium subangular blocky structure; friable, slightly sticky and slightly plastic; 10 percent gravel and 50 percent cobbles; strongly acid (pH 5.4); gradual wavy boundary.
BC—14 to 19 inches (35 to 48 cm); brown (10YR 4/3) extremely cobbly silt loam; weak fine granular structure; very friable, slightly sticky and nonplastic; 5 percent gravel and 60 percent cobbles; strongly acid (pH 5.4); gradual wavy boundary.
R—19 inches (48 cm); gneiss bedrock.

Representative Pedon Location

Map unit in which located: 88, Dystrogelepts-Turbels complex, 0 to 30 percent slopes
Location in survey area: Fort Wainwright Soil Survey Area, UTM zone 6, 538030E, 7172847N; near the east end of Brigadier Road, Yukon Maneuver Area; Transect 99MM147, stop 2.

Range in Characteristics

Depth to skeletal material: 6 to 24 inches (15 to 60 cm)
Organic layer thickness: 1 to 5 inches (2 to 12 cm)

O horizon:
Color—hue of 2.5YR to 10YR, value moist of 2 or 3, and chroma moist from 1 to 3
Texture—peat or mucky peat
Reaction—extremely acid to slightly acid

A horizon:
Color—hue 7.5YR or 10YR, value moist of 2 or 3, and chroma moist from 1 to 3
Texture—silt loam or loam in the fine earth fraction
Coarse fragments – 5 to 30 percent
Reaction – very strongly acid to slightly acid

Bw horizon (where present):
Color—hue 10YR, 7.5YR, or 2.5Y, value moist from 3 to 5, and chroma moist 2 or 3
Texture— silt loam or loam in the fine earth fraction
Coarse fragments—10 to 60 percent
Reaction—very strongly acid to moderately acid

BC horizon:
Color—hue 10YR, 7.5YR, or 2.5Y, value moist from 3 to 5, and chroma moist 2 or 3
Texture—silt loam or loam in the fine earth fraction
Coarse fragments—60 to 80 percent
Reaction—very strongly acid to moderately acid

Eutrocryepts

Taxonomic Classification

- Eutrocryepts

Setting

Depth class: deep and very deep
Drainage class: well drained
Permeability: moderate
Landforms and positions: loess mantled hills in unglaciated uplands; and terrace escarpments
Parent material: loess over eolian sand, weathered bedrock, or colluvium
Slope range: 0 to 70 percent
Elevation: 700 to 1,400 feet (213 to 426 m)
Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)
Growing degree days—1,800 degree days (40°F base temperature)

Representative Pedon Description

Eutrocryept—on a 10 percent slope at 950 feet (290 m) elevation under white spruce and paper birch forest.
Oi—0 to 2 inches (0 to 5 cm); slightly decomposed forest litter; very strongly acid (pH 5.0); clear smooth boundary.

Bw1—2 to 24 inches (5 to 60 cm); olive brown (2.5Y 4/4) silt loam; weak thin platy structure; friable, slightly sticky and slightly plastic; few fine to coarse roots; moderately acid (pH 5.8); clear smooth boundary.
Bw2—24 to 31 inches (60 to 80 cm); olive brown (2.5Y 4/4) silt loam; common medium distinct olive gray (5Y 5/2) mottles; structureless; friable, slightly sticky and slightly plastic; few fine to coarse roots; neutral (pH 6.8); gradual smooth boundary.
2Bw—31 to 51 inches (80 to 130 cm); olive brown (2.5Y 4/4) loamy very fine sand; common medium distinct gray (5Y 5/1) mottles; structureless; friable, slightly sticky and slightly plastic; few fine to coarse roots; neutral (pH 6.8); diffuse smooth boundary.
2C1—51 to 63 inches (130 to 160 cm); light olive brown (2.5Y 5/3) loamy fine sand; structureless; loose; nonsticky and nonplastic; neutral (pH 7.0); diffuse smooth boundary.
2C2—63 to 71 inches (160 to 180 cm); light olive brown (2.5Y 5/3) fine sand; structureless; loose; nonsticky and nonplastic; moderately alkaline (pH 8.2).

Representative Pedon Location

Map unit in which located: 46C, Eutrocryepts, 7 to 12 percent slopes
Location in survey area: SE1/4, Section 29, T6S, R2E, Fairbanks Meridian; near Blair Lakes, approximately 35 miles south of Fairbanks, Alaska. Transect 97DS058, hole 14.

Range in Characteristics

Thickness of loamy surface mantle: 8 to more than 60 inches (20 to more than 150 cm)
Organic layer thickness: 1 to 7 inches (2 to 18 cm)

O horizon:
Color—hue of 7.5YR or 10YR, value moist of 2 or 3, and chroma moist from 1 to 3
Texture—peat or mucky peat
Reaction—extremely acid to slightly acid

Bw horizon:
Color—hue from 7.5YR to 2.5Y, value moist from 3 to 5, and chroma moist 3 or 4
Texture—silt loam, very fine sandy loam, find sandy loam, stratified silt loam and loamy fine sand, or gravelly loam
Reaction—strongly acid to neutral

2Bw horizon (where present):
Color—hue 10YR or 2.5Y, value moist from 3 to 5, and chroma moist 3 or 4
Texture—loamy fine sand or stratified silt loam and fine sand
Reaction—moderately acid to neutral

2C horizon (where present):
Color—hue 2.5Y, value moist of 4 or 5, and chroma moist of 3 or 4
Texture—fine sand, loamy fine sand, gravelly loamy sand, gravelly sandy loam, very gravelly loam, or extremely gravelly sandy loam
Coarse fragments—0 to 75 percent
Gravel content—0 to 40 percent
Cobble content—0 to 30 percent
Stone content—0 to 20 percent
Reaction—moderately acid to moderately alkaline

Histels

Taxonomic Classification

- Histels

Setting

Depth class: shallow to moderately deep over permafrost
Drainage class: very poorly drained
Permeability: rapid in the fibric organic materials; slow in the sapric organic materials; impermeable in the frozen soil
Landforms and positions: floodplains, terraces, and toeslopes of hills
Parent material: organic matter over alluvium or loess
Slope range: 0 to 2 percent
Elevation: 400 to 1,200 feet (122 to 366 m)
Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)
Growing degree days—1,800 degree days (40°F base temperature)

Representative Pedon Description

Histel—on a level slope at 426 feet (130 m) elevation, under birch scrub

Oe—0 to 17 inches (0 to 43 cm); black (10YR 2/1) mucky peat; many very fine and fine roots; moderately acid (pH 5.8); gradual smooth boundary
Oa—17 to 25 inches (43 to 64 cm); very dark brown (10YR 2/2) muck; moderately acid (pH 6.0); abrupt smooth boundary
Oaf—25 to 29 inches (64 to 74 cm); very dark brown (10YR 2/2) muck; slightly acid (pH 6.4); clear broken boundary
Cgf—29 to 39 inches (74 to 99 cm); very dark gray (10YR 3/1) silt loam; slightly acid (pH 6.4)

Representative Pedon Location

Map unit in which located: 26—Histels, Terric and Mosquito peat, in the Ft. Wainwright Soil Survey Area.
Location in survey area: UTM zone 6, 461983 m N, 7183017 m E; between the Tanana River and Salchaket Slough south of Fairbanks, Alaska; transect 97DS220B, hole 5

Range in Characteristics

Depth to frozen soil (July-August): 12 to 35 inches (30 to 89 cm)
Organic layer thickness: 16 to more than 40 inches (40 to more than 100 cm)
Note: particle-size class of mineral layers, where present, is coarse-silty

O horizon:
Color—hue of 5YR, 7.5YR, or 10YR; value moist from 2 to 5; chroma moist from 1 to 6
Texture—peat, mucky peat, or muck
Coarse fragments—0 percent
Reaction—extremely acid to moderately acid

Cg horizon (where present):
Color—hue of 2.5Y or 10YR; value moist of 3 or 4; chroma moist of 1 or 2

Texture—silt loam, mucky silt loam, silty clay loam, or stratified silt loam and loamy fine sand
Coarse fragments—0 percent
Reaction—moderately acid to slightly acid

Histic Cryaquepts

Taxonomic Classification

- Histic Cryaquepts

Setting

Depth class: very deep—more than 60 inches (more than 152 cm)
Drainage class: poorly drained
Permeability: moderate in the loamy surface materials
Landforms and positions: depressions on terraces
Parent material: organic matter over loess or loess reworked by water
Slope range: 0 to 2 percent
Elevation: 500 to 650 feet (152 to 198 m)
Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)
Growing degree days—1,800 degree days (40°F base temperature)

Representative Pedon Description

Histic Cryaquept—on a level slope at 585 feet (178 m) elevation, under sedges

Oa—0 to 13 inches (0 to 33 cm); very dark brown (7.5YR 2.5/2) muck; many very fine and fine roots; very strongly acid (pH 5.0); abrupt smooth boundary
C—13 to 30 inches (33 to 76 cm); olive brown (2.5Y 4/3) silt loam; common medium distinct grayish brown (2.5Y 5/2) mottles; structureless; friable, slightly sticky and slightly plastic; strongly acid (pH 5.4); gradual smooth boundary
Cg—30 to 59 inches (76 to 150 cm); dark grayish brown (2.5Y 4/2) silt loam; many medium prominent strong brown (7.5YR 4/6) mottles; structureless; friable, slightly sticky and slightly plastic; moderately acid (pH 5.6)

Representative Pedon Location

Map unit in which located: WAH—Typic Cryaquent, Terric Cryofibrist, and Histic Cryaquept soils
Location in survey area: UTM zone 6, 498818 m N, 7173649 m E; northeast corner of Eielson Air Force Base; transect 97DS258, hole 2

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 41 cm)
Note: particle-size class is coarse-silty

O Horizon:
Color—hue of 7.5YR or 10YR; value moist of 2 or 3; chroma moist from 1 to 3
Texture—mucky peat or muck
Coarse fragments—0 percent
Reaction—very strongly acid to moderately acid

C horizon:
Color—hue of 2.5Y; value moist of 3 or 4; chroma moist from 2 to 4
Texture—silt loam or very fine sandy loam
Coarse fragments—0 percent
Reaction—strongly acid to moderately acid

Cg horizon:
Color—hue of 5Y or 2.5Y; value moist of 3 or 4; chroma moist of 1 or 2
Texture—silt loam or stratified silt loam and very fine sand
Coarse fragments—0 percent
Reaction—strongly acid to slightly acid

Terric Cryofibrists

Taxonomic Classification

- Terric Cryofibrists

Setting

Depth class: very deep—more than 60 inches (more than 152 cm)
Drainage class: very poorly drained
Permeability: very rapid in the organic surface materials; moderate in the loamy substratum
Landforms and positions: depressions on floodplains and terraces
Parent material: organic matter over alluvium
Slope range: 0 to 1 percent
Elevation: 400 to 500 feet (122 to 152 m)
Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)
Growing degree days—1,800 degree days (40°F base temperature)

Representative Pedon Description

Terric Cryofibrist—in a level depression at 426 feet (130 m) elevation, under sedges

Oi1—0 to 10 inches (0 to 25 cm); very dark brown (10YR 2/2) peat; many very fine to medium roots; moderately acid (pH 5.8); gradual smooth boundary
COi—10 to 12 inches (25 to 30 cm); very dark gray (10YR 3/1) peaty silt loam; structureless; slightly sticky and slightly plastic; many very fine to medium roots; slightly acid (pH 6.2); gradual smooth boundary
Oi2—12 to 28 inches (30 to 71 cm); very dark brown (10YR 2/2) peat; many very fine to medium roots; slightly acid (pH 6.2); clear smooth boundary
Oa—28 to 40 inches (71 to 102 cm); black (10YR 2/1) muck; slightly acid (pH 6.2); clear smooth boundary
CgOa—40 to 51 inches (102 to 130 cm); black (5Y 2.5/1) mucky silty clay loam; structureless; sticky and plastic; neutral (pH 6.6)

Representative Pedon Location

Map unit in which located: 14—Histels-Terric Cryofibrists complex, in the Ft. Wainwright Soil Survey Area
Location in survey area: UTM zone 6, 456439 m N, 717151 m E; south of Salchaket Slough, south of Fairbanks, Alaska; transect 97DS093, hole 3

Range in Characteristics

Organic layer thickness: 16 to 51 inches (41 to 130 cm)
Note: particle size class of mineral layers is coarse-silty or fine-silty

Oi horizon:
Color—hue of 10YR; value moist of 2 or 3; chroma moist from 1 to 3
Texture—peat
Coarse fragments—0 percent
Reaction—very strongly acid to slightly acid

Oa horizon (where present):
Color—hue of 10YR; value moist of 2 or 3; chroma moist from 1 to 3
Texture—muck
Coarse fragments—0 percent
Reaction—moderately acid to neutral

Cg horizon:
Color—hue of 10Y, 5Y, 2.5Y, 5GY, or N; value moist from 2 to 4; chroma moist from 0 to 2
Texture—silt loam, very fine sandy loam, silty clay loam, or mucky; or peat variants of these textures
Coarse fragments—0 percent
Reaction—moderately acid to neutral

Turbels

Taxonomic Classification

- Turbels

Setting

Depth class: Very shallow to moderately deep over skeletal material
Drainage class: poorly
Permeability: moderately rapid in the organic mat and moderate in the mineral soil above the permafrost
Landforms and positions: steep, dominantly north facing hill slopes
Parent material: colluvium over weathered bedrock
Slope range: 0 to 30 percent
Elevation: 2,500 to 3,300 feet (762 to 1,006 m)
Climatic data (average annual):
Precipitation—12 to 16 inches (30 to 40 cm)
Air temperature—24° to 28°F (-4° to -2°C)
Growing degree days—1,000 degree days (40°F base temperature)

Representative Pedon Description

Turbel—on a 20 percent slope at 2,900 feet (884 m) elevation under alpine tundra.

Oi—0 to 3 inches (0 to 6 cm); slightly decomposed organic matter; common very fine, fine, and coarse roots; extremely acid (pH 4.4); clear smooth boundary.
A/Ejj—2 to 13 inches (6 to 33 cm); (A) very dark brown (7.5YR 2.5/2) and (E) dark gray (7.5YR 4/1) cobbley silt loam; common large distinct very dark gray (10YR 3/1) mottles; weak medium subangular blocky structure; friable, slightly sticky and slightly plastic; few very fine and fine roots; 15 percent gravel and 10 percent cobbles; very strongly acid (pH 4.8); clear wavy boundary.

BCjj—13 to 24 inches (33 to 62 cm); dark brown (10YR 3/3) very gravelly silt loam; weak medium subangular blocky structure; friable; slightly sticky and slightly plastic; 35 percent gravel and 10 percent cobbles; very strongly acid (pH 4.8); abrupt wavy boundary.
BCfm—24 to 32 inches (62 to 80 cm); dark brown (10YR 3/3) very gravelly silt loam; structureless; extremely firm; 35 percent gravel and 10 percent channers; very strongly acid (pH 4.8); clear smooth boundary.
Cf—32 to 72 inches (80 to 183 cm); permanently frozen material.
Crf—72 inches (183 cm); weathered bedrock.

Representative Pedon Location

Map unit in which located: 88 Dystrogelepts-Turbels complex, 0 to 30 percent slopes
Location in survey area: Ft. Wainwright Soil Survey Area; UTM zone 6, 538164E, 7172014N; near the end of Brigadier Road in the Yukon Maneuver Area; transect 99MM147, stop 6.

Range in Characteristics

Depth to skeletal material: 0 to 30 inches
Organic layer thickness: 0 to 16 inches (0 to 40 cm)
Depth to frozen soil (July-Aug): 14 to 26 inches (36 to 65cm)

O horizon:
Color—hue of 5YR, 7.5YR,or 10YR; value moist of 2 to 6; and chroma moist of 1 to 8
Degree of decomposition—fibric or hemic
Reaction—extremely acid to very strongly acid

A or A/E horizon:
Color—hue of 7.5YR,10YR or 2.5Y; value moist of 2 or 3; and chroma moist of 1 or 2
Texture—silt loam or mucky silt loam in the fine earth fraction
Coarse fragments—0 to 50 percent
Reaction—extremely acid to strongly acid

BC horizon:
Color—10YR or 2.5Y; value moist of 3 or 4; and chroma moist from 2 to 4
Texture—silt loam or loam in the fine earth fraction
Coarse fragments—30 to 70 percent
Reaction—very strongly acid to moderately acid

Typic Aquorthels

Taxonomic Classification

- Typic Aquorthels

Setting

Depth class: very deep (more than 60 inches (152 cm))
Drainage class: poorly drained
Permeability: rapid in the fibric organic matter, moderate in the loamy mineral soil and impermeable in the frozen soil
Landforms and positions: floodplains
Parent material: alluvium
Slope range: 0 to 10 percent
Elevation: 400 to 1,800 feet (122 to 549 m)

Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)
Growing degree days—1,800 degree days (40°F base temperature)

Representative Pedon Description

Typic Aquorthel—on a level slope at 426 feet (130 m) elevation under alder scrub

Oi—0 to 4 inches (0 to 9 cm); very dark gray (10YR 3/1) slightly decomposed organic matter; many very fine to coarse roots; slightly acid (pH 6.4); abrupt wavy boundary.
Cg1—4 to 8 inches (9 to 20 cm); 50 percent dark gray (2.5Y 4/2) and 50 percent dark yellowish brown (10YR 4/6) silt loam; structureless; friable; slightly sticky and slightly plastic; few very fine and fine roots; slightly acid (pH 6.4); abrupt wavy boundary.
Oab—8 to 9 inches (20 to 23 cm); black (7.5YR 2.5/1) muck; few very fine and fine roots; neutral (pH 6.8); abrupt wavy boundary.
Cg2—9 to 18 inches (23 to 46 cm); olive gray (5Y 4/2) and dark yellowish brown (10YR 4/4) very fine sandy loam; structureless; friable; nonsticky and nonplastic; few very fine and fine roots; neutral (pH 6.8); abrupt smooth boundary.
Oeb—18 to 26 inches (46 to 65 cm); dark brown (7.5YR 3/3) mucky peat; moderately acid (pH 6.6); abrupt smooth boundary.
Cg/Oef— 26 to 152 inches (65 to 100 cm); stratified, frozen, 60 percent dark gray (2.5Y 4/2) and dark yellowish brown (10YR 4/4) very fine sandy loam and 40 percent dark brown (7.5YR 3/3) mucky peat; structureless; extremely firm; nonsticky and nonplastic; neutral (pH 6.6).

Representative Pedon Location

Map unit in which located: (65) Typic Cryaquents and Typic Aquorthels.
Location in survey area: 461425 m N, 7184649 m E, UTM zone 6; between Salchaket Slough and the Tanana River south of Fairbanks, Alaska. 97DS037 hole 2.

Range in Characteristics

Depth to frozen soil (July-Aug): 14 to 28 inches (35 to 70 cm)
Organic layer thickness: 2 to 8 inches (4 to 24 cm)
Notes: particle size class is coarse-silty or coarse-loamy

O horizons
Color—hue of 7.5YR or 10YR; value moist of 2 or 3; chroma moist of 1 to 3
Texture—peat, mucky peat, or muck
Coarse fragments—0 percent
Reaction—strongly acid to neutral

Cg horizons:
Color—hue of 5Y, 2.5Y or 10Y/R, value moist of 3 to 5; chroma moist of 1 to 4
Texture—silt loam, very fine sandy loam, or stratified silt loam, loamy sand, and coarse sand
Coarse fragments—0 percent
Reaction—moderately acid to neutral

Typic Cryaquents

Taxonomic Classification

- Typic Cryaquents

Setting

Depth class: very deep—more than 60 inches (more than 152 cm)
Drainage class: poorly drained
Permeability: moderate in the loamy surface materials; rapid in the sand and gravel
Landforms and positions: floodplains and depressions on terraces and in narrow mountain valleys
Parent material: alluvium or lake sediment
Slope range: 0 to 10 percent
Elevation: 400 to 1,800 feet (122 to 549 m)
Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)
Growing degree days—1,800 degree days, 40°F base temperature

Representative Pedon Description

Typic Cryaquent—on a level slope at 417 feet (127 m) elevation, under alder scrub

Oe—0 to 4 inches (0 to 10 cm); black (10YR 2/1) partially decomposed forest litter; many very fine and fine roots; neutral (pH 6.8); abrupt wavy boundary
Cg1—4 to 5 inches (10 to 13 cm); dark gray (2.5Y 4/2 and 2.5Y 4/1) silt loam; many medium distinct olive brown (2.5Y 4/4) mottles; structureless; friable, slightly sticky and slightly plastic; few very fine to medium roots; neutral (pH 7.0); abrupt smooth boundary
Oab—5 to 6 inches (13 to 15 cm); black (7.5YR 2.5/1) muck; few very fine roots; neutral (pH 7.0); abrupt smooth boundary
Cg2—6 to 21 inches (15 to 53 cm); dark gray (2.5Y 4/2 and 2.5Y 4/1) silt loam; many medium distinct olive brown (2.5Y 4/4) mottles; structureless; friable, slightly sticky and slightly plastic; few very fine and fine roots; neutral (pH 7.0); gradual wavy boundary
Cg3—21 to 30 inches (53 to 76 cm); dark gray (5Y 4/1) and olive brown (2.5Y 4/3) silt loam; many medium prominent olive brown (2.5Y 4/4) mottles; structureless; friable, slightly sticky and slightly plastic; neutral (pH 7.0); clear irregular boundary
Oeb—30 to 40 inches (76 to 102 cm); black (10YR 2/1) mucky peat; moderately acid (pH 6.0); abrupt irregular boundary
Cg4—40 to 75 inches (102 to 191 cm); dark gray (5Y 4/1) stratified loamy very fine sand and silt loam; structureless; very friable, nonsticky and nonplastic; slightly acid (pH 6.4)

Representative Pedon Location

Map unit in which located: 65—Typic Cryaquents and Typic Aquorthels, in the Ft. Wainwright Soil Survey Area
Location in survey area: UTM zone 6, 456828 m N, 7180951 m E; between Salchaket Slough and the Tanana River south of Fairbanks, Alaska; transect 97DS102, hole 4

Range in Characteristics

Thickness of loamy surface layer: 14 to more than 60 inches (35 to more than 152 cm)
Organic layer thickness: 1 to 8 inches (3 to 20 cm)
Note: particle size class is coarse-silty or coarse-loamy

O Horizon:
Color—hue of 7.5YR or 10YR; value moist of 2 or 3; chroma moist from 1 to 3
Texture—peat, mucky peat or muck
Coarse fragments—0 percent
Reaction—moderately acid to neutral

Cg horizon:
Color—hue of 5Y, 2.5Y, or N; value moist of 3 or 4; chroma moist of 1 or 2
Texture—silt loam, silty clay loam, or stratified silt loam, very fine sand, loamy sand, or gravel
Coarse fragments—0 to 30 percent
Reaction—moderately acid to neutral

2C horizon (where present):
Color—variegated
Texture—sand, very gravelly sand, or fine sand
Coarse fragments—0 to 50 percent
Gravel content—0 to 50 percent
Reaction—slightly acid to neutral

Typic Cryorthents

Taxonomic Classification

- Typic Cryorthents

Setting

Depth class: deep and very deep
Drainage class: moderately well drained to well drained
Permeability: moderate in the loamy surface horizons; rapid in the coarse-textured substratum
Landforms and positions: floodplains and hills and man-made features
Parent material: loamy fill over alluvium
Slope range: 0 to 70 percent
Elevation: 400 to 600 feet (122 to 183 m)
Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)
Growing degree days—1,800 degree days, 40°F base temperature

Representative Pedon Description

Typic Cryorthent—on a level floodplain at 450 feet (137 m) elevation, under grass lawn

A—0 to 3 inches (0 to 8 cm); very dark grayish brown (10YR 3/2) gravelly loamy very fine sand; weak fine granular structure; very friable, nonsticky and nonplastic; common very fine and fine roots; 25 percent gravel; neutral; clear smooth boundary
C1—3 to 30 inches (8 to 76 cm); light olive brown (2.5Y 5/3) stratified gravelly silt loam, gravelly very fine sandy loam, and gravelly sand; weak fine platy structure; very friable, nonsticky and nonplastic; few very fine roots; 15 percent gravel; neutral; gradual smooth boundary
2C2—30 to 63 inches (76 to 160 cm); light olive brown (2.5Y 5/3) stratified very fine sandy loam and silt loam; weak fine platy structure; friable, nonsticky and nonplastic; few fine faint gray (2.5Y 6/1) redoximorphic depletions; slightly alkaline; abrupt smooth boundary

2C3—63 to 75 inches (160 to 191 cm); light brownish gray (2.5Y 6/2) sand; structureless; loose, nonsticky and nonplastic; slightly alkaline

Representative Pedon Location

Map unit in which located: UC—Urban land-Typic Cryorthents complex, 0 to 1 percent slopes, in the Ft. Wainwright Soil Survey Area
Location in survey area: UTM zone 6, 469107 m E, 7189193 m N; on Ft. Wainwright Army Base, contonement area, Fairbanks, Alaska; transect 97MM098, hole 1

Range in Characteristics

Depth to alluvial material: 20 to more than 60 inches (51 to more than 152 cm)
Note: particle size class is coarse-loamy, loamy-skeletal, or sandy

O horizon (when present):
Color—hue of 7.5YR; value moist of 3; chroma moist of 2
Texture—slightly decomposed organic matter
Reaction—neutral

A horizon (when present):
Color—hue of 10YR; value moist from 2 to 4; chroma moist of 2
Texture—very fine sandy loam, gravelly loamy very fine sand, and very fine sandy loam
Gravel content—0 to 35 percent
Reaction—neutral

C horizon:
Color—hue of 2.5Y; value moist from 3 to 5; chroma moist from 2 to 4
Texture—loamy very fine sand, very fine sandy loam, gravelly and very gravelly loamy sand, and sandy loam
Gravel content—0 to 40 percent
Reaction—neutral to slightly alkaline

2C2 horizon:
Color—hue of 2.5Y; value moist from 3 to 5; chroma moist from 2 to 4
Texture—silt loam and sand; stratified, with textures including very fine sandy loam, loamy very fine sand, very fine sand, fine sand, and silt loam
Gravel content—0 to 10 percent
Reaction—neutral to slightly alkaline

2C3 horizon (when present):
Color—hue of 2.5Y; value moist of 4; chroma moist of 2
Texture—sand, gravelly sand, very gravelly loamy fine sand, or very gravelly sand
Gravel content—0 to 50 percent
Reaction—neutral to slightly alkaline

Formation of the Soils

Soil is the unconsolidated mineral and organic material on the surface of the earth that serves as a natural medium for the growth of land plants (USDA 1999). Soil formation is controlled by genetic and environmental factors of climate (including temperature and moisture effects), topography, parent material, and living organisms—all acting over a period of time. The influence of any one of these factors varies from place to place, and the interaction of all of them determines the kind of soil that forms (Jenny 1941).

The soils of Fort Wainwright are weakly developed as a result of the cold climate and youth of the parent materials. Thus, soil properties such as particle size, composition, and clay mineralogy are largely determined by the properties of the parent material. Parent materials in this area include alluvium, bedrock, and loess. Alluvium consists of stratified fine sand and silt, or in some areas mostly silt, underlain at some depth by sand and gravel. The surface alluvium is Holocene in age and flood deposition still occurs. Loess covers most unflooded surfaces and is many feet thick in the unflooded lowlands. Loess is Pleistocene and Holocene in age and, at present, loess deposition continues. On lower hillslopes, loess has probably been transported and redeposited by slope processes. Metamorphic rocks (mostly schist), bedrock of Precambrian age, and granitic rocks of Teriary age underly the loess on upper hillslopes (Péwé et al. 1966; Weber et al., 1978). The bedrock is highly weathered in some places, which is probably the result of hydrothermal activity rather than soil formation.

The major soil-forming processes in the Fort Wainwright area are organic matter accumulation at the surface, oxidation and reduction of iron, and cryoturbation. Organic matter accumulates on the surface because decomposition cannot keep pace with the annual addition of dead plant material. Decomposition is inhibited by cold temperatures and, in many places, by soil wetness and the lack of soil oxygen. Nearly all areas have some organic layer, except where floods or humans frequently disturb the surface. The thickest accumulations of surface organic matter, several feet (1 m) or more, occur on the coldest and wettest soils. For example, wet soils in depressions and in areas with permafrost have thick organic surface layers. The warmest and driest soils, which occur on hilltops and on sandy and gravelly alluvium, may have only an inch or two of surface organic matter. Surface organic layers that were buried by flood deposits are frequently observed in flood plain soils.

Iron weathers from primary minerals in the soil and may be either oxidized or reduced, depending on soil wetness and the consequent availability of oxygen. In dry, well-aerated soils, weathered iron oxidizes to form a reddish Bw horizon. Bw horizons are best developed in the soils of hillslopes, such as Angel and Steese soils, and are weak or absent in the young soils of flood plains, such as Salchaket and Jarvis soils. As a result of the rather dry climate, very little vertical movement of iron occurs in the soil, and thus E horizons are rare. In the very wettest soils iron is reduced due to a lack of oxygen, which results in grayish soil colors. More commonly, alternating wet and dry conditions result in mottled reduced (grayish) and oxidized (reddish) zones in the soil.

Cryoturbation, which is the mixing of soil due to freezing and thawing, results in contorted and broken horizons. Cryoturbation occurs mainly in soils with permafrost.

In addition to facilitating cryoturbation, permafrost has other important impacts on soils. Since permafrost is nearly impermeable, water perches near the surface causing permafrost soils to be wet; and runoff is rapid from sloping soils with permafrost. Some permafrost soils contain large amounts of ground ice, and subsidence of the surface can occur if the ground ice melts. Permafrost soils on thick Pleistocene loess deposits (Bolio, Lemeta, Goldstream, Chatanika, Minto, and Histel soils) have the greatest amount of ground ice and, thus, the greatest risk of thaw subsidence.

The gravel deposits underlying the alluvial plain on Fort Wainwright are saturated with groundwater. In soils such as Piledriver, Eielson, North Pole, and Fubar, this groundwater is high enough to occur in the middle or lower part of the soil profile.

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Glossary

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alluvial fan. A body of alluvium, with overflow of water and debris flow deposits, whose surface forms a segment of a cone that radiates downslope from the point where the stream emerges from a narrow valley onto a less sloping surface. Source uplands range in relief and areal extent from mountains to gullied terrains on hillslopes.

Alluvium. Material, such as sand, silt, or clay, deposited on land by streams.

Area reclaim. An area difficult to reclaim after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

Aspect, slope. Direction of maximum pitch on a slope.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	More than 12

Backslope. The geomorphic component that forms the steepest inclined surface and principal element of many hillslopes. Backslopes in profile are commonly steep and linear and descend to a footslope. In terms of gradational process, backslopes are erosional forms produced mainly by mass wasting and running water.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bedrock-controlled topography. A landscape where the configuration and relief of the landforms are determined or strongly influenced by underlying bedrock.

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds the capillary water in the soil.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation exchange capacity. The total amount of exchangeable cations that can be held in the soil, expressed in terms of milliequivalents per hundred grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Channery soil material. Soil material that is by volume, 15 to 35 percent thin, flat fragments of schist, sandstone, shale, slate, or limestone as much as 6 inches (15 cm) along the longest axis. A single piece is called a channer.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Closed depression. A low area completely surrounded by higher ground and having no natural outlet.
Coarse fragments. Mineral or rock particles larger than 2 millimeters in diameter.
Coarse textured soil. Sand or loamy sand.
Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 cm) in diameter.
Cobbly soil material. Material that is 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 cm) in diameter. Very cobbly soil material is 35 to 60 percent of these rock fragments, and extremely cobbly soil material is more than 60 percent.
Colluvium. Soil material, rock fragments, or both, moved by creep, slide, or local wash and deposited at the base of steep slopes.
Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.
Consistence, soil. The feel of the soil and the ease with which a lump can be crushed by the fingers. Terms commonly used to describe consistence are:
Loose—Noncoherent when dry or moist; does not hold together in a mass.
Friable—When moist, crushes easily under gentle pressure between thumb and forefinger and can be pressed together into a lump.
Firm—When moist, crushes under moderate pressure between thumb and forefinger, but resistance is distinctly noticeable.
Plastic—Readily deformed by moderate pressure but can be pressed into a lump; will form a "wire" when rolled between thumb and forefinger.
Sticky—Adheres to other material and tends to stretch somewhat and pull apart rather than to pull free from other material.
Hard—When dry, moderately resistant to pressure; can be broken with difficulty between thumb and forefinger.
Soft—When dry, breaks into powder or individual grains under very slight pressure.
Cemented—Hard; little affected by moistening.
Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches (25 cm) and 40 or 80 inches (102 or 203 cm).
Corrosive. High risk of corrosion to uncoated steel or deterioration of concrete.
Cryoturbation (frost churning). The mixing of the soil resulting in irregular or broken horizons, organic matter accumulation on the permafrost table, and oriented rock fragments due to frost action.
Cutbanks cave (in tables)**.** The walls of excavations tend to cave in or slough.
Deep soil. A soil that is 40 to 60 inches (102 to 152 cm) deep over bedrock or other material that restricts the penetration of plant roots.
Depth, soil. Generally, the thickness of soil over bedrock. Very deep soils are more than 60 inches (more than 152 cm) deep over bedrock; deep soils, 40 to 60 inches (102 to 152 cm); moderately deep, 20 to 40 inches (51 to 102 cm); shallow, 10 to 20 inches (25 to 51 cm); and very shallow, less than 10 inches (less than 25 cm).
Depth to rock (in tables)**.** Bedrock is too near the surface for the specified use.
Drainage class (natural). Refers to the frequency and duration of periods of saturation or partial saturation during soil formation, as opposed to altered drainage, which is commonly the result of artificial drainage or irrigation but may be caused by the sudden deepening of channels or the blocking of drainage outlets. Seven classes of natural soil drainage are recognized:
Excessively drained—These soils have very high and high hydraulic conductivity and a low water-holding capacity. They are not suited to crop production unless irrigated.
Somewhat excessively drained—These soils have high hydraulic conductivity and a low water-holding capacity. Without irrigation, only a narrow range of crops can be grown and yields are low.
Well drained—These soils have an intermediate water-holding capacity. They retain optimum amounts of moisture, but they are not wet close enough to the surface or long enough during the growing season to adversely affect yields.
Moderately well drained—These soils are wet close enough to the surface or long enough that planting or harvesting operations or yields of some field crops are adversely affected unless a

drainage system is installed. Moderately well drained soils commonly have a layer with low hydraulic
conductivity, a wet layer relatively high in the profile, additions of water by seepage, or some combination of these.

Somewhat poorly drained—These soils are wet close enough to the surface or long enough that planting or harvesting operations or crop growth is markedly restricted unless a drainage system is installed. Somewhat poorly drained soils commonly have a layer with low hydraulic conductivity, a wet layer high in the profile, additions of water through seepage, or a combination of these.

Poorly drained—These soils commonly are so wet at or near the surface during a considerable part of the year that field crops cannot be grown under natural conditions. Poorly drained conditions are caused by a saturated zone, a layer with low hydraulic conductivity, seepage, or a combination of these.

Very poorly drained—These soils are wet to the surface most of the time. The wetness prevents the growth of important crops (except rice) unless a drainage system is installed.

Drainage, surface. Runoff, or surface flow of water, from an area.

Effluent. Solid, liquid, or gas wastes which enter the environment as a by-product of man-made processes. The discharge or outflow of water from ground or sub-surface storage.

Eolian. Of or pertaining to wind.

Eolian soil material. Earthy parent material accumulated through wind action; commonly refers to sandy material in dunes or to loess in blankets on the surface.

Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents, and by such processes as gravitational creep.

Escarpment. A relatively continuous and steep slope or cliff, breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. The term is more often applied to cliffs resulting from differential erosion.

Excess fines (in tables)**.** Excess silt and clay in the soil. The soil does not provide a source of gravel or sand for construction purposes.

Fast intake (in tables)**.** The rapid movement of water into the soil.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity.*

Floodplain. A nearly level alluvial plain that borders a stream and is subject to inundation under flood-stage conditions unless protected artificially. It is usually a constructional landform built of sediment deposited during overflow and lateral migration of the stream.

Forb. An herbaceous plant with broad leaves, in contrast to narrow-leafed grasses and sedges.

Footslope. The inclined surface at the base of a hill.

Frost action (in tables)**.** Freezing and thawing of soil moisture. Frost action can damage roads, buildings and other structures, and plant roots.

Genesis, soil. The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors and mottles.

Grassed waterway. A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from the cropland.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 cm) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that is 15 to 50 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 cm) in diameter.

Ground water (geology). Water filling all the unblocked pores of underlying material below the water table.

Hard bedrock. Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

Hill. A natural elevation of the land surface, rising as much as 1,000 feet (305 m) above surrounding lowlands, commonly of limited summit area and having a well-defined outline; hillsides generally have slopes of more than 15 percent. The distinction between a hill and a mountain is arbitrary and dependent on local usage.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. The major horizons of mineral soil are as follows:

O horizon—An organic layer of fresh and decaying plant residue.

A horizon—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

B horizon—The mineral horizon below an A horizon. The B horizon is, in part, a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

E horizon—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

C horizon—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, the number 2 precedes the letter C.

Cr horizon—Sedimentary beds of consolidated sandstone and semiconsolidated and consolidated shale. Generally, roots can penetrate this horizon only along fracture plains.

R layer—Hard, consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon but can be directly below an A or a B horizon.

Humus. The well decomposed, more or less stable, part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff-producing characteristics. The chief consideration is the inherent capacity of soil bare of vegetation to permit infiltration. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff. Soils are assigned to four groups. Soils having a high infiltration rate when thoroughly wet and having a low runoff potential are in group A. They are mainly deep, well drained, and sandy or gravelly. At the other extreme, soils having a very slow infiltration rate and thus a high runoff potential are in group D. They have a claypan or clay layer at or near the surface, have a permanent high water table, or are shallow over nearly impervious bedrock or other material. A soil is assigned to two hydrologic groups if part of the acreage is artificially drained and part is undrained.

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all of the time.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Large stones (in tables)**.** Rock fragments 3 inches (7.6 cm) or more across. Large stones adversely affect the specified use of the soil.

Leaching. The removal of soluble material from soil or other material by percolating water.

Light textured soil. Sand and loamy sand.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loess. Fine-grained material, dominantly of silt-sized particles, deposited by wind.
Low strength. The soil is not strong enough to support loads.
Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.
Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement.
Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.
Minor component. A component of limited extent that may or may not be present.
Miscellaneous area. An area that has little or no natural soil and supports little or no vegetation.
Moderately coarse textured soil. Coarse sandy loam, sandy loam, or fine sandy loam.
Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.
Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.
Mottling, soil. Irregular spots of different colors that vary in number and size. Mottling generally indicates poor aeration and impeded drainage. Descriptive terms are as follows: abundance—*few, common,* and *many*; size—*fine, medium,* and *coarse*; and contrast—*faint, distinct,* and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium*, from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse*, more than 15 millimeters (about 0.6 inch).
Mountain. A natural elevation of the land surface, rising more than 1,000 feet (305 m) above the surrounding lowlands, commonly of limited summit area, and generally having steep sides (slopes greater than 25 percent) and considerable bare rock surface. A mountain can occur as an isolated mass or in a group forming a range or chain. Mountains are primarily formed by deep-seated earth movements or
volcanic action and secondarily by differential erosion.
Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)
Munsell notation. A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.
Muskeg. Wetland in boreal regions dominated by Sphagnum moss, stunted black spruce, and low shrubs.
Organic matter. Plant and animal residue in the soil in various stages of decomposition.
Outwash, glacial. Stratified sand and gravel produced by glaciers and carried, sorted, and deposited by glacial melt water.
Parent material. The unconsolidated organic and mineral material in which soil forms.
Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)
Pedon. The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square m to 10 square m), depending on the variability of the soil.
Percolation. The downward movement of water through the soil.
Percs slowly (in tables)**.** The slow movement of water through the soil, adversely affecting the specified use.
Permafrost. Layers of soil or even bedrock, occurring in arctic or subarctic regions, in which a temperature below freezing has existed for a long time.
Permeability. The quality of the soil that enables water to move downward through the profile. Permeability is measured as the number of inches per hour that water moves downward through the saturated soil. Terms describing permeability are:

Very slow	Less than 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2 inches
Moderately rapid	2 to 6 inches
Rapid	6 to 20 inches
Very rapid	More than 20 inches

Phase, soil. A subdivision of a soil series based on features that affect its use and management. For example, slope, stoniness, and thickness.

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Piping (in tables)**.** Formation of subsurface tunnels or pipe-like cavities by water moving through the soil.

Pitting (in tables)**.** Pits caused by the melting of ground ice. They form in the soil after plant cover is removed.

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Ponding. Standing water on soils in closed depressions. The water can be removed only by percolation or by evapotranspiration.

Poor filter (in tables)**.** Because of rapid permeability or an impermeable layer near the surface, the soil may not adequately filter effluent from a waste disposal system.

Poorly graded. Refers to a coarse-grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Poor outlets (in tables)**.** Refers to areas where surface or subsurface drainage outlets are difficult or expensive to install.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity expressed as pH values, are:

Ultra acid	Below 3.5
Extremely acid	3.5 to 4.5
Very strongly acid	4.6 to 5.0
Strongly acid	5.1 to 5.5
Medium acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Mildly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Riser. The relatively short, steeply sloping area below a terrace tread that grades to a lower terrace tread or base level.

Riverwash. Unstable areas of sandy, silty, clayey, or gravelly sediments. These areas are flooded, washed, and reworked by rivers so frequently that they support little or no vegetation.

Relief. The elevations or inequalities of a land surface, considered collectively.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Rock outcrop. Exposures of bare bedrock other than lava flows and rock-lined pits.

Root zone. The part of the soil that can be penetrated by plant roots.

Rooting depth (in tables)**.** Shallow root zone. The soil is shallow over a layer that greatly restricts roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the matrix into an unlined auger hole.

Sedimentary rock. Rock made up of particles deposited from suspension in water. The chief kinds of sedimentary rock are conglomerate, formed from gravel; sandstone, formed from sand; shale, formed

from clay; and limestone, formed from soft masses of calcium carbonate. There are many intermediate types. Some wind-deposited sand is consolidated into sandstone.

Seepage (in tables)**.** The movement of water through the soil. Seepage adversely affects the specified use.

Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer or of the underlying material. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Shallow soil. A soil that is 10 to 20 inches (25 to 51 cm) deep over bedrock or other material that restricts the penetration of plant roots.

Shoulder slope. The upper most inclined surface at the top of a hillside. It is the transition zone from the backslope to the summit of a hill or mountain. The surface is dominantly convex in profile and erosional in origin.

Shrink-swell (in tables)**.** The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance.

Slope (in tables)**.** Slope is great enough that special practices are required to ensure satisfactory performance of the soil for a specific use.

Slow intake (in tables)**.** The slow movement of water into the soil.

Slow refill (in tables)**.** The slow filling of ponds, resulting from restricted permeability in the soil.

Small stones (in tables)**.** Rock fragments less than 3 inches (7.6 cm) in diameter. Small stones adversely affect the specified use of the soil.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	Less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the underlying material. The living roots and plant and animal activities are largely confined to the solum.

Stones. Rock fragments 10 to 24 inches (25 to 61 cm) in diameter if rounded, or 6 to 15 inches (15 to 38 cm) in length if flat.

Stream terrace. One of a series of platforms on a stream valley, flanking and more or less parallel to the stream channel. It originally formed near the level of the stream and is the dissected remnants of an abandoned floodplain, streambed, or valley floor that was produced during a former stage of erosion or deposition.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are: *platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*.

Structureless soils are either *single grain* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Substratum. The part of the soil below the solum.

Summit. A general term for the top or highest level of an upland feature, such as a hill or mountain. It commonly refers to a higher area that has a gentle slope and is flanked by steeper slopes.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 cm). Frequently designated as the "plow layer" or the "Ap horizon."

Surface soil. The A, E, AB, and EB horizons. It includes all subdivisions of these horizons.

Terrace (geologic). An old alluvial plain, ordinarily flat or undulating, bordering a river, lake, or sea.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Thin layer (in tables)**.** Otherwise suitable soil material too thin for the specified use.

Toeslope. The outermost inclined surface at the base of a hill. Toeslopes are commonly gentle and linear in profile.

Topsoil. The upper part of the soil that is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Tread. The relatively flat terrace surface that was cut or built by stream or wave action.

Tussock. A small mound, typically 0.5 to 1 foot (15 to 30 cm) high, consisting of densely packed dead parts of sedges or grasses.

Unstable fill (in tables)**.** Risk of caving or sloughing on banks of fill material.

Variegation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Weathering. All physical and chemical changes produced in rocks or other deposits at or near the earth's surface by atmospheric agents. These changes result in disintegration and decomposition of the material.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Tables

Table 1. Temperature and Precipitation

TAPS Station : EIELSON FIELD, AK2707
Start yr.—1949 End yr. – 1996

Month	Temperature (Degrees F.)						Precipitation (Inches)				
				2 yrs in 10 will have				2 yrs in 10 will have			
	avg daily max	avg daily min	avg	max temp. >than	min temp. <than	avg # of grow deg days*	avg	less than	more than	avg # of days w/ .1 or more	avg total snow fall
January	-2.0	-18.2	-10.1	41	-54	0	0.71	0.20	1.12	2	11.5
February	5.7	-15.2	-4.8	43	-49	0	0.55	0.10	0.90	1	8.9
March	23.3	-2.8	10.3	48	-38	0	0.52	0.15	0.82	1	7.8
April	41.1	19.6	30.4	65	-13	0	0.34	0.08	0.57	1	4.3
May	58.4	37.1	47.8	78	20	90	0.72	0.24	1.11	2	1.0
June	68.9	48.1	58.5	87	35	555	1.78	0.88	2.56	4	0.0
July	70.7	51.1	60.9	87	40	646	2.40	1.45	3.25	6	0.0
August	65.6	46.3	56.0	84	30	420	2.24	1.28	3.10	6	0.0
September	54.0	35.1	44.5	74	16	0	1.37	0.53	2.07	3	2.3
October	31.6	16.6	24.1	59	-16	0	0.96	0.42	1.43	3	12.3
November	10.3	-5.3	2.5	44	-38	0	0.81	0.34	1.20	2	15.4
December	-0.2	-15.9	-8.0	41	-48	0	0.72	0.19	1.15	2	12.4
Yearly :											
Average	35.6	16.4	26.0	---	---	---	----	----	----	---	---
Extreme	93	-64	---	89	-56	---	----	----	----	---	---
Total	---	---	---	---	---	1711	13.13	8.44	15.73	33	75.8

Average number of days per year with at least 1 inch of snow on the ground: 155

*A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minumum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (Threshold: 40.0 deg. F, 4 deg C). It is determined for the average growing season (32 deg F, 0 deg C base) that occurs on the average in 8 years out of 10.

Table 2. Freeze Dates in Spring and Fall

FROST Station : EIELSON FIELD, AK2707
Start yr.—1949 End yr.—1996
Requested years of data: 48 Available years of data: 48

	Temperature		
Probability	24F or lower	28F or lower	32F or lower
Last freezing temperature in spring:			
1 year in 10 later than--	May 7	May 14	May 24
2 year in 10 later than--	May 3	May 11	May 21
5 year in 10 later than--	April 25	May 4	May 15
First freezing temperature in fall:			
1 yr in 10 earlier than--	September 13	August 29	August 22
2 yr in 10 earlier than--	September 18	September 3	August 26
5 yr in 10 earlier than--	September 26	September 13	September 2

Table 3. Growing Season

GROWTH Station : EIELSON FIELD, AK2707
Start yr.—1949 End yr.—1996
Requested years of data: 48 Available years of data: 48

	Daily Minimum Temperature		
Probability	# days > 24F	# days > 28F	# days > 32F
9 years in 10	133	112	91
8 years in 10	140	119	98
5 years in 10	153	132	110
2 years in 10	167	145	122
1 year in 10	173	152	128

Table 4. Forest Productivity

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber	
			Cu. Ft./Acre	
9:				
Histels	black spruce	---	---	---
13:				
Terric Cryofibrists	---	---	---	---
Liscum-	black spruce	---	---	---
	tamarack	---	---	
14:				
Histels	black spruce	---	---	---
Terric Cryofibrists	---	---	---	---
20:				
Mosquito	black spruce	---	---	---
	tamarack	---	---	
21A:				
Goldstream	black spruce	---	---	---
21B:				
Goldstream	black spruce	---	---	---
22:				
Tanacross	black spruce	---	---	---
25:				
Tanana, rare brief flooding	black spruce	22	---	---
	white spruce	55	14	
26:				
Histels	black spruce	---	---	---
Mosquito	black spruce	---	---	---
	tamarack	---	---	
31:				
Eielson	balsam poplar	---	---	white spruce
	white spruce	90	43	
Piledriver	balsam poplar	---	---	white spruce
	white spruce	74	14	
32:				
Salchaket	---	---	---	---

Table 4. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber	
			Cu. Ft./Acre	
35:				
North Pole	tamarack	37	---	---
	black spruce	---	---	
36:				
Jarvis	paper birch	50	29	white spruce
	quaking aspen	60	57	
	white spruce	80	29	
37:				
Chena	balsam poplar	---	---	white spruce
	white spruce	80	29	
39A:				
Nenana	---	---	---	white spruce
40A:				
Chatanika	black spruce	42	---	---
	white spruce	67	29	
40B:				
Chatanika	black spruce	42	---	---
	white spruce	67	29	
40C:				
Chatanika	black spruce	42	---	---
	white spruce	67	29	
40D:				
Chatanika	black spruce	42	---	---
	white spruce	67	29	
41A:				
Minto	white spruce	83	29	white spruce
41B:				
Minto	white spruce	83	29	white spruce
41C:				
Minto	white spruce	83	29	white spruce
41D:				
Minto	white spruce	83	29	white spruce
42B:				
Fairbanks	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	

Table 4. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber	
			Cu. Ft./Acre	
42C:				
Fairbanks	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	
42CG:				
Fairbanks	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	
Fairbanks	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	
42D:				
Fairbanks	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	
42E:				
Fairbanks	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	
44B:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	---	
44C:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	---	
44D:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	---	
44E:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	---	

Table 4. Forest Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			Cu. Ft./Acre	
44F:				
Steese-	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	---	
45C:				
Gilmore	black spruce	30	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
45D:				
Gilmore	black spruce	30	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
45E:				
Gilmore	black spruce	30	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
45F:				
Gilmore	black spruce	30	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
45G:				
Gilmore	black spruce	30	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
46C:				
Eutrocryepts, hills	white spruce	64	14	white spruce
46D:				
Eutrocryepts, hills	white spruce	64	14	white spruce
48D:				
McCloud	black spruce	---	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	

Table 4. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber	
			Cu. Ft./Acre	
48E:				
McCloud	black spruce	---	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
48F:				
McCloud	black spruce	---	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
49D:				
Angel	paper birch	38	14	white spruce
	quaking aspen	44	29	
	white spruce	68	29	
	black spruce	---	---	
49E:				
Angel	paper birch	38	14	white spruce
	quaking aspen	44	29	
	white spruce	68	29	
	black spruce	---	---	
49F:				
Angel	paper birch	38	14	white spruce
	quaking aspen	44	29	
	white spruce	68	29	
	black spruce	---	---	
50G:				
Ester	---	---	---	---
50X:				
Ester	---	---	---	---
51B:				
Saulich	black spruce	---	---	---
51C:				
Saulich	black spruce	---	---	---
61:				
Piledriver	balsam poplar	---	---	white spruce
	white spruce	74	14	
62:				
Peede	---	---	---	---
Mosquito	black spruce	---	---	---
	tamarack	---	---	

Table 4. Forest Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			Cu. Ft./Acre	
63:				
Typic Cryaquents, occasional long flooding	black spruce	---	---	---
	paper birch	---	---	
	white spruce	---	---	
Tanana, rare brief flooding	black spruce	22	---	---
	white spruce	55	14	
64:				
Eielson	balsam poplar	---	---	white spruce
	white spruce	90	43	
Tanana, rare brief flooding	black spruce	22	---	---
	white spruce	55	14	
65:				
Fluvaquentic aquorthels	---	---	---	---
Typic Cryaquents, occasional long flooding	black spruce	---	---	---
	paper birch	---	---	
	white spruce	---	---	
66:				
Eielson	balsam poplar	---	---	white spruce
	white spruce	90	43	
69:				
Typic Cryaquents, occasional long flooding	black spruce	---	---	---
	paper birch	---	---	
	white spruce	---	---	
Eielson	balsam poplar	---	---	white spruce
	white spruce	90	43	
70A:				
Volkmar	---	---	---	white spruce
Richardson	---	---	---	white spruce
70B:				
Richardson	---	---	---	white spruce
Volkmar	---	---	---	white spruce

Table 4. Forest Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			Cu. Ft./Acre	
71:				
North Pole	tamarack	37	---	---
	black spruce	---	---	
Mosquito	black spruce	---	---	---
	tamarack	---	---	
Liscum	black spruce	---	---	---
	tamarack	---	---	
72F:				
Eutrocryepts, escarpments	white spruce	64	14	---
81V:				
Chatanika	black spruce	42	---	---
	white spruce	67	29	
Saulich	black spruce	---	---	---
81X:				
Chatanika	black spruce	42	---	---
	white spruce	67	29	
Saulich	black spruce	---	---	---
82V:				
Gilmore	black spruce	30	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	---	
82X:				
Gilmore	black spruce	30	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	---	
85:				
Eutrocryepts, hills	white spruce	64	14	white spruce
Minto	white spruce	83	29	white spruce
86G:				
Brigadier	black spruce	---	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	

Table 4. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber	
			Cu. Ft./Acre	
86V:				
Brigadier	black spruce	---	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
Manchu-	black spruce	---	---	white spruce
	paper birch	---	43	
	quaking aspen	---	72	
	white spruce	---	29	
86X:				
Brigadier	black spruce	---	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
Manchu-	black spruce	---	---	white spruce
	paper birch	---	43	
	quaking aspen	---	72	
	white spruce	---	29	
87V:				
Gilmore	black spruce	30	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
Manchu-	black spruce	---	---	white spruce
	paper birch	---	43	
	quaking aspen	---	72	
	white spruce	---	29	
87X:				
Gilmore	black spruce	30	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
88:				
Dystrogelepts	---	---	---	white spruce
Turbels	---	---	---	---
89X:				
Fairbanks	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	
Steese-	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	---	

Table 4. Forest Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			Cu. Ft./Acre	
90:				
Fubar	balsam poplar	---	---	paper birch, white spruce
	paper birch	---	---	
	quaking aspen	---	---	
	white spruce	79	29	
Tanana, rare brief flooding	black spruce	22	---	---
	white spruce	55	14	
91:				
Aquic Cryofluvents	---	---	---	---
Fluvaquentic aquorthels	---	---	---	---
Typic Cryaquents, frequent flooding	black spruce	---	---	---
	paper birch	---	---	
	white spruce	---	---	
211:				
Chatanika	black spruce	42	---	---
	white spruce	67	29	
Goldstream	black spruce	---	---	---
212:				
Goldstream	black spruce	---	---	---
Histels	black spruce	---	---	---
251:				
Tanana, rare brief flooding	black spruce	22	---	---
	white spruce	55	14	
Mosquito	black spruce	---	---	---
	tamarack	---	---	
361:				
Jarvis	paper birch	50	29	white spruce
	quaking aspen	60	57	
	white spruce	80	29	
Chena	balsam poplar	---	---	white spruce
	white spruce	80	29	
362:				
Piledriver	balsam poplar	---	---	white spruce
	white spruce	74	14	
Fubar	balsam poplar	---	---	paper birch, white spruce
	paper birch	---	---	
	quaking aspen	---	---	
	white spruce	79	29	

Table 4. Forest Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			Cu. Ft./Acre	
363:				
Jarvis	paper birch	50	29	white spruce
	quaking aspen	60	57	
	white spruce	80	29	
Salchaket	---	---	---	---
411A:				
Minto	white spruce	83	29	white spruce
Chatanika	black spruce	42	---	---
	white spruce	67	29	
411B:				
Minto	white spruce	83	29	white spruce
Chatanika	black spruce	42	---	---
	white spruce	67	29	
411C:				
Minto	white spruce	83	29	white spruce
Chatanika	black spruce	42	---	---
	white spruce	67	29	
411D:				
Minto	white spruce	83	29	white spruce
Chatanika	black spruce	42	---	---
	white spruce	67	29	
421D:				
Fairbanks	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	---	
441D:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	---	
Gilmore	black spruce	30	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	

Table 4. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber	
			Cu. Ft./Acre	
441E:				
Steese-	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	---	
Gilmore	black spruce	30	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
441F:				
Gilmore	black spruce	30	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
Steese-	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	---	
441G:				
Gilmore	black spruce	30	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
Steese-	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	---	
451G:				
Brigadier	black spruce	---	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
Ester	---	---	---	---
451X:				
Brigadier	black spruce	---	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
Ester	---	---	---	---
452:				
Gilmore	black spruce	30	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
Steese-	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	---	

Table 4. Forest Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			Cu. Ft./Acre	
492:				
Angel	paper birch	38	14	white spruce
	quaking aspen	44	29	
	white spruce	68	29	
	black spruce	---	---	
McCloud	black spruce	---	---	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
611:				
Piledriver	balsam poplar	---	---	white spruce
	white spruce	74	14	
Eielson	balsam poplar	---	---	white spruce
	white spruce	90	43	
CL:				
Typic Cryorthents	---	---	---	---
Gv:				
Pits, gravel	---	---	---	---
Lf:				
Dumps, landfill	---	---	---	---
ME:				
Dumps, mine	---	---	---	---
Qu:				
Pits, quarry	---	---	---	---
Rv:				
Riverwash	---	---	---	---
UC:				
Typic Cryorthents, fill	---	---	---	---
Urban land	---	---	---	---
W:				
Water	---	---	---	---
WAH:				
Typic Cryaquents, frequent long ponding	black spruce	---	---	---
Histic Cryaquepts	black spruce	---	---	---
Terric Cryofibrists	---	---	---	---

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
9:					
Histels	90	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to permafrost	1.00
		Ponding	1.00	Depth to saturated zone	1.00
				Excess surface organic matter	1.00
				Ponding	1.00
13:					
Terric Cryofibrists	60	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Excess surface organic matter	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50
Liscum	30	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Excess surface organic matter	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50
14:					
Histels	60	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to permafrost	1.00
		Ponding	1.00	Depth to saturated zone	1.00
				Excess surface organic matter	1.00
				Ponding	1.00
Terric Cryofibrists	27	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Excess surface organic matter	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50
20:					
Mosquito	85	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Excess surface organic matter	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
				Depth to permafrost	0.92
				Silty surface layer dusty when dry and slippery when wet	0.50
21A:					
Goldstream	80	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to permafrost	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Excess surface organic matter	1.00
				Ponding	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
21B:					
Goldstream	80	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to permafrost	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Excess surface organic matter	1.00
				Ponding	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50
22:					
Tanacross	90	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to permafrost	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Excess surface organic matter	1.00
				Ponding	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50
25:					
Tanana, rare brief flooding	75	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.86
				Silty surface layer dusty when dry and slippery when wet	0.50
26:					
Histels	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to permafrost	1.00
		Ponding	1.00	Depth to saturated zone	1.00
				Excess surface organic matter	1.00
				Ponding	1.00
Mosquito	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Excess surface organic matter	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
				Depth to permafrost	0.92
				Silty surface layer dusty when dry and slippery when wet	0.50
31:					
Eielson	60	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Piledriver	30	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
32:					
Salchaket	85	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
35:					
North Pole	85	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
36:					
Jarvis	75	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
37:					
Chena	90	Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
39A:					
Nenana	90	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
40A:					
Chatanika	75	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.99
				Silty surface layer dusty when dry and slippery when wet	0.50
40B:					
Chatanika	75	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.99
				Silty surface layer dusty when dry and slippery when wet	0.50
40C:					
Chatanika	80	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Depth to permafrost	0.99
				Silty surface layer dusty when dry and slippery when wet	0.50
40D:					
Chatanika	80	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.99
				Silty surface layer dusty when dry and slippery when wet	0.50

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
41A:					
Minto	80	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
41B:					
Minto	70	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
41C:					
Minto	60	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.04	Silty surface layer dusty when dry and slippery when wet	0.50
41D:					
Minto	85	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
42B:					
Fairbanks	80	Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
42C:					
Fairbanks	80	Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
42CG:					
Fairbanks	60	Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
Fairbanks	30	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
42D:					
Fairbanks	70	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
42E:					
Fairbanks	80	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
44B:					
Steese	80	Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
44C:					
Steese	80	Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
44D:					
Steese	70	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
44E:					
Steese	75	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
44F:					
Steese	85	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
45C:					
Gilmore	70	Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
45D:					
Gilmore	75	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
45E:					
Gilmore	70	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
45F:					
Gilmore	85	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
45G:					
Gilmore	85	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
46C:					
Eutrocryepts, hills	90	Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
46D:					
Eutrocryepts, hills	90	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
48D:					
McCloud	85	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
48E:					
McCloud	85	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
48F:					
McCloud	80	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
49D:					
Angel	78	Very limited:		Somewhat limited:	
		Slope	1.00	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50		
49E:					
Angel	80	Very limited:		Somewhat limited:	
		Slope	1.00	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50		
49F:					
Angel	80	Very limited:		Somewhat limited:	
		Slope	1.00	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50		
50G:					
Ester	75	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to permafrost	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Excess surface organic matter	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
50X:					
Ester	75	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to permafrost	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Excess surface organic matter	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50
51B:					
Saulich	80	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Excess surface organic matter	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
				Depth to permafrost	0.99
				Silty surface layer dusty when dry and slippery when wet	0.50
51C:					
Saulich	80	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Excess surface organic matter	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
		Slope	0.16	Water erosion hazard	1.00
				Depth to permafrost	0.99
61:					
Piledriver	75	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
62:					
Peede	70	Not rated		Not rated	
		Not rated; Sieve size, 3 to 10", > 10"		Not rated; Sieve size, 3 to 10", > 10"	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
Mosquito	25	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Excess surface organic matter	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
				Depth to permafrost	0.92
				Silty surface layer dusty when dry and slippery when wet	0.50

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
63:					
Typic Cryaquents, occasional long flooding	45	Not rated		Not rated	
		Not rated; Surface Fragments > 75mm		Not rated; Surface Fragments >75mm	
		Not rated; Sieve size, 3 to 10", > 10"		Not rated; Sieve size, 3 to 10", > 10"	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Tanana, rare brief flooding	35	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.86
				Silty surface layer dusty when dry and slippery when wet	0.50
64:					
Eielson	50	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Tanana, rare brief flooding	35	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.86
				Silty surface layer dusty when dry and slippery when wet	0.50
65:					
Fluvaquentic aquorthels	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.92
				Sandy surface layer easily displaced	0.50
				Clayey surface layer slippery when wet	0.50
Typic Cryaquents, occasional long flooding	45	Not rated		Not rated	
		Not rated; Surface Fragments > 75mm		Not rated; Surface Fragments > 75mm	
		Not rated; Sieve size, 3 to 10", > 10"		Not rated; Sieve size, 3 to 10", > 10"	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
66:					
Eielson	80	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
69:					
Typic Cryaquents, occasional long flooding	50	Not rated		Not rated	
		Not rated; Surface Fragments > 75mm		Not rated; Surface Fragments > 75mm	
		Not rated; Sieve size, 3 to 10", > 10"		Not rated; Sieve size, 3 to 10", > 10"	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Eielson	30	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
70A:					
Volkmar	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Richardson	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
70B:					
Richardson	35	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Volkmar	35	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
71:					
North Pole	50	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Mosquito	30	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Excess surface organic matter	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
				Depth to permafrost	0.92
				Silty surface layer dusty when dry and slippery when wet	0.50

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
71:					
Liscum	20	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Excess surface organic matter	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50
72F:					
Eutrocryepts, escarpments	90	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
81V:					
Chatanika	48	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Depth to permafrost	0.99
				Silty surface layer dusty when dry and slippery when wet	0.50
Saulich	48	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Excess surface organic matter	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
		Slope	0.16	Water erosion hazard	1.00
				Depth to permafrost	0.99
81X:					
Chatanika	50	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Ponding	1.00
		Ponding	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.99
				Silty surface layer dusty when dry and slippery when wet	0.50
Saulich	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Excess surface organic matter	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
				Depth to permafrost	0.99
82V:					
Gilmore	50	Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.04	Silty surface layer dusty when dry and slippery when wet	0.50
Steese	45	Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
82X:					
Gilmore	45	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Steese	45	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
85:					
Eutrocryepts, hills	45	Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
Minto	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
86G:					
Brigadier	75	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
86V:					
Brigadier	45	Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
Manchu	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
86X:					
Brigadier	60	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Manchu	25	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
87V:					
Gilmore	60	Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Manchu	35	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
87X:					
Gilmore	90	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
88:					
Dystrogelepts	60	Very limited:		Somewhat limited:	
		Slope	1.00	Sandy surface layer easily displaced	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Turbels	35	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Depth to permafrost	0.88
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
89X:					
Fairbanks	45	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Steese	45	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
90:					
Fubar	45	Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Tanana, rare brief flooding	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.86
				Silty surface layer dusty when dry and slippery when wet	0.50

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
91:					
Aquic Cryofluvents	30	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Fluvaquentic aquorthels	30	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.92
				Sandy surface layer easily displaced	0.50
				Clayey surface layer slippery when wet	0.50
Typic Cryaquents, frequent flooding	30	Not rated		Not rated	
		Not rated; Surface Fragments > 75mm		Not rated; Surface Fragments > 75mm	
		Not rated; Sieve size, 3 to 10", > 10"		Not rated; Sieve size, 3 to 10", > 10"	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
				Flooding	0.40
211:					
Chatanika	55	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.99
				Silty surface layer dusty when dry and slippery when wet	0.50
Goldstream	35	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to permafrost	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Excess surface organic matter	1.00
				Ponding	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50
212:					
Goldstream	50	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to permafrost	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Excess surface organic matter	1.00
				Ponding	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50
Histels	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to permafrost	1.00
		Ponding	1.00	Depth to saturated zone	1.00
				Excess surface organic matter	1.00
				Ponding	1.00

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
251:					
Tanana, rare brief flooding	60	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.86
				Silty surface layer dusty when dry and slippery when wet	0.50
Mosquito	20	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Excess surface organic matter	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
				Depth to permafrost	0.92
				Silty surface layer dusty when dry and slippery when wet	0.50
361:					
Jarvis	55	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Chena	35	Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
362:					
Piledriver	50	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Fubar	40	Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
363:					
Jarvis	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Salchaket	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
411A:					
Minto	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Chatanika	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.99
				Silty surface layer dusty when dry and slippery when wet	0.50

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
411B:					
Minto	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Chatanika	35	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.99
				Silty surface layer dusty when dry and slippery when wet	0.50
411C:					
Minto	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.04	Silty surface layer dusty when dry and slippery when wet	0.50
Chatanika	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.04	Depth to permafrost	0.99
				Silty surface layer dusty when dry and slippery when wet	0.50
411D:					
Minto	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Chatanika	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Slope	0.63	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.99
				Silty surface layer dusty when dry and slippery when wet	0.50
421D:					
Fairbanks	55	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Steese	30	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
441D:					
Steese	55	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Gilmore	25	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
441E:					
Steese	50	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Gilmore	40	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
441F:					
Gilmore	45	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Steese	45	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
441G:					
Gilmore	45	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Steese	45	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
451G:					
Brigadier	40	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Ester	30	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to permafrost	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Excess surface organic matter	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
451X:					
Brigadier	45	Very limited:		Very limited:	
		Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Ester	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to permafrost	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Excess surface organic matter	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50
452:					
Gilmore	65	Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Slope	0.01		
Steese	33	Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Slope	0.01		
492:					
Angel	55	Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Slope	0.16		
McCloud	40	Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
611:					
Piledriver	50	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Eielson	35	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
CL:					
Typic Cryorthents	80	Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Gv:					
Pits, gravel	100	Not rated		Not rated	
Lf:					
Dumps, landfill	100	Not rated		Not rated	

Table 5. Recreation: Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct of map unit	Camp Areas (primitive) (Alaska criteria)		Foot and ATV Trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
ME:					
Dumps, mine	100	Not rated		Not rated	
Qu:					
Pits, quarry	100	Not rated		Not rated	
Rv:					
Riverwash	100	Not rated		Not rated	
UC:					
Typic Cryorthents, fill	45	Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Sandy surface layer easily displaced	0.50
		Gravel content	0.08	Silty surface layer dusty when dry and slippery when wet	0.50
Urban land	45	Not rated		Not rated	
W:					
Water	100	Not rated		Not rated	
WAH:					
Typic Cryaquents, frequent long ponding	30	Not rated		Not rated	
		Not rated; Surface Fragments > 75mm		Not rated; Surface Fragments > 75mm	
		Not rated; Sieve size, 3 to 10", > 10"		Not rated; Sieve size, 3 to 10", > 10"	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Histic Cryaquepts	25	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Excess surface organic matter	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50
Terric Cryofibrists	20	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Excess surface organic matter	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
				Silty surface layer dusty when dry and slippery when wet	0.50

Table 6. Building Site Development: Site Improvements

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
9:					
Histels	90	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00		
		Frost action	1.00		
13:					
Terric Cryofibrists	60	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
		Frost action	1.00	Cutbanks cave	0.10
Liscum	30	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
14:					
Histels	60	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00		
		Frost action	1.00		
Terric Cryofibrists	27	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
		Frost action	1.00	Cutbanks cave	0.10
20:					
Mosquito	85	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.92
		Frost action	1.00	Cutbanks cave	0.10
		Depth to permafrost	0.92		
21A:					
Goldstream	80	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00		
		Frost action	1.00		

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
21B:					
Goldstream	80	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00		
		Frost action	1.00		
22:					
Tanacross	90	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00		
		Frost action	1.00		
25:					
Tanana, rare brief flooding	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.86
		Depth to permafrost	0.86	Cutbanks cave	0.10
		Flooding	0.40		
26:					
Histels	40	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00		
		Frost action	1.00		
Mosquito	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.92
		Depth to permafrost	0.92	Cutbanks cave	0.10
		Flooding	0.40		
31:					
Eielson	60	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Flooding	0.60
Piledriver	30	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
32:					
Salchaket	85	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
35:					
North Pole	85	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
36:					
Jarvis	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		
37:					
Chena	90	Somewhat limited:		Very limited:	
		Flooding	0.40	Cutbanks cave	1.00
39A:					
Nenana	90	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Frost action	1.00	Cutbanks cave	1.00
40A:					
Chatanika	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Frost action	1.00	Cutbanks cave	0.10
		Depth to permafrost	0.99		
40B:					
Chatanika	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Frost action	1.00	Cutbanks cave	0.10
		Depth to permafrost	0.99		
40C:					
Chatanika	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Frost action	1.00	Slope	0.16
		Depth to permafrost	0.99	Cutbanks cave	0.10
40D:					
Chatanika	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Slope	1.00
		Frost action	1.00	Depth to permafrost	0.99
		Slope	1.00	Cutbanks cave	0.10
41A:					
Minto	80	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Cutbanks cave	0.10
		Frost action	1.00		

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
41B:					
Minto	70	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Cutbanks cave	0.10
		Frost action	1.00		
41C:					
Minto	60	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Cutbanks cave	0.10
		Frost action	1.00	Slope	0.04
		Slope	0.04		
41D:					
Minto	85	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Slope	1.00
		Frost action	1.00	Cutbanks cave	0.10
		Slope	1.00		
42B:					
Fairbanks	80	Very limited:		Somewhat limited:	
		Frost action	1.00	Cutbanks cave	0.10
42C:					
Fairbanks	80	Very limited:		Somewhat limited:	
		Frost action	1.00	Slope	0.16
		Slope	0.16	Cutbanks cave	0.10
42CG:					
Fairbanks	60	Very limited:		Somewhat limited:	
		Frost action	1.00	Slope	0.16
		Slope	0.16	Cutbanks cave	0.10
Fairbanks	30	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	1.00	Cutbanks cave	0.10
42D:					
Fairbanks	70	Very limited:		Very limited:	
		Frost action	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10
42E:					
Fairbanks	80	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	1.00	Cutbanks cave	0.10
44B:					
Steese	80	Somewhat limited:		Somewhat limited:	
		Frost action	0.50	Depth to soft bedrock	0.20
				Cutbanks cave	0.10
44C:					
Steese	80	Somewhat limited:		Somewhat limited:	
		Frost action	0.50	Depth to soft bedrock	0.20
		Slope	0.16	Slope	0.16
				Cutbanks cave	0.10

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
44D:					
Steese	70	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.20
				Cutbanks cave	0.10
44E:					
Steese	75	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.20
				Cutbanks cave	0.10
44F:					
Steese	85	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.20
				Cutbanks cave	0.10
45C:					
Gilmore	70	Somewhat limited:		Very limited:	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Frost action	0.50	Slope	0.16
		Slope	0.16		
45D:					
Gilmore	75	Very limited:		Very limited:	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Frost action	0.50		
45E:					
Gilmore	70	Very limited:		Very limited:	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00
		Frost action	0.50		
45F:					
Gilmore	85	Very limited:		Very limited:	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00
		Frost action	0.50		
45G:					
Gilmore	85	Very limited:		Very limited:	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00
		Frost action	0.50		
46C:					
Eutrocryepts, hills	90	Very limited:		Very limited:	
		Frost action	1.00	Cutbanks cave	1.00
		Slope	0.16	Slope	0.16
46D:					
Eutrocryepts, hills	90	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	1.00	Cutbanks cave	1.00

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
48D:					
McCloud	85	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.54
				Cutbanks cave	0.10
48E:					
McCloud	85	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.54
				Cutbanks cave	0.10
48F:					
McCloud	80	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.54
				Cutbanks cave	0.10
49D:					
Angel	78	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.98
				Cutbanks cave	0.10
49E:					
Angel	80	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.98
				Cutbanks cave	0.10
49F:					
Angel	80	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.98
				Cutbanks cave	0.10
50G:					
Ester	75	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to soft bedrock	0.99
50X:					
Ester	75	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to soft bedrock	0.99
51B:					
Saulich	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
		Frost action	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Cutbanks cave	0.10

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
51C:					
Saulich	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
		Frost action	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Slope	0.16
61:					
Piledriver	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
62:					
Peede	70	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10
Mosquito	25	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.92
		Depth to permafrost	0.92	Cutbanks cave	0.10
		Flooding	0.40		
63:					
Typic Cryaquents, occasional long flooding	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10
Tanana, rare brief flooding	35	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.86
		Depth to permafrost	0.86	Cutbanks cave	0.10
		Flooding	0.40		
64:					
Eielson	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Flooding	0.60
Tanana, rare brief flooding	35	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.86
		Depth to permafrost	0.86	Cutbanks cave	0.10
		Flooding	0.40		

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
65:					
Fluvaquentic aquorthels	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.92
		Frost action	1.00	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10
Typic Cryaquents, occasional long flooding	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10
66:					
Eielson	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Flooding	0.60
69:					
Typic Cryaquents, occasional long flooding	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10
Eielson	30	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Flooding	0.60
70A:					
Volkmar	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
Richardson	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
70B:					
Richardson	35	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
Volkmar	35	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
71:					
North Pole	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
Mosquito	30	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.92
		Depth to permafrost	0.92	Cutbanks cave	0.10
		Flooding	0.40		
Liscum	20	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
72F:					
Eutrocryepts, escarpments	90	Very limited:		Very limited:	
		Frost action	1.00	Cutbanks cave	1.00
		Slope	1.00	Slope	1.00
81V:					
Chatanika	48	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Frost action	1.00	Slope	0.16
		Depth to permafrost	0.99	Cutbanks cave	0.10
Saulich	48	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
		Frost action	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Slope	0.16
81X:					
Chatanika	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Frost action	1.00	Cutbanks cave	0.10
Saulich	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
		Frost action	1.00	Depth to permafrost	0.99

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
82V:					
Gilmore	50	Somewhat limited:		Very limited:	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Frost action	0.50	Slope	0.04
		Slope	0.04		
Steese	45	Somewhat limited:		Somewhat limited:	
		Frost action	0.50	Depth to soft bedrock	0.20
		Slope	0.16	Slope	0.16
				Cutbanks cave	0.10
82X:					
Gilmore	45	Very limited:		Very limited:	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00
		Frost action	0.50		
Steese	45	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.20
				Cutbanks cave	0.10
85:					
Eutrocryepts, hills	45	Very limited:		Very limited:	
		Frost action	1.00	Cutbanks cave	1.00
		Slope	0.16	Slope	0.16
Minto	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Slope	0.16
		Frost action	1.00	Cutbanks cave	0.10
		Slope	0.16		
86G:					
Brigadier	75	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	1.00
86V:					
Brigadier	45	Somewhat limited:		Very limited:	
		Frost action	0.50	Depth to soft bedrock	1.00
		Slope	0.16	Slope	0.16
Manchu	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Slope	0.16
		Slope	0.16	Cutbanks cave	0.10
86X:					
Brigadier	60	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	1.00
Manchu	25	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Slope	0.16
		Slope	0.16	Cutbanks cave	0.10

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
87V:					
Gilmore	60	Somewhat limited:		Very limited:	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Frost action	0.50		
Manchu	35	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Slope	0.16
		Slope	0.16	Cutbanks cave	0.10
87X:					
Gilmore	90	Very limited:		Very limited:	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00
		Frost action	0.50		
88:					
Dystrogelepts	60	Very limited:		Very limited:	
		Slope	1.00	Depth to hard bedrock	1.00
		Depth to hard bedrock	0.90	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10
		Large stones content	0.02	Large stones content	0.02
Turbels	35	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Cutbanks cave	1.00
		Frost action	1.00	Slope	1.00
		Slope	1.00	Depth to permafrost	0.88
		Depth to permafrost	0.88		
89X:					
Fairbanks	45	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	1.00	Cutbanks cave	0.10
Steese	45	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.20
				Cutbanks cave	0.10
90:					
Fubar	45	Somewhat limited:		Very limited:	
		Flooding	0.40	Cutbanks cave	1.00
				Depth to saturated zone	0.35
Tanana, rare brief flooding	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.86
		Depth to permafrost	0.86	Cutbanks cave	0.10
		Flooding	0.40		

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
91:					
Aquic Cryofluvents	30	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Flooding	0.60
Fluvaquentic aquorthels	30	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.92
		Frost action	1.00	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10
Typic Cryaquents, frequent flooding	30	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.80
		Flooding	1.00	Cutbanks cave	0.10
211:					
Chatanika	55	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Frost action	1.00	Cutbanks cave	0.10
		Depth to permafrost	0.99		
Goldstream	35	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00		
		Frost action	1.00		
212:					
Goldstream	50	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00		
		Frost action	1.00		
Histels	45	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00		
		Frost action	1.00		

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
251:					
Tanana, rare brief flooding	60	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.86
		Depth to permafrost	0.86	Cutbanks cave	0.10
		Flooding	0.40		
Mosquito	20	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.92
		Depth to permafrost	0.92	Cutbanks cave	0.10
		Flooding	0.40		
361:					
Jarvis	55	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		
Chena	35	Somewhat limited:		Very limited:	
		Flooding	0.40	Cutbanks cave	1.00
362:					
Piledriver	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
Fubar	40	Somewhat limited:		Very limited:	
		Flooding	0.40	Cutbanks cave	1.00
				Depth to saturated zone	0.35
363:					
Jarvis	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		
Salchaket	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		
411A:					
Minto	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Cutbanks cave	0.10
		Frost action	1.00		
Chatanika	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Frost action	1.00	Cutbanks cave	0.10
		Depth to permafrost	0.99		

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
411B:					
Minto	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Cutbanks cave	0.10
		Frost action	1.00		
Chatanika	35	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Frost action	1.00	Cutbanks cave	0.10
		Depth to permafrost	0.99		
411C:					
Minto	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Cutbanks cave	0.10
		Frost action	1.00	Slope	0.04
		Slope	0.04		
Chatanika	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Frost action	1.00	Cutbanks cave	0.10
		Depth to permafrost	0.99	Slope	0.04
411D:					
Minto	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Slope	1.00
		Frost action	1.00	Cutbanks cave	0.10
		Slope	1.00		
Chatanika	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Frost action	1.00	Slope	0.63
		Depth to permafrost	0.99	Cutbanks cave	0.10
421D:					
Fairbanks	55	Very limited:		Very limited:	
		Frost action	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10
Steese	30	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.20
				Cutbanks cave	0.10
441D:					
Steese	55	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.20
				Cutbanks cave	0.10
Gilmore	25	Very limited:		Very limited:	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Frost action	0.50		

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
441E:					
Steese	50	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.20
				Cutbanks cave	0.10
Gilmore	40	Very limited:		Very limited:	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00
		Frost action	0.50		
441F:					
Gilmore	45	Very limited:		Very limited:	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00
		Frost action	0.50		
Steese	45	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.20
				Cutbanks cave	0.10
441G:					
Gilmore	45	Very limited:		Very limited:	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00
		Frost action	0.50		
Steese	45	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	0.20
				Cutbanks cave	0.10
451G:					
Brigadier	40	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	1.00
Ester	30	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to soft bedrock	0.99
451X:					
Brigadier	45	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to soft bedrock	1.00
Ester	40	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to soft bedrock	0.99

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
452:					
Gilmore	65	Somewhat limited:		Very limited:	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Frost action	0.50	Slope	0.01
		Slope	0.01		
Steese	33	Somewhat limited:		Somewhat limited:	
		Frost action	0.50	Depth to soft bedrock	0.20
		Slope	0.01	Cutbanks cave	0.10
				Slope	0.01
492:					
Angel	55	Somewhat limited:		Somewhat limited:	
		Frost action	0.50	Depth to soft bedrock	0.98
		Slope	0.16	Slope	0.16
				Cutbanks cave	0.10
McCloud	40	Somewhat limited:		Somewhat limited:	
		Frost action	0.50	Depth to soft bedrock	0.54
		Slope	0.16	Slope	0.16
				Cutbanks cave	0.10
611:					
Piledriver	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
Eielson	35	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Flooding	0.60
CL:					
Typic Cryorthents	80	Somewhat limited:		Very limited:	
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		
Gv:					
Pits, gravel	100	Not rated		Not rated	
Lf:					
Dumps, landfill	100	Not rated		Not rated	
ME:					
Dumps, mine	100	Not rated		Not rated	
Qu:					
Pits, quarry	100	Not rated		Not rated	
Rv:					
Riverwash	100	Not rated		Not rated	
UC:					
Typic Cryorthents, fill	45	Somewhat limited:		Very limited:	
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		
Urban land	45	Not rated		Not rated	

Table 6. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
W:					
Water	100	Not rated		Not rated	
WAH:					
Typic Cryaquents, frequent long ponding	30	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10
Histic Cryaquepts	25	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10
Terric Cryofibrists	20	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
		Frost action	1.00	Cutbanks cave	0.10

Table 7. Building Site Development: Structures

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
9:							
Histels	90	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
13:							
Terric Cryofibrists	60	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00			Organic matter content	1.00
Liscum	30	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
14:							
Histels	60	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
Terric Cryofibrists	27	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00			Organic matter content	1.00
20:							
Mosquito	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Depth to permafrost	0.92	Organic matter content	1.00
21A:							
Goldstream	80	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21B:							
Goldstream	80	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Slope	0.12
22:							
Tanacross	90	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
25:							
Tanana, rare brief flooding	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
26:							
Histels	40	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
Mosquito	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Depth to permafrost	0.92	Organic matter content	1.00
		Depth to permafrost	0.92			Depth to permafrost	0.92
31:							
Eielson	60	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Piledriver	30	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
32:							
Salchaket	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
35:							
North Pole	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
36:							
Jarvis	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
37:							
Chena	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
39A:							
Nenana	90	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
40A:							
Chatanika	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
40B:							
Chatanika	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
						Slope	0.12
40C:							
Chatanika	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Slope	1.00
		Slope	0.16	Slope	0.16	Depth to permafrost	0.99
40D:							
Chatanika	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Slope	1.00
		Subsidence	1.00	Subsidence	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Subsidence	1.00
		Slope	1.00	Slope	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
41A:							
Minto	80	Very limited		Very limited		Very limited	
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
41B:							
Minto	70	Very limited		Very limited		Very limited	
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Slope	0.12
41C:							
Minto	60	Very limited		Very limited		Very limited	
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.04	Slope	0.04	Slope	1.00
41D:							
Minto	85	Very limited		Very limited		Very limited	
		Subsidence	1.00	Subsidence	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Subsidence	1.00
		Slope	1.00	Slope	1.00	Depth to saturated zone	1.00
42B:							
Fairbanks	80	Not limited		Not limited		Somewhat limited	
						Slope	0.12
42C:							
Fairbanks	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
42CG:							
Fairbanks	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
Fairbanks	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
42D:							
Fairbanks	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
42E:							
Fairbanks	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
44B:							
Steese	80	Not limited		Somewhat limited		Somewhat limited	
				Depth to soft bedrock	0.20	Slope	0.12
44C:							
Steese	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Depth to soft bedrock	0.20	Slope	1.00
				Slope	0.16		
44D:							
Steese	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
44E:							
Steese	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
44F:							
Steese	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
45C:							
Gilmore	70	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	0.16	Slope	0.16	Slope	1.00
45D:							
Gilmore	75	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Slope	1.00	Depth to soft bedrock	1.00
45E:							
Gilmore	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
45F:							
Gilmore	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
45G:							
Gilmore	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
46C:							
Eutrocryepts, hills	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
46D:							
Eutrocryepts, hills	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
48D:							
McCloud	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.54		
48E:							
McCloud	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.54		
48F:							
McCloud	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.54		

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
49D:							
Angel	78	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.98		
49E:							
Angel	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.98		
49F:							
Angel	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.98		
50G:							
Ester	75	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Depth to soft bedrock	0.99		
50X:							
Ester	75	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Depth to soft bedrock	0.99		
51B:							
Saulich	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
51C:							
Saulich	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Slope	1.00
61:							
Piledriver	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
62:							
Peede	70	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Mosquito	25	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Depth to permafrost	0.92	Organic matter content	1.00
		Depth to permafrost	0.92			Depth to permafrost	0.92
63:							
Typic Cryaquents, occasional long flooding	45	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Tanana, rare brief flooding	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
64:							
Eielson	50	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Tanana, rare brief flooding	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
65:							
Fluvaquentic aquorthels	45	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.92	Depth to permafrost	0.92	Depth to permafrost	0.92
Typic Cryaquents, occasional long flooding	45	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
66:							
Eielson	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
69:							
Typic Cryaquents, occasional long flooding	50	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Eielson	30	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
70A:							
Volkmar	45	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Richardson	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
70B:							
Richardson	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Slope	0.12
Volkmar	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Slope	0.12
71:							
North Pole	50	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Mosquito	30	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Depth to permafrost	0.92	Organic matter content	1.00
		Depth to permafrost	0.92			Depth to permafrost	0.92
Liscum	20	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
72F:							
Eutrocryepts, escarpments	90	Very limited		Very limited		\Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
81V:							
Chatanika	48	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Slope	1.00
		Slope	0.16	Slope	0.16	Depth to permafrost	0.99
Saulich	48	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Slope	1.00
81X:							
Chatanika	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
Saulich	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
82V:							
Gilmore	50	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	0.04	Slope	0.04	Slope	1.00
Steese	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Depth to soft bedrock	0.20	Slope	1.00
				Slope	0.16		
82X:							
Gilmore	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
Steese	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
85:							
Eutrocryepts, hills	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
Minto	45	Very limited		Very limited		Very limited	
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.16	Slope	0.16	Slope	1.00
86G:							
Brigadier	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	1.00		
86V:							
Brigadier	45	Somewhat limited		Very limited		Very limited	
		Slope	0.16	Depth to soft bedrock	1.00	Slope	1.00
				Slope	0.16		
Manchu	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.16	Slope	0.16	Slope	1.00
86X:							
Brigadier	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	1.00		
Manchu	25	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.16	Slope	0.16	Slope	1.00
87V:							
Gilmore	60	Somewhat limited		Very limited		Somewhat limited	
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
						Slope	0.88
Manchu	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.16	Slope	0.16	Slope	1.00
87X:							
Gilmore	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
88:							
Dystrogelepts	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.90	Slope	1.00	Depth to hard bedrock	0.90
		Large stones content	0.02	Large stones content	0.02	Large stones content	0.02
Turbels	35	Very limited		Very limited		Very limited	
		Subsidence	1.00	Subsidence	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Subsidence	1.00
		Slope	1.00	Slope	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.88	Depth to permafrost	0.88	Depth to permafrost	0.88

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
89X:							
Fairbanks	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Steese	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
90:							
Fubar	45	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.35		
Tanana, rare brief flooding	45	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
91:							
Aquic Cryofluvents	30	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Slope	0.12
Fluvaquentic aquorthels	30	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.92	Depth to permafrost	0.92	Depth to permafrost	0.92
Typic Cryaquents, frequent flooding	30	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Slope	0.12
211:							
Chatanika	55	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
Goldstream	35	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
212:							
Goldstream	50	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Histels	45	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
251:							
Tanana, rare brief flooding	60	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
Mosquito	20	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Depth to permafrost	0.92	Organic matter content	1.00
		Depth to permafrost	0.92			Depth to permafrost	0.92
361:							
Jarvis	55	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Chena	35	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
362:							
Piledriver	50	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Fubar	40	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.35		
363:							
Jarvis	45	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Salchaket	45	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
411A:							
Minto	45	Very limited		Very limited		Very limited	
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Chatanika	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
411B:							
Minto	40	Very limited		Very limited		Very limited	
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Slope	0.12
Chatanika	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
						Slope	0.12
411C:							
Minto	45	Very limited		Very limited		Very limited	
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.04	Slope	0.04	Slope	1.00
Chatanika	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Slope	1.00
		Slope	0.04	Slope	0.04	Depth to permafrost	0.99
411D:							
Minto	45	Very limited		Very limited		Very limited	
		Subsidence	1.00	Subsidence	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Subsidence	1.00
		Slope	1.00	Slope	1.00	Depth to saturated zone	1.00
Chatanika	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Slope	1.00
		Subsidence	1.00	Subsidence	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Subsidence	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to saturated zone	1.00
		Slope	0.63	Slope	0.63	Depth to permafrost	0.99
421D:							
Fairbanks	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Steese	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
441D:							
Steese	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
Gilmore	25	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Slope	1.00	Depth to soft bedrock	1.00
441E:							
Steese	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
Gilmore	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
441F:							
Gilmore	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
Steese	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
441G:							
Gilmore	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
Steese	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
451G:							
Brigadier	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	1.00		
Ester	30	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Depth to soft bedrock	0.99		
451X:							
Brigadier	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	1.00		
Ester	40	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Depth to soft bedrock	0.99		

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
452:							
Gilmore	65	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	0.01	Slope	0.01	Slope	1.00
Steese	33	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Depth to soft bedrock	0.20	Slope	1.00
				Slope	0.01		
492:							
Angel	55	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Depth to soft bedrock	0.98	Slope	1.00
				Slope	0.16		
McCloud	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Depth to soft bedrock	0.54	Slope	1.00
				Slope	0.16		
611:							
Piledriver	50	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Eielson	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
CL:							
Typic Cryorthents	80	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
Gv:							
Pits, gravel	100	Not rated		Not rated		Not rated	
Lf:							
Dumps, landfill	100	Not rated		Not rated		Not rated	
ME:							
Dumps, mine	100	Not rated		Not rated		Not rated	
Qu:							
Pits, quarry	100	Not rated		Not rated		Not rated	
Rv:							
Riverwash	100	Not rated		Not rated		Not rated	
UC:							
Typic Cryorthents, fill	45	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
Urban land	45	Not rated		Not rated		Not rated	
W:							
Water	100	Not rated		Not rated		Not rated	

Table 7. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WAH:							
Typic Cryaquents, frequent long ponding	30	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Histic Cryaquepts	25	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Terric Cryofibrists	20	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00			Organic matter content	1.00

Table 8. Sanitary Facilities: Landfill

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
9:							
Histels	90	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00			Organic matter content	1.00
13:							
Terric Cryofibrists	60	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	0.50	Seepage	1.00	Too clayey	0.50
Liscum	30	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Flooding	0.40		
		Flooding	0.40				
14:							
Histels	60	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00			Organic matter content	1.00
Terric Cryofibrists	27	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	0.50	Seepage	1.00	Too clayey	0.50
20:							
Mosquito	85	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Depth to permafrost	0.92	Seepage	1.00
		Depth to permafrost	0.92	Flooding	0.40	Organic matter content	1.00
		Flooding	0.40			Depth to permafrost	0.92
21A:							
Goldstream	80	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
21B:							
Goldstream	80	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
22:							
Tanacross	90	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	0.40	Flooding	0.40		
25:							
Tanana, rare brief flooding	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
		Flooding	0.40	Flooding	0.40		
26:							
Histels	40	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00			Organic matter content	1.00
Mosquito	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Depth to permafrost	0.92	Seepage	1.00
		Depth to permafrost	0.92	Flooding	0.40	Organic matter content	1.00
		Flooding	0.40			Depth to permafrost	0.92
31:							
Eielson	60	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
		Seepage	1.00				
Piledriver	30	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.16
32:							
Salchaket	85	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Flooding	0.40	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
		Flooding	0.40				
35:							
North Pole	85	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.01

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
36:							
Jarvis	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.41
37:							
Chena	90	Very limited:		Very limited:		Very limited:	
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	1.00
39A:							
Nenana	90	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
						Gravel content	1.00
40A:							
Chatanika	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
40B:							
Chatanika	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
40C:							
Chatanika	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
		Slope	0.16	Slope	0.16	Slope	0.16
40D:							
Chatanika	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
41A:							
Minto	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
41B:							
Minto	70	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
41C:							
Minto	60	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.04	Slope	0.04	Slope	0.04
41D:							
Minto	85	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
42B:							
Fairbanks	80	Not limited		Not limited		Not limited	
42C:							
Fairbanks	80	Somewhat limited:		Somewhat limited:		Somewhat limited:	
		Slope	0.16	Slope	0.16	Slope	0.16
42CG:							
Fairbanks	60	Somewhat limited:		Somewhat limited:		Somewhat limited:	
		Slope	0.16	Slope	0.16	Slope	0.16
Fairbanks	30	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
42D:							
Fairbanks	70	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
42E:							
Fairbanks	80	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
44B:							
Steese	80	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00		
44C:							
Steese	80	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	0.16
		Slope	0.16	Slope	0.16		
44D:							
Steese	70	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
44E:							
Steese	75	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
44F:							
Steese	85	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		
45C:							
Gilmore	70	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
		Slope	0.16	Slope	0.16	Slope	0.16
45D:							
Gilmore	75	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
45E:							
Gilmore	70	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
45F:							
Gilmore	85	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
45G:							
Gilmore	85	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
46C:							
Eutrocryepts, hills	90	Very limited:		Somewhat limited:		Very limited:	
		Too sandy	1.00	Slope	0.16	Too sandy	1.00
		Slope	0.16			Slope	0.16
46D:							
Eutrocryepts, hills	90	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	1.00			Too sandy	1.00
48D:							
McCloud	85	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
48E:							
McCloud	85	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
48F:							
McCloud	80	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
49D:							
Angel	78	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
49E:							
Angel	80	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
49F:							
Angel	80	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
50G:							
Ester	75	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to saturated zone	1.00
50X:							
Ester	75	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to saturated zone	1.00
51B:							
Saulich	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Depth to permafrost	0.99	Seepage	1.00
		Depth to permafrost	0.99			Organic matter content	1.00
						Depth to permafrost	0.99
51C:							
Saulich	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Depth to permafrost	0.99	Seepage	1.00
		Depth to permafrost	0.99	Slope	0.16	Organic matter content	1.00
		Slope	0.16			Depth to permafrost	0.99

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
61:							
Piledriver	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.16
62:							
Peede	70	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
Mosquito	25	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Depth to permafrost	0.92	Seepage	1.00
		Depth to permafrost	0.92	Flooding	0.40	Organic matter content	1.00
		Flooding	0.40			Depth to permafrost	0.92
63:							
Typic Cryaquents, occasional long flooding	45	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
Tanana, rare brief flooding	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
		Flooding	0.40	Flooding	0.40		
64:							
Eielson	50	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
		Seepage	1.00				
Tanana, rare brief flooding	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
		Flooding	0.40	Flooding	0.40		

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
65:							
Fluvaquentic aquorthels	45	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to permafrost	0.92
		Depth to permafrost	0.92	Depth to permafrost	0.92		
Typic Cryaquents, occasional long flooding	45	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
66:							
Eielson	80	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
		Seepage	1.00				
69:							
Typic Cryaquents, occasional long flooding	50	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
Eielson	30	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
		Seepage	1.00				
70A:							
Volkmar	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
						Gravel content	0.01
Richardson	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00				

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
70B:							
Richardson	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00				
Volkmar	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
						Gravel content	0.01
71:							
North Pole	50	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.01
Mosquito	30	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Depth to permafrost	0.92	Seepage	1.00
		Depth to permafrost	0.92	Flooding	0.40	Organic matter content	1.00
		Flooding	0.40			Depth to permafrost	0.92
Liscum	20	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Flooding	0.40		
		Flooding	0.40				
72F:							
Eutrocryepts, escarpments	90	Very limited:		Very limited:		Very limited:	
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
		Slope	1.00			Slope	1.00
81V:							
Chatanika	48	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
		Slope	0.16	Slope	0.16	Slope	0.16
Saulich	48	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Depth to permafrost	0.99	Seepage	1.00
		Depth to permafrost	0.99	Slope	0.16	Organic matter content	1.00
		Slope	0.16			Depth to permafrost	0.99

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
81X:							
Chatanika	50	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
Saulich	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Depth to permafrost	0.99	Seepage	1.00
		Depth to permafrost	0.99			Organic matter content	1.00
82V:							
Gilmore	50	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
		Slope	0.04	Slope	0.04	Slope	0.04
Steese	45	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	0.16
		Slope	0.16	Slope	0.16		
82X:							
Gilmore	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
Steese	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		
85:							
Eutrocryepts, hills	45	Very limited:		Somewhat limited:		Very limited:	
		Too sandy	1.00	Slope	0.16	Too sandy	1.00
		Slope	0.16			Slope	0.16
Minto	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.16	Slope	0.16	Slope	0.16
86G:							
Brigadier	75	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
86V:							
Brigadier	45	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	0.16
		Slope	0.16	Slope	0.16		
Manchu	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	0.16
		Slope	0.16	Slope	0.16		
86X:							
Brigadier	60	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		
Manchu	25	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	0.16
		Slope	0.16	Slope	0.16		
87V:							
Gilmore	60	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
Manchu	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	0.16
		Slope	0.16	Slope	0.16		
87X:							
Gilmore	90	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
88:							
Dystrogelepts	60	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
		Large stones content	0.02			Gravel content	0.07
						Large stones content	0.02
Turbels	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to permafrost	0.88
		Depth to permafrost	0.88	Depth to permafrost	0.88	Seepage	0.52
						Gravel content	0.14

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
89X:							
Fairbanks	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
Steese	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		
90:							
Fubar	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too sandy	1.00	Flooding	0.40	Gravel content	1.00
		Flooding	0.40				
Tanana, rare brief flooding	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
		Flooding	0.40	Flooding	0.40		
91:							
Aquic Cryofluvents	30	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Too sandy	0.50
		Too sandy	0.50				
Fluvaquentic aquorthels	30	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to permafrost	0.92
		Depth to permafrost	0.92	Depth to permafrost	0.92		
Typic Cryaquents, frequent flooding	30	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
211:							
Chatanika	55	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
Goldstream	35	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
212:							
Goldstream	50	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Histels	45	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00			Organic matter content	1.00
251:							
Tanana, rare brief flooding	60	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
		Flooding	0.40	Flooding	0.40		
Mosquito	20	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Depth to permafrost	0.92	Seepage	1.00
		Depth to permafrost	0.92	Flooding	0.40	Organic matter content	1.00
		Flooding	0.40			Depth to permafrost	0.92
361:							
Jarvis	55	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.41
Chena	35	Very limited:		Very limited:		Very limited:	
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	1.00
362:							
Piledriver	50	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.16
Fubar	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too sandy	1.00	Flooding	0.40	Gravel content	1.00
		Flooding	0.40				

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
363:							
Jarvis	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.41
Salchaket	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Flooding	0.40	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
		Flooding	0.40				
411A:							
Minto	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Chatanika	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
411B:							
Minto	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Chatanika	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
411C:							
Minto	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.04	Slope	0.04	Slope	0.04
Chatanika	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
		Slope	0.04	Slope	0.04	Slope	0.04
411D:							
Minto	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
Chatanika	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
		Slope	0.63	Slope	0.63	Slope	0.63

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
421D:							
Fairbanks	55	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
Steese	30	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
441D:							
Steese	55	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
Gilmore	25	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
441E:							
Steese	50	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		
Gilmore	40	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
441F:							
Gilmore	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
Steese	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		
441G:							
Gilmore	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
Steese	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
451G:							
Brigadier	40	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		
Ester	30	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to saturated zone	1.00
451X:							
Brigadier	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		
Ester	40	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to saturated zone	1.00
452:							
Gilmore	65	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
		Slope	0.01	Slope	0.01	Slope	0.01
Steese	33	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	0.01
		Slope	0.01	Slope	0.01		
492:							
Angel	55	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
		Slope	0.16	Slope	0.16	Slope	0.16
McCloud	40	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.16	Slope	0.16	Slope	0.16
611:							
Piledriver	50	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.16
Eielson	35	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
		Seepage	1.00				

Table 8. Sanitary Facilities: Landfill—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CL:							
Typic Cryorthents	80	Very limited:		Somewhat limited:		Very limited:	
		Seepage	1.00	Flooding	0.40	Too sandy	1.00
		Too sandy	1.00				
		Flooding	0.40				
Gv:							
Pits, gravel	100	Not rated		Not rated		Not rated	
Lf:							
Dumps, landfill	100	Not rated		Not rated		Not rated	
ME:							
Dumps, mine	100	Not rated		Not rated		Not rated	
Qu:							
Pits, quarry	100	Not rated		Not rated		Not rated	
Rv:							
Riverwash	100	Not rated		Not rated		Not rated	
UC:							
Typic Cryorthents, fill	45	Very limited:		Somewhat limited:		Very limited:	
		Seepage	1.00	Flooding	0.40	Too sandy	1.00
		Too sandy	1.00				
		Flooding	0.40				
Urban land	45	Not rated		Not rated		Not rated	
W:							
Water	100	Not rated		Not rated		Not rated	
WAH:							
Typic Cryaquents, frequent long ponding	30	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Histic Cryaquepts	25	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Terric Cryofibrists	20	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	0.50	Seepage	1.00	Too clayey	0.50

Table 9. Sanitary Facilities: Sewage Treatment

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
9:					
Histels	90	Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
				Seepage	0.50
13:					
Terric Cryofibrists	60	Very limited		Very limited	
		Slow water movement	1.00	Ponding	1.00
		Ponding	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
Liscum	30	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Organic matter content	1.00
		Slow water movement	0.46	Seepage	0.53
		Flooding	0.40	Flooding	0.40
14:					
Histels	60	Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
				Seepage	0.50
Terric Cryofibrists	27	Very limited		Very limited	
		Slow water movement	1.00	Ponding	1.00
		Ponding	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
20:					
Mosquito	85	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.92	Organic matter content	1.00
		Flooding	0.40	Depth to permafrost	0.92
21A:					
Goldstream	80	Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
				Seepage	0.53

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
21B:					
Goldstream	80	Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
				Slope	0.68
22:					
Tanacross	90	Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
		Flooding	0.40	Seepage	0.53
25:					
Tanana, rare brief flooding	75	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86
		Slow water movement	0.46	Seepage	0.53
		Flooding	0.40	Flooding	0.40
26:					
Histels	40	Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
				Seepage	0.50
Mosquito	40	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to permafrost	0.92	Depth to saturated zone	1.00
		Flooding	0.40	Organic matter content	1.00
				Depth to permafrost	0.92
31:					
Eielson	60	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	0.53
		Slow water movement	0.46		
Piledriver	30	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Flooding	0.40
		Flooding	0.40		

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
32:					
Salchaket	85	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Flooding	0.40
		Flooding	0.40		
35:					
North Pole	85	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Flooding	0.40
		Flooding	0.40		
36:					
Jarvis	75	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Flooding	0.40
		Flooding	0.40		
37:					
Chena	90	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage	1.00	Flooding	0.40
		Flooding	0.40		
39A:					
Nenana	90	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Filtering capacity	1.00	Seepage	1.00
		Seepage	1.00		
40A:					
Chatanika	75	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Seepage	0.50
40B:					
Chatanika	75	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Slope	0.68
				Seepage	0.50
40C:					
Chatanika	80	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99
		Slope	0.16	Seepage	0.50

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
40D:					
Chatanika	80	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Slope	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Seepage	0.50
41A:					
Minto	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Seepage	0.53
		Slow water movement	0.46		
41B:					
Minto	70	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Slope	0.68
		Slow water movement	0.46	Seepage	0.53
41C:					
Minto	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53
		Slope	0.04		
41D:					
Minto	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Slope	1.00	Seepage	0.53
		Slow water movement	0.46		
42B:					
Fairbanks	80	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Slope	0.68
				Seepage	0.53
42C:					
Fairbanks	80	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Slope	0.16	Seepage	0.53
42CG:					
Fairbanks	60	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Slope	0.16	Seepage	0.53
Fairbanks	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
42D:					
Fairbanks	70	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
42E:					
Fairbanks	80	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
44B:					
Steese	80	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	0.68
44C:					
Steese	80	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	1.00
		Slope	0.16		
44D:					
Steese	70	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Slow water movement	0.46		
44E:					
Steese	75	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
44F:					
Steese	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
45C:					
Gilmore	70	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Slope	1.00
		Slope	0.16	Seepage	1.00
45D:					
Gilmore	75	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
45E:					
Gilmore	70	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
45F:					
Gilmore	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
45G:					
Gilmore	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
46C:					
Eutrocryepts, hills	90	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.16	Organic matter content	1.00
				Seepage	0.50
46D:					
Eutrocryepts, hills	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	1.00	Organic matter content	1.00
				Seepage	0.50
48D:					
McCloud	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Organic matter content	1.00
				Seepage	0.53
48E:					
McCloud	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Organic matter content	1.00
				Seepage	0.53
48F:					
McCloud	80	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Organic matter content	1.00
				Seepage	0.53
49D:					
Angel	78	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
				Organic matter content	1.00
49E:					
Angel	80	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
				Organic matter content	1.00

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
49F:					
Angel	80	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
				Organic matter content	1.00
50G:					
Ester	75	Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
				Organic matter content	1.00
50X:					
Ester	75	Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
				Organic matter content	1.00
51B:					
Saulich	80	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Organic matter content	1.00
				Depth to permafrost	0.99
51C:					
Saulich	80	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Subsidence	1.00	Seepage	1.00
		Depth to permafrost	0.99	Depth to saturated zone	1.00
		Slope	0.16	Organic matter content	1.00
61:					
Piledriver	75	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Flooding	0.40
		Flooding	0.40		
62:					
Peede	70	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	0.50
Mosquito	25	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to permafrost	0.92	Depth to saturated zone	1.00
		Flooding	0.40	Organic matter content	1.00
				Depth to permafrost	0.92

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
63:					
Typic Cryaquents, occasional long flooding	45	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.99	Seepage	0.01
Tanana, rare brief flooding	35	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86
		Slow water movement	0.46	Seepage	0.53
		Flooding	0.40	Flooding	0.40
64:					
Eielson	50	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	0.53
		Slow water movement	0.46		
Tanana, rare brief flooding	35	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86
		Slow water movement	0.46	Seepage	0.53
		Flooding	0.40	Flooding	0.40
65:					
Fluvaquentic aquorthels	45	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.92
		Depth to permafrost	0.92	Seepage	0.50
Typic Cryaquents, occasional long flooding	45	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.99	Seepage	0.01
66:					
Eielson	80	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	0.53
		Slow water movement	0.46		

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
69:					
Typic Cryaquents, occasional long flooding	50	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.99	Seepage	0.01
Eielson	30	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	0.53
		Slow water movement	0.46		
70A:					
Volkmar	45	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46		
Richardson	40	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	0.53
		Slow water movement	0.46		
70B:					
Richardson	35	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Slope	0.68
		Slow water movement	0.46	Seepage	0.53
Volkmar	35	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Slope	0.68
71:					
North Pole	50	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Flooding	0.40
		Flooding	0.40		
Mosquito	30	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to permafrost	0.92	Depth to saturated zone	1.00
		Flooding	0.40	Organic matter content	1.00
				Depth to permafrost	0.92

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
71:					
Liscum	20	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Organic matter content	1.00
		Slow water movement	0.46	Seepage	0.53
		Flooding	0.40	Flooding	0.40
72F:					
Eutrocryepts, escarpments	90	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Organic matter content	1.00
				Seepage	0.50
81V:					
Chatanika	48	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Slope	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99
		Slope	0.16	Seepage	0.50
Saulich	48	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Subsidence	1.00	Seepage	1.00
		Depth to permafrost	0.99	Depth to saturated zone	1.00
		Slope	0.16	Organic matter content	1.00
81X:					
Chatanika	50	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Seepage	0.50
Saulich	45	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Organic matter content	1.00
82V:					
Gilmore	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Seepage	1.00
		Slope	0.04	Slope	1.00
Steese	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	1.00
		Slope	0.16		

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Septic tank absorption fields: Value	Sewage lagoons: Rating class and limiting features	Sewage lagoons: Value
82X:					
Gilmore	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
Steese	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
85:					
Eutrocryepts, hills	45	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.16	Organic matter content	1.00
				Seepage	0.50
Minto	45	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
		Slope	0.16		
86G:					
Brigadier	75	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
86V:					
Brigadier	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Seepage	1.00
		Slope	0.16	Slope	1.00
Manchu	40	Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Slope	1.00
		Slow water movement	0.46	Organic matter content	1.00
		Slope	0.16	Depth to soft bedrock	0.99
86X:					
Brigadier	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
Manchu	25	Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Slope	1.00
		Slow water movement	0.46	Organic matter content	1.00
		Slope	0.16	Depth to soft bedrock	0.99
87V:					
Gilmore	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Seepage	1.00
				Slope	1.00

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
87V:					
Manchu	35	Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Slope	1.00
		Slow water movement	0.46	Organic matter content	1.00
		Slope	0.16	Depth to soft bedrock	0.99
87X:					
Gilmore	90	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
88:					
Dystrogelepts	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Large stones content	0.02	Organic matter content	1.00
				Large stones content	0.31
Turbels	35	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Subsidence	1.00	Seepage	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.88	Depth to permafrost	0.88
89X:					
Fairbanks	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Steese	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
90:					
Fubar	45	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage	1.00	Flooding	0.40
		Depth to saturated zone	0.84	Depth to saturated zone	0.17
		Flooding	0.40		
Tanana, rare brief flooding	45	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86
		Slow water movement	0.46	Seepage	0.53
		Flooding	0.40	Flooding	0.40

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
91:					
Aquic Cryofluvents	30	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Organic matter content	1.00
				Slope	0.68
Fluvaquentic aquorthels	30	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.92
		Depth to permafrost	0.92	Slope	0.68
Typic Cryaquents, frequent flooding	30	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.99	Slope	0.68
				Seepage	0.01
211:					
Chatanika	55	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Seepage	0.50
Goldstream	35	Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
				Seepage	0.53
212:					
Goldstream	50	Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
				Seepage	0.53
Histels	45	Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
				Seepage	0.50
251:					
Tanana, rare brief flooding	60	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86
		Slow water movement	0.46	Seepage	0.53
		Flooding	0.40	Flooding	0.40

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
251:					
Mosquito	20	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to permafrost	0.92	Depth to saturated zone	1.00
		Flooding	0.40	Organic matter content	1.00
				Depth to permafrost	0.92
361:					
Jarvis	55	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Flooding	0.40
		Flooding	0.40		
Chena	35	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage	1.00	Flooding	0.40
		Flooding	0.40		
362:					
Piledriver	50	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Flooding	0.40
		Flooding	0.40		
Fubar	40	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage	1.00	Flooding	0.40
		Depth to saturated zone	0.84	Depth to saturated zone	0.17
		Flooding	0.40		
363:					
Jarvis	45	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Flooding	0.40
		Flooding	0.40		
Salchaket	45	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Flooding	0.40
		Flooding	0.40		
411A:					
Minto	45	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Seepage	0.53
		Slow water movement	0.46		
Chatanika	40	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Seepage	0.50

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
411B:					
Minto	40	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Slope	0.68
		Slow water movement	0.46	Seepage	0.53
Chatanika	35	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Slope	0.68
				Seepage	0.50
411C:					
Minto	45	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53
		Slope	0.04		
Chatanika	40	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99
		Slope	0.04	Seepage	0.50
411D:					
Minto	45	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Slope	1.00	Seepage	0.53
		Slow water movement	0.46		
Chatanika	40	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99
		Slope	0.63	Seepage	0.50
421D:					
Fairbanks	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Steese	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Slow water movement	0.46		

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
441D:					
Steese	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Slow water movement	0.46		
Gilmore	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
441E:					
Steese	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
Gilmore	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
441F:					
Gilmore	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
Steese	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
441G:					
Gilmore	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
Steese	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
451G:					
Brigadier	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
Ester	30	Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
				Organic matter content	1.00

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
451X:					
Brigadier	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
Ester	40	Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
				Organic matter content	1.00
452:					
Gilmore	65	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Seepage	1.00
		Slope	0.01	Slope	1.00
Steese	33	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	1.00
		Slope	0.01		
492:					
Angel	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Seepage	1.00
		Slope	0.16	Slope	1.00
				Organic matter content	1.00
McCloud	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slow water movement	0.46	Slope	1.00
		Slope	0.16	Organic matter content	1.00
				Seepage	0.53
611:					
Piledriver	50	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Flooding	0.40
		Flooding	0.40		
Eielson	35	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	0.53
		Slow water movement	0.46		
CL:					
Typic Cryorthents	80	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.50	Flooding	0.40
		Flooding	0.40		
Gv:					
Pits, gravel	100	Not rated		Not rated	

Table 9. Sanitary Facilities: Sewage Disposal—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
Lf:					
Dumps, landfill	100	Not rated		Not rated	
ME:					
Dumps, mine	100	Not rated		Not rated	
Qu:					
Pits, quarry	100	Not rated		Not rated	
Rv:					
Riverwash	100	Not rated		Not rated	
UC:					
Typic Cryorthents, fill	45	Very limited		Somewhat limited	
		Seepage	1.00	Seepage	0.50
		Slow water movement	0.50	Flooding	0.40
		Flooding	0.40		
Urban land	45	Not rated		Not rated	
W:					
Water	100	Not rated		Not rated	
WAH:					
Typic Cryaquents, frequent long ponding	30	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.99	Seepage	0.01
Histic Cryaquepts	25	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	0.50	Depth to saturated zone	1.00
				Organic matter content	1.00
Terric Cryofibrists	20	Very limited		Very limited	
		Slow water movement	1.00	Ponding	1.00
		Ponding	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00

Table 10. Construction Materials: Gravel and Sand

(This table gives soil suitability ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the potential limitation. Information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
9:					
Histels	90	Improbable:		Improbable:	
		Permafrost at less than 20 inches	0.00	Organic soil	0.00
		Organic soil	0.00	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	Permafrost at less than 20 inches	0.00
13:					
Terric Cryofibrists	60	Improbable:		Improbable:	
		Organic soil	0.00	Organic soil	0.00
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Liscum	30	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
14:					
Histels	60	Improbable:		Improbable:	
		Permafrost at less than 20 inches	0.00	Organic soil	0.00
		Organic soil	0.00	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	Permafrost at less than 20 inches	0.00
Terric Cryofibrists	27	Improbable:		Improbable:	
		Organic soil	0.00	Organic soil	0.00
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
20:					
Mosquito	85	Improbable:		Improbable:	
		No permafrost depth limitation	0.08	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.08
21A:					
Goldstream	80	Improbable:		Improbable:	
		No permafrost depth limitation	0.00	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.00
21B:					
Goldstream	80	Improbable:		Improbable:	
		No permafrost depth limitation	0.00	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.00
22:					
Tanacross	90	Improbable:		Improbable:	
		Depth to permafrost	0.00	Bottom layer not a source	0.00
		Bottom layer not a source	0.00	Depth to permafrost	0.00
25:					
Tanana, rare brief flood	75	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.14	No permafrost depth limitation	0.14

Table 10. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
26:					
Histels	40	Improbable:		Improbable:	
		Permafrost at less than 20 inches	0.00	Organic soil	0.00
		Organic soil	0.00	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	Permafrost at less than 20 inches	0.00
Mosquito	40	Improbable:		Improbable:	
		No permafrost depth limitation	0.08	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.08
31:					
Eielson	60	Gravel source		Improbable	
				Bottom layer not a source	0.00
Piledriver	30	Gravel source		Sand source	
32:					
Salchaket	85	Gravel source		Sand source	
35:					
North Pole	85	Gravel source		Sand source	
36:					
Jarvis	75	Gravel source		Sand source	
37:					
Chena	90	Gravel source		Sand source	
39A:					
Nenana	90	Gravel source		Sand source	
40A:					
Chatanika	75	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	Bottom layer not a source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.01
40B:					
Chatanika	75	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	Bottom layer not a source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.01
40C:					
Chatanika	80	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	Bottom layer not a source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.01
40D:					
Chatanika	80	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	Bottom layer not a source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.01
41A:					
Minto	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
41B:					
Minto	70	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00

Table 10. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
41C:					
Minto	60	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
41D:					
Minto	85	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
42B:					
Fairbanks	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
42C:					
Fairbanks	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
42CG:					
Fairbanks	60	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Fairbanks	30	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
42D:					
Fairbanks	70	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
42E:					
Fairbanks	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
44B:					
Steese	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
44C:					
Steese	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
44D:					
Steese	70	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
44E:					
Steese	75	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
44F:					
Steese	85	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
45C:					
Gilmore	70	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00

Table 10. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
45D:					
Gilmore	75	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
45E:					
Gilmore	70	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
45F:					
Gilmore	85	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
45G:					
Gilmore	85	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
46C:					
Eutrocryepts, hills	90	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
46D:					
Eutrocryepts, hills	90	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
48D:					
McCloud	85	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
48E:					
McCloud	85	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
48F:					
McCloud	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
49D:					
Angel	78	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
49E:					
Angel	80	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
49F:					
Angel	80	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
50G:					
Ester	75	Improbable		Improbable	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00
50X:					
Ester	75	Improbable		Improbable	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00

Table 10. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
51B:					
Saulich	80	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
		Bottom layer not a source	0.00	Permafrost at less than 20 inches	0.00
51C:					
Saulich	80	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
		Bottom layer not a source	0.00	Permafrost at less than 20 inches	0.00
61:					
Piledriver	75	Gravel source		Sand source	
62:					
Peede	70	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Mosquito	25	Improbable:		Improbable:	
		No permafrost depth limitation	0.08	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.08
63:					
Typic Cryaquents, occasional long flooding	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Tanana, rare brief flood	35	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.14	No permafrost depth limitation	0.14
64:					
Eielson	50	Gravel source		Improbable	
				Bottom layer not a source	0.00
Tanana, rare brief flood	35	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.14	No permafrost depth limitation	0.14
65:					
Fluvaquentic aquorthels	45	Improbable:		Improbable:	
		Permafrost at less than 20 inches	0.00	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	Permafrost at less than 20 inches	0.00
Typic Cryaquents, occasional long flooding	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
66:					
Eielson	80	Gravel source		Improbable	
				Bottom layer not a source	0.00
69:					
Typic Cryaquents, occasional long flooding	50	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Eielson	30	Gravel source		Improbable	
				Bottom layer not a source	0.00

Table 10. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
70A:					
Volkmar	45	Gravel source		Sand source	
Richardson	40	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
70B:					
Richardson	35	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Volkmar	35	Gravel source		Sand source	
71:					
North Pole	50	Improbable:		Sand source	
		Bottom layer not a source			
Mosquito	30	Improbable:		Improbable:	
		No permafrost depth limitation	0.08	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.08
Liscum	20	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
72F:					
Eutrocryepts, escarpment	90	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
81V:					
Chatanika	48	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	Bottom layer not a source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.01
Saulich	48	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
		Bottom layer not a source	0.00	Permafrost at less than 20 inches	0.00
81X:					
Chatanika	50	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	Bottom layer not a source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.01
Saulich	45	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
		Bottom layer not a source	0.00	Permafrost at less than 20 inches	0.00
82V:					
Gilmore	50	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Steese	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43

Table 10. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
82X:					
Gilmore	45	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Steese	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
85:					
Eutrocryepts, hills	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Minto	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
86G:					
Brigadier	75	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
86V:					
Brigadier	45	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Manchu	40	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
86X:					
Brigadier	60	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Manchu	25	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
87V:					
Gilmore	60	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Manchu	35	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
87X:					
Gilmore	90	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
88:					
Dystrogelepts	60	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Too many large rock fragments	0.00	Too many large rock fragments	0.00
Turbels	35	Improbable:		Improbable:	
		Permafrost at less than 20 inches	0.00	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	Permafrost at less than 20 inches	0.00
		Large rock fragments	0.57	Large rock fragments	0.57

Table 10. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
89X:					
Fairbanks	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Steese	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
90:					
Fubar	45	Gravel source		Sand source	
Tanana, rare brief flood	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.14	No permafrost depth limitation	0.14
91:					
Aquic Cryofluvents	30	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Fluvaquentic aquorthels	30	Improbable:		Improbable:	
		Permafrost at less than 20 inches	0.00	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	Permafrost at less than 20 inches	0.00
Typic Cryaquents, frequent flooding	30	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
211:					
Chatanika	55	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	Bottom layer not a source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.01
Goldstream	35	Improbable:		Improbable:	
		No permafrost depth limitation	0.00	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.00
212:					
Goldstream	50	Improbable:		Improbable:	
		No permafrost depth limitation	0.00	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.00
Histels	45	Improbable:		Improbable:	
		Permafrost at less than 20 inches	0.00	Organic soil	0.00
		Organic soil	0.00	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	Permafrost at less than 20 inches	0.00
251:					
Tanana, rare brief flood	60	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.14	No permafrost depth limitation	0.14
Mosquito	20	Improbable:		Improbable:	
		No permafrost depth limitation	0.08	Bottom layer a poor source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.08

Table 10. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
361:					
Jarvis	55	Gravel source		Sand source	
Chena	35	Gravel source		Sand source	
362:					
Piledriver	50	Gravel source		Sand source	
Fubar	40	Gravel source		Sand source	
363:					
Jarvis	45	Gravel source		Sand source	
Salchaket	45	Gravel source		Sand source	
411A:					
Minto	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Chatanika	40	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	Bottom layer not a source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.01
411B:					
Minto	40	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Chatanika	35	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	Bottom layer not a source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.01
411C:					
Minto	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Chatanika	40	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	Bottom layer not a source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.01
411D:					
Minto	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Chatanika	40	Improbable:		Improbable:	
		No permafrost depth limitation	0.01	Bottom layer not a source	0.00
		Bottom layer not a source	0.00	No permafrost depth limitation	0.01
421D:					
Fairbanks	55	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Steese	30	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43

Table 10. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
441D:					
Steese	55	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
Gilmore	25	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
441E:					
Steese	50	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
Gilmore	40	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
441F:					
Gilmore	45	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Steese	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
441G:					
Gilmore	45	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Steese	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
451G:					
Brigadier	40	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Ester	30	Improbable		Improbable	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00
451X:					
Brigadier	45	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Ester	40	Improbable		Improbable	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00
452:					
Gilmore	65	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Steese	33	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43

Table 10. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
492:					
Angel	55	Improbable:		Impriobable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
McCloud	40	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
		Large rock fragments	0.43	Large rock fragments	0.43
611:					
Piledriver	50	Gravel source		Sand source	
Eielson	35	Gravel source		Improbable	
				Bottom layer not a source	0.00
CL:					
Typic Cryorthents	80	Gravel source		Sand source	
Gv:					
Pits, gravel	100	Not rated		Not rated	
Lf:					
Dumps, landfill	100	Not rated		Not rated	
ME:					
Dumps, mine	100	Not rated		Not rated	
Qu:					
Pits, quarry	100	Not rated		Not rated	
Rv:					
Riverwash	100	Not rated		Not rated	
UC:					
Typic Cryorthents, fill	45	Gravel source		Sand source	
Urban land	45	Not rated		Not rated	
W:					
Water	100	Not rated		Not rated	
WAH:					
Typic Cryaquents, frequent long ponding	30	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Histic Cryaquepts	25	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00
Terric Cryofibrists	20	Improbable:		Improbable:	
		Organic soil	0.00	Organic soil	0.00
		Bottom layer not a source	0.00	Bottom layer a poor source	0.00

Table 11. Construction Materials: Topsoil and Roadfill

(This table gives soil suitability ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the potential limitation. Information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
9:					
Histels	90	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Too acid	0.18		
13:					
Terric Cryofibrists	60	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
				Low strength	0.00
Liscum	30	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
14:					
Histels	60	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Too acid	0.18		
Terric Cryofibrists	27	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
				Low strength	0.00
20:					
Mosquito	85	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
21A:					
Goldstream	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Too acid	0.18		
21B:					
Goldstream	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Too acid	0.18		
22:					
Tanacross	90	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Too acid	0.32		
25:					
Tanana, rare brief flooding	75	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00

Table 11. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Histels	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Too acid	0.18		
Mosquito	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
31:					
Eielson	60	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Piledriver	30	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
32:					
Salchaket	85	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				Moderate frost action (check lower layers)	0.50
35:					
North Pole	85	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
36:					
Jarvis	75	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				Moderate frost action (check lower layers)	0.50
37:					
Chena	90	Poor:		Good source	
		Too sandy	0.00		
		Rock fragment content	0.00		
39A:					
Nenana	90	Poor:		Poor:	
		Rock fragment content	0.00	High frost action (check lower layers)	0.00
40A:					
Chatanika	75	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
40B:					
Chatanika	75	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
40C:					
Chatanika	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.84	High frost action (check lower layers)	0.00

Table 11. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
40D:					
Chatanika	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.00	High frost action (check lower layers)	0.00
41A:					
Minto	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
41B:					
Minto	70	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
41C:					
Minto	60	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.96	High frost action (check lower layers)	0.00
41D:					
Minto	85	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.00	High frost action (check lower layers)	0.00
				Slope	0.98
42B:					
Fairbanks	80	Good source		Poor:	
				High frost action (check lower layers)	0.00
42C:					
Fairbanks	80	Fair:		Poor:	
		Slope	0.84	High frost action (check lower layers)	0.00
42CG:					
Fairbanks	60	Fair:		Poor:	
		Slope	0.84	High frost action (check lower layers)	0.00
Fairbanks	30	Poor:		Poor:	
		Slope	0.00	Slope	0.00
				High frost action (check lower layers)	0.00
42D:					
Fairbanks	70	Poor:		Poor:	
		Slope	0.00	High frost action (check lower layers)	0.00
42E:					
Fairbanks	80	Poor:		Poor:	
		Slope	0.00	High frost action (check lower layers)	0.00
				Slope	0.00
44B:					
Steese	80	Fair:		Poor:	
		Depth to bedrock	0.79	Depth to bedrock	0.00
				Moderate frost action (check lower layers)	0.50

Table 11. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
44C:					
Steese	80	Fair:		Poor:	
		Depth to bedrock	0.79	Depth to bedrock	0.00
		Slope	0.84	Moderate frost action (check lower layers)	0.50
44D:					
Steese	70	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Moderate frost action (check lower layers)	0.50
44E:					
Steese	75	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Slope	0.00
				Moderate frost action (check lower layers)	0.50
44F:					
Steese	85	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Slope	0.00
				Moderate frost action (check lower layers)	0.50
45C:					
Gilmore	70	Poor:		Poor:	
		Rock fragment content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
		Slope	0.84		
45D:					
Gilmore	75	Poor:		Poor:	
		Rock fragment content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
		Slope	0.00	Slope	0.98
45E:					
Gilmore	70	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
45F:					
Gilmore	85	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
45G:					
Gilmore	85	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50

Table 11. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
46C:					
Eutrocryepts, hills	90	Fair:		Poor:	
		Slope	0.84	High frost action (check lower layers)	0.00
46D:					
Eutrocryepts, hills	90	Poor:		Poor:	
		Slope	0.00	High frost action (check lower layers)	0.00
48D:					
McCloud	85	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.44	Moderate frost action (check lower layers)	0.50
				Slope	0.98
48E:					
McCloud	85	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.44	Slope	0.00
				Moderate frost action (check lower layers)	0.50
48F:					
McCloud	80	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.44	Slope	0.00
				Moderate frost action (check lower layers)	0.50
49D:					
Angel	78	Poor:		Poor:	
		Depth to dense layer	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Cobble content	0.18
		Slope	0.00	Moderate frost action (check lower layers)	0.50
		Depth to bedrock	0.01	Slope	0.98
49E:					
Angel	80	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to dense layer	0.00	Slope	0.00
		Rock fragment content	0.00	Cobble content	0.18
		Depth to bedrock	0.01	Moderate frost action (check lower layers)	0.50
49F:					
Angel	80	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to dense layer	0.00	Slope	0.00
		Rock fragment content	0.00	Cobble content	0.18
		Depth to bedrock	0.01	Moderate frost action (check lower layers)	0.50
50G:					
Ester	75	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	Slope	0.00
		Depth to bedrock	0.00	High frost action (check lower layers)	0.00
		Too acid	0.18		

Table 11. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
50X:					
Ester	75	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Depth to bedrock	0.00	Slope	0.00
		Too acid	0.18		
51B:					
Saulich	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Too acid	0.95		
51C:					
Saulich	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Slope	0.84		
		Too acid	0.95		
61:					
Piledriver	75	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
62:					
Peede	70	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Mosquito	25	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
63:					
Typic Cryaquents, occasional long flooding	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Tanana, rare brief flooding	35	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
64:					
Eielson	50	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Tanana, rare brief flooding	35	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00

Table 11. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
65:					
Fluvaquentic aquorthels	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Typic Cryaquents, occasional long flooding	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
66:					
Eielson	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
69:					
Typic Cryaquents, occasional long flooding	50	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Eielson	30	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
70A:					
Volkmar	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Not hard to reclaim	0.99	High frost action (check lower layers)	0.00
Richardson	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
70B:					
Richardson	35	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Volkmar	35	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Not hard to reclaim	0.99	High frost action (check lower layers)	0.00
71:					
North Pole	50	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Mosquito	30	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
Liscum	20	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
72F:					
Eutrocryepts, escarpments	90	Poor:		Poor:	
		Slope	0.00	High frost action (check lower layers)	0.00

Table 11. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
81V:					
Chatanika	48	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.84	High frost action (check lower layers)	0.00
Saulich	48	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Slope	0.84		
		Too acid	0.95		
81X:					
Chatanika	50	Poor:		Poor:	
		Slope	0.00	Depth to saturated zone	0.00
		Depth to saturated zone	0.00	High frost action (check lower layers)	0.00
				Slope	0.92
Saulich	45	Poor:		Poor:	
		Slope	0.00	Depth to saturated zone	0.00
		Depth to saturated zone	0.00	High frost action (check lower layers)	0.00
		Content of organic matter	0.00	Slope	0.92
		Too acid	0.95		
82V:					
Gilmore	50	Poor:		Poor:	
		Rock fragment content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
		Slope	0.96		
Steese	45	Fair:		Poor:	
		Depth to bedrock	0.79	Depth to bedrock	0.00
		Slope	0.84	Moderate frost action (check lower layers)	0.50
82X:					
Gilmore	45	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
Steese	45	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Slope	0.00
				Moderate frost action (check lower layers)	0.50
85:					
Eutrocryepts, hills	45	Fair:		Poor:	
		Slope	0.84	High frost action (check lower layers)	0.00
Minto	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.84	High frost action (check lower layers)	0.00

Table 11. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
86G:					
Brigadier	75	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Content of organic matter	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
		Too acid	0.24		
86V:					
Brigadier	45	Poor:		Poor:	
		Content of organic matter	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
		Too acid	0.24		
		Slope	0.84		
Manchu	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to bedrock	0.00
		Slope	0.84	Depth to saturated zone	0.00
				Moderate frost action (check lower layers)	0.50
86X:					
Brigadier	60	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Content of organic matter	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
		Too acid	0.24		
Manchu	25	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to bedrock	0.00
		Slope	0.84	Depth to saturated zone	0.00
				Moderate frost action (check lower layers)	0.50
87V:					
Gilmore	60	Poor:		Poor:	
		Rock fragment content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
Manchu	35	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to bedrock	0.00
		Slope	0.84	Depth to saturated zone	0.00
				Moderate frost action (check lower layers)	0.50
87X:					
Gilmore	90	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50

Table 11. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
88:					
Dystrogelepts	60	Poor:		Poor:	
		Rock fragment content	0.00	Depth to bedrock	0.00
		Slope	0.00	Moderate frost action (check lower layers)	0.50
		Depth to bedrock	0.08	Slope	0.50
		Too acid	0.99	Cobble content	0.98
Turbels	35	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Rock fragment content	0.00	High frost action (check lower layers)	0.00
		Slope	0.00	Slope	0.50
		Too acid	0.95		
89X:					
Fairbanks	45	Poor:		Poor:	
				High frost action (check lower layers)	0.00
				Slope	0.00
Steese	45	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Slope	0.00
				Moderate frost action (check lower layers)	0.50
90:					
Fubar	45	Poor:		Good source	
		Rock fragment content	0.00		
		Too sandy	0.00		
Tanana, rare brief flooding	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
91:					
Aquic Cryofluvents	30	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Fluvaquentic aquorthels	30	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Typic Cryaquents, frequent flooding	30	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
211:					
Chatanika	55	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Goldstream	35	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Too acid	0.18		

Table 11. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
212:					
Goldstream	50	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Too acid	0.18		
Histels	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Too acid	0.18		
251:					
Tanana, rare brief flooding	60	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Mosquito	20	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
361:					
Jarvis	55	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				Moderate frost action (check lower layers)	0.50
Chena	35	Poor:		Good source	
		Too sandy	0.00		
		Rock fragment content	0.00		
362:					
Piledriver	50	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Fubar	40	Poor:		Good source	
		Rock fragment content	0.00		
		Too sandy	0.00		
363:					
Jarvis	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				Moderate frost action (check lower layers)	0.50
Salchaket	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				Moderate frost action (check lower layers)	0.50
411A:					
Minto	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Chatanika	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00

Table 11. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
411B:					
Minto	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Chatanika	35	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
411C:					
Minto	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.00	High frost action (check lower layers)	0.00
Chatanika	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.00	High frost action (check lower layers)	0.00
411D:					
Minto	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.00	High frost action (check lower layers)	0.00
Chatanika	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.00	High frost action (check lower layers)	0.00
421D:					
Fairbanks	55	Poor:		Poor:	
		Slope	0.00	High frost action (check lower layers)	0.00
Steese	30	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Moderate frost action (check lower layers)	0.50
441D:					
Steese	55	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Moderate frost action (check lower layers)	0.50
Gilmore	25	Poor:		Poor:	
		Rock fragment content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
		Slope	0.00		
441E:					
Steese	50	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Slope	0.00
				Moderate frost action (check lower layers)	0.50
Gilmore	40	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50

Table 11. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
441F:					
Gilmore	45	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
Steese	45	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Slope	0.00
				Moderate frost action (check lower layers)	0.50
441G:					
Gilmore	45	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
Steese	45	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Slope	0.00
				Moderate frost action (check lower layers)	0.50
451G:					
Brigadier	40	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Content of organic matter	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
		Too acid	0.24		
Ester	30	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	Slope	0.00
		Depth to bedrock	0.00	High frost action (check lower layers)	0.00
		Too acid	0.18		
451X:					
Brigadier	45	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Content of organic matter	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
		Too acid	0.24		
Ester	40	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Depth to bedrock	0.00	Slope	0.00
		Too acid	0.18		

Table 11. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
452:					
Gilmore	65	Poor:		Poor:	
		Rock fragment content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
Steese	33	Fair:		Poor:	
		Depth to bedrock	0.79	Depth to bedrock	0.00
				Moderate frost action (check lower layers)	0.50
492:					
Angel	55	Poor:		Poor:	
		Depth to dense layer	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Cobble content	0.18
		Depth to bedrock	0.01	Moderate frost action (check lower layers)	0.50
		Slope	0.84		
McCloud	40	Fair:		Poor:	
		Depth to bedrock	0.44	Depth to bedrock	0.00
		Slope	0.84	Moderate frost action (check lower layers)	0.50
611:					
Piledriver	50	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Eielson	35	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
CL:					
Typic Cryorthents	80	Good source		Fair:	
				Moderate frost action (check lower layers)	0.50
Gv:					
Pits, gravel	100	Not rated		Not rated	
Lf:					
Dumps, landfill	100	Not rated		Not rated	
ME:					
Dumps, mine	100	Not rated		Not rated	
Qu:					
Pits, quarry	100	Not rated		Not rated	
Rv:					
Riverwash	100	Not rated		Not rated	
UC:					
Typic Cryorthents, fil	45	Poor:		Fair:	
		Rock fragment content	0.00	Moderate frost action (check lower layers)	0.50
Urban land	45	Not rated		Not rated	

Table 11. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
W:					
Water	100	Not rated		Not rated	
WAH:					
Typic Cryaquents, frequent long ponding	30	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Histic Cryaquepts	25	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Terric Cryofibrists	20	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
				Low strength	0.00

Table 12. Engineering Index Properties

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas-ticity index
			Unified	AASHTO		
	In.				Pct.	
9:						
Histels	0-12	Peat	PT	A-8	0-0	NP
	12-17	Mucky peat	PT	A-8	0-0	NP
	17-26	Permanently frozen mucky peat			---	---
	26-72	Permanently frozen material			---	---
13:						
Terric Cryofibrists	0-28	Peat	PT	A-8	---	---
	28-40	Muck	PT	A-8	---	---
	40-72	Silt loam, very fine sandy loam, silty clay loam	ML, CL	A-4, A-7, A-6	30-45	NP-30
Liscum	0-3	Peat	PT	A-8	---	---
	3-11	Muck	PT	A-8	---	---
	11-15	Silt loam, mucky silt loam	ML, OL	A-5, A-4	30-50	NP-10
	15-70	Stratified silt loam to loamy fine sand	CL, ML, CL-ML	A-4	0-30	NP-10
	70-72	Very gravelly sandy loam	GC-GM, GP-GM, GM	A-2, A-1	0-15	NP-5
14:						
Histels	0-12	Peat	PT	A-8	0-0	NP
	12-17	Mucky peat	PT	A-8	0-0	NP
	17-26	Permanently frozen mucky peat			---	---
	26-72	Permanently frozen material			---	---
Terric Cryofibrists	0-28	Peat	PT	A-8	---	---
	28-40	Muck	PT	A-8	---	---
	40-72	Silt loam, very fine sandy loam, silty clay loam	ML, CL	A-4, A-7, A-6	30-45	NP-30
20:						
Mosquito	0-18	Peat	PT	A-8	---	---
	18-24	Silt loam, stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-5
	24-72	Permanently frozen material			---	---
21A:						
Goldstream	0-9	Peat, mucky peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-5, A-4	30-50	NP-10
	12-20	Silt loam	ML	A-4	25-35	NP-10
	20-72	Permanently frozen material			---	---
21B:						
Goldstream	0-9	Peat, mucky peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-5, A-4	30-50	NP-10
	12-20	Silt loam	ML	A-4	25-35	NP-10
	20-72	Permanently frozen material			---	---
22:						
Tanacross	0-9	Peat	PT	A-8	---	---
	9-11	Mucky silt loam	OL, ML	A-4	30-40	NP-10
	11-17	Stratified fine sandy loam to silt loam	ML	A-4	0-40	NP-10
	17-72	Permanently frozen material			---	---

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas-ticity index
			Unified	AASHTO		
	In.				Pct.	
25:						
Tanana, rare brief flooding	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-6	Silt loam, mucky silt loam	OL, ML	A-4	30-40	NP-10
	6-25	Stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-10
	25-72	Permanently frozen material			---	---
26:						
Histels	0-12	Peat	PT	A-8	0-0	NP
	12-17	Mucky peat	PT	A-8	0-0	NP
	17-26	Permanently frozen mucky peat			---	---
	26-72	Permanently frozen material			---	---
Mosquito	0-18	Peat	PT	A-8	---	---
	18-24	Silt loam, stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-5
	24-72	Permanently frozen material			---	---
31:						
Eielson	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-49	Very fine sandy loam	ML	A-4	25-30	NP-5
	49-71	Stratified silt loam to fine sand	SM, ML	A-4	25-30	NP-5
	71-72	Gravelly sand, extremely gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
Piledriver	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-15	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	15-33	Stratified sand to fine sand to very fine sandy loam	CL-ML, SM	A-2, A-4	20-25	NP-5
	33-72	Sand, very gravelly sand	SM, SW, SP-SM	A-2, A-1	0-0	NP
32:						
Salchaket	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-24	Very fine sandy loam	ML	A-4	25-30	NP-5
	24-45	Stratified silt loam to fine sand	SM, ML	A-4	25-30	NP-5
	45-72	Very gravelly sand	SP-SM, GP-GM	A-1	0-0	NP
35:						
North Pole	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-4	Highly decomposed plant material	PT	A-8	---	---
	4-39	Stratified fine sand to silt loam	SM, CL-ML	A-4	0-30	NP-10
	39-72	Gravelly coarse sand, extremely gravelly sand, very gravelly sand	SM, SP	A-1	0-0	NP
36:						
Jarvis	0-3	Moderately decomposed plant material	PT	A-8	---	---
	3-6	Stratified fine sand to silt loam, very fine sandy loam	SM, ML	A-4	25-30	NP-5
	6-24	Stratified sand to fine sand to very fine sandy loam	SC-SM, SM	A-4, A-2	20-25	NP-5
	24-72	Very gravelly sand	GP, SP-SM	A-1	0-0	NP
37:						
Chena	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-9	Fine sand, fine sandy loam, stratified fine sand to silt loam	SM, ML	A-4	25-30	NP-5
	9-72	Coarse sand, sand, very gravelly sand	GP, SM, SP-SM	A-1	0-0	NP

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas-ticity index
			Unified	AASHTO		
	In.				Pct.	
39A:						
Nenana	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-15	Silt, silt loam	ML	A-4	25-35	NP-10
	15-21	Gravelly silt, gravelly silt loam	GM, ML	A-4	25-35	NP-10
	21-72	Very gravelly sand, extremely gravelly sand	SP-SM, GW	A-1	0-0	NP
40A:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
40B:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
40C:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
40D:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
41A:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
41B:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
41C:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
41D:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
42B:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas-ticity index
			Unified	AASHTO		
	In.				Pct.	
42C:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
42CG:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
42D:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
42E:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
44B:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
44C:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
44D:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
44E:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas-ticity index
			Unified	AASHTO		
	In.				Pct.	
44F:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
45C:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
45D:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
45E:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
45F:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
45G:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
46C:						
Eutrocryepts, hills	0-2	Mucky peat, peat	PT	A-8	---	---
	2-31	Very fine sandy loam, silt loam	ML	A-4	25-35	NP-5
	31-72	Gravelly loamy sand, gravelly sandy loam, stratified silt loam to fine sand	SM, ML	A-2	0-35	NP-5
46D:						
Eutrocryepts, hills	0-2	Mucky peat, peat	PT	A-8	---	---
	2-31	Very fine sandy loam, silt loam	ML	A-4	25-35	NP-5
	31-72	Gravelly loamy sand, gravelly sandy loam, stratified silt loam to fine sand	SM, ML	A-2	0-35	NP-5

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas-ticity index
			Unified	AASHTO		
	In.				Pct.	
48D:						
McCloud	0-3	Mucky peat, peat	PT	A-8	---	---
	3-20	Silt loam	ML	A-4	25-35	NP-10
	20-29	Loam, silt loam	ML	A-4	25-35	NP-10
	29-72	Weathered bedrock			---	---
48E:						
McCloud	0-3	Mucky peat, peat	PT	A-8	---	---
	3-20	Silt loam	ML	A-4	25-35	NP-10
	20-29	Loam, silt loam	ML	A-4	25-35	NP-10
	29-72	Weathered bedrock			---	---
48F:						
McCloud	0-3	Mucky peat, peat	PT	A-8	---	---
	3-20	Silt loam	ML	A-4	25-35	NP-10
	20-29	Loam, silt loam	ML	A-4	25-35	NP-10
	29-72	Weathered bedrock			---	---
49D:						
Angel	0-2	Mucky peat, peat	PT	A-8	---	---
	2-4	Silt loam	ML	A-4	25-35	2-5
	4-8	Gravelly sandy loam, silt loam	SM, ML	A-2, A-4	5-35	NP-5
	8-22	Extremely cobbly sandy loam, very gravelly loamy coarse sand, very gravelly sandy loam, very cobbly sandy loam	GW-GM, SM	A-1, A-2	0-15	NP-2
	22-72	Extremely cobbly loamy sand, extremely gravelly sand, weathered bedrock	GM, GP, GW-GM	A-1	0-14	NP
49E:						
Angel	0-2	Mucky peat, peat	PT	A-8	---	---
	2-4	Silt loam	ML	A-4	25-35	2-5
	4-8	Gravelly sandy loam, silt loam	SM, ML	A-2, A-4	5-35	NP-5
	8-22	Extremely cobbly sandy loam, very gravelly loamy coarse sand, very gravelly sandy loam, very cobbly sandy loam	GW-GM, SM	A-1, A-2	0-15	NP-2
	22-72	Extremely cobbly loamy sand, extremely gravelly sand, weathered bedrock	GM, GP, GW-GM	A-1	0-14	NP
49F:						
Angel	0-2	Mucky peat, peat	PT	A-8	---	---
	2-4	Silt loam	ML	A-4	25-35	2-5
	4-8	Gravelly sandy loam, silt loam	SM, ML	A-2, A-4	5-35	NP-5
	8-22	Extremely cobbly sandy loam, very gravelly loamy coarse sand, very gravelly sandy loam, very cobbly sandy loam	GW-GM, SM	A-1, A-2	0-15	NP-2
	22-72	Extremely cobbly loamy sand, extremely gravelly sand, weathered bedrock	GM, GP, GW-GM	A-1	0-14	NP
50G:						
Ester	0-9	Peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-4	30-40	NP-5
	12-21	Permanently frozen very channery silt loam	GM	A-2, A-4	---	---
	21-72	Permanently frozen weathered bedrock			---	---

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas-ticity index
			Unified	AASHTO		
	In.				Pct.	
50X:						
Ester	0-9	Peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-4	30-40	NP-5
	12-21	Permanently frozen very channery silt loam	GM	A-2, A-4	---	---
	21-72	Permanently frozen weathered bedrock			---	---
51B:						
Saulich	0-16	Mucky peat, peat	PT	A-8	---	---
	16-21	Silt loam, mucky silt loam	ML, OL	A-4	30-40	NP-10
	21-72	Permanently frozen material			---	---
51C:						
Saulich	0-16	Mucky peat, peat	PT	A-8	---	---
	16-21	Silt loam, mucky silt loam	ML, OL	A-4	30-40	NP-10
	21-72	Permanently frozen material			---	---
61:						
Piledriver	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-15	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	15-33	Stratified sand to fine sand to very fine sandy loam	CL-ML, SM	A-2, A-4	20-25	NP-5
	33-72	Sand, very gravelly sand	SM, SW, SP-SM	A-2, A-1	0-0	NP
62:						
Peede	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-72	Silt loam	ML	A-4	20-35	NP-10
Mosquito	0-18	Peat	PT	A-8	---	---
	18-24	Silt loam, stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-5
	24-72	Permanently frozen material			---	---
63:						
Typic Cryaquents, occasional long flooding	0-6	Moderately decomposed plant material	PT	A-8	---	---
	6-72	Silt loam	ML	A-4	25-40	NP-10
Tanana, rare brief flooding	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-6	Silt loam, mucky silt loam	OL, ML	A-4	30-40	NP-10
	6-25	Stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-10
	25-72	Permanently frozen material			---	---
64:						
Eielson	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-49	Very fine sandy loam	ML	A-4	25-30	NP-5
	49-71	Stratified silt loam to fine sand	SM, ML	A-4	25-30	NP-5
	71-72	Gravelly sand, extremely gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
Tanana, rare brief flooding	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-6	Silt loam, mucky silt loam	OL, ML	A-4	30-40	NP-10
	6-25	Stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-10
	25-72	Permanently frozen material			---	---

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas-ticity index
			Unified	AASHTO		
	In.				Pct.	
65:						
Fluvaquentic aquorthels --	0-4	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	4-24	Stratified silt loam to very fine sandy loam to highly decomposed plant material	OL, ML	A-4	30-40	NP-10
	24-72	Permanently frozen stratified silt loam to very fine sandy loam to moderately decomposed plant material			---	---
Typic Cryaquents, occasional long flooding ----------	0-6	Moderately decomposed plant material	PT	A-8	---	---
	6-72	Silt loam	ML	A-4	25-40	NP-10
66:						
Eielson ----------	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-49	Very fine sandy loam	ML	A-4	25-30	NP-5
	49-71	Stratified silt loam to fine sand	SM, ML	A-4	25-30	NP-5
	71-72	Gravelly sand, extremely gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
69:						
Typic Cryaquents, occasional long flooding ----------	0-6	Moderately decomposed plant material	PT	A-8	---	---
	6-72	Silt loam	ML	A-4	25-40	NP-10
Eielson ----------	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-49	Very fine sandy loam	ML	A-4	25-30	NP-5
	49-71	Stratified silt loam to fine sand	SM, ML	A-4	25-30	NP-5
	71-72	Gravelly sand, extremely gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
70A:						
Volkmar ----------	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-10	Silt loam, very fine sandy loam	SM, ML	A-4	30-40	NP-10
	10-30	Silt loam, very fine sandy loam	SM, ML	A-4	30-40	NP-10
	30-72	Extremely gravelly sand, very gravelly coarse sand	SW-SM, GP, SP-SM	A-1	0-0	NP
Richardson ----------	0-1	Moderately decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	1-20	Very fine sandy loam, silt loam	ML	A-4	25-40	NP-10
	20-59	Gravelly sandy loam, stratified silt loam to sandy loam, very fine sandy loam, silt loam	SM, ML	A-4	25-40	NP-10
	59-72	Very gravelly coarse sand, extremely gravelly sand, sand, loamy sand	GP, SM	A-1, A-2	0-0	NP

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas-ticity index
			Unified	AASHTO		
	In.				Pct.	
70B:						
Richardson	0-1	Moderately decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	1-20	Very fine sandy loam, silt loam	ML	A-4	25-40	NP-10
	20-59	Gravelly sandy loam, stratified silt loam to sandy loam, very fine sandy loam, silt loam	SM, ML	A-4	25-40	NP-10
	59-72	Very gravelly coarse sand, extremely gravelly sand, sand, loamy sand	GP, SM	A-1, A-2	0-0	NP
Volkmar	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-10	Silt loam, very fine sandy loam	SM, ML	A-4	30-40	NP-10
	10-30	Silt loam, very fine sandy loam	SM, ML	A-4	30-40	NP-10
	30-72	Extremely gravelly sand, very gravelly coarse sand	SW-SM, GP, SP-SM	A-1	0-0	NP
71:						
North Pole	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-4	Highly decomposed plant material	PT	A-8	---	---
	4-39	Stratified fine sand to silt loam	SM, CL-ML	A-4	0-30	NP-10
	39-72	Gravelly coarse sand, extremely gravelly sand, very gravelly sand	SM, SP	A-1	0-0	NP
Mosquito	0-18	Peat	PT	A-8	---	---
	18-24	Silt loam, stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-5
	24-72	Permanently frozen material			---	---
Liscum	0-3	Peat	PT	A-8	---	---
	3-11	Muck	PT	A-8	---	---
	11-15	Silt loam, mucky silt loam	ML, OL	A-5, A-4	30-50	NP-10
	15-70	Stratified silt loam to loamy fine sand	CL, ML, CL-ML	A-4	0-30	NP-10
	70-72	Very gravelly sandy loam	GC-GM, GP-GM, GM	A-2, A-1	0-15	NP-5
72F:						
Eutrocryepts, escarpments	0-2	Mucky peat, peat	PT	A-8	---	---
	2-31	Very fine sandy loam, silt loam	ML	A-4	25-35	NP-5
	31-72	Gravelly loamy sand, gravelly sandy loam, stratified silt loam to fine sand	SM, ML	A-2	0-35	NP-5
81V:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
Saulich	0-16	Mucky peat, peat	PT	A-8	---	---
	16-21	Silt loam, mucky silt loam	ML, OL	A-4	30-40	NP-10
	21-72	Permanently frozen material			---	---

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Liquid limit	Plas-ticity index
	In.				Pct.	
81X:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
Saulich	0-16	Mucky peat, peat	PT	A-8	---	---
	16-21	Silt loam, mucky silt loam	ML, OL	A-4	30-40	NP-10
	21-72	Permanently frozen material			---	---
82V:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
82X:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
85:						
Eutrocryepts, hills	0-2	Mucky peat, peat	PT	A-8	---	---
	2-31	Very fine sandy loam, silt loam	ML	A-4	25-35	NP-5
	31-72	Gravelly loamy sand, gravelly sandy loam, stratified silt loam to fine sand	SM, ML	A-2	0-35	NP-5
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
86G:						
Brigadier	0-6	Slightly decomposed plant material	PT	A-8	0-0	NP
	6-11	Silt loam	OL, ML	A-4	30-40	NP-10
	11-16	Silt loam	ML	A-4	25-35	NP-10
	16-20	Very gravelly loam, very channery sandy loam	GC-GM, GP-GM, GM	A-1, A-4, A-2	0-15	NP-5
	20-72	Weathered bedrock			---	---

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas-ticity index
			Unified	AASHTO		
	In.				Pct.	
86V:						
Brigadier	0-6	Slightly decomposed plant material	PT	A-8	0-0	NP
	6-11	Silt loam	OL, ML	A-4	30-40	NP-10
	11-16	Silt loam	ML	A-4	25-35	NP-10
	16-20	Very gravelly loam, very channery sandy loam	GC-GM, GP-GM, GM	A-1, A-4, A-2	0-15	NP-5
	20-72	Weathered bedrock			---	---
Manchu	0-7	Peat	PT	A-8	---	---
	7-9	Mucky silt loam, silt loam	ML	A-4	25-35	NP-10
	9-28	Silt, silt loam	ML	A-4	25-35	NP-10
	28-39	Extremely channery loam, very channery silt loam	GM	A-4, A-2	25-35	NP-10
	39-72	Weathered bedrock			---	---
86X:						
Brigadier	0-6	Slightly decomposed plant material	PT	A-8	0-0	NP
	6-11	Silt loam	OL, ML	A-4	30-40	NP-10
	11-16	Silt loam	ML	A-4	25-35	NP-10
	16-20	Very gravelly loam, very channery sandy loam	GC-GM, GP-GM, GM	A-1, A-4, A-2	0-15	NP-5
	20-72	Weathered bedrock			---	---
Manchu	0-7	Peat	PT	A-8	---	---
	7-9	Mucky silt loam, silt loam	ML	A-4	25-35	NP-10
	9-28	Silt, silt loam	ML	A-4	25-35	NP-10
	28-39	Extremely channery loam, very channery silt loam	GM	A-4, A-2	25-35	NP-10
	39-72	Weathered bedrock			---	---
87V:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
Manchu	0-7	Peat	PT	A-8	---	---
	7-9	Mucky silt loam, silt loam	ML	A-4	25-35	NP-10
	9-28	Silt, silt loam	ML	A-4	25-35	NP-10
	28-39	Extremely channery loam, very channery silt loam	GM	A-4, A-2	25-35	NP-10
	39-72	Weathered bedrock			---	---
87X:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
88:						
Dystrogelepts	0-2	Peat, mucky peat	PT	A-8	---	---
	2-7	Silt loam, gravelly sandy loam	SM, ML	A-2, A-4	5-40	NP-5
	7-14	Cobbly silt loam, cobbly sandy loam	GM, ML	A-4	5-35	NP-5
	14-24	Extremely stony loam, extremely channery silt loam	GW-GM, ML, GM	A-4, A-1	20-35	NP-5
	24-72	Bedrock			---	---

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Liquid limit	Plas-ticity index
	In.				Pct.	
88:						
Turbels	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-13	Gravelly silt loam, cobbly silt loam	CL, ML	A-4	15-30	NP-10
	13-24	Very cobbly silt loam, gravelly silt loam, very gravelly silt loam	CL, GM	A-1, A-4	15-30	NP-10
	24-31	Permanently frozen very cobbly silt loam, permanently frozen extremely gravelly silt loam, permanently frozen very gravelly silt loam			---	---
	31-72	Permanently frozen material			---	---
	>72	Permanently frozen bedrock			---	---
89X:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
90:						
Fubar	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-10	Very fine sandy loam, stratified fine sand to silt loam	SM, ML	A-1, A-4	20-30	NP-5
	10-72	Fine sand, extremely gravelly sand, sand, very gravelly coarse sand	GW, SW-SM	A-1	0-0	NP
Tanana, rare brief flooding	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-6	Silt loam, mucky silt loam	OL, ML	A-4	30-40	NP-10
	6-25	Stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-10
	25-72	Permanently frozen material			---	---
91:						
Aquic Cryofluvents	0-3	Mucky peat	PT	A-8	---	---
	3-10	Gravelly silt loam, mucky silt loam, silt loam	OL, ML	A-4	25-40	NP-10
	10-72	Stratified silt loam to loamy sand to gravel	SM, ML	A-4	25-40	NP-10
Fluvaquentic aquorthels	0-4	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	4-24	Stratified silt loam to very fine sandy loam to highly decomposed plant material	OL, ML	A-4	30-40	NP-10
	24-72	Permanently frozen stratified silt loam to very fine sandy loam to moderately decomposed plant material			---	---
Typic Cryaquents, frequent flooding	0-6	Moderately decomposed plant material	PT	A-8	---	---
	6-72	Silt loam	ML	A-4	25-40	NP-10

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Liquid limit	Plas-ticity index
	In.				Pct.	
211:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
Goldstream	0-9	Peat, mucky peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-5, A-4	30-50	NP-10
	12-20	Silt loam	ML	A-4	25-35	NP-10
	20-72	Permanently frozen material			---	---
212:						
Goldstream	0-9	Peat, mucky peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-5, A-4	30-50	NP-10
	12-20	Silt loam	ML	A-4	25-35	NP-10
	20-72	Permanently frozen material			---	---
Histels	0-12	Peat	PT	A-8	0-0	NP
	12-17	Mucky peat	PT	A-8	0-0	NP
	17-26	Permanently frozen mucky peat			---	---
	26-72	Permanently frozen material			---	---
251:						
Tanana, rare brief flooding	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-6	Silt loam, mucky silt loam	OL, ML	A-4	30-40	NP-10
	6-25	Stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-10
	25-72	Permanently frozen material			---	---
Mosquito	0-18	Peat	PT	A-8	---	---
	18-24	Silt loam, stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-5
	24-72	Permanently frozen material			---	---
361:						
Jarvis	0-3	Moderately decomposed plant material	PT	A-8	---	---
	3-6	Stratified fine sand to silt loam, very fine sandy loam	SM, ML	A-4	25-30	NP-5
	6-24	Stratified sand to fine sand to very fine sandy loam	SC-SM, SM	A-4, A-2	20-25	NP-5
	24-72	Very gravelly sand	GP, SP-SM	A-1	0-0	NP
Chena	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-9	Fine sand, fine sandy loam, stratified fine sand to silt loam	SM, ML	A-4	25-30	NP-5
	9-72	Coarse sand, sand, very gravelly sand	GP, SM, SP-SM	A-1	0-0	NP
362:						
Piledriver	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-15	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	15-33	Stratified sand to fine sand to very fine sandy loam	CL-ML, SM	A-2, A-4	20-25	NP-5
	33-72	Sand, very gravelly sand	SM, SW, SP-SM	A-2, A-1	0-0	NP
Fubar	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-10	Very fine sandy loam, stratified fine sand to silt loam	SM, ML	A-1, A-4	20-30	NP-5
	10-72	Fine sand, extremely gravelly sand, sand, very gravelly coarse sand	GW, SW-SM	A-1	0-0	NP

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Liquid limit	Plas-ticity index
	In.				Pct.	
363:						
Jarvis	0-3	Moderately decomposed plant material	PT	A-8	---	---
	3-6	Stratified fine sand to silt loam, very fine sandy loam	SM, ML	A-4	25-30	NP-5
	6-24	Stratified sand to fine sand to very fine sandy loam	SC-SM, SM	A-4, A-2	20-25	NP-5
	24-72	Very gravelly sand	GP, SP-SM	A-1	0-0	NP
Salchaket	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-24	Very fine sandy loam	ML	A-4	25-30	NP-5
	24-45	Stratified silt loam to fine sand	SM, ML	A-4	25-30	NP-5
	45-72	Very gravelly sand	SP-SM, GP-GM	A-1	0-0	NP
411A:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
411B:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
411C:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
411D:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas-ticity index
			Unified	AASHTO		
	In.				Pct.	
421D:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
441D:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
441E:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
441F:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas-ticity index
			Unified	AASHTO		
	In.				Pct.	
441G:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
451G:						
Brigadier	0-6	Slightly decomposed plant material	PT	A-8	0-0	NP
	6-11	Silt loam	OL, ML	A-4	30-40	NP-10
	11-16	Silt loam	ML	A-4	25-35	NP-10
	16-20	Very gravelly loam, very channery sandy loam	GC-GM, GP-GM, GM	A-1, A-4, A-2	0-15	NP-5
	20-72	Weathered bedrock			---	---
Ester	0-9	Peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-4	30-40	NP-5
	12-21	Permanently frozen very channery silt loam	GM	A-2, A-4	---	---
	21-72	Permanently frozen weathered bedrock			---	---
451X:						
Brigadier	0-6	Slightly decomposed plant material	PT	A-8	0-0	NP
	6-11	Silt loam	OL, ML	A-4	30-40	NP-10
	11-16	Silt loam	ML	A-4	25-35	NP-10
	16-20	Very gravelly loam, very channery sandy loam	GC-GM, GP-GM, GM	A-1, A-4, A-2	0-15	NP-5
	20-72	Weathered bedrock			---	---
Ester	0-9	Peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-4	30-40	NP-5
	12-21	Permanently frozen very channery silt loam	GM	A-2, A-4	---	---
	21-72	Permanently frozen weathered bedrock			---	---
452:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas-ticity index
			Unified	AASHTO		
	In.				Pct.	
492:						
Angel	0-2	Mucky peat, peat	PT	A-8	---	---
	2-4	Silt loam	ML	A-4	25-35	2-5
	4-8	Gravelly sandy loam, silt loam	SM, ML	A-2, A-4	5-35	NP-5
	8-22	Extremely cobbly sandy loam, very gravelly loamy coarse sand, very gravelly sandy loam, very cobbly sandy loam	GW-GM, SM	A-1, A-2	0-15	NP-2
	22-72	Extremely cobbly loamy sand, extremely gravelly sand, weathered bedrock	GM, GP, GW-GM	A-1	0-14	NP
McCloud	0-3	Mucky peat, peat	PT	A-8	---	---
	3-20	Silt loam	ML	A-4	25-35	NP-10
	20-29	Loam, silt loam	ML	A-4	25-35	NP-10
	29-72	Weathered bedrock			---	---
611:						
Piledriver	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-15	Stratified fine sand to silt loam, very fine sandy loam	ML A-4	25-30	NP-5	
	15-33	Stratified sand to fine sand to very fine sandy loam	CL-ML, SM	A-2, A-4	20-25	NP-5
	33-72	Sand, very gravelly sand	SM, SW, SP-SM	A-2, A-1	0-0	NP
Eielson	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-49	Very fine sandy loam	ML	A-4	25-30	NP-5
	49-71	Stratified silt loam to fine sand	SM, ML	A-4	25-30	NP-5
	71-72	Gravelly sand, extremely gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
CL:						
Typic Cryorthents	0-1	Slightly decomposed plant material	PT	A-8	---	---
	1-49	Stratified fine sand to silt loam	SM, ML	A-4	25-35	NP-10
	49-72	Extremely gravelly sand, very gravelly sand	GP, SP-SM	A-1	0-0	NP
Gv:						
Pits, gravel	---	---	---	---	---	---
Lf:						
Dumps, landfill	---	---	---	---	---	---
ME:						
Dumps, mine	---	---	---	---	---	---
Qu:						
Pits, quarry	---	---	---	---	---	---
Rv:						
Riverwash	---	---	---	---	---	---
UC:						
Typic Cryorthents, fill	0-30	Stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam	CL-ML, SP-SM, SM	A-1, A-4, A-2	0-15	NP-5
	30-63	Stratified fine sand to silt loam	SM, ML	A-4	25-35	NP-10
	63-72	Extremely gravelly sand, very gravelly sand	GP, SP-SM	A-1	0-0	NP
Urban land	---	---	---	---	---	---

Table 12. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas-ticity index
			Unified	AASHTO		
	In.				Pct.	
W:						
Water	---	---	---	---	---	---
WAH:						
Typic Cryaquents, frequent long ponding	0-6	Moderately decomposed plant material	PT	A-8	---	---
	6-72	Silt loam	ML	A-4	25-40	NP-10
Histic Cryaquepts	0-13	Mucky peat, muck	PT	A-8	---	---
	13-30	Very fine sandy loam, silt loam	ML	A-4	25-35	NP-10
	30-72	Very fine sandy loam, silt loam	ML	A-4	25-35	NP-10
Terric Cryofibrists	0-28	Peat	PT	A-8	---	---
	28-40	Muck	PT	A-8	---	---
	40-72	Silt loam, very fine sandy loam, silty clay loam	ML, CL	A-4, A-7, A-6	30-45	NP-30

Table 13. Engineering Sieve Data

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
9:											
Histels	0-12	Peat	0	0	---	---	---	---	---	---	---
	12-17	Mucky peat	0	0	---	---	---	---	---	---	---
	17-26	Permanently frozen mucky peat	0	0	---	---	---	---	---	---	---
	26-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
13:											
Terric Cryofibrists	0-28	Peat	0	0	---	---	---	---	---	---	---
	28-40	Muck	0	0	---	---	---	---	---	---	---
	40-72	Silt loam, very fine sandy loam, silty clay loam	0	0	100	100	95-100	80-100	0-75	20-90	5-35
Liscum	0-3	Peat	0	0	---	---	---	---	---	---	---
	3-11	Muck	0	0	---	---	---	---	---	---	---
	11-15	Silt loam, mucky silt loam	0	0	100	100	95-100	75-90	15-45	50-80	3-10
	15-70	Stratified silt loam to loamy fine sand	0	0	100	100	80-100	50-80	45-80	15-60	3-10
	70-72	Very gravelly sandy loam	0	0	35-60	25-50	25-45	10-35	55-75	15-45	1-10
14:											
Histels	0-12	Peat	0	0	---	---	---	---	---	---	---
	12-17	Mucky peat	0	0	---	---	---	---	---	---	---
	17-26	Permanently frozen mucky peat	0	0	---	---	---	---	---	---	---
	26-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
Terric Cryofibrists	0-28	Peat	0	0	---	---	---	---	---	---	---
	28-40	Muck	0	0	---	---	---	---	---	---	---
	40-72	Silt loam, very fine sandy loam, silty clay loam	0	0	100	100	95-100	80-100	0-75	20-90	5-35
20:											
Mosquito	0-18	Peat	0	0	---	---	---	---	---	---	---
	18-24	Silt loam, stratified silt loam to loamy fine sand, very fine sandy loam	0	0	100	100	90-100	70-95	40-80	15-55	3-10
	24-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
21A:											
Goldstream	0-9	Peat, mucky peat	0	0	---	---	---	---	---	---	---
	9-12	Silt loam, mucky silt loam	0	0	100	100	95-100	75-90	10-18	71-80	3-14
	12-20	Silt loam	0	0	100	100	95-100	75-95	10-18	71-80	3-14
	20-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
21B:											
Goldstream	0-9	Peat, mucky peat	0	0	---	---	---	---	---	---	---
	9-12	Silt loam, mucky silt loam	0	0	100	100	95-100	75-90	10-18	71-80	3-14
	12-20	Silt loam	0	0	100	100	95-100	75-95	10-18	71-80	3-14
	20-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
22:											
Tanacross	0-9	Peat	0	0	---	---	---	---	---	---	---
	9-11	Mucky silt loam	0	0	100	100	95-100	75-90	10-50	50-80	0-10
	11-17	Stratified fine sandy loam to silt loam	0	0	100	100	85-100	60-95	45-80	10-50	0-10
	17-72	Permanently frozen material	---	---	---	---	---	---	---	---	---

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
25:											
Tanana, rare brief flooding	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam, mucky silt loam	0	0	100	100	95-100	75-90	10-45	50-80	5-10
	6-25	Stratified silt loam to loamy fine sand, very fine sandy loam	0	0	100	100	85-100	65-90	45-80	10-50	5-10
	25-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
26:											
Histels	0-12	Peat	0	0	---	---	---	---	---	---	---
	12-17	Mucky peat	0	0	---	---	---	---	---	---	---
	17-26	Permanently frozen mucky peat	0	0	---	---	---	---	---	---	---
	26-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
Mosquito	0-18	Peat	0	0	---	---	---	---	---	---	---
	18-24	Silt loam, stratified silt loam to loamy fine sand, very fine sandy loam	0	0	100	100	90-100	70-95	40-80	15-55	3-10
	24-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
31:											
Eielson	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-49	Very fine sandy loam	0	0	100	100	90-100	65-75	50-75	15-45	3-10
	49-71	Stratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-86	0-50	0-10
	71-72	Gravelly sand, extremely gravelly sand, very gravelly sand	0	15-30	50-80	30-80	20-30	5-10	86-100	0-10	0-5
Piledriver	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-15	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	70-100	40-95	45-86	10-50	0-10
	15-33	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	85-100	25-55	45-86	10-50	0-10
	33-72	Sand, very gravelly sand	0	0	55-90	30-85	30-70	2-20	85-100	0-5	0-10
32:											
Salchaket	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-24	Very fine sandy loam	0	0	100	100	90-100	65-75	45-80	10-50	5-10
	24-45	Stratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-80	10-50	5-10
	45-72	Very gravelly sand	0	0	40-70	30-55	20-30	5-10	85-100	0-15	0-5
35:											
North Pole	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-4	Highly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-39	Stratified fine sand to silt loam	0	0	100	100	80-100	40-80	45-86	10-50	0-10
	39-72	Gravelly coarse sand, extremely gravelly sand, very gravelly sand	0	0	65-90	25-75	20-70	1-15	85-100	0-10	0-5

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
36:											
Jarvis	0-3	Moderately decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	90-97	40-70	45-86	10-55	3-10
	6-24	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	85-95	25-45	60-86	10-30	3-10
	24-72	Very gravelly sand	0	0	45-65	30-55	20-40	2-11	85-100	0-10	0-5
37:											
Chena	0-4	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-9	Fine sand, fine sandy loam, stratified fine sand to silt loam	0	0	90-100	90-100	70-90	35-70	45-90	10-50	0-10
	9-72	Coarse sand, sand, very gravelly sand	0	0	45-95	30-90	15-65	0-15	85-100	0-10	0-5
39A:											
Nenana	0-2	Moderately decomposed plant material	0	0	---	---	---	---	---	---	---
	2-15	Silt, silt loam	0	0	100	100	90-100	80-95	2-35	55-90	5-10
	15-21	Gravelly silt, gravelly silt loam	0	0	65-80	60-75	55-70	45-65	20-35	55-90	5-10
	21-72	Very gravelly sand, extremely gravelly sand	0	0-11	33-60	16-50	11-36	1-8	87-100	0-8	0-5
40A:											
Chatanika	0-4	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-6	Silt loam, mucky silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
40B:											
Chatanika	0-4	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-6	Silt loam, mucky silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
40C:											
Chatanika	0-4	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-6	Silt loam, mucky silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
40D:											
Chatanika	0-4	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-6	Silt loam, mucky silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
41A:											
Minto	0-5	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-18	71-80	3-14
	9-16	Silt, silt loam	0	0	100	100	90-100	85-100	6-15	71-85	3-14
	16-72	Silt, silt loam	0	0	100	100	95-100	85-100	6-15	71-85	3-14

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
41B:											
Minto	0-5	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-18	71-80	3-14
	9-16	Silt, silt loam	0	0	100	100	90-100	85-100	6-15	71-85	3-14
	16-72	Silt, silt loam	0	0	100	100	95-100	85-100	6-15	71-85	3-14
41C:											
Minto	0-5	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-18	71-80	3-14
	9-16	Silt, silt loam	0	0	100	100	90-100	85-100	6-15	71-85	3-14
	16-72	Silt, silt loam	0	0	100	100	95-100	85-100	6-15	71-85	3-14
41D:											
Minto	0-5	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-18	71-80	3-14
	9-16	Silt, silt loam	0	0	100	100	90-100	85-100	6-15	71-85	3-14
	16-72	Silt, silt loam	0	0	100	100	95-100	85-100	6-15	71-85	3-14
42B:											
Fairbanks	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	30-72	Silt, silt loam	0	0	100	100	90-100	80-95	6-13	71-85	3-14
42C:											
Fairbanks	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	30-72	Silt, silt loam	0	0	100	100	90-100	80-95	6-13	71-85	3-14
42CG:											
Fairbanks	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	30-72	Silt, silt loam	0	0	100	100	90-100	80-95	6-13	71-85	3-14
Fairbanks	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	30-72	Silt, silt loam	0	0	100	100	90-100	80-95	6-13	71-85	3-14
42D:											
Fairbanks	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	30-72	Silt, silt loam	0	0	100	100	90-100	80-95	6-13	71-85	3-14
42E:											
Fairbanks	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	30-72	Silt, silt loam	0	0	100	100	90-100	80-95	6-13	71-85	3-14

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
44B:											
Steese	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-5	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
44C:											
Steese	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-5	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
44D:											
Steese	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-5	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
44E:											
Steese	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-5	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
44F:											
Steese	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-5	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
45C:											
Gilmore	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	6-12	Silt, silt loam	0	0	100	100	85-95	75-85	6-13	71-85	3-14
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	3-10
	19-72	Weathered bedrock	---	---	---	---	---	---	---	---	---

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
45D:											
Gilmore	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	6-12	Silt, silt loam	0	0	100	100	85-95	75-85	6-13	71-85	3-14
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	3-10
	19-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
45E:											
Gilmore	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	6-12	Silt, silt loam	0	0	100	100	85-95	75-85	6-13	71-85	3-14
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	3-10
	19-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
45F:											
Gilmore	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	6-12	Silt, silt loam	0	0	100	100	85-95	75-85	6-13	71-85	3-14
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	3-10
	19-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
45G:											
Gilmore	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	6-12	Silt, silt loam	0	0	100	100	85-95	75-85	6-13	71-85	3-14
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	3-10
	19-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
46C:											
Eutrocryepts, hills	0-2	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	2-31	Very fine sandy loam, silt loam	0	0	100	100	90-100	75-90	15-65	30-80	3-10
	31-72	Gravelly loamy sand, gravelly sandy loam, stratified silt loam to fine sand	0	0	80-100	70-100	70-100	30-70	50-75	15-45	3-10
46D:											
Eutrocryepts, hills	0-2	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	2-31	Very fine sandy loam, silt loam	0	0	100	100	90-100	75-90	15-65	30-80	3-10
	31-72	Gravelly loamy sand, gravelly sandy loam, stratified silt loam to fine sand	0	0	80-100	70-100	70-100	30-70	50-75	15-45	3-10
48D:											
McCloud	0-3	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	3-20	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	20-29	Loam, silt loam	0	0	100	100	60-95	50-85	10-50	35-80	3-15
	29-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
48E:											
McCloud	0-3	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	3-20	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	20-29	Loam, silt loam	0	0	100	100	60-95	50-85	10-50	35-80	3-15
	29-72	Weathered bedrock	---	---	---	---	---	---	---	---	---

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
48F:											
McCloud	0-3	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	3-20	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	20-29	Loam, silt loam	0	0	100	100	60-95	50-85	10-50	35-80	3-15
	29-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
49D:											
Angel	0-2	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	2-4	Silt loam	0	0	100	100	85-95	80-90	10-18	71-80	3-14
	4-8	Gravelly sandy loam, silt loam	0	0	70-100	50-100	45-95	30-90	10-65	30-80	3-14
	8-22	Extremely cobbly sandy loam, very gravelly loamy coarse sand, very gravelly sandy loam, very cobbly sandy loam	0	20-50	40-75	20-65	15-50	6-35	55-80	5-45	0-10
	22-72	Extremely cobbly loamy sand, extremely gravelly sand, weathered bedrock	0	35-50	30-60	7-40	5-30	1-15	75-95	4-25	0-10
49E:											
Angel	0-2	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	2-4	Silt loam	0	0	100	100	85-95	80-90	10-18	71-80	3-14
	4-8	Gravelly sandy loam, silt loam	0	0	70-100	50-100	45-95	30-90	10-65	30-80	3-14
	8-22	Extremely cobbly sandy loam, very gravelly loamy coarse sand, very gravelly sandy loam, very cobbly sandy loam	0	20-50	40-75	20-65	15-50	6-35	55-80	5-45	0-10
	22-72	Extremely cobbly loamy sand, extremely gravelly sand, weathered bedrock	0	35-50	30-60	7-40	5-30	1-15	75-95	4-25	0-10
49F:											
Angel	0-2	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	2-4	Silt loam	0	0	100	100	85-95	80-90	10-18	71-80	3-14
	4-8	Gravelly sandy loam, silt loam	0	0	70-100	50-100	45-95	30-90	10-65	30-80	3-14
	8-22	Extremely cobbly sandy loam, very gravelly loamy coarse sand, very gravelly sandy loam, very cobbly sandy loam	0	20-50	40-75	20-65	15-50	6-35	55-80	5-45	0-10
	22-72	Extremely cobbly loamy sand, extremely gravelly sand, weathered bedrock	0	35-50	30-60	7-40	5-30	1-15	75-95	4-25	0-10
50G:											
Ester	0-9	Peat	0	0	---	---	---	---	---	---	---
	9-12	Silt loam, mucky silt loam	0	0	100	100	90-100	70-90	11-45	50-80	5-10
	12-21	Permanently frozen very channery silt loam	0	35-45	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	21-72	Permanently frozen weathered bedrock	---	---	---	---	---	---	---	---	---
50X:											
Ester	0-9	Peat	0	0	---	---	---	---	---	---	---
	9-12	Silt loam, mucky silt loam	0	0	100	100	90-100	70-90	11-45	50-80	5-10
	12-21	Permanently frozen very channery silt loam	0	35-45	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	21-72	Permanently frozen weathered bedrock	---	---	---	---	---	---	---	---	---

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
51B:											
Saulich	0-16	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	16-21	Silt loam, mucky silt loam	0	0	100	100	90-100	65-75	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
51C:											
Saulich	0-16	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	16-21	Silt loam, mucky silt loam	0	0	100	100	90-100	65-75	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
61:											
Piledriver	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-15	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	70-100	40-95	45-86	10-50	0-10
	15-33	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	85-100	25-55	45-86	10-50	0-10
	33-72	Sand, very gravelly sand	0	0	55-90	30-85	30-70	2-20	85-100	0-5	0-10
62:											
Peede	0-2	Moderately decomposed plant material	0	0	---	---	---	---	---	---	---
	2-72	Silt loam	0	0	100	100	85-100	70-90	15-45	50-80	3-10
Mosquito	0-18	Peat	0	0	---	---	---	---	---	---	---
	18-24	Silt loam, stratified silt loam to loamy fine sand, very fine sandy loam	0	0	100	100	90-100	70-95	40-80	15-55	3-10
	24-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
63:											
Typic Cryaquents, occasional long flooding	0-6	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	6-72	Silt loam	0	0	100	100	85-100	75-95	15-35	50-80	3-10
Tanana, rare brief flooding	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam, mucky silt loam	0	0	100	100	95-100	75-90	10-45	50-80	5-10
	6-25	Stratified silt loam to loamy fine sand, very fine sandy loam	0	0	100	100	85-100	65-90	45-80	10-50	5-10
	25-72	Permanently frozen material	---	---	---	---	---	---	---	---	---

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
64:											
Eielson	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-49	Very fine sandy loam	0	0	100	100	90-100	65-75	50-75	15-45	3-10
	49-71	Stratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-86	0-50	0-10
	71-72	Gravelly sand, extremely gravelly sand, very gravelly sand	0	15-30	50-80	30-80	20-30	5-10	86-100	0-10	0-5
Tanana, rare brief flooding	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam, mucky silt loam	0	0	100	100	95-100	75-90	10-45	50-80	5-10
	6-25	Stratified silt loam to loamy fine sand, very fine sandy loam	0	0	100	100	85-100	65-90	45-80	10-50	5-10
	25-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
65:											
Fluvaquentic aquorthels	0-4	Slightly decomposed plant material, moderately decomposed plant material	0	0	---	---	---	---	---	---	---
	4-24	Stratified silt loam to very fine sandy loam to highly decomposed plant material	0	0	100	100	95-100	70-90	20-75	15-75	0-5
	24-72	Permanently frozen stratified silt loam to very fine sandy loam to moderately decomposed plant material	0	0	100	100	95-100	70-90	20-75	15-75	0-5
Typic Cryaquents, occasional long flooding	0-6	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	6-72	Silt loam	0	0	100	100	85-100	75-95	15-35	50-80	3-10
66:											
Eielson	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-49	Very fine sandy loam	0	0	100	100	90-100	65-75	50-75	15-45	3-10
	49-71	Stratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-86	0-50	0-10
	71-72	Gravelly sand, extremely gravelly sand, very gravelly sand	0	15-30	50-80	30-80	20-30	5-10	86-100	0-10	0-5
69:											
Typic Cryaquents, occasional long flooding	0-6	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	6-72	Silt loam	0	0	100	100	85-100	75-95	15-35	50-80	3-10
Eielson	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-49	Very fine sandy loam	0	0	100	100	90-100	65-75	50-75	15-45	3-10
	49-71	Stratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-86	0-50	0-10
	71-72	Gravelly sand, extremely gravelly sand, very gravelly sand	0	15-30	50-80	30-80	20-30	5-10	86-100	0-10	0-5

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
70A:											
Volkmar	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-10	Silt loam, very fine sandy loam	0	0	100	100	90-98	45-75	35-75	20-60	3-10
	10-30	Silt loam, very fine sandy loam	0	0	100	100	90-98	45-75	35-75	20-60	3-10
	30-72	Extremely gravelly sand, very gravelly coarse sand	0	0-11	40-70	25-60	10-25	1-10	87-100	0-10	0-5
Richardson	0-1	Moderately decomposed plant material, slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	1-20	Very fine sandy loam, silt loam	0	0	100	100	90-97	50-85	25-65	30-70	5-10
	20-59	Gravelly sandy loam, stratified silt loam to sandy loam, very fine sandy loam, silt loam	0	0	80-100	75-100	70-97	40-85	25-65	30-70	5-10
	59-72	Very gravelly coarse sand, extremely gravelly sand, sand, loamy sand	0	0-15	40-100	25-100	15-65	1-30	75-100	0-20	0-5
70B:											
Richardson	0-1	Moderately decomposed plant material, slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	1-20	Very fine sandy loam, silt loam	0	0	100	100	90-97	50-85	25-65	30-70	5-10
	20-59	Gravelly sandy loam, stratified silt loam to sandy loam, very fine sandy loam, silt loam	0	0	80-100	75-100	70-97	40-85	25-65	30-70	5-10
	59-72	Very gravelly coarse sand, extremely gravelly sand, sand, loamy sand	0	0-15	40-100	25-100	15-65	1-30	75-100	0-20	0-5
Volkmar	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-10	Silt loam, very fine sandy loam	0	0	100	100	90-98	45-75	35-75	20-60	3-10
	10-30	Silt loam, very fine sandy loam	0	0	100	100	90-98	45-75	35-75	20-60	3-10
	30-72	Extremely gravelly sand, very gravelly coarse sand	0	0-11	40-70	25-60	10-25	1-10	87-100	0-10	0-5
71:											
North Pole	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-4	Highly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-39	Stratified fine sand to silt loam	0	0	100	100	80-100	40-80	45-86	10-50	0-10
	39-72	Gravelly coarse sand, extremely gravelly sand, very gravelly sand	0	0	65-90	25-75	20-70	1-15	85-100	0-10	0-5
Mosquito	0-18	Peat	0	0	---	---	---	---	---	---	---
	18-24	Silt loam, stratified silt loam to loamy fine sand, very fine sandy loam	0	0	100	100	90-100	70-95	40-80	15-55	3-10
	24-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
Liscum	0-3	Peat	0	0	---	---	---	---	---	---	---
	3-11	Muck	0	0	---	---	---	---	---	---	---
	11-15	Silt loam, mucky silt loam	0	0	100	100	95-100	75-90	15-45	50-80	3-10
	15-70	Stratified silt loam to loamy fine sand	0	0	100	100	80-100	50-80	45-80	15-60	3-10
	70-72	Very gravelly sandy loam	0	0	35-60	25-50	25-45	10-35	55-75	15-45	1-10

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
72F:											
Eutrocryepts, escarpments	0-2	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	2-31	Very fine sandy loam, silt loam	0	0	100	100	90-100	75-90	15-65	30-80	3-10
	31-72	Gravelly loamy sand, gravelly sandy loam, stratified silt loam to fine sand	0	0	80-100	70-100	70-100	30-70	50-75	15-45	3-10
81V:											
Chatanika	0-4	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-6	Silt loam, mucky silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
Saulich	0-16	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	16-21	Silt loam, mucky silt loam	0	0	100	100	90-100	65-75	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
81X:											
Chatanika	0-4	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-6	Silt loam, mucky silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
Saulich	0-16	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	16-21	Silt loam, mucky silt loam	0	0	100	100	90-100	65-75	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
82V:											
Gilmore	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	6-12	Silt, silt loam	0	0	100	100	85-95	75-85	6-13	71-85	3-14
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	3-10
	19-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
Steese	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-5	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	---	---	---	---	---	---	---	---	---

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
82X:											
Gilmore	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	6-12	Silt, silt loam	0	0	100	100	85-95	75-85	6-13	71-85	3-14
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	3-10
	19-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
Steese	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-5	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
85:											
Eutrocryepts, hills	0-2	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	2-31	Very fine sandy loam, silt loam	0	0	100	100	90-100	75-90	15-65	30-80	3-10
	31-72	Gravelly loamy sand, gravelly sandy loam, stratified silt loam to fine sand	0	0	80-100	70-100	70-100	30-70	50-75	15-45	3-10
Minto	0-5	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-18	71-80	3-14
	9-16	Silt, silt loam	0	0	100	100	90-100	85-100	6-15	71-85	3-14
	16-72	Silt, silt loam	0	0	100	100	95-100	85-100	6-15	71-85	3-14
86G:											
Brigadier	0-6	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	6-11	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	11-16	Silt loam	0	0	100	100	85-95	75-85	10-18	71-80	3-14
	16-20	Very gravelly loam, very channery sandy loam	0	0-40	40-65	15-55	15-55	10-50	50-75	15-45	1-14
	20-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
86V:											
Brigadier	0-6	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	6-11	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	11-16	Silt loam	0	0	100	100	85-95	75-85	10-18	71-80	3-14
	16-20	Very gravelly loam, very channery sandy loam	0	0-40	40-65	15-55	15-55	10-50	50-75	15-45	1-14
	20-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
Manchu	0-7	Peat	0	0	---	---	---	---	---	---	---
	7-9	Mucky silt loam, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	9-28	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-15
	28-39	Extremely channery loam, very channery silt loam	0	30-40	40-65	15-55	15-55	10-50	15-50	35-80	3-15
	39-72	Weathered bedrock	---	---	---	---	---	---	---	---	---

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
86X:											
Brigadier	0-6	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	6-11	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	11-16	Silt loam	0	0	100	100	85-95	75-85	10-18	71-80	3-14
	16-20	Very gravelly loam, very channery sandy loam	0	0-40	40-65	15-55	15-55	10-50	50-75	15-45	1-14
	20-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
Manchu	0-7	Peat	0	0	---	---	---	---	---	---	---
	7-9	Mucky silt loam, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	9-28	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-15
	28-39	Extremely channery loam, very channery silt loam	0	30-40	40-65	15-55	15-55	10-50	15-50	35-80	3-15
	39-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
87V:											
Gilmore	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	6-12	Silt, silt loam	0	0	100	100	85-95	75-85	6-13	71-85	3-14
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	3-10
	19-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
Manchu	0-7	Peat	0	0	---	---	---	---	---	---	---
	7-9	Mucky silt loam, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	9-28	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-15
	28-39	Extremely channery loam, very channery silt loam	0	30-40	40-65	15-55	15-55	10-50	15-50	35-80	3-15
	39-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
87X:											
Gilmore	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	6-12	Silt, silt loam	0	0	100	100	85-95	75-85	6-13	71-85	3-14
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	3-10
	19-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
88:											
Dystrogelepts	0-2	Peat, mucky peat	0	0	---	---	---	---	---	---	---
	2-7	Silt loam, gravelly sandy loam	0	0-34	70-100	60-95	40-80	30-75	15-75	20-80	1-10
	7-14	Cobbly silt loam, cobbly sandy loam	0	20-60	65-95	55-90	45-80	40-75	15-75	20-80	1-10
	14-24	Extremely stony loam, extremely channery silt loam	0-70	20-70	30-85	15-75	10-70	5-65	15-50	40-80	1-10
	24-72	Bedrock	---	---	---	---	---	---	---	---	---

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
88:											
Turbels	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-13	Gravelly silt loam, cobbly silt loam	0	10-20	70-85	60-80	55-75	50-70	5-15	70-90	3-10
	13-24	Very cobbly silt loam, gravelly silt loam, very gravelly silt loam	0	10-35	50-85	35-80	30-75	25-70	5-15	70-90	3-10
	24-31	Permanently frozen very cobbly silt loam, permanently frozen extremely gravelly silt loam, permanently frozen very gravelly silt loam	0	10-45	50-70	35-55	30-50	25-45	5-15	70-90	3-10
	31-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
	>72	Permanently frozen bedrock	---	---	---	---	---	---	---	---	---
89X:											
Fairbanks	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	30-72	Silt, silt loam	0	0	100	100	90-100	80-95	6-13	71-85	3-14
Steese	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-5	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
90:											
Fubar	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-10	Very fine sandy loam, stratified fine sand to silt loam	0	0	95-100	90-100	50-100	25-80	45-86	10-45	3-10
	10-72	Fine sand, extremely gravelly sand, sand, very gravelly coarse sand	0	0	48-90	15-85	15-35	0-10	85-100	0-15	0-5
Tanana, rare brief flooding	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam, mucky silt loam	0	0	100	100	95-100	75-90	10-45	50-80	5-10
	6-25	Stratified silt loam to loamy fine sand, very fine sandy loam	0	0	100	100	85-100	65-90	45-80	10-50	5-10
	25-72	Permanently frozen material	---	---	---	---	---	---	---	---	---

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
91:											
Aquic Cryofluvents -	0-3	Mucky peat	0	0	---	---	---	---	---	---	---
	3-10	Gravelly silt loam, mucky silt loam, silt loam	0	0	80-100	75-100	70-90	50-80	10-18	71-80	3-14
	10-72	Stratified silt loam to loamy sand to gravel	0	0-10	80-95	75-95	70-90	40-80	45-75	15-45	3-10
Fluvaquentic aquorthels ----------	0-4	Slightly decomposed plant material, moderately decomposed plant material	0	0	---	---	---	---	---	---	---
	4-24	Stratified silt loam to very fine sandy loam to highly decomposed plant material	0	0	100	100	95-100	70-90	20-75	15-75	0-5
	24-72	Permanently frozen stratified silt loam to very fine sandy loam to moderately decomposed plant material	0	0	100	100	95-100	70-90	20-75	15-75	0-5
Typic Cryaquents, frequent flooding ---	0-6	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	6-72	Silt loam	0	0	100	100	85-100	75-95	15-35	50-80	3-10
211:											
Chatanika----------	0-4	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-6	Silt loam, mucky silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
Goldstream----------	0-9	Peat, mucky peat	0	0	---	---	---	---	---	---	---
	9-12	Silt loam, mucky silt loam	0	0	100	100	95-100	75-90	10-18	71-80	3-14
	12-20	Silt loam	0	0	100	100	95-100	75-95	10-18	71-80	3-14
	20-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
212:											
Goldstream----------	0-9	Peat, mucky peat	0	0	---	---	---	---	---	---	---
	9-12	Silt loam, mucky silt loam	0	0	100	100	95-100	75-90	10-18	71-80	3-14
	12-20	Silt loam	0	0	100	100	95-100	75-95	10-18	71-80	3-14
	20-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
Histels ----------	0-12	Peat	0	0	---	---	---	---	---	---	---
	12-17	Mucky peat	0	0	---	---	---	---	---	---	---
	17-26	Permanently frozen mucky peat	0	0	---	---	---	---	---	---	---
	26-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
251:											
Tanana, rare brief flooding----------	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam, mucky silt loam	0	0	100	100	95-100	75-90	10-45	50-80	5-10
	6-25	Stratified silt loam to loamy fine sand, very fine sandy loam	0	0	100	100	85-100	65-90	45-80	10-50	5-10
	25-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
Mosquito ----------	0-18	Peat	0	0	---	---	---	---	---	---	---
	18-24	Silt loam, stratified silt loam to loamy fine sand, very fine sandy loam	0	0	100	100	90-100	70-95	40-80	15-55	3-10
	24-72	Permanently frozen material	---	---	---	---	---	---	---	---	---

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
361:											
Jarvis	0-3	Moderately decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	90-97	40-70	45-86	10-55	3-10
	6-24	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	85-95	25-45	60-86	10-30	3-10
	24-72	Very gravelly sand	0	0	45-65	30-55	20-40	2-11	85-100	0-10	0-5
Chena	0-4	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-9	Fine sand, fine sandy loam, stratified fine sand to silt loam	0	0	90-100	90-100	70-90	35-70	45-90	10-50	0-10
	9-72	Coarse sand, sand, very gravelly sand	0	0	45-95	30-90	15-65	0-15	85-100	0-10	0-5
362:											
Piledriver	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-15	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	70-100	40-95	45-86	10-50	0-10
	15-33	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	85-100	25-55	45-86	10-50	0-10
	33-72	Sand, very gravelly sand	0	0	55-90	30-85	30-70	2-20	85-100	0-5	0-10
Fubar	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-10	Very fine sandy loam, stratified fine sand to silt loam	0	0	95-100	90-100	50-100	25-80	45-86	10-45	3-10
	10-72	Fine sand, extremely gravelly sand, sand, very gravelly coarse sand	0	0	48-90	15-85	15-35	0-10	85-100	0-15	0-5
363:											
Jarvis	0-3	Moderately decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	90-97	40-70	45-86	10-55	3-10
	6-24	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	85-95	25-45	60-86	10-30	3-10
	24-72	Very gravelly sand	0	0	45-65	30-55	20-40	2-11	85-100	0-10	0-5
Salchaket	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-24	Very fine sandy loam	0	0	100	100	90-100	65-75	45-80	10-50	5-10
	24-45	Stratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-80	10-50	5-10
	45-72	Very gravelly sand	0	0	40-70	30-55	20-30	5-10	85-100	0-15	0-5

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
411A:											
Minto	0-5	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-18	71-80	3-14
	9-16	Silt, silt loam	0	0	100	100	90-100	85-100	6-15	71-85	3-14
	16-72	Silt, silt loam	0	0	100	100	95-100	85-100	6-15	71-85	3-14
Chatanika	0-4	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-6	Silt loam, mucky silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
411B:											
Minto	0-5	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-18	71-80	3-14
	9-16	Silt, silt loam	0	0	100	100	90-100	85-100	6-15	71-85	3-14
	16-72	Silt, silt loam	0	0	100	100	95-100	85-100	6-15	71-85	3-14
Chatanika	0-4	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-6	Silt loam, mucky silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
411C:											
Minto	0-5	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-18	71-80	3-14
	9-16	Silt, silt loam	0	0	100	100	90-100	85-100	6-15	71-85	3-14
	16-72	Silt, silt loam	0	0	100	100	95-100	85-100	6-15	71-85	3-14
Chatanika	0-4	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-6	Silt loam, mucky silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---
411D:											
Minto	0-5	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-18	71-80	3-14
	9-16	Silt, silt loam	0	0	100	100	90-100	85-100	6-15	71-85	3-14
	16-72	Silt, silt loam	0	0	100	100	95-100	85-100	6-15	71-85	3-14
Chatanika	0-4	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	4-6	Silt loam, mucky silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-18	71-80	3-14
	21-72	Permanently frozen material	---	---	---	---	---	---	---	---	---

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
421D:											
Fairbanks	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	30-72	Silt, silt loam	0	0	100	100	90-100	80-95	6-13	71-85	3-14
Steese	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-5	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
441D:											
Steese	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-5	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
Gilmore	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	6-12	Silt, silt loam	0	0	100	100	85-95	75-85	6-13	71-85	3-14
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	3-10
	19-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
441E:											
Steese	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-5	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
Gilmore	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	6-12	Silt, silt loam	0	0	100	100	85-95	75-85	6-13	71-85	3-14
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	3-10
	19-72	Weathered bedrock	---	---	---	---	---	---	---	---	---

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
441F:											
Gilmore	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	6-12	Silt, silt loam	0	0	100	100	85-95	75-85	6-13	71-85	3-14
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	3-10
	19-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
Steese	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-5	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
441G:											
Gilmore	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	6-12	Silt, silt loam	0	0	100	100	85-95	75-85	6-13	71-85	3-14
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	3-10
	19-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
Steese	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-5	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
451G:											
Brigadier	0-6	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	6-11	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	11-16	Silt loam	0	0	100	100	85-95	75-85	10-18	71-80	3-14
	16-20	Very gravelly loam, very channery sandy loam	0	0-40	40-65	15-55	15-55	10-50	50-75	15-45	1-14
	20-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
Ester	0-9	Peat	0	0	---	---	---	---	---	---	---
	9-12	Silt loam, mucky silt loam	0	0	100	100	90-100	70-90	11-45	50-80	5-10
	12-21	Permanently frozen very channery silt loam	0	35-45	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	21-72	Permanently frozen weathered bedrock	---	---	---	---	---	---	---	---	---
451X:											
Brigadier	0-6	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	6-11	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	11-16	Silt loam	0	0	100	100	85-95	75-85	10-18	71-80	3-14
	16-20	Very gravelly loam, very channery sandy loam	0	0-40	40-65	15-55	15-55	10-50	50-75	15-45	1-14
	20-72	Weathered bedrock	---	---	---	---	---	---	---	---	---

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
451X:											
Ester	0-9	Peat	0	0	---	---	---	---	---	---	---
	9-12	Silt loam, mucky silt loam	0	0	100	100	90-100	70-90	11-45	50-80	5-10
	12-21	Permanently frozen very channery silt loam	0	35-45	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	21-72	Permanently frozen weathered bedrock	---	---	---	---	---	---	---	---	---
452:											
Gilmore	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-6	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	6-12	Silt, silt loam	0	0	100	100	85-95	75-85	6-13	71-85	3-14
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	3-10
	19-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
Steese	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-5	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	6-13	71-85	3-14
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
492:											
Angel	0-2	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	2-4	Silt loam	0	0	100	100	85-95	80-90	10-18	71-80	3-14
	4-8	Gravelly sandy loam, silt loam	0	0	70-100	50-100	45-95	30-90	10-65	30-80	3-14
	8-22	Extremely cobbly sandy loam, very gravelly loamy coarse sand, very gravelly sandy loam, very cobbly sandy loam	0	20-50	40-75	20-65	15-50	6-35	55-80	5-45	0-10
	22-72	Extremely cobbly loamy sand, extremely gravelly sand, weathered bedrock	0	35-50	30-60	7-40	5-30	1-15	75-95	4-25	0-10
McCloud	0-3	Mucky peat, peat	0	0	---	---	---	---	---	---	---
	3-20	Silt loam	0	0	100	100	90-100	80-90	10-18	71-80	3-14
	20-29	Loam, silt loam	0	0	100	100	60-95	50-85	10-50	35-80	3-15
	29-72	Weathered bedrock	---	---	---	---	---	---	---	---	---
611:											
Piledriver	0-3	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	3-15	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	70-100	40-95	45-86	10-50	0-10
	15-33	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	85-100	25-55	45-86	10-50	0-10
	33-72	Sand, very gravelly sand	0	0	55-90	30-85	30-70	2-20	85-100	0-5	0-10
Eielson	0-2	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	2-49	Very fine sandy loam	0	0	100	100	90-100	65-75	50-75	15-45	3-10
	49-71	Stratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-86	0-50	0-10
	71-72	Gravelly sand, extremely gravelly sand, very gravelly sand	0	15-30	50-80	30-80	20-30	5-10	86-100	0-10	0-5

Table 13. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10"	Fragments 3-10"	Percentage passing sieve number-- 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
CL:											
Typic Cryorthents---	0-1	Slightly decomposed plant material	0	0	---	---	---	---	---	---	---
	1-49	Stratified fine sand to silt loam	0	0	100	100	85-95	40-65	40-86	10-60	0-10
	49-72	Extremely gravelly sand, very gravelly sand	0	0	40-65	20-50	10-35	0-10	85-100	0-10	0-5
Gv:											
Pits, gravel ----------	---	---	---	---	---	---	---	---	---	---	
Lf:											
Dumps, landfill-------	---	---	---	---	---	---	---	---	---	---	
ME:											
Dumps, mine---------	---	---	---	---	---	---	---	---	---	---	
Qu:											
Pits, quarry ----------	---	---	---	---	---	---	---	---	---	---	
Rv:											
Riverwash ----------	---	---	---	---	---	---	---	---	---	---	
UC:											
Typic Cryorthents, fill----------	0-30	Stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam	0	0	65-80	50-75	30-65	10-55	40-86	10-60	0-10
	30-63	Stratified fine sand to silt loam	0	0	100	100	85-95	40-65	40-86	10-60	0-10
	63-72	Extremely gravelly sand, very gravelly sand	0	0	40-65	20-50	10-35	0-10	85-100	0-10	0-5
Urban land----------	---	---	---	---	---	---	---	---	---	---	
W:											
Water ----------	---	---	---	---	---	---	---	---	---	---	
WAH:											
Typic Cryaquents, frequent long ponding----------	0-6	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	6-72	Silt loam	0	0	100	100	85-100	75-95	15-35	50-80	3-10
Histic Cryaquepts---	0-13	Mucky peat, muck	0	0	---	---	---	---	---	---	---
	13-30	Very fine sandy loam, silt loam	0	0	100	100	85-95	75-90	15-65	30-80	3-10
	30-72	Very fine sandy loam, silt loam	0	0	100	100	85-95	75-90	15-65	30-80	3-10
Terric Cryofibrists---	0-28	Peat	0	0	---	---	---	---	---	---	---
	28-40	Muck	0	0	---	---	---	---	---	---	---
	40-72	Silt loam, very fine sandy loam, silty clay loam	0	0	100	100	95-100	80-100	0-75	20-90	5-35

Table 14. Physical Properties of the Soils

(See text for definitions of terms used in this table. Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
9:											
Histels	0-12	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	12-17	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---			
	17-26	---	0.000-0.001	---	---	---	---	---			
	26-72	---	0.000-0.001	---	---	---	---	---			
13:											
Terric Cryofibrists	0-28	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	28-40	0.20-0.30	0.001-0.06	0.40-0.55	---	60-85	---	---			
	40-72	1.30-1.45	0.2-0.6	0.20-0.27	0.0-2.9	5.0-10	.37	.37			
Liscum	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	3-11	0.20-0.30	0.001-0.06	0.25-0.30	---	60-85	---	---			
	11-15	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	6.0-14	.37	.37			
	15-70	1.20-1.60	0.6-2	0.15-0.22	0.0-2.9	1.0-5.0	.43	.43			
	70-72	1.30-1.50	2-6	0.10-0.14	0.0-2.9	1.0-3.0	.20	.37			
14:											
Histels	0-12	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	12-17	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---			
	17-26	---	0.000-0.001	---	---	---	---	---			
	26-72	---	0.000-0.001	---	---	---	---	---			
Terric Cryofibrists	0-28	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	28-40	0.20-0.30	0.001-0.06	0.40-0.55	---	60-85	---	---			
	40-72	1.30-1.45	0.2-0.6	0.20-0.27	0.0-2.9	5.0-10	.37	.37			
20:											
Mosquito	0-18	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	18-24	0.80-1.40	0.6-2	0.24-0.28	0.0-2.9	5.0-9.0	.37	.37			
	24-72	---	0.000-0.001	---	---	---	---	---			
21A:											
Goldstream	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-12	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-12	.37	.37			
	12-20	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-5.0	.55	.55			
	20-72	---	0.000-0.001	---	---	---	---	---			
21B:											
Goldstream	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-12	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-12	.37	.37			
	12-20	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-5.0	.55	.55			
	20-72	---	0.000-0.001	---	---	---	---	---			
22:											
Tanacross	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	9-11	0.80-1.20	0.6-2	0.20-0.22	0.0-2.9	5.0-10	.37	.37			
	11-17	1.20-1.40	0.6-6	0.17-0.22	0.0-2.9	0.0-1.0	.43	.43			
	17-72	---	0.000-0.001	---	---	---	---	---			
25:											
Tanana, rare brief flooding	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-6	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	2.0-6.0	.37	.37			
	6-25	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	0.0-2.0	.43	.43			
	25-72	---	0.000-0.001	---	---	---	---	---			

Table 14. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
26:											
Histels	0-12	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	12-17	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---			
	17-26	---	0.000-0.001	---	---	---	---	---			
	26-72	---	0.000-0.001	---	---	---	---	---			
Mosquito	0-18	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	18-24	0.80-1.40	0.6-2	0.24-0.28	0.0-2.9	5.0-9.0	.37	.37			
	24-72	---	0.000-0.001	---	---	---	---	---			
31:											
Eielson	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	2-49	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	49-71	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	71-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
Piledriver	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-15	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	15-33	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	33-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
32:											
Salchaket	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	3	2	134
	3-24	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	24-45	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	45-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
35:											
North Pole	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-4	0.20-0.30	0.001-0.06	0.25-0.30	---	60-85	---	---			
	4-39	1.20-1.60	0.6-2	0.15-0.22	0.0-2.9	1.0-5.0	.43	.43			
	39-72	1.40-1.70	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.05	.28			
36:											
Jarvis	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-6	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	6-24	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	24-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
37:											
Chena	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	4-9	1.10-1.20	0.6-6	0.16-0.18	0.0-2.9	3.0-6.0	.28	.32			
	9-72	1.40-1.50	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.10	.55			
39A:											
Nenana	0-2	0.07-0.18	0.6-2	0.35-0.50	0.0-2.9	75-90	---	---	2	3	86
	2-15	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.49	.49			
	15-21	1.20-1.30	0.6-2	0.18-0.20	0.0-2.9	0.0-1.0	.43	.64			
	21-72	1.40-1.50	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.10	.10			
40A:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
40B:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			

Table 14. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
40C:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
40D:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
41A:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
41B:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
41C:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
41D:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
42B:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
42C:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
42CG:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
42D:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			

Table 14. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
42E:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
44B:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.000-0.001	---	---	---	---	---			
44C:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.000-0.001	---	---	---	---	---			
44D:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.000-0.001	---	---	---	---	---			
44E:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.000-0.001	---	---	---	---	---			
44F:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.000-0.001	---	---	---	---	---			
45C:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
45D:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
45E:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			

Table 14. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
45F:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
45G:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
46C:											
Eutrocryepts, hills	0-2	0.05-0.10	0.6-20	0.05-0.55	0.0-2.9	75-95	---	---	5	2	134
	2-31	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.37	.37			
	31-72	1.30-1.50	0.2-0.6	0.08-0.12	0.0-2.9	0.0-1.0	.37	.43			
46D:											
Eutrocryepts, hills	0-2	0.05-0.10	0.6-20	0.05-0.55	0.0-2.9	75-95	---	---	5	2	134
	2-31	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.37	.37			
	31-72	1.30-1.50	0.2-0.6	0.08-0.12	0.0-2.9	0.0-1.0	.37	.43			
48D:											
McCloud	0-3	0.05-0.18	2-20	0.05-0.50	0.0-2.9	85-95	---	---	2	2	134
	3-20	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	20-29	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	0.0-1.0	.43	.43			
	29-72	---	0.000-0.001	---	0.0-2.9	---	---	---			
48E:											
McCloud	0-3	0.05-0.18	2-20	0.05-0.50	0.0-2.9	85-95	---	---	2	2	134
	3-20	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	20-29	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	0.0-1.0	.43	.43			
	29-72	---	0.000-0.001	---	0.0-2.9	---	---	---			
48F:											
McCloud	0-3	0.05-0.18	2-20	0.05-0.50	0.0-2.9	85-95	---	---	2	2	134
	3-20	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	20-29	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	0.0-1.0	.43	.43			
	29-72	---	0.000-0.001	---	0.0-2.9	---	---	---			
49D:											
Angel	0-2	0.05-0.10	2-20	0.05-0.50	0.0-2.9	85-95	---	---	1	2	134
	2-4	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	3.0-8.0	.32	.32			
	4-8	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.37	.37			
	8-22	1.40-1.60	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.32			
	22-72	1.50-2.00	2-14	0.00-0.01	0.0-2.9	0.0-0.0	---	---			
49E:											
Angel	0-2	0.05-0.10	2-20	0.05-0.50	0.0-2.9	85-95	---	---	1	2	134
	2-4	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	3.0-8.0	.32	.32			
	4-8	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.37	.37			
	8-22	1.40-1.60	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.32			
	22-72	1.50-2.00	2-14	0.00-0.01	0.0-2.9	0.0-0.0	---	---			
49F:											
Angel	0-2	0.05-0.10	2-20	0.05-0.50	0.0-2.9	85-95	---	---	1	2	134
	2-4	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	3.0-8.0	.32	.32			
	4-8	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.37	.37			
	8-22	1.40-1.60	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.32			
	22-72	1.50-2.00	2-14	0.00-0.01	0.0-2.9	0.0-0.0	---	---			

Table 14. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
50G:											
Ester	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	9-12	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	7.0-12	.15	.15			
	12-21	---	0.000-0.001	---	---	1.0-5.0	---	---			
	21-72	---	0.000-0.001	---	---	---	---	---			
50X:											
Ester	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	9-12	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	7.0-12	.15	.15			
	12-21	---	0.000-0.001	---	---	1.0-5.0	---	---			
	21-72	---	0.000-0.001	---	---	---	---	---			
51B:											
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-13	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
51C:											
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-13	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
61:											
Piledriver	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-15	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	15-33	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	33-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
62:											
Peede	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-72	1.10-1.20	0.6-2	0.20-0.25	0.0-2.9	0.0-5.0	.37	.37			
Mosquito	0-18	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	18-24	0.80-1.40	0.6-2	0.24-0.28	0.0-2.9	5.0-9.0	.37	.37			
	24-72	---	0.000-0.001	---	---	---	---	---			
63:											
Typic Cryaquents, occasional long flooding	0-6	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	5	8	0
	6-72	1.10-1.30	0.2-2	0.20-0.22	0.0-2.9	1.0-5.0	.37	.37			
Tanana, rare brief flooding	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-6	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	2.0-6.0	.37	.37			
	6-25	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	0.0-2.0	.43	.43			
	25-72	---	0.000-0.001	---	---	---	---	---			
64:											
Eielson	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	2-49	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	49-71	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	71-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
Tanana, rare brief flooding	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-6	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	2.0-6.0	.37	.37			
	6-25	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	0.0-2.0	.43	.43			
	25-72	---	0.000-0.001	---	---	---	---	---			

Table 14. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
65:											
Fluvaquentic aquorthels	0-4	0.05-0.18	0.6-20	0.05-0.50	---	85-95	---	---	2	8	0
	4-24	1.10-1.30	0.6-2	0.22-0.24	0.0-2.9	3.0-20	.37	.37			
	24-72	---	0.000-0.001	---	---	3.0-20	---	---			
Typic Cryaquents, occasional long flooding	0-6	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	5	8	0
	6-72	1.10-1.30	0.2-2	0.20-0.22	0.0-2.9	1.0-5.0	.37	.37			
66:											
Eielson	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	2-49	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	49-71	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	71-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
69:											
Typic Cryaquents, occasional long flooding	0-6	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	5	8	0
	6-72	1.10-1.30	0.2-2	0.20-0.22	0.0-2.9	1.0-5.0	.37	.37			
Eielson	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	2-49	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	49-71	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	71-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
70A:											
Volkmar	0-3	0.05-0.18	0.6-20	0.05-0.50	0.0-2.9	75-95	---	---	2	3	86
	3-10	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	1.0-5.0	.49	.49			
	10-30	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	0.0-1.0	.55	.55			
	30-72	1.60-1.70	6-20	0.05-0.07	0.0-2.9	0.0-1.0	.10	.10			
Richardson	0-1	0.05-0.18	0.6-20	0.05-0.50	0.0-2.9	75-95	---	---	5	3	86
	1-20	1.35-1.55	0.6-2	0.18-0.23	0.0-2.9	1.0-4.0	.55	.55			
	20-59	1.35-1.55	0.6-2	0.18-0.23	0.0-2.9	0.0-0.5	.55	.43			
	59-72	1.55-1.70	20-20	0.02-0.08	0.0-2.9	0.0-0.2	.15	.10			
70B:											
Richardson	0-1	0.05-0.18	0.6-20	0.05-0.50	0.0-2.9	75-95	---	---	5	3	86
	1-20	1.35-1.55	0.6-2	0.18-0.23	0.0-2.9	1.0-4.0	.55	.55			
	20-59	1.35-1.55	0.6-2	0.18-0.23	0.0-2.9	0.0-0.5	.55	.43			
	59-72	1.55-1.70	20-20	0.02-0.08	0.0-2.9	0.0-0.2	.15	.10			
Volkmar	0-3	0.05-0.18	0.6-20	0.05-0.50	0.0-2.9	75-95	---	---	2	3	86
	3-10	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	1.0-5.0	.49	.49			
	10-30	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	0.0-1.0	.55	.55			
	30-72	1.60-1.70	6-20	0.05-0.07	0.0-2.9	0.0-1.0	.10	.10			
71:											
North Pole	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-4	0.20-0.30	0.001-0.06	0.25-0.30	---	60-85	---	---			
	4-39	1.20-1.60	0.6-2	0.15-0.22	0.0-2.9	1.0-5.0	.43	.43			
	39-72	1.40-1.70	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.05	.28			
Mosquito	0-18	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	18-24	0.80-1.40	0.6-2	0.24-0.28	0.0-2.9	5.0-9.0	.37	.37			
	24-72	---	0.000-0.001	---	---	---	---	---			

Table 14. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
71:											
Liscum	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	3-11	0.20-0.30	0.001-0.06	0.25-0.30	---	60-85	---	---			
	11-15	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	6.0-14	.37	.37			
	15-70	1.20-1.60	0.6-2	0.15-0.22	0.0-2.9	1.0-5.0	.43	.43			
	70-72	1.30-1.50	2-6	0.10-0.14	0.0-2.9	1.0-3.0	.20	.37			
72F:											
Eutrocryepts, escarpments	0-2	0.05-0.10	0.6-20	0.05-0.55	0.0-2.9	75-95	---	---	5	2	134
	2-31	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.37	.37			
	31-72	1.30-1.50	0.2-0.6	0.08-0.12	0.0-2.9	0.0-1.0	.37	.43			
81V:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-13	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
81X:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-13	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
82V:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.000-0.001	---	---	---	---	---			
82X:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.000-0.001	---	---	---	---	---			

Table 14. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
85:											
Eutrocryepts, hills	0-2	0.05-0.10	0.6-20	0.05-0.55	0.0-2.9	75-95	---	---	5	2	134
	2-31	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.37	.37			
	31-72	1.30-1.50	0.2-0.6	0.08-0.12	0.0-2.9	0.0-1.0	.37	.43			
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
86G:											
Brigadier	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	6-11	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-10	.37	.37			
	11-16	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	16-20	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	20-72	---	2-6	---	---	---	---	---			
86V:											
Brigadier	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	6-11	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-10	.37	.37			
	11-16	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	16-20	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	20-72	---	2-6	---	---	---	---	---			
Manchu	0-7	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	2	2	134
	7-9	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-10	.37	.37			
	9-28	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	28-39	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	39-72	---	0.000-0.001	---	---	---	---	---			
86X:											
Brigadier	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	6-11	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-10	.37	.37			
	11-16	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	16-20	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	20-72	---	2-6	---	---	---	---	---			
Manchu	0-7	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	2	2	134
	7-9	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-10	.37	.37			
	9-28	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	28-39	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	39-72	---	0.000-0.001	---	---	---	---	---			
87V:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
Manchu	0-7	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	2	2	134
	7-9	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-10	.37	.37			
	9-28	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	28-39	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	39-72	---	0.000-0.001	---	---	---	---	---			
87X:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			

Table 14. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
88:											
Dystrogelepts	0-2	0.05-0.18	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	2-7	1.10-1.40	0.6-2	0.18-0.22	0.0-2.9	2.0-8.0	.28	.37			
	7-14	1.10-1.40	0.6-2	0.12-0.18	0.0-2.9	1.0-5.0	.20	.43			
	14-24	1.20-1.40	2-6	0.05-0.10	0.0-2.9	1.0-5.0	.05	.43			
	24-72	---	0.000-0.001	---	---	---	---	---			
Turbels	0-2	0.05-0.10	6-20	0.05-0.35	0.0-2.9	80-95	---	---	1	8	0
	2-13	1.10-1.20	2-6	0.20-0.22	0.0-2.9	2.0-7.0	.20	.32			
	13-24	1.40-1.50	2-6	0.05-0.10	0.0-2.9	1.0-3.0	.10	.37			
	24-31	---	0.000-0.001	---	---	0.2-0.7	---	---			
	31-72	---	0.000-0.001	---	---	---	---	---			
	>72	---	0.000-0.001	---	---	---	---	---			
89X:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.000-0.001	---	---	---	---	---			
90:											
Fubar	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	2-10	1.20-1.30	0.6-2	0.20-0.22	0.0-2.9	2.0-4.0	.32	.32			
	10-72	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.05	.28			
Tanana, rare brief flooding	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-6	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	2.0-6.0	.37	.37			
	6-25	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	0.0-2.0	.43	.43			
	25-72	---	0.000-0.001	---	---	---	---	---			
91:											
Aquic Cryofluvents	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	5	3	86
	3-10	1.10-1.30	0.6-2	0.22-0.24	0.0-2.9	2.0-11	.37	.37			
	10-72	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	0.0-2.0	.32	.37			
Fluvaquentic aquorthels	0-4	0.05-0.18	0.6-20	0.05-0.50	---	85-95	---	---	2	8	0
	4-24	1.10-1.30	0.6-2	0.22-0.24	0.0-2.9	3.0-20	.37	.37			
	24-72	---	0.000-0.001	---	---	3.0-20	---	---			
Typic Cryaquents, frequent flooding	0-6	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	5	8	0
	6-72	1.10-1.30	0.2-2	0.20-0.22	0.0-2.9	1.0-5.0	.37	.37			
211:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
Goldstream	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-12	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-12	.37	.37			
	12-20	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-5.0	.55	.55			
	20-72	---	0.000-0.001	---	---	---	---	---			

Table 14. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
212:											
Goldstream	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-12	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-12	.37	.37			
	12-20	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-5.0	.55	.55			
	20-72	---	0.000-0.001	---	---	---	---	---			
Histels	0-12	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	12-17	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---			
	17-26	---	0.000-0.001	---	---	---	---	---			
	26-72	---	0.000-0.001	---	---	---	---	---			
251:											
Tanana, rare brief flooding	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-6	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	2.0-6.0	.37	.37			
	6-25	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	0.0-2.0	.43	.43			
	25-72	---	0.000-0.001	---	---	---	---	---			
Mosquito	0-18	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	18-24	0.80-1.40	0.6-2	0.24-0.28	0.0-2.9	5.0-9.0	.37	.37			
	24-72	---	0.000-0.001	---	---	---	---	---			
361:											
Jarvis	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-6	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	6-24	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	24-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
Chena	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	4-9	1.10-1.20	0.6-6	0.16-0.18	0.0-2.9	3.0-6.0	.28	.32			
	9-72	1.40-1.50	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.10	.55			
362:											
Piledriver	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-15	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	15-33	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	33-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
Fubar	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	2-10	1.20-1.30	0.6-2	0.20-0.22	0.0-2.9	2.0-4.0	.32	.32			
	10-72	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.05	.28			
363:											
Jarvis	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-6	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	6-24	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	24-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
Salchaket	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	3	2	134
	3-24	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	24-45	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	45-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			

Table 14. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
411A:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
411B:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
411C:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
411D:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
421D:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.000-0.001	---	---	---	---	---			

Table 14. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
441D:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.000-0.001	---	---	---	---	---			
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
441E:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.000-0.001	---	---	---	---	---			
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
441F:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.000-0.001	---	---	---	---	---			
441G:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.000-0.001	---	---	---	---	---			

Table 14. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
451G:											
Brigadier	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	6-11	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-10	.37	.37			
	11-16	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	16-20	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	20-72	---	2-6	---	---	---	---	---			
Ester	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	9-12	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	7.0-12	.15	.15			
	12-21	---	0.000-0.001	---	---	1.0-5.0	---	---			
	21-72	---	0.000-0.001	---	---	---	---	---			
451X:											
Brigadier	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	6-11	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-10	.37	.37			
	11-16	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	16-20	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	20-72	---	2-6	---	---	---	---	---			
Ester	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	9-12	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	7.0-12	.15	.15			
	12-21	---	0.000-0.001	---	---	1.0-5.0	---	---			
	21-72	---	0.000-0.001	---	---	---	---	---			
452:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.000-0.001	---	---	---	---	---			
492:											
Angel	0-2	0.05-0.10	2-20	0.05-0.50	0.0-2.9	85-95	---	---	1	2	134
	2-4	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	3.0-8.0	.32	.32			
	4-8	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.37	.37			
	8-22	1.40-1.60	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.32			
	22-72	1.50-2.00	2-14	0.00-0.01	0.0-2.9	0.0-0.0	---	---			
McCloud	0-3	0.05-0.18	2-20	0.05-0.50	0.0-2.9	85-95	---	---	2	2	134
	3-20	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	20-29	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	0.0-1.0	.43	.43			
	29-72	---	0.000-0.001	---	0.0-2.9	---	---	---			
611:											
Piledriver	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-15	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	15-33	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	33-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
Eielson	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	2-49	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	49-71	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	71-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			

Table 14. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
CL:											
Typic Cryorthents	0-1	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	1-49	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	1.0-3.0	.32	.32			
	49-72	1.30-1.50	6-20	0.05-0.06	0.0-2.9	0.0-1.0	.05	.28			
Gv:											
Pits, gravel	---	---	---	---	---	---	---	---	-	---	---
Lf:											
Dumps, landfill	---	---	---	---	---	---	---	---	-	---	---
ME:											
Dumps, mine	---	---	---	---	---	---	---	---	-	---	---
Qu:											
Pits, quarry	---	---	---	---	---	---	---	---	-	---	---
Rv:											
Riverwash	---	---	---	---	---	---	---	---	-	---	---
UC:											
Typic Cryorthents, fill	0-30	1.30-1.60	0.6-2	0.12-0.15	0.0-2.9	3.0-10	.24	.37	5	2	134
	30-63	1.10-1.30	0.6-2	0.06-0.22	0.0-2.9	1.0-3.0	.05	.28			
	63-72	1.30-1.50	6-20	0.05-0.06	0.0-2.9	0.0-1.0	.05	.28			
Urban land	---	---	---	---	---	---	---	---	-	---	---
W:											
Water	---	---	---	---	---	---	---	---	-	---	---
WAH:											
Typic Cryaquents, frequent long ponding	0-6	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	5	8	0
	6-72	1.10-1.30	0.2-2	0.20-0.22	0.0-2.9	1.0-5.0	.37	.37			
Histic Cryaquepts	0-13	0.20-0.30	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	13-30	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	3.0-7.0	.37	.37			
	30-72	1.20-1.40	0.6-2	0.18-0.23	0.0-2.9	1.0-5.0	.43	.43			
Terric Cryofibrists	0-28	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	28-40	0.20-0.30	0.001-0.06	0.40-0.55	---	60-85	---	---			
	40-72	1.30-1.45	0.2-0.6	0.20-0.27	0.0-2.9	5.0-10	.37	.37			

Table 15. Chemical Properties of the Soils

(Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
9:				
Histels	0-12	---	115-155	3.6-4.5
	12-17	---	120-210	3.6-5.0
	17-26	---	---	3.6-5.0
	26-72	---	---	5.1-6.0
13:				
Terric Cryofibrists	0-28	115-155	---	5.0-6.0
	28-40	120-240	---	5.6-6.6
	40-72	30-50	---	5.6-6.6
Liscum	0-3	115-155	---	6.1-7.3
	3-11	120-240	---	6.1-7.3
	11-15	---	15-30	4.5-5.5
	15-70	5-25	---	6.1-7.3
	70-72	5-10	---	6.1-7.3
14:				
Histels	0-12	---	115-155	3.6-4.5
	12-17	---	120-210	3.6-5.0
	17-26	---	---	3.6-5.0
	26-72	---	---	5.1-6.0
Terric Cryofibrists	0-28	115-155	---	5.0-6.0
	28-40	120-240	---	5.6-6.6
	40-72	30-50	---	5.6-6.6
20:				
Mosquito	0-18	115-155	---	5.1-6.1
	18-24	30-50	---	5.6-6.6
	24-72	---	---	5.6-6.6
21A:				
Goldstream	0-9	---	70-120	3.6-4.5
	9-12	---	15-30	4.5-5.5
	12-20	---	5-15	4.5-5.5
	20-72	---	---	4.5-5.5
21B:				
Goldstream	0-9	---	70-120	3.6-4.5
	9-12	---	15-30	4.5-5.5
	12-20	---	5-15	4.5-5.5
	20-72	---	---	4.5-5.5
22:				
Tanacross	0-9	---	30-80	3.5-5.0
	9-11	20-40	---	5.1-6.0
	11-17	5-20	---	5.1-6.0
	17-72	---	---	5.1-6.0

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
25:				
Tanana, rare brief flooding	0-3	---	115-155	4.5-5.0
	3-6	15-30	---	5.1-6.0
	6-25	5-20	---	5.6-7.3
	25-72	---	---	6.6-7.3
26:				
Histels	0-12	---	115-155	3.6-4.5
	12-17	---	120-210	3.6-5.0
	17-26	---	---	3.6-5.0
	26-72	---	---	5.1-6.0
Mosquito	0-18	115-155	---	5.1-6.1
	18-24	30-50	---	5.6-6.6
	24-72	---	---	5.6-6.6
31:				
Eielson	0-2	115-155	---	5.1-7.1
	2-49	15-30	---	5.6-7.1
	49-71	1-5	---	6.1-7.6
	71-72	1-5	---	6.1-7.6
Piledriver	0-3	115-155	---	5.6-6.6
	3-15	15-30	---	5.1-6.5
	15-33	5-15	---	5.6-7.3
	33-72	1-5	---	5.6-7.3
32:				
Salchaket	0-3	---	115-155	4.5-5.6
	3-24	15-30	---	5.1-6.0
	24-45	5-15	---	5.6-7.3
	45-72	1-5	---	6.1-7.3
35:				
North Pole	0-2	115-155	---	6.1-7.3
	2-4	120-240	---	6.1-7.3
	4-39	5-25	---	6.1-7.3
	39-72	1-5	---	6.1-7.3
36:				
Jarvis	0-3	115-155	---	5.6-6.6
	3-6	15-30	---	5.1-6.5
	6-24	1-5	---	5.6-7.3
	24-72	1-5	---	5.6-7.3
37:				
Chena-	0-4	115-155	---	5.1-6.0
	4-9	5-20	---	5.6-6.5
	9-72	1-5	---	5.6-6.5

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
39A:				
Nenana	0-2	---	120-210	5.1-6.1
	2-15	5-10	---	5.1-6.5
	15-21	1-5	---	5.6-6.5
	21-72	1-5	---	5.6-6.5
40A:				
Chatanika	0-4	---	115-155	4.5-6.1
	4-6	---	15-30	4.5-5.5
	6-21	5-15	---	4.5-6.1
	21-72	---	---	5.6-6.5
40B:				
Chatanika	0-4	---	115-155	4.5-6.1
	4-6	---	15-30	4.5-5.5
	6-21	5-15	---	4.5-6.1
	21-72	---	---	5.6-6.5
40C:				
Chatanika	0-4	---	115-155	4.5-6.1
	4-6	---	15-30	4.5-5.5
	6-21	5-15	---	4.5-6.1
	21-72	---	---	5.6-6.5
40D:				
Chatanika	0-4	---	115-155	4.5-6.1
	4-6	---	15-30	4.5-5.5
	6-21	5-15	---	4.5-6.1
	21-72	---	---	5.6-6.5
41A:				
Minto	0-5	---	115-155	4.5-5.0
	5-9	15-30	---	5.6-6.5
	9-16	5-15	---	5.6-6.0
	16-72	5-15	---	6.1-6.5
41B:				
Minto	0-5	---	115-155	4.5-5.0
	5-9	15-30	---	5.6-6.5
	9-16	5-15	---	5.6-6.0
	16-72	5-15	---	6.1-6.5
41C:				
Minto	0-5	---	115-155	4.5-5.0
	5-9	15-30	---	5.6-6.5
	9-16	5-15	---	5.6-6.0
	16-72	5-15	---	6.1-6.5

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
41D:				
Minto	0-5	---	115-155	4.5-5.0
	5-9	15-30	---	5.6-6.5
	9-16	5-15	---	5.6-6.0
	16-72	5-15	---	6.1-6.5
42B:				
Fairbanks	0-3	115-155	---	5.6-6.0
	3-30	15-30	---	5.6-6.0
	30-72	5-15	---	6.1-7.3
42C:				
Fairbanks	0-3	115-155	---	5.6-6.0
	3-30	15-30	---	5.6-6.0
	30-72	5-15	---	6.1-7.3
42CG:				
Fairbanks	0-3	115-155	---	5.6-6.0
	3-30	15-30	---	5.6-6.0
	30-72	5-15	---	6.1-7.3
Fairbanks	0-3	115-155	---	5.6-6.0
	3-30	15-30	---	5.6-6.0
	30-72	5-15	---	6.1-7.3
42D:				
Fairbanks	0-3	115-155	---	5.6-6.0
	3-30	15-30	---	5.6-6.0
	30-72	5-15	---	6.1-7.3
42E:				
Fairbanks	0-3	115-155	---	5.6-6.0
	3-30	15-30	---	5.6-6.0
	30-72	5-15	---	6.1-7.3
44B:				
Steese	0-2	115-155	---	5.1-6.5
	2-5	---	15-30	5.1-6.0
	5-27	5-15	---	5.1-6.0
	27-33	5-10	---	6.1-6.5
	33-72	---	---	---
44C:				
Steese	0-2	115-155	---	5.1-6.5
	2-5	---	15-30	5.1-6.0
	5-27	5-15	---	5.1-6.0
	27-33	5-10	---	6.1-6.5
	33-72	---	---	---

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
44D:				
Steese	0-2	115-155	---	5.1-6.5
	2-5	---	15-30	5.1-6.0
	5-27	5-15	---	5.1-6.0
	27-33	5-10	---	6.1-6.5
	33-72	---	---	---
44E:				
Steese	0-2	115-155	---	5.1-6.5
	2-5	---	15-30	5.1-6.0
	5-27	5-15	---	5.1-6.0
	27-33	5-10	---	6.1-6.5
	33-72	---	---	---
44F:				
Steese	0-2	115-155	---	5.1-6.5
	2-5	---	15-30	5.1-6.0
	5-27	5-15	---	5.1-6.0
	27-33	5-10	---	6.1-6.5
	33-72	---	---	---
45C:				
Gilmore	0-3	115-155	---	5.1-6.0
	3-6	15-30	---	5.6-6.0
	6-12	1-5	---	5.6-6.0
	12-19	1-5	---	6.1-6.5
	19-72	---	---	---
45D:				
Gilmore	0-3	115-155	---	5.1-6.0
	3-6	15-30	---	5.6-6.0
	6-12	1-5	---	5.6-6.0
	12-19	1-5	---	6.1-6.5
	19-72	---	---	---
45E:				
Gilmore	0-3	115-155	---	5.1-6.0
	3-6	15-30	---	5.6-6.0
	6-12	1-5	---	5.6-6.0
	12-19	1-5	---	6.1-6.5
	19-72	---	---	---
45F:				
Gilmore	0-3	115-155	---	5.1-6.0
	3-6	15-30	---	5.6-6.0
	6-12	1-5	---	5.6-6.0
	12-19	1-5	---	6.1-6.5
	19-72	---	---	---

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
45G:				
Gilmore	0-3	115-155	---	5.1-6.0
	3-6	15-30	---	5.6-6.0
	6-12	1-5	---	5.6-6.0
	12-19	1-5	---	6.1-6.5
	19-72	---	---	---
46C:				
Eutrocryepts, hills	0-2	---	115-155	5.0-6.1
	2-31	5-15	---	5.6-7.3
	31-72	1-5	---	6.1-8.4
46D:				
Eutrocryepts, hills	0-2	---	115-155	5.0-6.1
	2-31	5-15	---	5.6-7.3
	31-72	1-5	---	6.1-8.4
48D:				
McCloud	0-3	---	115-155	4.1-5.6
	3-20	15-30	---	5.4-6.0
	20-29	5-15	---	5.4-6.0
	29-72	---	---	5.4-6.2
48E:				
McCloud	0-3	---	115-155	4.1-5.6
	3-20	15-30	---	5.4-6.0
	20-29	5-15	---	5.4-6.0
	29-72	---	---	5.4-6.2
48F:				
McCloud	0-3	---	115-155	4.1-5.6
	3-20	15-30	---	5.4-6.0
	20-29	5-15	---	5.4-6.0
	29-72	---	---	5.4-6.2
49D:				
Angel	0-2	---	115-155	4.1-5.0
	2-4	---	10-20	4.0-5.0
	4-8	15-30	---	5.4-6.0
	8-22	1-5	---	5.4-6.0
	22-72	1-5	---	5.4-5.8
49E:				
Angel	0-2	---	115-155	4.1-5.0
	2-4	---	10-20	4.0-5.0
	4-8	15-30	---	5.4-6.0
	8-22	1-5	---	5.4-6.0
	22-72	1-5	---	5.4-5.8

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
49F:				
Angel	0-2	---	115-155	4.1-5.0
	2-4	---	10-20	4.0-5.0
	4-8	15-30	---	5.4-6.0
	8-22	1-5	---	5.4-6.0
	22-72	1-5	---	5.4-5.8
50G:				
Ester	0-9	---	115-155	3.6-4.5
	9-12	---	15-30	4.5-5.5
	12-21	---	10-25	4.6-5.8
	21-72	---	---	---
50X:				
Ester	0-9	---	115-155	3.6-4.5
	9-12	---	15-30	4.5-5.5
	12-21	---	10-25	4.6-5.8
	21-72	---	---	---
51B:				
Saulich	0-16	---	115-155	4.5-5.5
	16-21	15-30	---	5.1-6.6
	21-72	---	---	6.1-7.3
51C:				
Saulich	0-16	---	115-155	4.5-5.5
	16-21	15-30	---	5.1-6.6
	21-72	---	---	6.1-7.3
61:				
Piledriver	0-3	115-155	---	5.6-6.6
	3-15	15-30	---	5.1-6.5
	15-33	5-15	---	5.6-7.3
	33-72	1-5	---	5.6-7.3
62:				
Peede	0-2	120-210	---	6.1-7.3
	2-72	5-9	---	6.1-7.3
Mosquito	0-18	115-155	---	5.1-6.1
	18-24	30-50	---	5.6-6.6
	24-72	---	---	5.6-6.6

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
63:				
Typic Cryaquents, occasional long flooding	0-6	120-210	---	5.6-7.3
	6-72	15-30	---	6.1-7.3
Tanana, rare brief flooding	0-3	---	115-155	4.5-5.0
	3-6	15-30	---	5.1-6.0
	6-25	5-20	---	5.6-7.3
	25-72	---	---	6.6-7.3
64:				
Eielson	0-2	115-155	---	5.1-7.1
	2-49	15-30	---	5.6-7.1
	49-71	1-5	---	6.1-7.6
	71-72	1-5	---	6.1-7.6
Tanana, rare brief flooding	0-3	---	115-155	4.5-5.0
	3-6	15-30	---	5.1-6.0
	6-25	5-20	---	5.6-7.3
	25-72	---	---	6.6-7.3
65:				
Fluvaquentic aquorthels	0-4	120-210	---	5.1-6.6
	4-24	6-25	---	5.6-6.6
	24-72	6-25	---	5.1-6.6
Typic Cryaquents, occasional long flooding	0-6	120-210	---	5.6-7.3
	6-72	15-30	---	6.1-7.3
66:				
Eielson	0-2	115-155	---	5.1-7.1
	2-49	15-30	---	5.6-7.1
	49-71	1-5	---	6.1-7.6
	71-72	1-5	---	6.1-7.6
69:				
Typic Cryaquents, occasional long flooding	0-6	120-210	---	5.6-7.3
	6-72	15-30	---	6.1-7.3
Eielson	0-2	115-155	---	5.1-7.1
	2-49	15-30	---	5.6-7.1
	49-71	1-5	---	6.1-7.6
	71-72	1-5	---	6.1-7.6

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
70A:				
Volkmar	0-3	---	15-50	3.5-5.5
	3-10	---	15-30	4.5-5.5
	10-30	5-10	---	5.1-6.5
	30-72	1-5	---	5.1-6.5
Richardson	0-1	---	15-50	3.5-5.5
	1-20	15-30	---	5.1-6.6
	20-59	1-5	---	5.4-6.7
	59-72	1-5	---	6.0-7.3
70B:				
Richardson	0-1	---	15-50	3.5-5.5
	1-20	15-30	---	5.1-6.6
	20-59	1-5	---	5.4-6.7
	59-72	1-5	---	6.0-7.3
Volkmar	0-3	---	15-50	3.5-5.5
	3-10	---	15-30	4.5-5.5
	10-30	5-10	---	5.1-6.5
	30-72	1-5	---	5.1-6.5
71:				
North Pole	0-2	115-155	---	6.1-7.3
	2-4	120-240	---	6.1-7.3
	4-39	5-25	---	6.1-7.3
	39-72	1-5	---	6.1-7.3
Mosquito	0-18	115-155	---	5.1-6.1
	18-24	30-50	---	5.6-6.6
	24-72	---	---	5.6-6.6
Liscum	0-3	115-155	---	6.1-7.3
	3-11	120-240	---	6.1-7.3
	11-15	---	15-30	4.5-5.5
	15-70	5-25	---	6.1-7.3
	70-72	5-10	---	6.1-7.3
72F:				
Eutrocryepts, escarpments	0-2	---	115-155	5.0-6.1
	2-31	5-15	---	5.6-7.3
	31-72	1-5	---	6.1-8.4
81V:				
Chatanika	0-4	---	115-155	4.5-6.1
	4-6	---	15-30	4.5-5.5
	6-21	5-15	---	4.5-6.1
	21-72	---	---	5.6-6.5
Saulich	0-16	---	115-155	4.5-5.5
	16-21	15-30	---	5.1-6.6
	21-72	---	---	6.1-7.3

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
81X:				
Chatanika	0-4	---	115-155	4.5-6.1
	4-6	---	15-30	4.5-5.5
	6-21	5-15	---	4.5-6.1
	21-72	---	---	5.6-6.5
Saulich	0-16	---	115-155	4.5-5.5
	16-21	15-30	---	5.1-6.6
	21-72	---	---	6.1-7.3
82V:				
Gilmore	0-3	115-155	---	5.1-6.0
	3-6	15-30	---	5.6-6.0
	6-12	1-5	---	5.6-6.0
	12-19	1-5	---	6.1-6.5
	19-72	---	---	---
Steese	0-2	115-155	---	5.1-6.5
	2-5	---	15-30	5.1-6.0
	5-27	5-15	---	5.1-6.0
	27-33	5-10	---	6.1-6.5
	33-72	---	---	---
82X:				
Gilmore	0-3	115-155	---	5.1-6.0
	3-6	15-30	---	5.6-6.0
	6-12	1-5	---	5.6-6.0
	12-19	1-5	---	6.1-6.5
	19-72	---	---	---
Steese	0-2	115-155	---	5.1-6.5
	2-5	---	15-30	5.1-6.0
	5-27	5-15	---	5.1-6.0
	27-33	5-10	---	6.1-6.5
	33-72	---	---	---
85:				
Eutrocryepts, hills	0-2	---	115-155	5.0-6.1
	2-31	5-15	---	5.6-7.3
	31-72	1-5	---	6.1-8.4
Minto	0-5	---	115-155	4.5-5.0
	5-9	15-30	---	5.6-6.5
	9-16	5-15	---	5.6-6.0
	16-72	5-15	---	6.1-6.5
86G:				
Brigadier	0-6	---	115-155	3.8-4.6
	6-11	---	15-30	4.3-5.3
	11-16	1-5	---	5.2-5.7
	16-20	1-5	---	5.2-5.7
	20-72	---	---	---

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
86V:				
Brigadier	0-6	---	115-155	3.8-4.6
	6-11	---	15-30	4.3-5.3
	11-16	1-5	---	5.2-5.7
	16-20	1-5	---	5.2-5.7
	20-72	---	---	---
Manchu	0-7	---	115-155	3.8-4.6
	7-9	---	15-30	4.3-5.4
	9-28	1-5	---	5.1-6.0
	28-39	1-5	---	5.6-6.5
	39-72	---	---	6.1-6.5
86X:				
Brigadier	0-6	---	115-155	3.8-4.6
	6-11	---	15-30	4.3-5.3
	11-16	1-5	---	5.2-5.7
	16-20	1-5	---	5.2-5.7
	20-72	---	---	---
Manchu	0-7	---	115-155	3.8-4.6
	7-9	---	15-30	4.3-5.4
	9-28	1-5	---	5.1-6.0
	28-39	1-5	---	5.6-6.5
	39-72	---	---	6.1-6.5
87V:				
Gilmore	0-3	115-155	---	5.1-6.0
	3-6	15-30	---	5.6-6.0
	6-12	1-5	---	5.6-6.0
	12-19	1-5	---	6.1-6.5
	19-72	---	---	---
Manchu	0-7	---	115-155	3.8-4.6
	7-9	---	15-30	4.3-5.4
	9-28	1-5	---	5.1-6.0
	28-39	1-5	---	5.6-6.5
	39-72	---	---	6.1-6.5
87X:				
Gilmore	0-3	115-155	---	5.1-6.0
	3-6	15-30	---	5.6-6.0
	6-12	1-5	---	5.6-6.0
	12-19	1-5	---	6.1-6.5
	19-72	---	---	---

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
88:				
Dystrogelepts	0-2	---	115-155	4.1-6.2
	2-7	---	15-30	4.6-5.6
	7-14	---	1-5	5.0-5.6
	14-24	---	1-5	5.0-5.6
	24-72	---	---	---
Turbels	0-2	---	115-155	3.6-4.5
	2-13	---	10-20	4.5-5.5
	13-24	---	5-15	4.6-5.8
	24-31	---	---	4.6-5.8
	31-72	---	---	---
	>72	---	---	---
89X:				
Fairbanks	0-3	115-155	---	5.6-6.0
	3-30	15-30	---	5.6-6.0
	30-72	5-15	---	6.1-7.3
Steese	0-2	115-155	---	5.1-6.5
	2-5	---	15-30	5.1-6.0
	5-27	5-15	---	5.1-6.0
	27-33	5-10	---	6.1-6.5
	33-72	---	---	---
90:				
Fubar	0-2	115-155	---	5.1-6.1
	2-10	5-10	---	5.6-6.5
	10-72	1-5	---	5.6-7.3
Tanana, rare brief flooding	0-3	---	115-155	4.5-5.0
	3-6	15-30	---	5.1-6.0
	6-25	5-20	---	5.6-7.3
	25-72	---	---	6.6-7.3
91:				
Aquic Cryofluvents	0-3	---	120-210	4.2-5.0
	3-10	---	15-35	4.5-5.2
	10-72	5-15	---	5.2-6.2
Fluvaquentic aquorthels	0-4	120-210	---	5.1-6.6
	4-24	6-25	---	5.6-6.6
	24-72	6-25	---	5.1-6.6
Typic Cryaquents, frequent flooding	0-6	120-210	---	5.6-7.3
	6-72	15-30	---	6.1-7.3

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
211:				
Chatanika	0-4	---	115-155	4.5-6.1
	4-6	---	15-30	4.5-5.5
	6-21	5-15	---	4.5-6.1
	21-72	---	---	5.6-6.5
Goldstream	0-9	---	70-120	3.6-4.5
	9-12	---	15-30	4.5-5.5
	12-20	---	5-15	4.5-5.5
	20-72	---	---	4.5-5.5
212:				
Goldstream	0-9	---	70-120	3.6-4.5
	9-12	---	15-30	4.5-5.5
	12-20	---	5-15	4.5-5.5
	20-72	---	---	4.5-5.5
Histels	0-12	---	115-155	3.6-4.5
	12-17	---	120-210	3.6-5.0
	17-26	---	---	3.6-5.0
	26-72	---	---	5.1-6.0
251:				
Tanana, rare brief flooding	0-3	---	115-155	4.5-5.0
	3-6	15-30	---	5.1-6.0
	6-25	5-20	---	5.6-7.3
	25-72	---	---	6.6-7.3
Mosquito	0-18	115-155	---	5.1-6.1
	18-24	30-50	---	5.6-6.6
	24-72	---	---	5.6-6.6
361:				
Jarvis	0-3	115-155	---	5.6-6.6
	3-6	15-30	---	5.1-6.5
	6-24	1-5	---	5.6-7.3
	24-72	1-5	---	5.6-7.3
Chena	0-4	115-155	---	5.1-6.0
	4-9	5-20	---	5.6-6.5
	9-72	1-5	---	5.6-6.5
362:				
Piledriver	0-3	115-155	---	5.6-6.6
	3-15	15-30	---	5.1-6.5
	15-33	5-15	---	5.6-7.3
	33-72	1-5	---	5.6-7.3
Fubar	0-2	115-155	---	5.1-6.1
	2-10	5-10	---	5.6-6.5
	10-72	1-5	---	5.6-7.3

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
363:				
Jarvis	0-3	115-155	---	5.6-6.6
	3-6	15-30	---	5.1-6.5
	6-24	1-5	---	5.6-7.3
	24-72	1-5	---	5.6-7.3
Salchaket	0-3	---	115-155	4.5-5.6
	3-24	15-30	---	5.1-6.0
	24-45	5-15	---	5.6-7.3
	45-72	1-5	---	6.1-7.3
411A:				
Minto	0-5	---	115-155	4.5-5.0
	5-9	15-30	---	5.6-6.5
	9-16	5-15	---	5.6-6.0
	16-72	5-15	---	6.1-6.5
Chatanika	0-4	---	115-155	4.5-6.1
	4-6	---	15-30	4.5-5.5
	6-21	5-15	---	4.5-6.1
	21-72	---	---	5.6-6.5
411B:				
Minto	0-5	---	115-155	4.5-5.0
	5-9	15-30	---	5.6-6.5
	9-16	5-15	---	5.6-6.0
	16-72	5-15	---	6.1-6.5
Chatanika	0-4	---	115-155	4.5-6.1
	4-6	---	15-30	4.5-5.5
	6-21	5-15	---	4.5-6.1
	21-72	---	---	5.6-6.5
411C:				
Minto	0-5	---	115-155	4.5-5.0
	5-9	15-30	---	5.6-6.5
	9-16	5-15	---	5.6-6.0
	16-72	5-15	---	6.1-6.5
Chatanika	0-4	---	115-155	4.5-6.1
	4-6	---	15-30	4.5-5.5
	6-21	5-15	---	4.5-6.1
	21-72	---	---	5.6-6.5

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
411D:				
Minto	0-5	---	115-155	4.5-5.0
	5-9	15-30	---	5.6-6.5
	9-16	5-15	---	5.6-6.0
	16-72	5-15	---	6.1-6.5
Chatanika	0-4	---	115-155	4.5-6.1
	4-6	---	15-30	4.5-5.5
	6-21	5-15	---	4.5-6.1
	21-72	---	---	5.6-6.5
421D:				
Fairbanks	0-3	115-155	---	5.6-6.0
	3-30	15-30	---	5.6-6.0
	30-72	5-15	---	6.1-7.3
Steese	0-2	115-155	---	5.1-6.5
	2-5	---	15-30	5.1-6.0
	5-27	5-15	---	5.1-6.0
	27-33	5-10	---	6.1-6.5
	33-72	---	---	---
441D:				
Steese	0-2	115-155	---	5.1-6.5
	2-5	---	15-30	5.1-6.0
	5-27	5-15	---	5.1-6.0
	27-33	5-10	---	6.1-6.5
	33-72	---	---	---
Gilmore	0-3	115-155	---	5.1-6.0
	3-6	15-30	---	5.6-6.0
	6-12	1-5	---	5.6-6.0
	12-19	1-5	---	6.1-6.5
	19-72	---	---	---
441E:				
Steese	0-2	115-155	---	5.1-6.5
	2-5	---	15-30	5.1-6.0
	5-27	5-15	---	5.1-6.0
	27-33	5-10	---	6.1-6.5
	33-72	---	---	---
Gilmore	0-3	115-155	---	5.1-6.0
	3-6	15-30	---	5.6-6.0
	6-12	1-5	---	5.6-6.0
	12-19	1-5	---	6.1-6.5
	19-72	---	---	---

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
441F:				
Gilmore	0-3	115-155	---	5.1-6.0
	3-6	15-30	---	5.6-6.0
	6-12	1-5	---	5.6-6.0
	12-19	1-5	---	6.1-6.5
	19-72	---	---	---
Steese	0-2	115-155	---	5.1-6.5
	2-5	---	15-30	5.1-6.0
	5-27	5-15	---	5.1-6.0
	27-33	5-10	---	6.1-6.5
	33-72	---	---	---
441G:				
Gilmore	0-3	115-155	---	5.1-6.0
	3-6	15-30	---	5.6-6.0
	6-12	1-5	---	5.6-6.0
	12-19	1-5	---	6.1-6.5
	19-72	---	---	---
Steese	0-2	115-155	---	5.1-6.5
	2-5	---	15-30	5.1-6.0
	5-27	5-15	---	5.1-6.0
	27-33	5-10	---	6.1-6.5
	33-72	---	---	---
451G:				
Brigadier	0-6	---	115-155	3.8-4.6
	6-11	---	15-30	4.3-5.3
	11-16	1-5	---	5.2-5.7
	16-20	1-5	---	5.2-5.7
	20-72	---	---	---
Ester	0-9	---	115-155	3.6-4.5
	9-12	---	15-30	4.5-5.5
	12-21	---	10-25	4.6-5.8
	21-72	---	---	---
451X:				
Brigadier	0-6	---	115-155	3.8-4.6
	6-11	---	15-30	4.3-5.3
	11-16	1-5	---	5.2-5.7
	16-20	1-5	---	5.2-5.7
	20-72	---	---	---
Ester	0-9	---	115-155	3.6-4.5
	9-12	---	15-30	4.5-5.5
	12-21	---	10-25	4.6-5.8
	21-72	---	---	---

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
452:				
Gilmore	0-3	115-155	---	5.1-6.0
	3-6	15-30	---	5.6-6.0
	6-12	1-5	---	5.6-6.0
	12-19	1-5	---	6.1-6.5
	19-72	---	---	---
Steese	0-2	115-155	---	5.1-6.5
	2-5	---	15-30	5.1-6.0
	5-27	5-15	---	5.1-6.0
	27-33	5-10	---	6.1-6.5
	33-72	---	---	---
492:				
Angel	0-2	---	115-155	4.1-5.0
	2-4	---	10-20	4.0-5.0
	4-8	15-30	---	5.4-6.0
	8-22	1-5	---	5.4-6.0
	22-72	1-5	---	5.4-5.8
McCloud	0-3	---	115-155	4.1-5.6
	3-20	15-30	---	5.4-6.0
	20-29	5-15	---	5.4-6.0
	29-72	---	---	5.4-6.2
611:				
Piledriver	0-3	115-155	---	5.6-6.6
	3-15	15-30	---	5.1-6.5
	15-33	5-15	---	5.6-7.3
	33-72	1-5	---	5.6-7.3
Eielson	0-2	115-155	---	5.1-7.1
	2-49	15-30	---	5.6-7.1
	49-71	1-5	---	6.1-7.6
	71-72	1-5	---	6.1-7.6
CL:				
Typic Cryorthents	0-1	115-155	---	5.5-6.6
	1-49	10-20	---	6.1-7.3
	49-72	5-10	---	6.1-7.3
Gv:				
Pits, gravel	---	---	---	---
Lf:				
Dumps, landfill	---	---	---	---
ME:				
Dumps, mine	---	---	---	---
Qu:				
Pits, quarry	---	---	---	---

Table 15. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
Rv:				
Riverwash	---	---	---	---
UC:				
Typic Cryorthents, fill --------	0-30	5-15	---	6.1-7.3
	30-63	5-15	---	6.1-7.8
	63-72	5-10	---	6.1-7.8
Urban land	---	---	---	---
W:				
Water	---	---	---	---
WAH:				
Typic Cryaquents, frequent long ponding ------	0-6	120-210	---	5.6-7.3
	6-72	15-30	---	6.1-7.3
Histic Cryaquepts----------	0-13	---	115-155	4.5-5.6
	13-30	5-15	---	5.1-6.0
	30-72	5-15	---	5.5-6.1
Terric Cryofibrists----------	0-28	115-155	---	5.0-6.0
	28-40	120-240	---	5.6-6.6
	40-72	30-50	---	5.6-6.6

Table 16. Water Features

(See text for definitions of terms used in this table. Upper limit, Lower limit, and Surface water depth are in feet. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Hydrologic group	Month	Wet soil: Upper limit	Wet soil: Lower limit	Wet soil: Water table kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft.	Ft.		Ft.				
9:										
Histels	D	Apr-Jun	0.0	1.3-2.0	Perched	0.0-1.0	Long	Frequent	---	None
		Jul-Sep	0.0	1.3-2.0	Perched	---	---	---	---	None
13:										
Terric Cryofibrists	D	Apr-Jun	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jul-Sep	0.0-0.3	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
Liscum	D	Apr-Jun	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	Brief	Rare
		Jul-Sep	0.0-0.7	>6.0	Apparent	---	---	---	Brief	Rare
14:										
Histels	D	Apr-Jun	0.0	1.3-2.0	Perched	0.0-1.0	Long	Frequent	---	None
		Jul-Sep	0.0	1.3-2.0	Perched	---	---	---	---	None
Terric Cryofibrists	D	Apr-Jun	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jul-Sep	0.0-0.3	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
20:										
Mosquito	D	Apr-Jun	0.0	1.1-2.6	Perched	0.0-1.0	Long	Frequent	Brief	Rare
		Jul-Sep	0.0	1.1-2.6	Perched	---	---	---	Brief	Rare
21A:										
Goldstream	D	Apr	0.0	1.1-2.0	Perched	0.0-1.0	Long	Frequent	---	None
		May-Jun	0.0-0.3	1.1-2.0	Perched	0.0-1.0	Long	Frequent	---	None
		Jul-Sep	0.0-1.0	1.1-2.0	Perched	---	---	---	---	None
21B:										
Goldstream	D	Apr	0.0	1.1-2.0	Perched	0.0-1.0	Long	Frequent	---	None
		May-Jun	0.0-0.3	1.1-2.0	Perched	0.0-1.0	Long	Frequent	---	None
		Jul-Sep	0.0-1.0	1.1-2.0	Perched	---	---	---	---	None
22:										
Tanacross	D	Apr-May	0.0	0.8-2.3	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		Jun-Sep	0.0	0.8-2.3	Perched	---	---	---	Brief	Rare
25:										
Tanana, rare brief flooding	D	Apr-May	0.0	1.3-3.9	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		Jun	0.0-1.0	1.3-3.9	Perched	---	---	---	Brief	Rare
		Jul-Sep	0.0-1.3	1.3-3.9	Perched	---	---	---	Brief	Rare
26:										
Histels	D	Apr-Jun	0.0	1.3-2.0	Perched	0.0-1.0	Long	Frequent	---	None
		Jul-Sep	0.0	1.3-2.0	Perched	---	---	---	---	None
Mosquito	D	Apr-Jun	0.0	1.1-2.6	Perched	0.0-1.0	Long	Frequent	Brief	Rare
		Jul-Sep	0.0	1.1-2.6	Perched	---	---	---	Brief	Rare

Table 16. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Wet soil: Upper limit	Wet soil: Lower limit	Wet soil: Water table kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft.	Ft.		Ft.				
31:										
Eielson	B	Apr	0.0-0.3	0.8-1.5	Perched	0.0-0.5	Long	Frequent	Brief	Occasional
		May	0.0	1.1-2.1	Perched	0.0-0.5	Long	Frequent	Brief	Occasional
		Jun	3.3-4.9	>6.0	Apparent	---	---	---	Brief	Occasional
		Jul-Sep	2.6-4.9	>6.0	Apparent	---	---	---	Brief	Occasional
Piledriver	B	Apr	0.0-0.3	0.8-1.5	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		May	0.0-0.7	1.5-2.5	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		Jun-Sep	3.3-4.9	>6.0	Apparent	---	---	---	Brief	Rare
32:										
Salchaket	B	Apr	0.0-1.0	0.8-2.5	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		May	0.0-1.3	1.1-2.5	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		Jun-Sep	---	---	---	---	---	---	Brief	Rare
35:										
North Pole	D	Apr-Jun	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Brief	Rare
		Jul	0.0-0.3	>6.0	Apparent	---	---	---	Brief	Rare
		Aug-Sep	0.0-1.3	>6.0	Apparent	---	---	---	Brief	Rare
36:										
Jarvis	B	Apr	0.0-0.3	0.8-2.5	Perched	0.0-0.3	Long	Occasional	Brief	Rare
		May	0.0	0.8-2.5	Perched	---	---	---	Brief	Rare
		Jun-Sep	---	---	---	---	---	---	Brief	Rare
37:										
Chena	A	Apr-Sep	---	---	---	---	---	None	Brief	Rare
39A:										
Nenana	B	Apr	---	---	---	0.0-0.3	Long	Occasional	---	None
		May-Sep	---	---	---	---	---	---	---	None
40A:										
Chatanika	D	Apr-May	0.0	1.0-3.3	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.0-3.3	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.0-3.3	Perched	---	---	---	---	None
40B:										
Chatanika	D	Apr-May	0.0	1.0-3.3	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.0-3.3	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.0-3.3	Perched	---	---	---	---	None
40C:										
Chatanika	D	Apr-May	0.0	1.0-3.3	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.0-3.3	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.0-3.3	Perched	---	---	---	---	None
40D:										
Chatanika	D	Apr-May	0.0	1.0-3.3	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.0-3.3	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.0-3.3	Perched	---	---	---	---	None
41A:										
Minto	B	Apr-May	0.2-1.0	1.3-3.0	Perched	---	---	None	---	None
		Jun-Sep	---	---	---	---	---	None	---	None
41B:										
Minto	B	Apr-May	0.2-1.0	1.3-3.0	Perched	---	---	None	---	None
		Jun-Sep	---	---	---	---	---	None	---	None

Table 16. Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Wet soil: Upper limit	Wet soil: Lower limit	Wet soil: Water table kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft.	Ft.		Ft.				
41C:										
Minto	B	Apr-May	0.2-1.0	1.3-3.0	Perched	---	---	None	---	None
		Jun-Sep	---	---	---	---	---	None	---	None
41D:										
Minto	B	Apr-May	0.2-1.0	1.3-3.0	Perched	---	---	None	---	None
		Jun-Sep	---	---	---	---	---	None	---	None
42B:										
Fairbanks	B	Apr-Sep	---	---	---	---	---	None	---	None
42C:										
Fairbanks	B	Apr-Sep	---	---	---	---	---	None	---	None
42CG:										
Fairbanks	B	Apr	---	---	---	---	---	None	---	None
42D:										
Fairbanks	B	Apr-Sep	---	---	---	---	---	None	---	None
42E:										
Fairbanks	B	Apr-Sep	---	---	---	---	---	None	---	None
44B:										
Steese	B	Apr-Sep	---	---	---	---	---	None	---	None
44C:										
Steese	B	Apr-Sep	---	---	---	---	---	None	---	None
44D:										
Steese	B	Apr-Sep	---	---	---	---	---	None	---	None
44E:										
Steese	B	Apr-Sep	---	---	---	---	---	None	---	None
44F:										
Steese	B	Apr-Sep	---	---	---	---	---	None	---	None
45C:										
Gilmore	D	Apr-Sep	---	---	---	---	---	None	---	None
45D:										
Gilmore	D	Apr-Sep	---	---	---	---	---	None	---	None
45E:										
Gilmore	D	Apr-Sep	---	---	---	---	---	None	---	None
45F:										
Gilmore	D	Apr-Sep	---	---	---	---	---	None	---	None
45G:										
Gilmore	D	Apr-Sep	---	---	---	---	---	None	---	None
46C:										
Eutrocryepts, hills	B	Apr-Sep	---	---	---	---	---	None	---	None
46D:										
Eutrocryepts, hills	B	Apr-Sep	---	---	---	---	---	None	---	None

Table 16. Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Wet soil: Upper limit	Wet soil: Lower limit	Wet soil: Water table kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft.	Ft.		Ft.				
48D:										
McCloud	B	Apr-Sep	---	---	---	---	---	None	---	None
48E:										
McCloud	B	Apr-Sep	---	---	---	---	---	None	---	None
48F:										
McCloud	B	Apr-Sep	---	---	---	---	---	None	---	None
49D:										
Angel	B	Apr-Sep	---	---	---	---	---	None	---	None
49E:										
Angel	B	Apr-Sep	---	---	---	---	---	None	---	None
49F:										
Angel	B	Apr-Sep	---	---	---	---	---	None	---	None
50G:										
Ester	D	Apr-Sep	0.0-0.7	0.6-2.5	Perched	---	---	None	---	None
50X:										
Ester	D	Apr-Sep	0.0-0.7	0.6-2.5	Perched	---	---	None	---	None
51B:										
Saulich	D	Apr-May	0.0	1.1-2.0	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.1-2.0	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.1-2.0	Perched	---	---	---	---	None
51C:										
Saulich	D	Apr-May	0.0	1.1-2.0	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.1-2.0	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.1-2.0	Perched	---	---	---	---	None
61:										
Piledriver	B	Apr	0.0-0.3	0.8-1.5	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		May	0.0-0.7	1.5-2.5	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		Jun-Sep	3.3-4.9	>6.0	Apparent	---	---	---	Brief	Rare
62:										
Peede	D	Apr-Jun	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	Brief	Occasional
		Jul-Sep	0.0-1.0	>6.0	Apparent	---	---	---	Brief	Occasional
Mosquito	D	Apr-Jun	0.0	1.1-2.6	Perched	0.0-1.0	Long	Frequent	Brief	Rare
		Jul-Sep	0.0	1.1-2.6	Perched	---	---	---	Brief	Rare
63:										
Typic Cryaquents, occasional long flooding	D	Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Long	Occasional
		Jun	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Brief	Occasional
		Jul-Sep	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	Brief	Occasional
Tanana, rare brief flooding	D	Apr-May	0.0	1.3-3.9	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		Jun	0.0-1.0	1.3-3.9	Perched	---	---	---	Brief	Rare
		Jul-Sep	0.0-1.3	1.3-3.9	Perched	---	---	---	Brief	Rare

Table 16. Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Wet soil: Upper limit	Wet soil: Lower limit	Wet soil: Water table kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft.	Ft.		Ft.				
64:										
Eielson	B	Apr	0.0-0.3	0.8-1.5	Perched	0.0-0.5	Long	Frequent	Brief	Occasional
		May	0.0	1.1-2.1	Perched	0.0-0.5	Long	Frequent	Brief	Occasional
		Jun	3.3-4.9	>6.0	Apparent	---	---	---	Brief	Occasional
		Jul-Sep	2.6-4.9	>6.0	Apparent	---	---	---	Brief	Occasional
Tanana, rare brief flooding	D	Apr-May	0.0	1.3-3.9	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		Jun	0.0-1.0	1.3-3.9	Perched	---	---	---	Brief	Rare
		Jul-Sep	0.0-1.3	1.3-3.9	Perched	---	---	---	Brief	Rare
65:										
Fluvaquentic aquorthels	D	Apr-Jun	0.0	1.1-2.3	Perched	0.0-0.5	Long	Frequent	Brief	Occasional
		Jul-Sep	0.3-1.0	1.1-2.3	Perched	---	---	---	Brief	Occasional
Typic Cryaquents, occasional long flooding	D	Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Long	Occasional
		Jun	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Brief	Occasional
		Jul-Sep	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	Brief	Occasional
66:										
Eielson	B	Apr	0.0-0.3	0.8-1.5	Perched	0.0-0.5	Long	Frequent	Brief	Occasional
		May	0.0	1.1-2.1	Perched	0.0-0.5	Long	Frequent	Brief	Occasional
		Jun	3.3-4.9	>6.0	Apparent	---	---	---	Brief	Occasional
		Jul-Sep	2.6-4.9	>6.0	Apparent	---	---	---	Brief	Occasional
69:										
Typic Cryaquents, occasional long flooding	D	Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Long	Occasional
		Jun	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Brief	Occasional
		Jul-Sep	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	Brief	Occasional
Eielson	B	Apr	0.0-0.3	0.8-1.5	Perched	0.0-0.5	Long	Frequent	Brief	Occasional
		May	0.0	1.1-2.1	Perched	0.0-0.5	Long	Frequent	Brief	Occasional
		Jun	3.3-4.9	>6.0	Apparent	---	---	---	Brief	Occasional
		Jul-Sep	2.6-4.9	>6.0	Apparent	---	---	---	Brief	Occasional
70A:										
Volkmar	B	Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun-Sep	---	---	---	---	---	---	---	None
Richardson	B	Apr	0.0-1.0	0.8-2.5	Perched	0.0-0.5	Long	Frequent	---	None
		May	0.0-1.3	1.1-2.5	Perched	0.0-0.5	Long	Frequent	---	None
		Jun-Sep	---	---	---	---	---	---	---	None
70B:										
Richardson	B	Apr	0.0-1.0	0.8-2.5	Perched	0.0-0.5	Long	Frequent	---	None
		May	0.0-1.3	1.1-2.5	Perched	0.0-0.5	Long	Frequent	---	None
		Jun-Sep	---	---	---	---	---	---	---	None
Volkmar	B	Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun-Sep	---	---	---	---	---	---	---	None

Table 16. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Wet soil: Upper limit	Wet soil: Lower limit	Wet soil: Water table kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft.	Ft.		Ft.				
71:										
North Pole	D	Apr-Jun	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Brief	Rare
		Jul	0.0-0.3	>6.0	Apparent	---	---	---	Brief	Rare
		Aug-Sep	0.0-1.3	>6.0	Apparent	---	---	---	Brief	Rare
Mosquito	D	Apr-Jun	0.0	1.1-2.6	Perched	0.0-1.0	Long	Frequent	Brief	Rare
		Jul-Sep	0.0	1.1-2.6	Perched	---	---	---	Brief	Rare
Liscum	D	Apr-Jun	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	Brief	Rare
		Jul-Sep	0.0-0.7	>6.0	Apparent	---	---	---	Brief	Rare
72F:										
Eutrocryepts, escarpments	B	Apr-Sep	---	---	---	---	---	None	---	None
81V:										
Chatanika	D	Apr-May	0.0	1.0-3.3	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.0-3.3	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.0-3.3	Perched	---	---	---	---	None
Saulich	D	Apr-May	0.0	1.1-2.0	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.1-2.0	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.1-2.0	Perched	---	---	---	---	None
81X:										
Chatanika	D	Apr-May	0.0	1.0-3.3	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.0-3.3	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.0-3.3	Perched	---	---	---	---	None
Saulich	D	Apr-May	0.0	1.1-2.0	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.1-2.0	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.1-2.0	Perched	---	---	---	---	None
82V:										
Gilmore	D	Apr-Sep	---	---	---	---	---	None	---	None
Steese	B	Apr-Sep	---	---	---	---	---	None	---	None
82X:										
Gilmore	D	Apr-Sep	---	---	---	---	---	None	---	None
Steese	B	Apr-Sep	---	---	---	---	---	None	---	None
85:										
Eutrocryepts, hills	B	Apr-Sep	---	---	---	---	---	None	---	None
Minto	B	Apr-May	0.2-1.0	1.3-3.0	Perched	---	---	None	---	None
		Jun-Sep	---	---	---	---	---	None	---	None
86G:										
Brigadier	D	Apr-Sep	---	---	---	---	---	None	---	None
86V:										
Brigadier	D	Apr-Sep	---	---	---	---	---	None	---	None
Manchu	B	Apr	0.3-0.7	>6.0	Apparent	---	---	None	---	None
		May	0.6-1.0	>6.0	Apparent	---	---	None	---	None
		Jun	0.6-1.5	>6.0	Apparent	---	---	None	---	None
		Jul-Sep	---	---	---	---	---	None	---	None

Table 16. Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Wet soil: Upper limit	Wet soil: Lower limit	Wet soil: Water table kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft.	Ft.		Ft.				
86X:										
Brigadier	D	Apr-Sep	---	---	---	---	---	None	---	None
Manchu	B	Apr	0.3-0.7	>6.0	Apparent	---	---	None	---	None
		May	0.6-1.0	>6.0	Apparent	---	---	None	---	None
		Jun	0.6-1.5	>6.0	Apparent	---	---	None	---	None
		Jul-Sep	---	---	---	---	---	None	---	None
87V:										
Gilmore	D	Apr-Sep	---	---	---	---	---	None	---	None
Manchu	B	Apr	0.3-0.7	>6.0	Apparent	---	---	None	---	None
		May	0.6-1.0	>6.0	Apparent	---	---	None	---	None
		Jun	0.6-1.5	>6.0	Apparent	---	---	None	---	None
		Jul-Sep	---	---	---	---	---	None	---	None
87X:										
Gilmore	D	Apr-Sep	---	---	---	---	---	None	---	None
88:										
Dystrogelepts	D	Apr-Sep	---	---	---	---	---	None	---	None
Turbels	D	Apr-May	0.0	1.3-2.3	Perched	---	---	None	---	None
		Jun-Sep	0.5-1.8	1.3-2.3	Perched	---	---	None	---	None
89X:										
Fairbanks	B	Apr-Sep	---	---	---	---	---	None	---	None
Steese	B	Apr-Sep	---	---	---	---	---	None	---	None
90:										
Fubar	B	Apr-Sep	3.9-6.0	>6.0	Apparent	---	---	None	Brief	Rare
Tanana, rare brief flooding	D	Apr-May	0.0	1.3-3.9	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		Jun	0.0-1.0	1.3-3.9	Perched	---	---	---	Brief	Rare
		Jul-Sep	0.0-1.3	1.3-3.9	Perched	---	---	---	Brief	Rare
91:										
Aquic Cryofluvents	C	Apr-May	0.0-0.5	>6.0	Apparent	0.0-0.5	Long	Frequent	Long	Occasional
		Jun	3.9-4.9	>6.0	Apparent	---	---	---	Brief	Occasional
		Jul	4.1-5.9	>6.0	Apparent	---	---	---	Brief	Occasional
		Aug	4.1-6.2	>6.0	Apparent	---	---	---	Brief	Occasional
		Sep	4.1-5.9	>6.0	Apparent	---	---	---	Brief	Occasional
Fluvaquentic aquorthels	D	Apr-Jun	0.0	1.1-2.3	Perched	0.0-0.5	Long	Frequent	Brief	Occasional
		Jul-Sep	0.3-1.0	1.1-2.3	Perched	---	---	---	Brief	Occasional
Typic Cryaquents, frequent flooding	D	Apr-May	0.0	>6.0	Apparent	---	---	None	Long	Frequent
		Jun	0.0	>6.0	Apparent	---	---	None	Brief	Frequent
		Jul	0.0	>6.0	Apparent	---	---	None	---	---
		Aug-Sep	0.0	>6.0	Apparent	---	---	None	Brief	Frequent

Table 16. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Wet soil: Upper limit	Wet soil: Lower limit	Wet soil: Water table kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft.	Ft.		Ft.				
211:										
Chatanika	D	Apr-May	0.0	1.0-3.3	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.0-3.3	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.0-3.3	Perched	---	---	---	---	None
Goldstream	D	Apr	0.0	1.1-2.0	Perched	0.0-1.0	Long	Frequent	---	None
		May-Jun	0.0-0.3	1.1-2.0	Perched	0.0-1.0	Long	Frequent	---	None
		Jul-Sep	0.0-1.0	1.1-2.0	Perched	---	---	---	---	None
212:										
Goldstream	D	Apr	0.0	1.1-2.0	Perched	0.0-1.0	Long	Frequent	---	None
		May-Jun	0.0-0.3	1.1-2.0	Perched	0.0-1.0	Long	Frequent	---	None
		Jul-Sep	0.0-1.0	1.1-2.0	Perched	---	---	---	---	None
Histels	D	Apr-Jun	0.0	1.3-2.0	Perched	0.0-1.0	Long	Frequent	---	None
		Jul-Sep	0.0	1.3-2.0	Perched	---	---	---	---	None
251:										
Tanana, rare brief flooding	D	Apr-May	0.0	1.3-3.9	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		Jun	0.0-1.0	1.3-3.9	Perched	---	---	---	Brief	Rare
		Jul-Sep	0.0-1.3	1.3-3.9	Perched	---	---	---	Brief	Rare
Mosquito	D	Apr-Jun	0.0	1.1-2.6	Perched	0.0-1.0	Long	Frequent	Brief	Rare
		Jul-Sep	0.0	1.1-2.6	Perched	---	---	---	Brief	Rare
361:										
Jarvis	B	Apr	0.0-0.3	0.8-2.5	Perched	0.0-0.3	Long	Occasional	Brief	Rare
		May	0.0	0.8-2.5	Perched	---	---	---	Brief	Rare
		Jun-Sep	---	---	---	---	---	---	Brief	Rare
Chena	A	Apr-Sep	---	---	---	---	---	None	Brief	Rare
362:										
Piledriver	B	Apr	0.0-0.3	0.8-1.5	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		May	0.0-0.7	1.5-2.5	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		Jun-Sep	3.3-4.9	>6.0	Apparent	---	---	---	Brief	Rare
Fubar	B	Apr-Sep	3.9-6.0	>6.0	Apparent	---	---	None	Brief	Rare
363:										
Jarvis	B	Apr	0.0-0.3	0.8-2.5	Perched	0.0-0.3	Long	Occasional	Brief	Rare
		May	0.0	0.8-2.5	Perched	---	---	---	Brief	Rare
		Jun-Sep	---	---	---	---	---	---	Brief	Rare
Salchaket	B	Apr	0.0-1.0	0.8-2.5	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		May	0.0-1.3	1.1-2.5	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		Jun-Sep	---	---	---	---	---	---	Brief	Rare
411A:										
Minto	B	Apr-May	0.2-1.0	1.3-3.0	Perched	---	---	None	---	None
		Jun-Sep	---	---	---	---	---	None	---	None
Chatanika	D	Apr-May	0.0	1.0-3.3	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.0-3.3	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.0-3.3	Perched	---	---	---	---	None

Table 16. Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Wet soil: Upper limit	Wet soil: Lower limit	Wet soil: Water table kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft.	Ft.		Ft.				
411B:										
Minto	B	Apr-May	0.2-1.0	1.3-3.0	Perched	---	---	None	---	None
		Jun-Sep	---	---	---	---	---	None	---	None
Chatanika	D	Apr-May	0.0	1.0-3.3	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.0-3.3	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.0-3.3	Perched	---	---	---	---	None
411C:										
Minto	B	Apr-May	0.2-1.0	1.3-3.0	Perched	---	---	None	---	None
		Jun-Sep	---	---	---	---	---	None	---	None
Chatanika	D	Apr-May	0.0	1.0-3.3	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.0-3.3	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.0-3.3	Perched	---	---	---	---	None
411D:										
Minto	B	Apr-May	0.2-1.0	1.3-3.0	Perched	---	---	None	---	None
		Jun-Sep	---	---	---	---	---	None	---	None
Chatanika	D	Apr-May	0.0	1.0-3.3	Perched	0.0-0.3	Long	Frequent	---	None
		Jun	0.0-1.0	1.0-3.3	Perched	---	---	---	---	None
		Jul-Sep	0.3-1.0	1.0-3.3	Perched	---	---	---	---	None
421D:										
Fairbanks	B	Apr-Sep	---	---	---	---	---	None	---	None
Steese	B	Apr-Sep	---	---	---	---	---	None	---	None
441D:										
Steese	B	Apr-Sep	---	---	---	---	---	None	---	None
Gilmore	D	Apr-Sep	---	---	---	---	---	None	---	None
441E:										
Steese	B	Apr-Sep	---	---	---	---	---	None	---	None
Gilmore	D	Apr-Sep	---	---	---	---	---	None	---	None
441F:										
Gilmore	D	Apr-Sep	---	---	---	---	---	None	---	None
Steese	B	Apr-Sep	---	---	---	---	---	None	---	None
441G:										
Gilmore	D	Apr-Sep	---	---	---	---	---	None	---	None
Steese	B	Apr-Sep	---	---	---	---	---	None	---	None
451G:										
Brigadier	D	Apr-Sep	---	---	---	---	---	None	---	None
Ester	D	Apr-Sep	0.0-0.7	0.6-2.5	Perched	---	---	None	---	None
451X:										
Brigadier	D	Apr-Sep	---	---	---	---	---	None	---	None
Ester	D	Apr-Sep	0.0-0.7	0.6-2.5	Perched	---	---	None	---	None

Table 16. Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Wet soil: Upper limit	Wet soil: Lower limit	Wet soil: Water table kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft.	Ft.		Ft.				
452:										
Gilmore	D	Apr-Sep	---	---	---	---	---	None	---	None
Steese	B	Apr-Sep	---	---	---	---	---	None	---	None
492:										
Angel	B	Apr-Sep	---	---	---	---	---	None	---	None
McCloud	B	Apr-Sep	---	---	---	---	---	None	---	None
611:										
Piledriver	B	Apr	0.0-0.3	0.8-1.5	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		May	0.0-0.7	1.5-2.5	Perched	0.0-0.5	Long	Frequent	Brief	Rare
		Jun-Sep	3.3-4.9	>6.0	Apparent	---	---	---	Brief	Rare
Eielson	B	Apr	0.0-0.3	0.8-1.5	Perched	0.0-0.5	Long	Frequent	Brief	Occasional
		May	0.0	1.1-2.1	Perched	0.0-0.5	Long	Frequent	Brief	Occasional
		Jun	3.3-4.9	>6.0	Apparent	---	---	---	Brief	Occasional
		Jul-Sep	2.6-4.9	>6.0	Apparent	---	---	---	Brief	Occasional
CL:										
Typic Cryorthents	B	Apr-Sep	---	---	---	---	---	None	Brief	Rare
Gv:										
Pits, gravel	---	---	---	---	---	---	---	---	---	---
Lf:										
Dumps, landfill	---	---	---	---	---	---	---	---	---	---
ME:										
Dumps, mine	---	---	---	---	---	---	---	---	---	---
Qu:										
Pits, quarry	---	---	---	---	---	---	---	---	---	---
Rv:										
Riverwash	---	---	---	---	---	---	---	---	---	---
UC:										
Typic Cryorthents, fill	B	Apr-Sep	---	---	---	---	---	None	Brief	Rare
Urban land	---	---	---	---	---	---	---	---	---	---
W:										
Water	---	---	---	---	---	---	---	---	---	---
WAH:										
Typic Cryaquents, frequent long ponding	D	Apr-Sep	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
Histic Cryaquepts	D	Apr-Jun	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jul-Sep	0.0-2.0	>6.0	Apparent	---	---	---	---	None
Terric Cryofibrists	D	Apr-Jun	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jul-Sep	0.0-0.3	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None

Table 17. Hydric Soils List

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
9:						
Histels (90%)	Yes	depressions on terraces, flats on terraces, valleys	1,3	Yes	No	Yes
Goldstream (10%)	Yes	valleys, flood plains	2B3,3	Yes	No	Yes
13:						
Terric Cryofibrists (60%)	Yes	depressions on flood plains	3,1	Yes	No	Yes
Liscum (30%)	Yes	alluvial flats	3,2B3	Yes	No	Yes
Histels (5%)	Yes	depressions on terraces, flats on terraces, valleys	1,3	Yes	No	Yes
Typic Cryaquents, occasional long flooding (5%)	Yes	flood plains	2B3,3	Yes	No	Yes
14:						
Histels (60%)	Yes	depressions on terraces, flats on terraces, valleys	1,3	Yes	No	Yes
Terric Cryofibrists (27%)	Yes	depressions on flood plains	1,3	Yes	No	Yes
Tanacross (10%)	Yes	flood plains	2B3,3	Yes	No	Yes
Water (3%)	Unranked	lakes	---	---	---	---
20:						
Mosquito (85%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Bolio (5%)	Yes	depressions on terraces	1,3	Yes	No	Yes
Bradway, frequent long ponding (5%)	Yes	depressions	2B3,3	Yes	No	Yes
Liscum (5%)	Yes	alluvial flats	3,2B3	Yes	No	Yes
Water (0%)	Unranked	lakes	---	---	---	---
21A:						
Goldstream (80%)	Yes	valleys, flood plains	2B3,3	Yes	No	Yes
Chatanika (10%)	Yes	hills	2B3	Yes	No	No
Histels (5%)	Yes	depressions on terraces, flats on terraces, valleys	1,3	Yes	No	Yes
Goldstream (3%)	Yes	valleys, flood plains	2B3,3	Yes	No	Yes
Typic Cryaquents, frequent long ponding (2%)	Yes	flood plains	3,2B3	Yes	No	Yes

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
21B:						
Goldstream (80%)	Yes	valleys, flood plains	2B3,3	Yes	No	Yes
Chatanika (10%)	Yes	hills	2B3	Yes	No	No
Histels (5%)	Yes	depressions on terraces, flats on terraces, valleys	1,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---
Typic Cryaquents, frequent long ponding (0%)	Yes	flood plains	2B3,3	Yes	No	Yes
22:						
Tanacross (90%)	Yes	flood plains	2B3,3	Yes	No	Yes
Tanana, rare brief flooding (10%)	Yes	terraces	2B3,3	Yes	No	Yes
25:						
Tanana, rare brief flooding (75%)	Yes	terraces	2B3,3	Yes	No	Yes
Bolio (5%)	Yes	depressions on terraces	1,3	Yes	No	Yes
Jarvis (5%)	No	flood plains	---	---	---	---
Noonku (5%)	Yes	flood plains	2B3,3	Yes	No	Yes
Salchaket (5%)	No	flood plains	---	---	---	---
Tanacross (5%)	Yes	flood plains	2B3,3	Yes	No	Yes
26:						
Histels (40%)	Yes	depressions on terraces, flats on terraces, valleys	1,3	Yes	No	Yes
Mosquito (40%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Terric Cryofibrists (10%)	Yes	depressions on flood plains	1,3	Yes	No	Yes
Peede (5%)	Yes	depressions on flood plains	3,2B3	Yes	No	Yes
Salchaket (5%)	No	flood plains	---	---	---	---
31:						
Eielson (60%)	No	flood plains	---	---	---	---
Piledriver (30%)	No	flood plains	---	---	---	---
Fubar (5%)	No	flood plains	---	---	---	---
Noonku (3%)	Yes	flood plains	2B3,3	Yes	No	Yes
Salchaket (2%)	No	flood plains	---	---	---	---
32:						
Salchaket (85%)	No	flood plains	---	---	---	---
Jarvis (10%)	No	flood plains	---	---	---	---
Tanana, rare brief flooding (5%)	Yes	terraces	2B3,3	Yes	No	Yes

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
35:						
North Pole (85%)	Yes	flood plains	2B3,3	Yes	No	Yes
Tanana, rare brief flooding (5%)	Yes	terraces	2B3,3	Yes	No	Yes
Mosquito (3%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Noonku (3%)	Yes	flood plains	3,2B3	Yes	No	Yes
Eielson (2%)	No	flood plains	---	---	---	---
Liscum (2%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
36:						
Jarvis (75%)	No	flood plains	---	---	---	---
Salchaket (10%)	No	flood plains	---	---	---	---
Chena (5%)	No	stream terraces	---	---	---	---
Noonku (5%)	Yes	flood plains	3,2B3	Yes	No	Yes
Tanana, rare brief flooding (5%)	Yes	terraces	2B3,3	Yes	No	Yes
37:						
Chena (90%)	No	stream terraces	---	---	---	---
Jarvis (5%)	No	flood plains	---	---	---	---
Noonku (5%)	Yes	flood plains	2B3,3	Yes	No	Yes
39A:						
Nenana (90%)	No	stream terraces	---	---	---	---
Richardson (5%)	No	stream terraces	---	---	---	---
Salchaket (5%)	No	flood plains	---	---	---	---
40A:						
Chatanika (75%)	Yes	hills	2B3	Yes	No	No
Goldstream (10%)	Yes	valleys, flood plains	2B3,3	Yes	No	Yes
Chatanika (7%)	Yes	hills	2B3	Yes	No	No
Minto (5%)	No	hills	---	---	---	---
Saulich (3%)	Yes	valley sides	2B3	Yes	No	No
Histels (0%)	Yes	depressions on terraces, flats on terraces, valleys	1,3	Yes	No	Yes
Water (0%)	Unranked	lakes	---	---	---	---

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
40B:						
Chatanika (75%)	Yes	hills	2B3	Yes	No	No
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Goldstream (5%)	Yes	valleys, flood plains	2B3,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---
Saulich (5%)	Yes	valley sides	2B3	Yes	No	No
40C:						
Chatanika (80%)	Yes	hills	2B3	Yes	No	No
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Goldstream (5%)	Yes	valleys, flood plains	2B3,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---
40D:						
Chatanika (80%)	Yes	hills	2B3	Yes	No	No
Chatanika (10%)	Yes	hills	2B3	Yes	No	No
Goldstream (5%)	Yes	valleys, flood plains	2B3,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---
41A:						
Minto (80%)	No	hills	---	---	---	---
Chatanika (10%)	Yes	hills	2B3	Yes	No	No
Fairbanks (5%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
41B:						
Minto (70%)	No	hills	---	---	---	---
Chatanika (13%)	Yes	hills	2B3	Yes	No	No
Minto (7%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
41C:						
Minto (60%)	No	hills	---	---	---	---
Chatanika (10%)	Yes	hills	2B3	Yes	No	No
Minto (10%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Saulich (5%)	Yes	valley sides	2B3	Yes	No	No

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
41D:						
Minto (85%)	No	hills	---	---	---	---
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Fairbanks (5%)	No	hills	---	---	---	---
Minto (3%)	No	hills	---	---	---	---
Minto (2%)	No	hills	---	---	---	---
42B:						
Fairbanks (80%)	No	hills	---	---	---	---
Minto (10%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
42C:						
Fairbanks (80%)	No	hills	---	---	---	---
Fairbanks (10%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
42CG:						
Fairbanks (60%)	No	hills	---	---	---	---
Fairbanks (30%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
42D:						
Fairbanks (70%)	No	hills	---	---	---	---
Fairbanks (10%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
42E:						
Fairbanks (80%)	No	hills	---	---	---	---
Fairbanks (10%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
44B:						
Steese (80%)	No	hills	---	---	---	---
Steese (10%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
44C:						
Steese (80%)	No	hills	---	---	---	---
Steese (10%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
44D:						
Steese (70%)	No	hills	---	---	---	---
Steese (10%)	No	hills	---	---	---	---
Fairbanks (8%)	No	hills	---	---	---	---
Gilmore (7%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
44E:						
Steese (75%)	No	hills	---	---	---	---
Steese (10%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
Fairbanks (3%)	No	hills	---	---	---	---
Ester (2%)	Yes	hills	2B2,2B3	Yes	No	No
44F:						
Steese (85%)	No	hills	---	---	---	---
Steese (10%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
45C:						
Gilmore (70%)	No	hills	---	---	---	---
Gilmore (13%)	No	hills	---	---	---	---
Gilmore (10%)	No	hills	---	---	---	---
Steese (7%)	No	hills	---	---	---	---

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
45D:						
Gilmore (75%)	No	hills	---	---	---	---
Gilmore (10%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
45E:						
Gilmore (70%)	No	hills	---	---	---	---
Gilmore (12%)	No	hills	---	---	---	---
Steese (10%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Ester (3%)	Yes	hills	2B3,2B2	Yes	No	No
45F:						
Gilmore (85%)	No	hills	---	---	---	---
Gilmore (10%)	No	hills	---	---	---	---
Steese (3%)	No	hills	---	---	---	---
Rock outcrop (2%)	Unranked	hills	---	---	---	---
45G:						
Gilmore (85%)	No	hills	---	---	---	---
Ester (5%)	Yes	hills	2B2,2B3	Yes	No	No
Gilmore (5%)	No	hills	---	---	---	---
Steese (3%)	No	hills	---	---	---	---
Rock outcrop (2%)	Unranked	hills	---	---	---	---
46C:						
Eutrocryepts, hills (90%)	No	hills	---	---	---	---
Eutrocryepts, hills (10%)	No	hills	---	---	---	---
46D:						
Eutrocryepts, hills (90%)	No	hills	---	---	---	---
Eutrocryepts, hills (10%)	No	hills	---	---	---	---
48D:						
McCloud (85%)	No	hills	---	---	---	---
Angel (10%)	No	hills	---	---	---	---
McCloud (3%)	No	hills	---	---	---	---
McCloud (2%)	No	hills	---	---	---	---

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
48E:						
McCloud (85%)	No	hills	---	---	---	---
Angel (10%)	No	hills	---	---	---	---
McCloud (3%)	No	hills	---	---	---	---
McCloud (2%)	No	hills	---	---	---	---
48F:						
McCloud (80%)	No	hills	---	---	---	---
Angel (15%)	No	hills	---	---	---	---
McCloud (3%)	No	hills	---	---	---	---
McCloud (2%)	No	hills	---	---	---	---
49D:						
Angel (78%)	No	hills	---	---	---	---
McCloud (12%)	No	hills	---	---	---	---
Angel (5%)	No	hills	---	---	---	---
49E:						
Angel (80%)	No	hills	---	---	---	---
McCloud (10%)	No	hills	---	---	---	---
Angel (5%)	No	hills	---	---	---	---
49F:						
Angel (80%)	No	hills	---	---	---	---
McCloud (10%)	No	hills	---	---	---	---
Angel (5%)	No	hills	---	---	---	---
50G:						
Ester (75%)	Yes	hills	2B2,2B3	Yes	No	No
Brigadier (10%)	No	hills	---	---	---	---
Ester (10%)	Yes	hills	2B2,2B3	Yes	No	No
Gilmore (5%)	No	hills	---	---	---	---
50X:						
Ester (75%)	Yes	hills	2B3,2B2	Yes	No	No
Brigadier (5%)	No	hills	---	---	---	---
Ester (5%)	Yes	hills	2B3,2B2	Yes	No	No
Saulich (5%)	Yes	valley sides	2B3	Yes	No	No
Steese (5%)	No	hills	---	---	---	---

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
51B:						
Saulich (80%)	Yes	valley sides	2B3	Yes	No	No
Goldstream (5%)	Yes	valleys, flood plains	2B3,3	Yes	No	Yes
Saulich (5%)	Yes	valley sides	2B3	Yes	No	No
Chatanika (3%)	Yes	hills	2B3	Yes	No	No
Minto (2%)	No	hills	---	---	---	---
51C:						
Saulich (80%)	Yes	valley sides	2B3	Yes	No	No
Goldstream (5%)	Yes	valleys, flood plains	2B3,3	Yes	No	Yes
Saulich (5%)	Yes	valley sides	2B3	Yes	No	No
Chatanika (3%)	Yes	hills	2B3	Yes	No	No
Minto (2%)	No	hills	---	---	---	---
61:						
Piledriver (75%)	No	flood plains	---	---	---	---
Eielson (10%)	No	flood plains	---	---	---	---
Fubar (10%)	No	flood plains	---	---	---	---
Tanana, rare brief flooding (3%)	Yes	terraces	2B3,3	Yes	No	Yes
North Pole (2%)	Yes	flood plains	2B3,3	Yes	No	Yes
62:						
Peede (70%)	Yes	depressions on flood plains	2B3,3	Yes	No	Yes
Mosquito (25%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Liscum (5%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
63:						
Typic Cryaquents,occasional long flooding (45%)	Yes	flood plains	2B3,3	Yes	No	Yes
Tanana, rare brief flooding (35%)	Yes	terraces	2B3,3	Yes	No	Yes
Eielson (10%)	No	flood plains	---	---	---	---
Histels (10%)	Yes	depressions on terraces, flats on terraces, valleys	1,3	Yes	No	Yes
64:						
Eielson (50%)	No	flood plains	---	---	---	---
Tanana, rare brief flooding (35%)	Yes	terraces	2B3,3	Yes	No	Yes
Peede (10%)	Yes	depressions on flood plains	3,2B3	Yes	No	Yes
Tanacross (5%)	Yes	flood plains	2B3,3	Yes	No	Yes

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
65:						
Fluvaquentic aquorthels (45%)	Yes	flood plains	2B3,3	Yes	No	Yes
Typic Cryaquents,occasional long flooding (45%)	Yes	flood plains	2B3,3	Yes	No	Yes
Eielson (5%)	No	flood plains	---	---	---	---
Terric Cryofibrists (5%)	Yes	thermokarst depressions	1,3	Yes	No	Yes
66:						
Eielson (80%)	No	flood plains	---	---	---	---
Peede (10%)	Yes	depressions on flood plains	2B3,3	Yes	No	Yes
Tanana, rare brief flooding (10%)	Yes	terraces	2B3,3	Yes	No	Yes
69:						
Typic Cryaquents,occasional long flooding (50%)	Yes	flood plains	2B3,3	Yes	No	Yes
Eielson (30%)	No	flood plains	---	---	---	---
Jarvis (10%)	No	flood plains	---	---	---	---
Riverwash (5%)	Unranked	flood plains	---	---	---	---
Tanana, rare brief flooding (5%)	Yes	terraces	2B3,3	Yes	No	Yes
70A:						
Volkmar (45%)	No	stream terraces	---	---	---	---
Richardson (40%)	No	stream terraces	---	---	---	---
Mosquito (5%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Tanacross (5%)	Yes	flood plains	2B3,3	Yes	No	Yes
Tanana, rare brief flooding (5%)	Yes	terraces	2B3,3	Yes	No	Yes
70B:						
Richardson (35%)	No	stream terraces	---	---	---	---
Volkmar (35%)	No	stream terraces	---	---	---	---
Eutrocryepts, escarpments (10%)	No	escarpments on terraces	---	---	---	---
Tanana, rare brief flooding (10%)	Yes	terraces	2B3,3	Yes	No	Yes
Typic Cryaquents,occasional brief ponding(10%)	Yes	flood plains	2B3,3	Yes	No	Yes

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
71:						
North Pole (50%)	Yes	flood plains	2B3,3	Yes	No	Yes
Mosquito (30%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Liscum (20%)	Yes	alluvial flats	3,2B3	Yes	No	Yes
Histels (0%)	Yes	depressions on terraces, flats on terraces, valleys	1,3	Yes	No	Yes
Typic Cryaquents, occasional long flooding (0%)	Yes	flood plains	2B3,3	Yes	No	Yes
72F:						
Eutrocryepts, escarpments (90%)	No	escarpments on terraces	---	---	---	---
Ester (10%)	Yes	hills	2B3,2B2	Yes	No	No
81V:						
Chatanika (48%)	Yes	hills	2B3	Yes	No	No
Saulich (48%)	Yes	valley sides	2B3	Yes	No	No
Minto (2%)	No	hills	---	---	---	---
Saulich (2%)	Yes	valley sides	2B3	Yes	No	No
81X:						
Chatanika (50%)	Yes	hills	2B3	Yes	No	No
Saulich (45%)	Yes	valley sides	2B3	Yes	No	No
Chatanika (3%)	Yes	hills	2B3	Yes	No	No
Saulich (2%)	Yes	valley sides	2B3	Yes	No	No
82V:						
Gilmore (50%)	No	hills	---	---	---	---
Steese (45%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
82X:						
Gilmore (45%)	No	hills	---	---	---	---
Steese (45%)	No	hills	---	---	---	---
Angel (6%)	No	hills	---	---	---	---
Steese (4%)	No	hills	---	---	---	---

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
85:						
Eutrocryepts, hills (45%)	No	hills	---	---	---	---
Minto (45%)	No	hills	---	---	---	---
Aquic Cryofluvents (5%)	No	flood plains	---	---	---	---
Saulich (5%)	Yes	valley sides	2B3	Yes	No	No
86G:						
Brigadier (75%)	No	hills	---	---	---	---
Brigadier (10%)	No	hills	---	---	---	---
Gilmore (10%)	No	hills	---	---	---	---
Manchu (5%)	No	hills	---	---	---	---
86V:						
Brigadier (45%)	No	hills	---	---	---	---
Manchu (40%)	No	hills	---	---	---	---
Gilmore (10%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
86X:						
Brigadier (60%)	No	hills	---	---	---	---
Manchu (25%)	No	hills	---	---	---	---
Gilmore (10%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
87V:						
Gilmore (60%)	No	hills	---	---	---	---
Manchu (35%)	No	hills	---	---	---	---
Ester (5%)	Yes	hills	2B3,2B2	Yes	No	No
87X:						
Gilmore (90%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Manchu (5%)	No	hills	---	---	---	---
88:						
Dystrogelepts (60%)	No	hills	---	---	---	---
Turbels (35%)	Yes	depressions on hills	2B3	Yes	No	No
Rock outcrops (5%)	Unranked	hills	---	---	---	---

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
89X:						
Fairbanks (45%)	No	hills	---	---	---	---
Steese (45%)	No	hills	---	---	---	---
Steese (10%)	No	hills	---	---	---	---
90:						
Fubar (45%)	No	flood plains	---	---	---	---
Tanana, rare brief flooding (45%)	Yes	terraces	2B3,3	Yes	No	Yes
Mosquito (5%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Piledriver (5%)	No	flood plains	---	---	---	---
91:						
Aquic Cryofluvents (30%)	No	flood plains	---	---	---	---
Fluvaquentic aquorthels (30%)	Yes	flood plains	2B3,3	Yes	No	Yes
Typic Cryaquents, frequent flooding (30%)	Yes	flood plains	3,2B3	Yes	No	Yes
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Saulich (5%)	Yes	valley sides	2B3	Yes	No	No
211:						
Chatanika (55%)	Yes	hills	2B3	Yes	No	No
Goldstream (35%)	Yes	valleys, flood plains	2B3,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---
Chatanika (3%)	Yes	hills	2B3	Yes	No	No
Histels (2%)	Yes	depressions on terraces, flats on terraces, valleys	1,3	Yes	No	Yes
Water (0%)	Unranked	lakes	---	---	---	---
212:						
Goldstream (50%)	Yes	valleys, flood plains	2B3,3	Yes	No	Yes
Histels (45%)	Yes	depressions on terraces, flats on terraces, valleys	1,3	Yes	No	Yes
Terric Cryofibrists (5%)	Yes	thermokarst depressions	1,3	Yes	No	Yes
251:						
Tanana, rare brief flooding (60%)	Yes	terraces	2B3,3	Yes	No	Yes
Mosquito (20%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Jarvis (10%)	No	flood plains	---	---	---	---
Liscum (5%)	Yes	alluvial flats	3,2B3	Yes	No	Yes
Noonku (5%)	Yes	flood plains	2B3,3	Yes	No	Yes

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
361:						
Jarvis (55%)	No	flood plains	---	---	---	---
Chena (35%)	No	stream terraces	---	---	---	---
Noonku (5%)	Yes	flood plains	2B3,3	Yes	No	Yes
Salchaket (5%)	No	flood plains	---	---	---	---
362:						
Piledriver (50%)	No	flood plains	---	---	---	---
Fubar (40%)	No	flood plains	---	---	---	---
Eielson (7%)	No	flood plains	---	---	---	---
Noonku (3%)	Yes	flood plains	3,2B3	Yes	No	Yes
363:						
Jarvis (45%)	No	flood plains	---	---	---	---
Salchaket (45%)	No	flood plains	---	---	---	---
Tanana, rare brief flooding (5%)	Yes	terraces	2B3,3	Yes	No	Yes
Chena (2%)	No	stream terraces	---	---	---	---
Noonku (2%)	Yes	flood plains	2B3,3	Yes	No	Yes
North Pole (1%)	Yes	flood plains	2B3,3	Yes	No	Yes
411A:						
Minto (45%)	No	hills	---	---	---	---
Chatanika (40%)	Yes	hills	2B3	Yes	No	No
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Goldstream (5%)	Yes	valleys, flood plains	2B3,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---
411B:						
Minto (40%)	No	hills	---	---	---	---
Chatanika (35%)	Yes	hills	2B3	Yes	No	No
Minto (7%)	No	hills	---	---	---	---
Saulich (5%)	Yes	valley sides	2B3	Yes	No	No
Chatanika (2%)	Yes	hills	2B3	Yes	No	No
Goldstream (2%)	Yes	valleys, flood plains	2B3,3	Yes	No	Yes

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
411C:						
Minto (45%)	No	hills	---	---	---	---
Chatanika (40%)	Yes	hills	2B3	Yes	No	No
Minto (10%)	No	hills	---	---	---	---
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Typic Cryaquents, frequent long ponding (0%)	Yes	flood plains	3,2B3	Yes	No	Yes
411D:						
Minto (45%)	No	hills	---	---	---	---
Chatanika (40%)	Yes	hills	2B3	Yes	No	No
Minto (7%)	No	hills	---	---	---	---
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Saulich (3%)	Yes	valley sides	2B3	Yes	No	No
421D:						
Fairbanks (55%)	No	hills	---	---	---	---
Steese (30%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Fairbanks (3%)	No	hills	---	---	---	---
Steese (3%)	No	hills	---	---	---	---
Gilmore (2%)	No	hills	---	---	---	---
Steese (2%)	No	hills	---	---	---	---
441D:						
Steese (55%)	No	hills	---	---	---	---
Gilmore (25%)	No	hills	---	---	---	---
Gilmore (10%)	No	hills	---	---	---	---
Steese (10%)	No	hills	---	---	---	---
441E:						
Steese (50%)	No	hills	---	---	---	---
Gilmore (40%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
441F:						
Gilmore (45%)	No	hills	---	---	---	---
Steese (45%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
441G:						
Gilmore (45%)	No	hills	---	---	---	---
Steese (45%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
451G:						
Brigadier (40%)	No	hills	---	---	---	---
Ester (30%)	Yes	hills	2B2,2B3	Yes	No	No
Ester (10%)	Yes	hills	2B2,2B3	Yes	No	No
Gilmore (10%)	No	hills	---	---	---	---
Steese (10%)	No	hills	---	---	---	---
451X:						
Brigadier (45%)	No	hills	---	---	---	---
Ester (40%)	Yes	hills	2B2,2B3	Yes	No	No
Ester (5%)	Yes	hills	2B3,2B2	Yes	No	No
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
452:						
Gilmore (65%)	No	hills	---	---	---	---
Steese (33%)	No	hills	---	---	---	---
Steese (2%)	No	hills	---	---	---	---
492:						
Angel (55%)	No	hills	---	---	---	---
McCloud (40%)	No	hills	---	---	---	---
Angel (3%)	No	hills	---	---	---	---
McCloud (2%)	No	hills	---	---	---	---

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
611:						
Piledriver (50%)	No	flood plains	---	---	---	---
Eielson (35%)	No	flood plains	---	---	---	---
Fubar (5%)	No	flood plains	---	---	---	---
Noonku (5%)	Yes	flood plains	2B3,3	Yes	No	Yes
Riverwash (5%)	Unranked	flood plains	---	---	---	---
CL:						
Typic Cryorthents (80%)	No	flood plains, terraces	---	---	---	---
Fubar (5%)	No	flood plains	---	---	---	---
Jarvis (5%)	No	flood plains	---	---	---	---
Piledriver (5%)	No	flood plains	---	---	---	---
Salchaket (5%)	No	flood plains	---	---	---	---
Gv:						
Pits, gravel (100%)	Unranked	gravel pits	---	---	---	---
Lf:						
Dumps, landfill (100%)	Unranked	sanitary landfills	---	---	---	---
ME:						
Dumps, mine (100%)	Unranked	spoil piles	---	---	---	---
Qu:						
Pits, quarry (100%)	Unranked	quarries	---	---	---	---
Rv:						
Riverwash (100%)	Unranked	flood plains	---	---	---	---
UC:						
Typic Cryorthents, fill (45%)	No	flood plains, terraces	---	---	---	---
Urban land (45%)	Unranked	urban land	---	---	---	---
Salchaket (5%)	No	flood plains	---	---	---	---
Jarvis (3%)	No	flood plains	---	---	---	---
Fubar (2%)	No	flood plains	---	---	---	---
W:						
Water (100%)	Unranked	lakes	---	---	---	---

Table 17. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
WAH:						
Typic Cryaquents, frequent long ponding (30%)	Yes	flood plains	2B3,3	Yes	No	Yes
Histic Cryaquepts (25%)	Yes	depressions on terraces	3,2B3	Yes	No	Yes
Terric Cryofibrists (20%)	Yes	thermokarst depressions	1,3	Yes	No	Yes
Histels (15%)	Yes	depressions on terraces, flats on terraces, valleys	1,3	Yes	No	Yes
Water (10%)	Unranked	lakes	---	---	---	---

Table 18. Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
9:								
Histels	Permafrost	16-24	Strongly cemented	28-55	39-79	High	High	High
13:								
Terric Cryofibrists	none	---	---	12-28	16-35	High	Moderate	Moderate
Liscum	none	---	---	1-6	6-12	High	Moderate	Moderate
14:								
Histels	Permafrost	16-24	Strongly cemented	28-55	39-79	High	High	High
Terric Cryofibrists	none	---	---	12-28	16-35	High	Moderate	Moderate
20:								
Mosquito	Permafrost	14-31	Strongly cemented	24-41	35-59	High	Moderate	Moderate
21A:								
Goldstream	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
21B:								
Goldstream	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
22:								
Tanacross	Permafrost	10-28	Strongly cemented	1-41	35-59	High	High	High
25:								
Tanana, rare brief flooding	Permafrost	16-47	Strongly cemented	4-16	4-24	High	Moderate	Moderate
26:								
Histels	Permafrost	16-24	Strongly cemented	28-55	39-79	High	High	High
Mosquito	Permafrost	14-31	Strongly cemented	1-6	10-12	High	Moderate	Moderate
31:								
Eielson	none	---	---	0	0	High	Moderate	Moderate
Piledriver	none	---	---	0	0	High	Moderate	Moderate
32:								
Salchaket	none	---	---	0	0	Moderate	Moderate	Moderate
35:								
North Pole	none	---	---	0	0	High	Moderate	Moderate
36:								
Jarvis	none	---	---	0	0	Moderate	Moderate	Moderate
37:								
Chena	none	---	---	0	0	Low	Moderate	Moderate
39A:								
Nenana	none	---	---	0	0	High	Moderate	Moderate
40A:								
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate

Table 18. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
40B:								
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
40C:								
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
40D:								
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
41A:								
Minto	none	---	---	28-55	39-79	High	High	High
41B:								
Minto	none	---	---	28-55	39-79	High	High	High
41C:								
Minto	none	---	---	28-55	39-79	High	High	High
41D:								
Minto	none	---	---	28-55	39-79	High	High	High
42B:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
42C:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
42CG:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
42D:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
42E:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
44B:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
44C:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
44D:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
44E:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
44F:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
45C:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
45D:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate

Table 18. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
45E:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
45F:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
45G:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
46C:								
Eutrocryepts, hills	none	---	---	0	0	High	Moderate	Moderate
46D:								
Eutrocryepts, hills	none	---	---	0	0	High	Moderate	Moderate
48D:								
McCloud	Bedrock (paralithic)	21-35	Moderately cemented	0	0	Moderate	Moderate	Moderate
48E:								
McCloud	Bedrock (paralithic)	21-35	Moderately cemented	0	0	Moderate	Moderate	Moderate
48F:								
McCloud	Bedrock (paralithic)	21-35	Moderately cemented	0	0	Moderate	Moderate	Moderate
49D:								
Angel	Bedrock (paralithic)	9-28	Moderately cemented	0	0	Moderate	Moderate	Moderate
49E:								
Angel	Bedrock (paralithic)	9-28	Moderately cemented	0	0	Moderate	Moderate	Moderate
49F:								
Angel	Bedrock (paralithic)	9-28	Moderately cemented	0	0	Moderate	Moderate	Moderate
50G:								
Ester	Permafrost	7-30	Strongly cemented	4-20	6-28	High	High	High
	Bedrock (paralithic)	14-39	Strongly cemented					
50X:								
Ester	Permafrost	7-30	Strongly cemented	4-20	6-28	High	High	High
	Bedrock (paralithic)	14-39	Strongly cemented					
51B:								
Saulich	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
51C:								
Saulich	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
61:								
Piledriver	none	---	---	0	0	High	Moderate	Moderate
62:								
Peede	none	---	---	0	0	High	Moderate	Moderate
Mosquito	Permafrost	14-31	Strongly cemented	1-6	10-12	High	Moderate	Moderate

Table 18. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
63:								
Typic Cryaquents, occasional long flooding	none	---	---	0	0	High	Moderate	Moderate
Tanana, rare brief flooding	Permafrost	16-47	Strongly cemented	4-16	4-24	High	Moderate	Moderate
64:								
Eielson	none	---	---	0	0	High	Moderate	Moderate
Tanana, rare brief flooding	Permafrost	16-47	Strongly cemented	4-16	4-24	High	Moderate	Moderate
65:								
Fluvaquentic aquorthels	Permafrost	14-28	Strongly cemented	24-41	35-59	High	Moderate	Moderate
Typic Cryaquents, occasional long flooding	none	---	---	0	0	High	Moderate	Moderate
66:								
Eielson	none	---	---	0	0	High	Moderate	Moderate
69:								
Typic Cryaquents, occasional long flooding	none	---	---	0	0	High	Moderate	Moderate
Eielson	none	---	---	0	0	High	Moderate	Moderate
70A:								
Volkmar	none	---	---	0	0	High	High	High
Richardson	none	---	---	0	0	High	High	Moderate
70B:								
Richardson	none	---	---	0	0	High	High	Moderate
Volkmar	none	---	---	0	0	High	High	High
71:								
North Pole	none	---	---	0	0	High	Moderate	Moderate
Mosquito	Permafrost	14-31	Strongly cemented	1-6	10-12	High	Moderate	Moderate
Liscum	none	---	---	1-6	6-12	High	Moderate	Moderate
72F:								
Eutrocryepts, escarpments	none	---	---	0	0	High	Moderate	Moderate
81V:								
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
Saulich	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
81X:								
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
Saulich	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High

Table 18. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
82V:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Steese	Bedrock (paralithic)	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
82X:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Steese	Bedrock (paralithic)	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
85:								
Eutrocryepts, hills	none	---	---	0	0	High	Moderate	Moderate
Minto	none	---	---	28-55	39-79	High	High	High
86G:								
Brigadier	Bedrock (paralithic)	12-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
86V:								
Brigadier	Bedrock (paralithic)	12-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Manchu	Bedrock (paralithic)	24-47	Moderately cemented	0	0	Moderate	Moderate	Moderate
86X:								
Brigadier	Bedrock (paralithic)	12-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Manchu	Bedrock (paralithic)	24-47	Moderately cemented	0	0	Moderate	Moderate	Moderate
87V:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Manchu	Bedrock (paralithic)	24-47	Moderately cemented	0	0	Moderate	Moderate	Moderate
87X:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
88:								
Dystrogelepts	Bedrock (lithic)	14-39	Indurated	0	0	Moderate	Moderate	Moderate
Turbels	Permafrost Bedrock (paralithic)	16-28 72-72	Strongly cemented Strongly cemented	24-41	35-59	High	High	High
89X:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
Steese	Bedrock (paralithic)	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
90:								
Fubar	none	---	---	0	0	Low	Moderate	Moderate
Tanana, rare brief flooding	Permafrost	16-47	Strongly cemented	4-16	4-24	High	Moderate	Moderate
91:								
Aquic Cryofluvents	none	---	---	0	0	High	Moderate	Moderate
Fluvaquentic aquorthels	Permafrost	14-28	Strongly cemented	24-41	35-59	High	Moderate	Moderate
Typic Cryaquents, frequent flooding	none	---	---	0	0	High	Moderate	Moderate

Table 18. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
211:								
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
Goldstream	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
212:								
Goldstream	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
Histels	Permafrost	16-24	Strongly cemented	28-55	39-79	High	High	High
251:								
Tanana, rare brief flooding	Permafrost	16-47	Strongly cemented	4-16	4-24	High	Moderate	Moderate
Mosquito	Permafrost	14-31	Strongly cemented	1-6	10-12	High	Moderate	Moderate
361:								
Jarvis	none	---	---	0	0	Moderate	Moderate	Moderate
Chena	none	---	---	0	0	Low	Moderate	Moderate
362:								
Piledriver	none	---	---	0	0	High	Moderate	Moderate
Fubar	none	---	---	0	0	Low	Moderate	Moderate
363:								
Jarvis	none	---	---	0	0	Moderate	Moderate	Moderate
Salchaket	none	---	---	0	0	Moderate	Moderate	Moderate
411A:								
Minto	none	---	---	28-55	39-79	High	High	High
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
411B:								
Minto	none	---	---	28-55	39-79	High	High	High
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
411C:								
Minto	none	---	---	28-55	39-79	High	High	High
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
411D:								
Minto	none	---	---	28-55	39-79	High	High	High
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
421D:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
Steese	Bedrock (paralithic)	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
441D:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate

Table 18. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
441E:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
441F:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Steese	Bedrock (paralithic)	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
441G:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Steese	Bedrock (paralithic)	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
451G:								
Brigadier	Bedrock (paralithic)	12-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Ester	Permafrost	7-30	Strongly cemented	4-20	6-28	High	High	High
	Bedrock (paralithic)	14-39	Strongly cemented					
451X:								
Brigadier	Bedrock (paralithic)	12-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Ester	Permafrost	7-30	Strongly cemented	4-20	6-28	High	High	High
	Bedrock (paralithic)	14-39	Strongly cemented					
452:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Steese	Bedrock (paralithic)	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
492:								
Angel	Bedrock (paralithic)	9-28	Moderately cemented	0	0	Moderate	Moderate	Moderate
McCloud	Bedrock (paralithic)	21-35	Moderately cemented	0	0	Moderate	Moderate	Moderate
611:								
Piledriver	none	---	---	0	0	High	Moderate	Moderate
Eielson	none	---	---	0	0	High	Moderate	Moderate
CL:								
Typic Cryorthents	none	---	---	0	0	Moderate	Moderate	Moderate
Gv:								
Pits, gravel	none	---	---	---	---	---	---	---
Lf:								
Dumps, landfill	none	---	---	---	---	---	---	---
ME:								
Dumps, mine	none	---	---	---	---	---	---	---
Qu:								
Pits, quarry	none	---	---	---	---	---	---	---
Rv:								
Riverwash	none	---	---	---	---	---	---	---

Table 18. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
UC:								
Typic Cryorthents, fill	none	---	---	0	0	Moderate	Moderate	Moderate
Urban land	none	---	---	---	---	---	---	---
W:								
Water	none	---	---	---	---	---	---	---
WAH:								
Typic Cryaquents, frequent long ponding	none	---	---	0	0	High	Moderate	Moderate
Histic Cryaquepts	none	---	---	2-3	3-6	High	High	High
Terric Cryofibrists	none	---	---	12-28	16-35	High	Moderate	Moderate

Table 19. Classification of the Soils

Soil name	Family or higher taxonomic class
Angel	Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts
Aquic Cryofluvents	Aquic Cryofluvents
Bolio	Euic, subgelic Typic Hemistels
Bradway	Coarse-loamy, mixed, superactive, subgelic Typic Aquiturbels
Brigadier	Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts
Chatanika	Coarse-silty, mixed, superactive, subgelic Typic Aquiturbels
Chena	Sandy-skeletal, mixed Typic Cryorthents
Dystrogelepts	Dystrogelepts
Eielson	Coarse-loamy, mixed, superactive, nonacid Aquic Cryofluvents
Ester	Loamy-skeletal, mixed, superactive, subgelic, shallow Typic Histoturbels
Eutrocryepts	Eutrocryepts
Fairbanks	Coarse-silty, mixed, superactive Typic Eutrocryepts
Fluvaquentic Aquorthels	Fluvaquentic Aquorthels
Fubar	Sandy-skeletal, mixed Typic Cryofluvents
Gilmore	Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts
Goldstream	Coarse-silty, mixed, superactive, subgelic Typic Histoturbels
Histels	Histels
Histic Cryaquepts	Histic Cryaquepts
Jarvis	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Typic Cryofluvents
Liscum	Coarse-loamy, mixed, superactive, nonacid Histic Cryaquepts
Manchu	Coarse-loamy, mixed, superactive Aquic Eutrocryepts
McCloud	Coarse-loamy, mixed, superactive Typic Dystrocryepts
Minto	Coarse-silty, mixed, superactive Aquic Eutrocryepts
Mosquito	Coarse-loamy, mixed, superactive, subgelic Ruptic Histoturbels
Nenana	Coarse-silty over sandy or sandy-skeletal, mixed, superactive Typic Eutrocryepts
Noonku	Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents
North Pole	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Aeric Cryaquepts
Peede	Coarse-silty, mixed, superactive, nonacid Typic Cryaquents
Piledriver	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Aquic Cryofluvents
Richardson	Coarse-silty, mixed, superactive Aquic Eutrocryepts
Salchaket	Coarse-loamy, mixed, superactive, nonacid Typic Cryofluvents
Saulich	Coarse-silty, mixed, superactive, subgelic Typic Histoturbels
Steese	Coarse-loamy, mixed, superactive Typic Eutrocryepts
Tanacross	Coarse-loamy, mixed, superactive, subgelic Typic Histoturbels
Tanana	Coarse-loamy, mixed, superactive, subgelic Typic Aquiturbels
Terric Cryofibrists	Terric Cryofibrists
Turbels	Turbels
Typic Cryaquents	Typic Cryaquents
Typic Cryorthents	Typic Cryorthents
Volkmar	Coarse-silty over sandy or sandy-skeletal, mixed, superactive Aquic Eutrocryepts

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