Soil Properties

Data relating to soil properties are collected during the course of the soil survey. The data and the estimates of soil and water features listed in tables are explained on the following pages.

Soil properties are determined 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 grain-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 characterize key soils.

The estimates of soil properties shown in the tables include the range of grain-size distribution and Atterberg limits, the engineering classifications, and the physical and chemical properties of the major layers of each soil. Pertinent soil and water features also are given.

Engineering Index Properties

Table 16 gives estimates of the engineering classification and of the range of index properties for the major layers of each soil in the survey area. Most soils have layers of contrasting properties within the upper 5 or 6 feet.

Depth to the upper and lower boundaries of each layer is indicated. The range in depth and information on other properties of each layer are given for each soil series under "Soil Series and Their Morphology."

Texture is given in the standard terms used by the U.S. Department of Agriculture. 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 as much as 15 percent, an appropriate modifier is added, for example, "gravelly." Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (*4, 11*) and the system adopted by the American Association of State Highway and Transportation Officials (*3*).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to grain-size distribution of the fraction less than 3 inches 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 in diameter is classified in one of seven groups from A-1 through A-7 on the basis of grain-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.

Rock fragments larger than 3 inches 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 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.

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.

The estimates of grain-size distribution, liquid limit, and plasticity index are 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 omitted in the table.

Physical and Chemical Properties

Table 17 shows estimates of some characteristics and features that affect soil behavior. These estimates are given for the major layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated. The range in depth and information on other properties of each layer are given for each soil series under "Soil Series and Their Morphology."

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

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

Permeability refers to the ability of a soil to transmit water or air. The estimates indicate the rate of downward movement of water 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, septic tank absorption fields, and construction where the rate of water movement under saturated conditions affects behavior.

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 major soil layer. The capacity varies, depending on soil properties that affect the retention of water and the depth of the root zone. 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.

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

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of the soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Shrink-swell potential is the potential for volume change in a soil with a loss or gain in moisture. Volume change occurs mainly because of the interaction of clay minerals with water and varies with the amount and type of clay minerals in the soil. The size of the load on the soil and the magnitude of the change in soil moisture content influence the amount of swelling of soils in place. Laboratory measurements of swelling of undisturbed clods were made for many soils. For others, swelling was estimated on the basis of the kind and amount of clay minerals in the soil and on measurements of similar soils.

If the shrink-swell potential is rated moderate to very high, shrinking and swelling can cause damage to buildings, roads, and other structures. Special design is often needed.

Shrink-swell potential classes are based on the change in length of an unconfined clod as moisture content is increased from air-dry to field capacity. The change is based on the soil fraction less than 2 millimeters in diameter. The classes are *low*, a change of less than 3 percent; *moderate*, 3 to 6 percent; and *high*, more than 6 percent. *Very high*, greater than 9 percent, is sometimes used.

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) 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, very fine sand, sand, and organic matter (up to 4 percent) and on soil structure and permeability. The estimates are modified by the presence of rock fragments. Values of K range from 0.02 to 0.69. The higher the value the more susceptible the soil is to sheet and rill erosion by water.

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 resistance to wind erosion in cultivated areas. The groups indicate the susceptibility of soil to wind erosion and the amount of soil lost. Soils are grouped according to the amount of

stable aggregates 0.84 millimeters in size. These are represented idealistically by USDA textural classes. Soils containing rock fragments can occur in any group.

1. Sands, fine sands, and very fine sands. These soils are generally not suitable for crops. They are extremely erodible, and vegetation is difficult to establish.
2. Loamy sands, loamy fine sands, and loamy very fine sands. these soils are very highly erodible. Crops can be grown if intensive measures to control wind erosion are used.
3. Sandy loams, coarse sandy loams, fine sandy loams, and very fine sandy loams. These soils are highly erodible. Crops can be grown if intensive measures to control wind erosion are used.

4L. Calcareous loamy soils that are less than 35 percent clay and more than 5 percent finely divided calcium carbonate. These soils are erodible. Crops can be grown if intensive measures to control wind erosion are used.

4. Clays, silty clays, clay loams, and silty clay loams that are more than 35 percent clay. These soils are moderately erodible. Crops can be grown if measures to control wind erosion are used.
5. Loamy soils that are less than 20 percent clay and less than 5 percent finely divided calcium carbonate and sandy clay loams and sandy clays that are less than 5 percent finely divided calcium carbonate. These soils are slightly erodible. Crops can be grown if measures to control wind erosion are used.
6. Loamy soils that are 20 to 35 percent clay and less than 5 percent finely divided calcium carbonate, except silty clay loams. These soils are very slightly erodible. Crops can easily be grown.
7. Silty clay loams that are less than 35 percent clay and less than 5 percent finely divided calcium carbonate. These soils are very slightly erodible. Crops can easily be grown.
8. Stony or gravelly soils and other soils not subject to wind erosion.

Organic matter is the plant and animal residue in the soil at various stages of decomposition.

In table 17, 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 of a soil can be maintained or increased by returning crop residue to the soil. Organic matter affects the available water capacity, infiltration rate, and tilth. It is a source of nitrogen and other nutrients for crops.

Soil and Water Features

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

Hydrologic soil groups are used to estimate runoff from precipitation. Soils not protected by vegetation are assigned to one of four groups. They are grouped according to the intake of water when the soils 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 deep or very 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 permanent 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.

Flooding, the temporary inundation of an area, is 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, nor is water in swamps and marshes.

Table 18 gives the frequency and duration of flooding and the time of year when flooding is most likely.

Frequency, duration, and probable dates of occurrence are estimated. Frequency is expressed as none, rare, occasional, and frequent. *None* means that flooding is not probable; *rare* that it is unlikely but possible under unusual weather conditions; *occasional* that it occurs, on the average, no more than once in 2 years; and *frequent* that it occurs, on the average, more than once in 2 years. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, and *long* if more than 7 days. Probable dates are expressed in months; November-May, for example, means that flooding can occur during the period November through May.

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 absence of distinctive horizons that form in soils that are not subject to flooding.

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.

High water table (seasonal) is the highest level of a saturated zone in the soil in most years. The depth to a seasonal high water table applies to undrained soils. The estimates are based mainly on the evidence of a saturated zone, namely grayish colors or mottles in the soil. Indicated in table 18 are the depth to the seasonal high water table; the kind of water table—that is, perched, artesian, or apparent; and the months of the year that the water table commonly is high. A water table that is seasonally high for less than 1 month is not indicated in the table.

An *apparent* water table is a thick zone of free water in the soil. It is indicated by the level at which water stands in an uncased borehole after adequate time is allowed for adjustment in the surrounding soil.

Only saturated zones within a depth of about 6 feet are indicated. A plus sign preceding the range in depth indicates that the water table is above the surface of the soil. The first numeral in the range indicates how high the water rises above the surface. The second numeral indicates the depth below the surface.

Depth to bedrock is given if bedrock is within a depth of 5 feet. The depth is based on many soil borings and on observations during soil mapping. The rock is specified as either soft or hard. If the rock is soft or fractured, excavations can be made with trenching machines, backhoes, or small rippers. If the rock is hard or massive, blasting or special equipment generally is needed for excavation.

Potential 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 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 mainly to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that dissolves 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 creates a severe corrosion environment. The steel in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than steel 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 is also 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 (*17*). 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. Ten 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 Mollisol.

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 Xeroll (*Xer*, meaning dry, plus *oll*, from Mollisol).

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; 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 Argixerolls (*Argi*, meaning clay accumulation, plus *xeroll*, the suborder of the Mollisols that have a xeric moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic 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 known kind of soil. 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 Argixerolls.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Mostly the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineral content, temperature regime, depth of the root zone, consistence, moisture equivalent, slope, and permanent cracks. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is loamy-skeletal, mixed, frigid Typic Argixerolls.

SERIES. The series consists of soils that have similar horizons in their profile. The horizons are similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. The texture of the surface layer or of the substratum can differ within a series. An example is the Valmar series.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. The descriptions are arranged in alphabetic order.

Characteristics of the soil and the material in which it formed are identified for each series. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the *Soil Survey Manual* (*14*). Many of the technical terms used in the descriptions are defined in *Soil Taxonomy* (*17*). Unless otherwise stated, colors in the descriptions are for dry soil. Following the pedon description is the range of important characteristics of the soils in the series.

The map units of each soil series are described in the section "Detailed Soil Map Units."

Arbone Series

The Arbone series consists of very deep, well drained soils on fan terraces, stream terraces, and mountain foot slopes. These soils formed in mixed alluvium. Slope is 1 to 30 percent. Elevation is 4,500 to 6,000 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 41 to 45 degrees F.

Typical pedon of Arbone silt loam, 4 to 12 percent slopes, about 3.5 miles south of Downey, about 100 feet south and 2,350 feet east of the northwest corner of sec. 14, T. 12 S., R. 37 E.

A1—0 to 9 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak

medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many fine and very fine roots; many very fine interstitial pores and few very fine tubular pores; about 5 percent pebbles; mildly alkaline (pH 7.4); abrupt smooth boundary.

B2—9 to 12 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine and very fine roots; many very fine interstitial pores and few very fine tubular pores; about 5 percent pebbles; slightly effervescent; mildly alkaline (pH 7.4); clear smooth boundary.

B3ca—12 to 18 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak fine and very fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine and very fine roots; common fine and very fine tubular pores; about 10 percent pebbles; strongly effervescent; mildly alkaline (pH 7.4); clear smooth boundary.

C1ca—18 to 38 inches; very pale brown (10YR 7/3) silt loam, pale brown (10YR 6/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few fine and very fine roots; many fine and very fine tubular pores; about 10 percent pebbles; violently effervescent; moderately alkaline (pH 7.9); gradual smooth boundary.

C2ca—38 to 60 inches; very pale brown (10YR 7/3) silt loam, pale brown (10YR 6/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few fine and very fine roots; many fine and very fine tubular pores; about 10 percent pebbles; strongly effervescent; moderately alkaline (pH 8.4).

Bedrock is at a depth of 60 inches or more. Secondary lime is at a depth of 12 to 20 inches. The control section is 0 to 30 percent rock fragments. Clay content in the control section averages 13 to 17 percent.

A horizon: Texture is silt loam or gravelly silt loam. Rock fragment content is 0 to 20 percent. Reaction is mildly alkaline or moderately alkaline.

B horizon: Texture is silt loam or gravelly silt loam. Rock fragment content is 0 to 30 percent. The upper part of the horizon is slightly effervescent in some pedons, and the lower part is strongly effervescent. Reaction is mildly alkaline or moderately alkaline.

Cca horizon: Texture is silt loam, loam, or gravelly silt loam. Rock fragment content is 0 to 30 percent. Reaction is mildly alkaline or moderately alkaline.

Arimo Series

The Arimo series consists of very deep, well drained soils on terraces. These soils formed in loess and silty alluvium overlying alluvial gravel and sand of mixed mineralogy. Slope is 0 to 8 percent. Elevation is 4,600 to 4,900 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 42 to 45 degrees F.

Typical pedon of an Arimo silt loam in an area of Downey-Arimo complex, 0 to 3 percent slopes, about 1.5 miles south of the city of Arimo, about 295 feet north and 575 feet east of the southwest corner of sec. 20, T. 10 S., R. 37 E.

A1—0 to 6 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine platy structure; soft, very friable, slightly sticky and slightly plastic; many fine and very fine roots and few medium roots; many very fine interstitial pores; about 5 percent pebbles; neutral (pH 7.1); clear smooth boundary.

B2—6 to 18 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; weak coarse and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine and very fine roots and few medium roots; common fine and very fine tubular pores; about 5 percent pebbles; neutral (pH 7.3); abrupt smooth boundary.

C1ca—18 to 33 inches; white (10YR 8/2) silt loam, pale brown (10YR 6/3) moist; massive; slightly hard, firm, slightly sticky and slightly plastic; few medium, fine, and very fine roots; few fine and very fine tubular pores; about 5 percent pebbles; strongly effervescent; moderately alkaline (pH 8.0); abrupt wavy boundary.

IIC2ca—33 to 60 inches; multicolored extremely gravelly coarse sand; alternating and irregular layers of strongly effervescent, weakly cemented material and layers of loose material with thick lime coatings on the undersides of the pebbles; lime content decreases with depth; few fine and very fine roots; about 70 percent pebbles and 5 percent cobbles; moderately alkaline (pH 8.4).

Depth to the IIC horizon is 20 to 40 inches. Secondary lime is at a depth of 8 to 18 inches. Clay content is 10 to 18 percent in the upper part of the control section and 0 to 5 percent in the lower part.

A and B horizons: Rock fragment content is 5 to 15 percent. Reaction is neutral or mildly alkaline.

C horizon: Rock fragment content is 5 to 15 percent. Reaction is mildly alkaline or moderately alkaline.

IIC horizon: Rock fragment content is 65 to 85 percent. Reaction is mildly alkaline or moderately alkaline.

Bahem Series

The Bahem series consists of very deep, well drained soils on terraces. These soils formed in silty alluvium overlying flood-deposited sand, gravel, cobbles, and stones of mixed mineralogy. Slope is 0 to 6 percent.

Elevation is 4,400 to 4,500 feet. Average annual precipitation is 9 to 11 inches, and average annual air temperature is 47 to 49 degrees F.

Typical pedon of Bahem silt loam, 0 to 2 percent slopes, about 3.5 miles west of Chubbuck, about 220 feet north and 1,700 feet west of the southeast corner of sec. 31, T. 5 S., R. 34 E.

Ap—0 to 11 inches; pale brown (10YR 6/3) silt loam, dark brown (10YR 4/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; many fine and very fine interstitial pores; slightly effervescent; mildly alkaline (pH 7.4); clear smooth boundary.

C1—11 to 16 inches; pale brown (10YR 6/3) silt loam, dark brown (10YR 4/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; common very fine and fine tubular and interstitial pores; strongly effervescent; mildly alkaline (pH 7.6); gradual smooth boundary.

C2ca—16 to 19 inches; white (10YR 8/2) silt loam, pale brown (10YR 6/3) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; many very fine tubular pores; violently effervescent; mildly alkaline (pH 7.5); clear smooth boundary.

C3ca—19 to 32 inches; light gray (10YR 7/2) silt loam, brown (10YR 5/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine tubular and interstitial pores; 10 percent firm cicada krotovinas; violently effervescent; mildly alkaline (pH 7.6); clear smooth boundary.

C4—32 to 49 inches; pale brown (10YR 6/3) silt loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine tubular pores; strongly effervescent; mildly alkaline (pH 7.6); abrupt irregular boundary.

IIC5—49 to 60 inches; multicolored extremely cobbly sand; mildly alkaline (pH 7.4).

Depth to the IIC horizon is 40 to 60 inches. Secondary lime is at a depth of 8 to 20 inches. Calcium carbonate equivalent averages 15 to 20 percent. Clay content in the control section is 8 to 18 percent.

C horizon: Texture is silt loam or silt. Reaction is mildly alkaline or moderately alkaline.

IIC horizon: Texture is extremely cobbly sand or extremely stony sand. Rock fragment content is 65 to 85 percent.

Bancroft Series

The Bancroft series consists of very deep, well drained soils on loess-covered fan terraces, foothills, and mountain foot slopes. These soils formed in loess and in silty alluvium derived from loess. Slope is 4 to 30 percent. Elevation is 5,000 to 6,000 feet. Average annual precipitation is 14 to 16 inches, and average annual air temperature is 40 to 45 degrees F.

Typical pedon of Bancroft silt loam, 4 to 12 percent slopes, about 3 miles north and 1 mile west of the town of Swan Lake, about 447 feet north and 1,115 feet west of the southeast corner of sec. 21, T. 10 S., R. 38 E.

Ap—0 to 7 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; weak coarse and medium subangular blocky structure parting to weak fine granular; hard, very friable, slightly sticky and slightly plastic; many very fine roots; many very fine interstitial pores and common very fine tubular pores; slightly acid (pH 6.2); abrupt smooth boundary.

B21t—7 to 17 inches; brown (10YR 5/3) silty clay loam, very dark grayish brown (10YR 3/2) moist; moderate coarse subangular blocky structure parting to weak fine subangular blocky; extremely hard, friable, sticky and plastic; common very fine roots; many very fine and few fine and medium tubular pores; many thin clay films in pores and on faces of peds; slightly acid (pH 6.4); gradual wavy boundary.

B22t—17 to 23 inches; brown (10YR 5/4) silty clay loam, dark yellowish brown (10YR 3/4) moist; moderate coarse angular blocky structure parting to moderate medium angular blocky; extremely hard, friable, sticky and plastic; few very fine roots; many very fine and few fine and medium tubular pores; many moderately thick clay films in pores and on faces of peds; neutral (pH 6.7); gradual wavy boundary.

B23t—23 to 37 inches; yellowish brown (10YR 5/4) silty clay loam, dark yellowish brown (10YR 4/4) moist; weak coarse angular blocky structure parting to moderate medium and fine angular blocky; extremely hard, firm, sticky and plastic; few very fine roots; many very fine tubular pores; many thin clay films in pores and on faces of peds; about 5 percent hard cicada krotovinas; neutral (pH 7.1); abrupt wavy boundary.

B3ca—37 to 41 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist; weak coarse angular blocky structure parting to weak medium subangular blocky; extremely hard, firm, slightly sticky and slightly plastic; few very fine roots; many very fine and few fine tubular pores; common thin clay films in pores and on faces of peds; slightly effervescent; neutral (pH 7.3); clear smooth boundary.

C1ca—41 to 58 inches; very pale brown (10YR 7/3) silt loam, yellowish brown (10YR 5/4) moist; massive; extremely hard, firm, slightly sticky and slightly plastic; many very fine and common fine tubular pores; many fine lime seams; violently effervescent; moderately alkaline (pH 7.9); gradual wavy boundary.

C2ca—58 to 60 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/4) moist; massive; hard, firm, slightly sticky and slightly plastic; many very fine and common fine tubular pores; common fine lime seams; strongly effervescent; mildly alkaline (pH 7.8).

Bedrock is at a depth of 60 inches or more. Lime is at a depth of 20 to 40 inches. Clay content in the control section averages 22 to 32 percent.

A horizon: Reaction is slightly acid or neutral.

B2t horizon: Texture is silt loam or silty clay loam. Reaction is slightly acid to mildly alkaline.

Cca horizon: Reaction is mildly alkaline or moderately alkaline.

Banida Series

The Banida series consists of very deep, moderately well drained soils on lake terraces. These soils formed in lake sediment and in alluvium derived from lake sediment. Slope is 0 to 20 percent. Elevation is 4,750 to 5,150 feet. Average annual precipitation is 15 to 18 inches, and average annual air temperature is 43 to 45 degrees F.

Typical pedon of Banida silty clay loam, 0 to 2 percent slopes, about 8 miles east and 6 miles south of Swan Lake, about 1,800 feet west and 1,800 feet north of the southeast corner of sec. 12, T. 14 S., R. 39 E.

Ap1—0 to 6 inches; brown (7.5YR 5/2) silty clay loam, dark brown (7.5YR 3/2) moist; moderate medium granular structure; slightly hard, firm, sticky and plastic; common very fine and fine roots and few coarse roots; few fine and very fine tubular pores; mildly alkaline (pH 7.8); clear smooth boundary.

Ap2—6 to 9 inches; brown (7.5YR 5/2) silty clay, dark reddish gray (5YR 4/2) moist; moderate fine and medium subangular blocky structure; hard, firm, sticky and plastic; common very fine and fine roots and few coarse roots; few fine and very fine tubular pores; mildly alkaline (pH 7.8); abrupt smooth boundary.

B21—9 to 22 inches; reddish brown (5YR 4/3) silty clay, dark reddish brown (5YR 3/4) moist; weak medium prismatic structure parting to strong fine angular blocky; very hard, very firm, very sticky and very plastic; few fine roots; few fine and very fine tubular pores; common vertical cracks 3/8 to 5/8 inch wide filled with brown (7.5YR 5/2) Ap material; moderately alkaline (pH 7.9); clear wavy boundary.

B22—22 to 29 inches; reddish brown (5YR 5/3) silty clay, reddish brown (5YR 4/4) moist; moderate medium subangular blocky structure; very hard, very firm, very sticky and very plastic; few very fine roots; few fine and very fine tubular pores; common vertical cracks 3/8 to 1 inch wide filled with brown (7.5YR 5/2) Ap material; slightly effervescent; moderately alkaline (pH 8.0); gradual wavy boundary.

B23—29 to 35 inches; reddish brown (5YR 5/3) silty clay, reddish brown (5YR 4/4) moist; moderate medium subangular blocky structure parting to moderate fine angular blocky; very hard, very firm, very sticky and very plastic; few very fine roots; few fine and very fine tubular pores; common vertical cracks 3/8 inch to 1.5 inches wide filled with brown (7.5YR 5/2) Ap material; slightly effervescent; moderately alkaline (pH 8.1); clear smooth boundary.

B3ca—35 to 40 inches; light brown (5YR 6/4) silty clay, brown (5YR 5/4) moist; moderate fine prismatic structure parting to moderate fine subangular blocky; very hard, very firm, very sticky and very plastic; few very fine roots; few fine and very fine tubular pores; few fine lime seams; strongly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

Cca—40 to 64 inches; light brown (7.5YR 6/4) silty clay, brown (5YR 5/4) moist; massive; hard, firm, very sticky and very plastic; few fine distinct strong brown (7.5YR 5/6) mottles; few very fine tubular pores; strongly effervescent; moderately alkaline (pH 8.4).

The solum is 26 to 60 inches thick or more. Clay content in the control section averages 40 to 55 percent. Lime is at a depth of 26 to 36 inches.

A horizon: Reaction is mildly alkaline or moderately alkaline.

B horizon: Texture is silty clay or clay. Reaction is mildly alkaline or moderately alkaline.

C horizon: Texture is silty clay or clay. Reaction is mildly alkaline or moderately alkaline.

Bear Lake Series

The Bear Lake series consists of very deep, very poorly drained soils on flood plains and low terraces. The drainage of these soils has been altered in most areas, and it is now poorly drained. These soils formed in silty alluvium derived from mixed sources. Slope is 0 to 1 percent. Elevation is 4,500 to 5,200 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 41 to 45 degrees F.

Typical pedon of a Bear Lake silt loam in an area of Downata-Bear Lake complex, 0 to 1 percent slopes, about 3.5 miles west of Downey, about 2,850 feet west

and 350 feet north of the southeast corner of sec. 25, T. 11 S., R. 31 E.

A1g—0 to 12 inches; dark grayish brown (2.5Y 4/2) silt loam, black (N 2/0) moist; weak fine platy structure; soft, very friable, slightly sticky and slightly plastic; many very fine, fine, and medium roots; many very fine interstitial pores; slightly effervescent; mildly alkaline (pH 7.7); abrupt smooth boundary.

B2cag—12 to 24 inches; light gray (N 6/0) silty clay loam, gray (N 5/0) moist; weak coarse subangular blocky structure; hard, friable, sticky and plastic; many very fine, fine, and medium roots; common very fine tubular pores; strongly effervescent; moderately alkaline (pH 7.9); abrupt smooth boundary.

C1cag—24 to 40 inches; light gray (N 7/0) silty clay loam, gray (N 7/0) moist; massive; hard, friable, sticky and plastic; few very fine and fine roots; common very fine tubular pores; violently effervescent; moderately alkaline (pH 8.0); clear smooth boundary.

C2cag—40 to 60 inches; light gray (N 7/0) silt loam, gray (N 6/0) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common very fine tubular pores; strongly effervescent; mildly alkaline (pH 7.8).

Clay content in the control section averages 24 to 32 percent. Secondary lime is at a depth of 9 to 16 inches.

A horizon: Reaction is mildly alkaline or moderately alkaline.

B horizon: Texture is silty clay loam or silt loam. Reaction is mildly alkaline to strongly alkaline.

C horizon: Texture is silty clay loam or silt loam. Reaction is mildly alkaline to strongly alkaline.

Bear Lake Variant

The Bear Lake Variant consists of poorly drained soils that are moderately deep to paralithic contact and are on flood plains and low terraces. These soils formed in silty alluvium derived from mixed sources. Slope is 0 to 1 percent. Elevation is 5,100 to 5,200 feet. Average annual precipitation is 14 to 16 inches, and average annual air temperature is 41 to 45 degrees F.

Typical pedon of a Bear Lake Variant silt loam in an area of Bear Lake-Bear Lake Variant complex, 0 to 1 percent slopes, about 3.5 miles north of Lava Hot Springs, about 2,350 feet east and 1,700 feet south of the northwest corner of sec. 4, T. 9 S., R. 38 E.

A1g—0 to 5 inches; very dark gray (5Y 3/1) silt loam, black (5Y 2.5/1) moist; weak very fine and fine granular structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine, fine, and medium roots and common coarse roots; many very fine tubular and interstitial pores; slightly effervescent; mildly alkaline (pH 7.4); abrupt smooth boundary.

B1g—5 to 9 inches; very dark gray (5Y 3/1) silt loam, black (5Y 2.5/1) moist; weak coarse subangular blocky structure parting to weak fine granular; hard, friable, slightly sticky and slightly plastic; many very fine, fine, and medium roots and common coarse roots; many very fine tubular pores; slightly effervescent; mildly alkaline (pH 7.4); clear smooth boundary.

B2cag—9 to 17 inches; dark gray (5Y 4/1) silt loam, very dark gray (5Y 3/1) moist; weak coarse subangular blocky structure parting to moderate fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots, few medium roots, and common coarse roots; few very fine tubular pores; strongly effervescent; moderately alkaline (pH 7.9); abrupt smooth boundary.

C1cag—17 to 26 inches; gray (5Y 6/1) silt loam, dark gray (5Y 4/1) moist; massive; hard, very friable, slightly sticky and slightly plastic; common very fine roots and few fine, medium, and coarse roots; many very fine, common fine, and few medium tubular pores; violently effervescent; moderately alkaline (pH 8.3); clear wavy boundary.

C2cag—26 to 33 inches; light olive gray (5Y 6/2) silt loam, olive gray (5Y 4/2) moist; few fine distinct light olive brown (2.5Y 5/4) mottles, olive brown (2.5Y 4/4) moist; massive; hard, very friable, slightly sticky and slightly plastic; common very fine roots and few fine, medium, and coarse roots; common very fine and fine tubular pores and few medium tubular pores; violently effervescent; moderately alkaline (pH 8.0); clear wavy boundary.

C3cag—33 to 36 inches; dark gray (5Y 4/1) silt loam, black (5Y 2.5/1) moist; massive; hard, very friable, slightly sticky and slightly plastic; common very fine roots and few fine, medium, and coarse roots; many very fine, fine, and medium tubular pores; strongly effervescent; moderately alkaline (pH 8.0); abrupt smooth boundary.

IIR—36 inches; tufa.

Clay content in the control section averages 18 to 30 percent. Secondary lime is at a depth of 8 to 16 inches. Paralithic contact is at a depth of 20 to 40 inches.

A horizon: Reaction is mildly alkaline or moderately alkaline.

B horizon: Texture is silt loam or silty clay loam. Reaction is mildly alkaline or moderately alkaline.

C horizon: Reaction is moderately alkaline or strongly alkaline.

Beaverdam Series

The Beaverdam series consists of very deep, well drained soils on mountainsides. These soils formed in

alluvium derived from various kinds of rock, dominantly sandstone and quartzite. Slope is 30 to 60 percent. Elevation is 5,500 to 7,500 feet. Average annual precipitation is 22 to 30 inches, and average annual air temperature is 36 to 42 degrees F.

Typical pedon of a Beaverdam silt loam in an area of Sedgway-Beaverdam complex, 30 to 60 percent slopes, about 6 miles southwest of Lava Hot Springs, about 1,080 feet north and 2,140 feet west of the southeast corner of sec. 30, T. 10 S., R. 38 E.

O1—1.5 inches to 1 inch; undecomposed needles, leaves, twigs, and grass.

O2—1 inch to 0; decomposed and partly decomposed needles, leaves, twigs, and grass.

A1—0 to 3 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; moderate fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine interstitial pores; about 5 percent pebbles and cobbles; slightly acid (pH 6.4); abrupt smooth boundary.

A3—3 to 12 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine and fine tubular pores; about 5 percent pebbles and cobbles; medium acid (pH 6.0); clear smooth boundary.

B21t—12 to 19 inches; light yellowish brown (10YR 6/4) silty clay loam, brown (10YR 4/3) moist; strong medium and coarse subangular blocky structure; hard, very firm, very sticky and very plastic; common very fine, fine, and medium roots; common very fine and fine tubular pores and many very fine interstitial pores; many moderately thick clay films on the faces of peds and in pores; about 5 percent pebbles and cobbles; slightly acid (pH 6.3); gradual smooth boundary.

B22t—19 to 45 inches; light yellowish brown (10YR 6/4) silty clay, brown (10YR 4/3) moist; strong medium and coarse angular blocky structure; hard, very firm, very sticky and very plastic; common very fine, fine, and medium roots; many very fine interstitial pores; continuous moderately thick clay films on the faces of peds and in pores; about 5 percent pebbles and cobbles; slightly acid (pH 6.4); clear smooth boundary.

B23t—45 to 65 inches; light yellowish brown (10YR 6/4) silty clay loam, dark yellowish brown (10YR 4/4) moist; moderate medium and coarse subangular blocky structure; hard, friable, sticky and plastic; few very fine and fine roots; few very fine and fine tubular pores; common thin clay films on the faces of peds and in pores; slightly acid (pH 6.1).

Depth to bedrock and thickness of the solum are 60 inches or more. Clay content in the control section averages 35 to 45 percent.

A horizon: The horizon is 0 to 10 percent rock fragments and 15 to 25 percent clay. Reaction is medium acid to neutral.

B2t horizon: Texture is silty clay loam or silty clay. The horizon is 0 to 10 percent rock fragments and 35 to 45 percent clay. Reaction is slightly acid or neutral.

Broadhead Series

The Broadhead series consists of very deep, well drained soils on mountainsides, foothills, and fan terraces. These soils formed in mixed alluvium derived dominantly from quartzite and sandstone. Slope is 4 to 30 percent. Elevation is 5,500 to 7,000 feet. Average annual precipitation is 18 to 22 inches, and average annual air temperature is 41 to 45 degrees F.

Typical pedon of a Broadhead silt loam in an area of Broadhead-Yago complex, 4 to 12 percent slopes, about 8 miles east and 3.5 miles south of Downey, about 1,200 feet south and 600 feet west of the northeast corner of sec. 13, T. 12 S., R. 38 E.

A11—0 to 2 inches; very dark grayish brown (10YR 3/2) silt loam, very dark brown (10YR 2/2) moist; moderate medium and fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots, common medium roots and few coarse roots; common very fine and fine tubular pores and many very fine interstitial pores; a trace of pebbles; medium acid (pH 5.9); abrupt smooth boundary.

A12—2 to 9 inches; very dark grayish brown (10YR 3/2) silty clay loam, very dark brown (10YR 2/2) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; many very fine and fine roots and common medium, and coarse roots; many very fine and fine and common medium tubular pores; trace of pebbles; slightly acid (pH 6.1); clear smooth boundary.

B21t—9 to 17 inches; dark grayish brown (10YR 4/2) silty clay loam, very dark brown (10YR 2/2) moist; moderate medium prismatic structure parting to strong medium angular blocky; very hard, firm, sticky and plastic; many very fine and fine roots, common medium roots, and few coarse roots; many very fine and fine tubular pores; common thin clay films on the faces of peds and in pores; trace of pebbles; slightly acid (pH 6.1); clear wavy boundary.

B22t—17 to 33 inches; brown (10YR 4/3) silty clay loam, very dark grayish brown (10YR 3/2) moist; strong medium prismatic structure; very hard, firm, sticky and plastic; common very fine roots and few fine and medium roots; common very fine tubular pores

and common very fine and fine interstitial pores; many moderately thick clay films on the faces of peds and in pores; trace of pebbles; slightly acid (pH 6.1); clear smooth boundary.

B23t—33 to 60 inches; brown (10YR 5/3) silty clay loam, dark brown (10YR 4/3) moist; moderate medium prismatic structure; very hard, firm, sticky and plastic; few very fine and fine roots; common very fine, fine, and medium tubular pores and many very fine interstitial pores; common moderately thick clay films on the faces of peds and in pores; trace of pebbles; slightly acid (pH 6.1).

Depth to bedrock and thickness of the solum are 60 inches or more. Clay content in the control section averages 35 to 50 percent clay. Lime is present below a depth of 40 inches in some pedons.

A horizon: The upper part of the horizon is silt loam and is 15 to 25 percent clay, and the lower part is silt loam or silty clay loam and is 25 to 34 percent clay. The upper part is medium acid or slightly acid, and the lower part is slightly acid or neutral.

B2t horizon: Texture is silty clay loam or silty clay. Clay content is 35 to 50 percent. Rock fragment content is 0 to 10 percent.

Broncho Series

The Broncho series consists of very deep, somewhat excessively drained soils on terraces. These soils formed in alluvium deposited mainly by the ancient Bonneville Flood. Slope is 1 to 20 percent. Elevation is 4,400 to 4,500 feet. Average annual precipitation is 9 to 11 inches, and average annual air temperature is 47 to 50 degrees F.

Typical pedon of Broncho cobbly loam, 1 to 8 percent slopes, about 2 miles north and 3 miles west of Chubbuck, about 660 feet north and 660 feet west of the southeast corner of sec. 30, T. 5 S., R. 34 E.

A1—0 to 6 inches; pale brown (10YR 6/3) cobbly loam, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure parting to weak fine platy; slightly hard, friable, slightly sticky and slightly plastic; many fine and very fine roots; many very fine interstitial pores and common very fine tubular pores; about 20 percent cobbles and 10 percent pebbles; mildly alkaline (pH 7.4); abrupt smooth boundary.

B2—6 to 13 inches; very pale brown (10YR 7/3) cobbly loam, brown (10YR 5/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine and very fine roots; many very fine tubular pores; about 20 percent cobbles and 10 percent pebbles; slightly effervescent; moderately alkaline (pH 7.9); abrupt irregular boundary.

C1ca—13 to 30 inches; multicolored extremely cobbly coarse sand; single grain; loose, nonsticky and nonplastic; common fine and very fine roots; about 50 percent cobbles and stones and 30 percent pebbles; moderately thick lime coatings on the undersides of rock fragments; strongly effervescent; moderately alkaline (pH 8.3); clear wavy boundary.

IIC2ca—30 to 39 inches; multicolored extremely cobbly coarse sand; single grain; loose, nonsticky and nonplastic; few fine and very fine roots; about 35 percent cobbles and stones and 40 percent pebbles; moderately thick lime coatings on the undersides of rock fragments; strongly effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

IIC3—39 to 60 inches; multicolored extremely cobbly coarse sand; single grain; loose, nonsticky and nonplastic; few fine and very fine roots; about 35 percent cobbles and stones and 40 percent pebbles; slightly effervescent; mildly alkaline (pH 7.7).

Depth to the IIC horizon is 10 to 20 inches. The control section is 35 to 85 percent rock fragments. Lime is at a depth of 6 to 17 inches.

A horizon: Texture is cobbly loam or extremely stony loam. Rock fragment content is 15 to 50 percent. Clay content is 10 to 15 percent. Reaction is mildly alkaline or moderately alkaline.

B2 horizon: Texture is cobbly loam or very stony loam. Rock fragment content is 30 to 50 percent. Clay content is 10 to 15 percent. Reaction is mildly alkaline or moderately alkaline.

IIC horizon: Texture is extremely cobbly or extremely stony coarse sand. Rock fragment content is 60 to 85 percent. Reaction is mildly alkaline or moderately alkaline.

Broncho Variant

The Broncho Variant consists of very deep, well drained soils on fan terrace breaks and on side slopes along drainageways. These soils formed in alluvium derived dominantly from sedimentary and metasedimentary rock. Slope is 20 to 50 percent. Elevation is 4,400 to 5,200 feet. Average annual precipitation is 10 to 13 inches, and average annual air temperature is 46 to 49 degrees F.

Typical pedon of a Broncho Variant very gravelly loam in an area of Broncho Variant-Pocatello complex, 20 to 50 percent slopes, about 1 mile east of Pocatello, about 2,315 feet south and 1,525 feet west of the northeast corner of sec. 13, T. 6 S., R. 34 E.

A1—0 to 4 inches; pale brown (10YR 6/3) very gravelly loam, dark brown (10YR 3/3) moist; weak coarse platy structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many

very fine roots, common fine roots, and few medium and coarse roots; many very fine tubular and interstitial pores; about 30 percent pebbles and 10 percent cobbles; slightly effervescent; neutral (pH 6.6); clear smooth boundary.

C1ca—4 to 20 inches; very pale brown (10YR 7/3) extremely gravelly loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; many very fine roots and few medium and fine roots; many very fine interstitial pores; about 40 percent pebbles, 20 percent cobbles, and 5 percent stones; rock fragments have thick lime coatings on the undersides; strongly effervescent; neutral (pH 6.8); clear irregular boundary.

B2tcab—20 to 28 inches; brown (7.5YR 5/4) extremely gravelly clay loam, dark brown (7.5YR 4/4) moist; moderate fine and medium subangular blocky structure; hard, firm, sticky and plastic; few very fine roots; common very fine interstitial pores; many moderately thick clay films on the insides of peds and in pores; evidence indicates a former argillic horizon that has been engulfed by carbonates; about 40 percent pebbles, 20 percent cobbles, and 5 percent stones; rock fragments have thick lime coatings on the undersides; strongly effervescent; neutral (pH 7.2); clear irregular boundary.

C2cab—28 to 60 inches; yellowish brown (10YR 5/4) extremely gravelly sandy loam, dark yellowish brown (10YR 4/6) moist; massive; soft, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine interstitial pores; about 40 percent pebbles, 20 percent cobbles, and 10 percent stones; rock fragments have thick lime coatings on the undersides; strongly effervescent; mildly alkaline (pH 7.4).

The control section is 40 to 75 percent rock fragments. Secondary lime is at a depth of 4 to 8 inches. Bedrock is at a depth of 60 inches or more.

A horizon: The horizon is 35 to 45 percent rock fragments, mostly gravel, and 10 to 20 percent clay. Reaction is neutral or mildly alkaline.

C1 and B2tcab horizons: Texture is extremely gravelly loam, extremely gravelly clay loam, or very gravelly loam. Rock fragment content is 40 to 65 percent. Clay content is 20 to 30 percent. Reaction is neutral to moderately alkaline.

C2cab horizon: Texture is extremely gravelly sandy loam or extremely cobbly sandy loam. Rock fragment content is 60 to 75 percent. Clay content is 5 to 15 percent. Reaction is mildly alkaline or moderately alkaline.

Broxon Series

The Broxon series consists of very deep, well drained soils on terraces. These soils formed in loess and silty alluvium overlying flood-deposited sand, gravel, cobbles, and stones of mixed mineralogy. Slope is 0 to 6 percent. Elevation is 4,400 to 4,500 feet. Average annual precipitation is 9 to 11 inches, and average annual air temperature is 47 to 51 degrees F.

Typical pedon of Broxon silt loam, 0 to 2 percent slopes, about 0.5 mile northwest of Pocatello, about 30 feet south and 1,485 feet east of the northwest corner of sec. 16, T. 6 S., R. 34 E.

Ap—0 to 8 inches; pale brown (10YR 6/3) silt loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure parting to weak fine granular; slightly hard, friable, slightly sticky and slightly plastic; few fine and many very fine roots; few very fine interstitial pores; slightly effervescent; moderately alkaline (pH 8.1); abrupt irregular boundary.

C1ca—8 to 16 inches; white (10YR 8/2) silt loam, pale brown (10YR 6/3) moist; weak medium platy structure; slightly hard, friable, slightly sticky and nonplastic; few fine and very fine roots; few fine and very fine tubular pores; violently effervescent; moderately alkaline (pH 7.9); gradual smooth boundary.

C2—16 to 25 inches; pale brown (10YR 6/3) silt loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and few medium roots; common very fine tubular pores; slightly effervescent; moderately alkaline (pH 8.0); abrupt smooth boundary.

IIC3—25 to 60 inches; multicolored extremely stony sand; single grain; loose, nonsticky and nonplastic; common very fine and few fine roots; moderately alkaline (pH 8.2).

Depth to the IIC horizon is 20 to 40 inches. Secondary lime is at a depth of 7 to 15 inches. Clay content in the silty upper part of the control section averages 8 to 18 percent.

A horizon: Reaction is mildly alkaline or moderately alkaline.

C horizon: Texture is silt loam or silt. Reaction is mildly alkaline or moderately alkaline.

IIC horizon: Texture is extremely stony sand or extremely cobbly sand. Rock fragment content is 65 to 85 percent. Reaction is mildly alkaline or moderately alkaline.

Camelback Series

The Camelback series consists of deep and very deep, well drained soils on mountainsides, foothills, and fan terraces. These soils formed in alluvium, colluvium, and residuum derived from sedimentary and metasedimentary rock, dominantly quartzite. Slope is 6 to 60 percent. Elevation is 5,000 to 8,000 feet. Average

annual precipitation is 16 to 20 inches, and average annual air temperature is 39 to 43 degrees F.

Typical pedon of a Camelback gravelly silt loam in an area of Valmar-Camelback-Hades complex, 30 to 60 percent slopes, about 6 miles east and 2 miles south of Pocatello, about 30 feet south and 670 feet west of the northeast corner of sec. 12, T. 7 S., R. 35 E.

A11—0 to 3 inches; dark brown (10YR 3/3) gravelly silt loam, very dark brown (10YR 2/2) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine, common fine, and few medium roots; many very fine interstitial pores; about 25 percent pebbles; slightly acid (pH 6.4); abrupt smooth boundary.

A12—3 to 12 inches; dark brown (10YR 4/3) gravelly silt loam, very dark brown (10YR 2/2) moist; weak coarse and medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine, common fine, and few medium roots; many very fine and few fine tubular pores; about 25 percent pebbles; slightly acid (pH 6.4); clear smooth boundary.

A3—12 to 21 inches; dark brown (10YR 4/3) gravelly silt loam, very dark brown (10YR 2/2) moist; weak medium and coarse subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and few fine roots; many very fine and few fine tubular pores; about 30 percent pebbles; slightly acid (pH 6.3); gradual wavy boundary.

B21t—21 to 30 inches; dark brown (10YR 4/3) extremely cobbly silt loam, very dark grayish brown (10YR 3/2) moist; moderate medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; many very fine tubular pores and few very fine interstitial pores; few thin clay films on faces of peds and in pores; about 5 percent stones, 25 percent cobbles, and 40 percent pebbles; slightly acid (pH 6.2); gradual wavy boundary.

B22t—30 to 42 inches; yellowish brown (10YR 5/4) extremely cobbly silt loam, dark yellowish brown (10YR 3/4) moist; moderate medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; many very fine tubular pores and few fine interstitial pores; common thin clay films on faces of peds and in pores; about 10 percent stones, 20 percent cobbles, and 40 percent pebbles; slightly acid (pH 6.2); abrupt irregular boundary.

R—42 inches; quartzite.

Depth to bedrock and thickness of the solum are 40 to 60 inches or more.

A horizon: Texture is gravelly silt loam, very cobbly silt loam, or extremely stony silt loam. Clay content is 12 to 18 percent. Rock fragment content is 20 to 45 percent. Reaction is slightly acid or neutral.

B2t horizon: Texture is extremely cobbly silt loam or extremely gravelly silt loam. Clay content is 18 to 27 percent. Rock fragment content is 60 to 80 percent. Reaction is slightly acid or neutral.

Camelback Variant

The Camelback Variant consists of very deep, well drained soils on the upper part of mountainsides. These soils formed in alluvium and colluvium derived from various kinds of sedimentary and metasedimentary rock, dominantly quartzite and sandstone. Slope is 20 to 60 percent. Elevation is 7,000 to 9,200 feet. Average annual precipitation is 18 to 22 inches, and average annual air temperature is 37 to 42 degrees F.

Typical pedon of a Camelback Variant gravelly silt loam in an area of Camelback Variant-Valmar Variant complex, 20 to 60 percent slopes, about 1 mile southeast of Baldy Mountain, about 1,650 feet north and 1,175 feet west of the southeast corner of sec. 19, T. 10 S., R. 39 E.

A11—0 to 4 inches; very dark grayish brown (10YR 3/2) gravelly silt loam, very dark brown (10YR 2/2) moist; weak fine and very fine platy structure parting to weak very fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine and fine interstitial pores and common very fine tubular pores; about 20 percent pebbles and 5 percent cobbles; slightly acid (pH 6.5); abrupt smooth boundary.

A12—4 to 10 inches; dark brown (10YR 3/3) gravelly silt loam, very dark brown (10YR 2/2) moist; weak coarse and medium subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine and fine interstitial pores and common very fine tubular pores; about 25 percent pebbles and 5 percent cobbles; neutral (pH 6.6); abrupt smooth boundary.

B21—10 to 17 inches; yellowish brown (10YR 5/4) very cobbly loam, dark yellowish brown (10YR 4/4) moist; weak fine and medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine and fine interstitial pores and few very fine tubular pores; about 30 percent pebbles and 20 percent cobbles; neutral (pH 6.8); gradual smooth boundary.

B22—17 to 31 inches; yellowish brown (10YR 5/6) very cobbly loam, dark yellowish brown (10YR 4/6) moist; weak fine and very fine subangular blocky structure; soft, very friable, slightly sticky and slightly

plastic; many very fine and fine roots and common medium and coarse roots; many very fine and fine interstitial pores and few very fine tubular pores; about 30 percent pebbles and 30 percent cobbles; slightly acid (pH 6.5); gradual wavy boundary.

B3—31 to 60 inches; yellowish brown (10YR 5/6) extremely cobbly loam, dark yellowish brown (10YR 4/6) moist; weak very fine and fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common fine and very fine roots and few medium roots; many very fine and fine interstitial pores and few very fine tubular pores; about 20 percent pebbles and 55 percent cobbles; neutral (pH 6.7).

Depth to bedrock and thickness of the solum are 60 inches or more.

A horizon: The horizon is 10 to 20 percent clay and 20 to 30 percent rock fragments. Reaction is slightly acid or neutral.

B horizon: Texture is very cobbly and extremely cobbly loam. The horizon is 10 to 25 percent clay and 50 to 75 percent rock fragments. Reaction is slightly acid or neutral.

Cedarhill Series

The Cedarhill series consists of very deep, well drained soils on mountainsides, ridges, foothills, and terrace breaks. These soils formed in alluvium and colluvium derived from limestone and other related sedimentary and metasedimentary rock. Slope is 12 to 60 percent. Elevation is 4,800 to 7,000 feet. Average annual precipitation is 13 to 18 inches, and average annual air temperature is 41 to 45 degrees F.

Typical pedon of a Cedarhill very cobbly silt loam in an area of Cedarhill-Ririe-Watercanyon complex, 30 to 60 percent slopes, about 4 miles south of Pocatello, about 1,750 feet north and 250 feet east of the southwest corner of sec. 20, T. 7 S., R. 35 E.

A11—0 to 4 inches; brown (10YR 5/3) very cobbly silt loam, very dark grayish brown (10YR 3/2) moist; weak coarse and medium subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots, common medium roots, and few coarse roots; 5 percent stones, 20 percent cobbles, and 15 percent pebbles; many very fine interstitial pores; slightly effervescent; mildly alkaline (pH 7.7); clear smooth boundary.

A12—4 to 9 inches; brown (10YR 5/3) very cobbly silt loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots, common medium roots, and few coarse roots; many very fine interstitial pores; 5 percent stones, 20 percent cobbles, and 15 percent pebbles; strongly effervescent; mildly alkaline (pH 7.7); clear wavy boundary.

C1ca—9 to 16 inches; very pale brown (10YR 7/3) very cobbly silt loam, light yellowish brown (10YR 6/4) moist; weak coarse subangular blocky structure; hard, firm, slightly sticky and slightly plastic; many very fine and fine roots, common medium roots, and few coarse roots; many very fine tubular pores; 5 percent stones, 20 percent cobbles, and 15 percent pebbles; violently effervescent; mildly alkaline (pH 7.8); gradual wavy boundary.

C2ca—16 to 28 inches; light yellowish brown (10YR 6/4) very cobbly silt loam, dark yellowish brown (10YR 4/4) moist; weak coarse subangular blocky structure; hard, firm, slightly sticky and slightly plastic; common very fine and fine roots and few medium and coarse roots; many very fine tubular pores; 5 percent stones, 20 percent cobbles, and 20 percent pebbles; violently effervescent; mildly alkaline (pH 7.8); gradual wavy boundary.

C3—28 to 60 inches; light yellowish brown (10YR 6/4) very cobbly loam, dark yellowish brown (10YR 4/4) moist; massive; hard, firm, slightly sticky and slightly plastic; few very fine, fine, and medium roots; many very fine tubular pores; 5 percent stones, 20 percent cobbles, and 20 percent pebbles; slightly effervescent; moderately alkaline (pH 7.9).

Bedrock is at a depth of 60 inches or more. Secondary lime is at a depth of 7 to 13 inches.

A horizon: Texture is very cobbly silt loam or very gravelly silt loam. Rock fragment content is 40 to 55 percent. Reaction is neutral to moderately alkaline.

Cca horizon: Texture is very cobbly silt loam, extremely cobbly silt loam, or extremely gravelly silt loam. Rock fragment content is 40 to 70 percent. Reaction is mildly alkaline or moderately alkaline.

C horizon: Texture is very cobbly silt loam, very cobbly loam, extremely cobbly silt loam, extremely gravelly silt loam, or extremely gravelly loam. Rock fragment content is 45 to 70 percent. Reaction is mildly alkaline or moderately alkaline.

Coalbank Series

The Coalbank series consists of very deep, well drained soils on mountainsides, foothills, and terraces. These soils formed in alluvium and residuum derived from volcanic ash. Slope is 4 to 50 percent. Elevation is 4,800 to 6,000 feet. Average annual precipitation is 14 to 18 inches, and average annual air temperature is 42 to 45 degrees F.

Typical pedon of Coalbank very fine sandy loam, 4 to 12 percent slopes, about 10 miles west of Arimo, about 2,850 feet north and 1,900 feet west of the southeast corner of sec. 16, T. 10 S., R. 35 E.

A11—0 to 2 inches; brown (10YR 5/3, crushed) very fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium and coarse subangular blocky structure parting to weak very fine granular; soft, very friable, nonsticky and nonplastic; many very fine and fine roots and common medium and coarse roots; many very fine interstitial pores; slightly acid (pH 6.4); abrupt smooth boundary.

A12—2 to 6 inches; brown (10YR 5/3) very fine sandy loam, very dark brown (10YR 2/2) moist; weak coarse and medium subangular blocky structure parting to weak fine subangular blocky; soft, very friable, nonsticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine interstitial pores and few very fine tubular pores; slightly acid (pH 6.4); abrupt smooth boundary.

B21—6 to 15 inches; brown (10YR 5/3) very fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; slightly hard, very friable, nonsticky and slightly plastic; common very fine, fine, medium, and coarse roots; many very fine interstitial pores and common very fine tubular pores; about 1 percent pebbles; slightly acid (pH 6.2); gradual smooth boundary.

B22—15 to 33 inches; brown (10YR 5/3) very fine sandy loam, dark brown (10YR 3/3) moist; weak coarse and medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine, fine, and medium roots and few coarse roots; many very fine tubular and interstitial pores; slightly acid (pH 6.1); abrupt irregular boundary.

C1—33 to 53 inches; light gray (10YR 7/1) very fine sandy loam, gray (10YR 5/1) moist; massive; slightly hard, friable, nonsticky and nonplastic; few very fine, fine, and medium roots; many very fine interstitial pores; neutral (pH 6.6); gradual wavy boundary.

C2—53 to 60 inches; light gray (5Y 7/1) very fine sandy loam, light olive gray (5Y 6/2) moist; massive; hard, firm, nonsticky and nonplastic; few very fine and fine roots; many very fine interstitial pores; few very fine iron concretions; neutral (pH 6.6).

The solum is 20 to 40 inches thick. Vitric volcanic ash content in the control section averages 65 to 85 percent.

A horizon: Reaction is slightly acid or neutral.

B horizon: Reaction is slightly acid to mildly alkaline.

C horizon: Reaction is neutral to moderately alkaline. Texture is very fine sandy loam or fine sandy loam.

Dateman Series

The Dateman series consists of moderately deep, well drained soils on mountainsides. These soils formed in alluvium, colluvium, and residuum derived dominantly from limestone and dolomite. Slope is 20 to 60 percent. Elevation is 6,000 to 8,000 feet. Average annual precipitation is 20 to 25 inches, and average annual air temperature is 36 to 40 degrees F.

Typical pedon of a Dateman cobbly silt loam in an area of Ireland-Dateman-Pavohroo association, 20 to 60 percent slopes, about 4.5 miles northeast of Lava Hot Springs, about 1,815 feet north and 710 feet west of the southeast corner of sec. 7, T. 9 S., R. 39 E.

O1 and O2—2 inches to 0; undecomposed and partially decomposed needles, twigs, and grass.

A11—0 to 2 inches; dark grayish brown (10YR 4/2) cobbly silt loam, very dark brown (10YR 2/2) moist; moderate fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and common fine roots; many very fine and common fine tubular pores; about 15 percent cobbles and 10 percent pebbles; slightly acid (pH 6.1); abrupt wavy boundary.

A12—2 to 9 inches; dark grayish brown (10YR 4/2) cobbly silt loam, very dark brown (10YR 2/2) moist; moderate fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; common fine tubular pores; about 5 percent stones, 15 percent cobbles, and 5 percent pebbles; neutral (pH 6.9); abrupt wavy boundary.

B2—9 to 17 inches; brown (10YR 5/3) extremely cobbly silt loam, dark brown (10YR 3/3) moist; moderate medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; common fine tubular pores; about 20 percent stones, 30 percent cobbles, and 15 percent pebbles; mildly alkaline (pH 7.4); clear wavy boundary.

B3—17 to 35 inches; yellowish brown (10YR 5/4) extremely cobbly silt loam, dark yellowish brown (10YR 4/4) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few medium roots; few fine tubular pores; 20 percent stones, 35 percent cobbles, and 10 percent pebbles; mildly alkaline (pH 7.7); abrupt irregular boundary.

R—35 inches; fractured dolomite.

Depth to bedrock and thickness of the solum are 30 to 40 inches.

A1 horizon: Rock fragment content is 20 to 30 percent. Reaction is slightly acid or neutral.

B horizon: Rock fragment content is 65 to 70 percent. Reaction is neutral or mildly alkaline.

Downata Series

The Downata series consists of very deep, very poorly drained soils on flood plains and low stream terraces. The drainage of these soils has been altered to poorly drained in most areas. These soils formed in silty

alluvium derived from mixed sources. Slope is 0 to 1 percent. Elevation is 4,500 to 4,800 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 41 to 45 degrees F.

Typical pedon of a Downata silt loam in an area of Downata-Bear Lake complex, drained, 0 to 1 percent slopes, about 3.25 miles west of Downey, about 1,400 feet west and 20 feet north of the southeast corner of sec. 25, T. 11 S., R. 36 E.

O—1 inch to 0; undecomposed grass and moss.

A11g—0 to 2 inches; grayish brown (2.5Y 5/2) silt loam, very dark grayish brown (2.5Y 3/2) moist; weak very fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine, fine, and medium roots; many very fine interstitial pores; strongly effervescent; mildly alkaline (pH 7.7); abrupt wavy boundary.

A12g—2 to 6 inches; grayish brown (2.5Y 5/2) silt loam, very dark grayish brown (2.5Y 3/2) moist; common fine prominent dark yellowish brown (10YR 3/6) mottles; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine, fine, and medium roots; many very fine interstitial pores; strongly effervescent; mildly alkaline (pH 7.6); abrupt wavy boundary.

B2g—6 to 14 inches; grayish brown (2.5Y 5/2) silt loam, very dark grayish brown (2.5Y 3/2) moist; many fine prominent dark yellowish brown (10YR 3/6) mottles; weak coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine, fine, and medium roots; many very fine interstitial pores and few fine tubular pores; strongly effervescent; mildly alkaline (pH 7.6); abrupt smooth boundary.

IIA1gb—14 to 20 inches; dark gray (5Y 4/1) silty clay loam, black (5Y 2.5/1) moist; weak coarse subangular blocky structure; hard, friable, sticky and plastic; many very fine roots and common fine and medium roots; common very fine tubular pores; slightly effervescent; mildly alkaline (pH 7.7); clear smooth boundary.

IIB2gb—20 to 30 inches; gray (5Y 5/1) silty clay loam, very dark gray (5Y 3/1) moist; weak coarse subangular blocky structure; hard, friable, sticky and plastic; few very fine and fine roots; many very fine tubular pores; strongly effervescent; moderately alkaline (pH 7.9); abrupt smooth boundary.

IIC1g—30 to 40 inches; light brownish gray (2.5Y 6/2) silty clay loam, dark grayish brown (2.5Y 4/2) moist; weak coarse subangular blocky structure; very hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common very fine tubular pores; violently effervescent; moderately alkaline (pH 8.0); abrupt smooth boundary.

IIC2g—40 to 60 inches; light gray (N 7/0) silt loam, gray (2.5Y 5/1) moist; weak coarse subangular blocky structure; very hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common very fine tubular pores; violently effervescent; moderately alkaline (pH 7.9).

Clay content in the control section averages 18 to 34 percent. A buried organic horizon 1 inch to 6 inches thick is in some pedons. The mollic epipedon is 24 to 36 inches thick.

A and B horizons: Reaction is mildly alkaline or moderately alkaline.

Buried A and B horizons and IIC horizon: Texture is silt loam or silty clay loam. Reaction is mildly alkaline or moderately alkaline.

Downey Series

The Downey series consists of very deep, well drained soils on terraces. These soils formed in silty alluvium overlying flood-deposited gravel and sand of mixed mineralogy. Slope is 0 to 8 percent. Elevation is 4,600 to 4,900 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 42 to 45 degrees F.

Typical pedon of a Downey gravelly silt loam in an area of Downey-Arimo complex, 0 to 3 percent slopes (fig. 11), about 2 miles west of Downey, about 445 feet south and 830 feet east of the northwest corner of sec. 20, T. 11 S., R. 37 E.

A11—0 to 3 inches; brown (10YR 5/3) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; weak coarse platy structure parting to weak fine granular; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and few fine roots; many very fine interstitial pores; about 15 percent pebbles and a trace of cobbles; neutral (pH 7.0); abrupt smooth boundary.

A12—3 to 12 inches; brown (10YR 5/3) gravelly silt loam, dark brown (10YR 3/3) moist; weak coarse and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and few fine roots; few fine and very fine tubular pores; about 15 percent pebbles and a trace of cobbles; neutral (pH 7.2); abrupt smooth boundary.

C1ca—12 to 17 inches; very pale brown (10YR 7/3) gravelly silt loam, brown (10YR 5/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; few very fine tubular pores; about 15 percent pebbles and a trace of cobbles; violently effervescent; mildly alkaline (pH 7.7); abrupt wavy boundary.

IIC2ca—17 to 32 inches; multicolored extremely gravelly coarse sand; massive; common very fine roots; about 60 percent pebbles and 15 percent cobbles;

Figure 11.—Profile of Downey gravelly silt loam in an area of Downey-Arimo complex, 0 to 3 percent slopes.

weakly cemented with lime; violently effervescent; moderately alkaline (pH 7.9); gradual wavy boundary.

IIC3ca—32 to 47 inches; multicolored extremely gravelly coarse sand; single grain; alternating and irregular layers of strongly effervescent weakly cemented material and layers of loose material with thick lime coatings on the undersides of the pebbles and cobbles; about 75 percent pebbles and 10 percent cobbles; moderately alkaline (pH 8.2); diffuse irregular boundary.

IIC4ca—47 to 60 inches; multicolored extremely gravelly coarse sand; single grain; about 75 percent pebbles and 10 percent cobbles; thick lime coatings on the undersides of the pebbles and cobbles; moderately alkaline (pH 8.0).

Depth to the IIC horizon is 12 to 20 inches. Secondary lime is at a depth of 8 to 15 inches.

A horizon: Rock fragment content is 15 to 30 percent. Reaction is neutral to moderately alkaline.

C horizon: Rock fragment content is 15 to 30 percent. Reaction is neutral to moderately alkaline.

IIC horizon: Texture is extremely gravelly coarse sand or very gravelly coarse sand. Rock fragment content is 55 to 80 percent. Reaction is mildly alkaline or moderately alkaline. The weakly cemented material slakes in water.

Enochville Series

The Enochville series consists of very deep, poorly drained soils on stream terraces. These soils formed in alluvium derived from mixed sources. Slope is 0 to 1 percent. Elevation is 6,000 to 6,400 feet. Average annual precipitation is 16 to 20 inches, and average annual air temperature is 40 to 42 degrees F.

Typical pedon of an Enochville silt loam in an area of Enochville-Enochville Variant complex, 0 to 1 percent slopes, about 3 miles southeast of Cottonwood Peak, about 100 feet east and 60 feet north of the southwest corner of sec. 16, T. 12 S., R. 39 E.

A11—0 to 2 inches; very dark grayish brown (10YR 3/2) silt loam, very dark brown (10YR 2/2) moist; strong medium granular structure; hard, friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium roots; few very fine tubular pores and many very fine interstitial pores; neutral (pH 6.9); abrupt wavy boundary.

A12—2 to 12 inches; very dark grayish brown (10YR 3/2) silt loam, very dark brown (10YR 2/2) moist; moderate coarse and medium subangular blocky structure parting to moderate medium and fine granular; hard, friable, slightly sticky and slightly plastic; many very fine roots and common fine and

medium roots; many very fine tubular pores; neutral (pH 7.0); clear smooth boundary.

IIB2g—12 to 20 inches; dark grayish brown (2.5Y 4/2) silty clay loam, very dark grayish brown (2.5Y 3/2) moist; moderate coarse prismatic structure parting to moderate medium and fine subangular blocky; extremely hard, firm, sticky and plastic; common very fine and fine roots and few fine and medium roots; many very fine tubular pores; mildly alkaline (pH 7.4); abrupt smooth boundary.

IIIC1g—20 to 27 inches; grayish brown (2.5Y 5/2) silt loam, very dark grayish brown (2.5Y 3/2) moist; many medium distinct yellowish brown (10YR 5/8) mottles, yellowish brown (10YR 5/6) moist; massive; extremely hard, friable, slightly sticky and slightly plastic; common very fine and fine roots and few medium roots; many very fine tubular pores; few fine round iron concretions; mildly alkaline (pH 7.7); abrupt wavy boundary.

IIIC2g—27 to 43 inches; grayish brown (2.5Y 5/2) silt loam, very dark grayish brown (2.5Y 3/2) moist; many medium distinct yellowish brown (10YR 5/8) mottles, dark yellowish brown (10YR 3/6) moist; massive; extremely hard, friable, slightly sticky and slightly plastic; many very fine roots, common fine roots, and few medium roots; many very fine tubular pores; moderately alkaline (pH 8.1); abrupt wavy boundary.

IVC3g—43 to 50 inches; pale olive (5Y 6/3) very cobbly sandy loam, olive (5Y 4/3) moist; common medium distinct yellowish brown (10YR 6/6) mottles, dark brownish yellow (10YR 4/6) moist; massive; hard, friable, slightly sticky and slightly plastic; many very fine roots, common fine roots, and few medium roots; many very fine interstitial pores and common fine tubular pores; about 20 percent pebbles, 10 percent cobbles, and 5 percent stones; moderately alkaline (pH 8.2); abrupt wavy boundary.

IVC4g—50 to 60 inches; pale yellow (2.5Y 7/4) extremely cobbly sandy loam, light olive brown (2.5Y 5/4) moist; common medium distinct yellowish brown (10YR 6/6) mottles, dark brownish yellow (10YR 4/6) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine roots; many very fine interstitial pores; about 40 percent pebbles, 25 percent cobbles, and 5 percent stones; mildly alkaline (pH 7.6).

The mollic epipedon is 20 to 37 inches thick. Clay content in the control section averages 20 to 29 percent.

A horizon: Reaction is slightly acid or neutral.

IIB horizon: Texture is silt loam or silty clay loam. Reaction is neutral or mildly alkaline.

IIIC horizon: Texture is silt loam or silty clay loam. Reaction is neutral to moderately alkaline.

IVC horizon: Texture is very cobbly sandy loam or extremely cobbly sandy loam. Rock fragment content is 35 to 70 percent. Reaction is mildly alkaline or moderately alkaline.

Enochville Variant

The Enochville Variant consists of very deep, poorly drained soils on stream terraces. These soils formed in alluvium derived from mixed sources. Slope is 0 to 1 percent. Elevation is 6,000 to 6,400 feet. Average annual precipitation is 16 to 20 inches, and average annual air temperature is 40 to 42 degrees F.

Typical pedon of an Enochville Variant gravelly silt loam in an area of Enochville-Enochville Variant complex, 0 to 1 percent slopes, about 2 miles northeast of Cottonwood Peak, about 1,850 feet east and 130 feet north of the southwest corner of sec. 29, T. 11 S., R. 39 E.

A11g—0 to 3 inches; dark grayish brown (2.5Y 4/2) gravelly silt loam, very dark grayish brown (2.5Y 3/2) moist; weak fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine interstitial and tubular pores; about 10 percent pebbles and 5 percent cobbles; slightly effervescent; neutral (pH 6.7); abrupt smooth boundary.

A12g—3 to 11 inches; dark grayish brown (2.5Y 4/2) gravelly silt loam, very dark grayish brown (2.5Y 3/2) moist; weak coarse subangular blocky structure parting to weak fine and medium subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; many very fine roots, common fine roots, and few medium and coarse roots; many very fine and fine tubular pores and common medium tubular pores; about 10 percent pebbles and 5 percent cobbles; slightly effervescent; neutral (pH 6.9); clear wavy boundary.

IIA1gb—11 to 18 inches; dark grayish brown (2.5Y 4/2) gravelly silt loam, black (N 2/0) moist; weak coarse angular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine roots and few fine, medium, and coarse roots; many very fine tubular pores and few fine tubular and interstitial pores; about 10 percent pebbles and 5 percent cobbles; slightly effervescent; neutral (pH 7.1); clear smooth boundary.

IIB2gb—18 to 24 inches; dark grayish brown (2.5Y 4/2) gravelly silt loam, very dark grayish brown (2.5Y 3/2) moist; common medium distinct strong brown (7.5YR 5/6) mottles; weak coarse angular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine roots and few fine, medium, and coarse roots; many very fine and few fine and medium tubular pores; about 10 percent pebbles and 5 percent cobbles; neutral (pH 7.2); clear wavy boundary.

IIIC1g—24 to 30 inches; grayish brown (2.5Y 5/2) very gravelly loam, very dark grayish brown (2.5Y 3/2) moist; few medium distinct strong brown (7.5YR 5/6) mottles; massive; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and few fine roots; many very fine interstitial pores; about 45 percent pebbles and 5 percent cobbles; slightly acid (pH 6.2); clear wavy boundary.

IIIC2g—30 to 39 inches; light brownish gray (2.5Y 6/2) extremely gravelly loam, dark grayish brown (2.5Y 4/2) moist; common medium prominent yellowish red (5YR 5/6) mottles; massive; soft, very friable, slightly sticky and slightly plastic; common very fine and few fine roots; many very fine interstitial pores; about 50 percent pebbles, 10 percent cobbles, and 10 percent stones; slightly effervescent; neutral (pH 6.6); gradual smooth boundary.

IIIC3g—39 to 60 inches; light gray (5Y 7/1) extremely gravelly loam, gray (5Y 5/1) moist; massive; soft, very friable, slightly sticky and slightly plastic; many very fine and few fine roots; many very fine interstitial pores; about 50 percent pebbles, 10 percent cobbles, and 10 percent stones; slightly effervescent; neutral (pH 6.9).

The mollic epipedon is 20 to 35 inches thick.

A horizon: Rock fragment content is 15 to 25 percent. Reaction is neutral or mildly alkaline.

IIB horizon: Texture is gravelly silt loam or gravelly loam. Rock fragment content is 15 to 25 percent. Reaction is neutral or mildly alkaline.

IIIC horizon: Texture is very gravelly loam or extremely gravelly loam. Rock fragment content is 45 to 75 percent. Reaction is slightly acid or neutral.

Greys Series

The Greys series consists of very deep, well drained soils on foothills, fan terraces, and mountain foot slopes. These soils formed in loess and in silty alluvium derived from loess. Slope is 4 to 30 percent. Elevation is 5,500 to 7,000 feet. Average annual precipitation is 18 to 22 inches, and average annual air temperature is 36 to 43 degrees F.

Typical pedon of a Greys silt loam in an area of Lanoak-Greys association, 4 to 12 percent slopes, about 7 miles north of Inkom, about 2,397 feet east and 2,219 feet north of the southwest corner of sec. 14, T. 6 S., R. 36 E.

O1 and O2—3 inches to 0; undecomposed and partially decomposed grasses, leaves, and twigs.

A11—0 to 3 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; many fine and very fine roots, common medium roots, and few coarse roots; many very fine tubular pores and few very fine interstitial pores; slightly acid (pH 6.3); clear smooth boundary.

A12—3 to 8 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak coarse and medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many fine and very fine roots, common medium roots, and few coarse roots; many very fine and fine tubular pores; medium acid (pH 5.9); clear smooth boundary.

A2—8 to 12 inches; light brownish gray (10YR 6/2) silt loam, dark grayish brown (10YR 4/2) moist; weak medium and fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many fine and very fine roots, common medium roots, and few coarse roots; many very fine and few fine tubular pores; medium acid (pH 5.8); clear smooth boundary.

A&B—12 to 19 inches; 60 percent light brownish gray (10YR 6/2) silt loam, dark grayish brown (10YR 4/2) moist; 40 percent brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; weak coarse and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common medium, fine, and very fine roots; many very fine tubular pores; medium acid (pH 5.6); gradual smooth boundary.

B21t—19 to 34 inches; brown (10YR 5/3) silt loam, dark yellowish brown (10YR 4/4) moist; moderate coarse and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common medium, fine, and very fine roots; common fine and very fine tubular pores; few thin clay films in pores and on faces of peds; medium acid (pH 5.6); clear smooth boundary.

B22t—34 to 41 inches; light yellowish brown (10YR 6/4) silt loam, brown (10YR 4/3) moist; moderate coarse and medium prismatic structure; hard, friable, slightly sticky and slightly plastic; few medium, fine, and very fine roots; common fine and very fine tubular pores; common thin clay films in pores and on faces of peds; medium acid (pH 5.6); clear smooth boundary.

B23t—41 to 60 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; moderate medium and fine angular blocky structure; hard, friable, slightly sticky and slightly plastic; few medium, fine, and very fine roots; few fine and very fine tubular pores; common thin clay films in pores and on faces of peds; medium acid (pH 5.6).

The solum is 30 to 60 inches thick or more. Lime is at a depth of 50 to 60 inches or more. Clay content in the control section averages 18 to 32 percent.

A horizon: Reaction is medium acid to neutral.

B horizon: Texture is silt loam or silty clay loam. Reaction is medium acid to neutral.

Hades Series

The Hades series consists of very deep, well drained soils on mountainsides, foothills, fan terraces, and stream terraces. These soils formed in mixed alluvium derived from loess and quartzite. Slope is 1 to 60 percent. Elevation is 4,800 to 7,000 feet. Average annual precipitation is 16 to 20 inches, and average annual air temperature is 39 to 45 degrees F.

Typical pedon of a Hades gravelly silt loam in an area of Lanoak-Hades complex, 6 to 20 percent slopes, about 9 miles west and 1 mile south of McCammon, about 1,585 feet east and 10 feet south of the northwest corner of sec. 16, T. 9 S., R. 35 E.

A11—0 to 3 inches; dark grayish brown (10YR 4/2) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; weak medium and fine subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many fine and very fine roots and few coarse and medium roots; many very fine interstitial pores and few very fine tubular pores; about 15 percent pebbles; neutral (pH 6.9); clear smooth boundary.

A12—3 to 7 inches; dark brown (10YR 4/3) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; weak coarse and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine and very fine roots and few medium roots; common fine and very fine tubular pores; about 15 percent pebbles; medium acid (pH 6.0); clear smooth boundary.

B1t—7 to 14 inches; dark brown (10YR 4/3) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; moderate medium and fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common fine and very fine roots and few medium roots; common fine and very fine tubular pores; common thin clay films in pores and on faces of peds; about 15 percent pebbles and 5 percent cobbles; medium acid (pH 5.9); gradual smooth boundary.

B21t—14 to 22 inches; brown (10YR 5/3) gravelly silty clay loam, dark brown (10YR 3/3) moist; moderate coarse and medium subangular blocky structure; hard, friable, sticky and plastic; common very fine roots and few medium and fine roots; common fine and very fine tubular pores; common moderately thick clay films in pores and on faces of peds; about 15 percent pebbles and 5 percent cobbles; medium acid (pH 6.0); clear wavy boundary.

B22t—22 to 33 inches; yellowish brown (10YR 5/4) gravelly silty clay loam, dark yellowish brown (10YR 4/4) moist; moderate coarse and medium prismatic structure; very hard, very firm, very sticky and very plastic; few fine and very fine roots; common fine and very fine tubular pores; continuous thick clay films in pores and on faces of peds; about 15 percent pebbles and 5 percent cobbles; medium acid (pH 5.7); gradual wavy boundary.

B23t—33 to 60 inches; light yellowish brown (10YR 6/4) gravelly silty clay loam, yellowish brown (10YR 5/4) moist; moderate medium and fine angular blocky structure; hard, firm, very sticky and very plastic; few fine and very fine roots; common fine and very fine tubular pores; common thick clay films in pores and on faces of peds; about 15 percent pebbles and 5 percent cobbles; medium acid (pH 5.6).

Bedrock is at a depth of 60 inches or more. Lime is at a depth of 54 to 60 inches or more. Rock fragments average 15 to 30 percent of the control section and are mainly pebbles. Clay content in the control section averages 25 to 34 percent.

A horizon: Rock fragment content is 15 to 30 percent. Reaction is medium acid to neutral.

B2t horizon: Texture is gravelly silt loam or gravelly silty clay loam. Rock fragment content is 15 to 30 percent. Reaction is medium acid to moderately alkaline.

Haploxerolls

Haploxerolls are deep and very deep, well drained soils on terraces at the edges of the Portneuf Basalt. They formed in alluvium and colluvium derived from mixed sources. They are too variable to map as individual units. Slope is 20 to 60 percent. Elevation is 4,500 to 4,700 feet. The average annual precipitation is 12 to 16 inches, and the average annual air temperature is 42 to 46 degrees F.

Typical pedon of Haploxerolls in an area of Rubble land-Haploxerolls complex, steep, about 3 miles northwest of McCammon, about 800 feet north and 1,350 feet west of the southeast corner of sec. 27, T. 8 S., R. 36 E.

A1—0 to 8 inches; grayish brown (10YR 5/2) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots and few medium roots; common very fine and fine interstitial pores; 30 percent pebbles; neutral (pH 7.0); clear smooth boundary.

B2—8 to 15 inches; brown (10YR 5/3) gravelly silt loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots, and common medium and coarse roots; common very fine tubular pores; 30 percent pebbles; mildly alkaline (pH 7.4); abrupt smooth boundary.

C1ca—15 to 35 inches; pale brown (10YR 6/3) very gravelly silt loam, brown (10YR 4/3) moist; massive; slightly hard, friable, slightly sticky and slightly

plastic; few very fine, fine, and medium roots; many very fine and fine tubular pores; 45 percent pebbles; strongly effervescent; mildly alkaline (pH 7.6); gradual smooth boundary.

C2ca—35 to 60 inches; pale brown (10YR 6/3) very gravelly silt loam, brown (10YR 4/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine and fine tubular pores; 50 percent pebbles; strongly effervescent; mildy alkaline (pH 7.6).

Bedrock is at a depth of 40 to 60 inches or more. Secondary lime, where present, is at a depth of 7 to 60 inches or more. Mollic colors extend to a depth of 7 to 60 inches. Organic carbon content decreases irregularly with depth in some pedons. Clay content of the control section averages 5 to 25 percent.

A horizon: Texture is gravelly silt loam, cobbly sandy loam, or extremely bouldery loam. Rock fragment content is 15 to 50 percent. Reaction is neutral or mildly alkaline.

B horizon: Texture is gravelly silt loam, very gravelly silt loam, very cobbly sandy loam, or extremely bouldery loam. Rock fragment content is 20 to 70 percent. Reaction is neutral to moderately alkaline.

C horizon: Texture is very gravelly silt loam, very cobbly sand, or extremely bouldery sandy loam. Rock fragment content is 35 to 90 percent. Reaction is mildly alkaline to strongly alkaline.

Harkness Series

The Harkness series consists of very deep, well drained soils on mountainsides. These soils formed in mixed alluvium derived from various kinds of sedimentary and metasedimentary rock, dominantly sandstone and quartzite. Slope is 20 to 50 percent. Elevation is 6,000 to 8,000 feet. Average annual precipitation is 22 to 32 inches, and average annual air temperature is 35 to 39 degrees F.

Typical pedon of a Harkness silt loam in an area of Harkness-Sedgway-Mikesell complex, 20 to 50 percent slopes, about 4 miles south of Sedgwick Peak, about 1,000 feet south and 200 feet east of the northwest corner of sec. 21, T. 11 S., R. 39 E.

O1—2 inches to 0.5 inch; undecomposed needles, leaves, twigs, and grasses.

O2—0.5 inch to 0; decomposed and partially decomposed needles, leaves, twigs, and grasses.

A11—0 to 3 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak coarse and medium subangular blocky structure parting to weak medium granular; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine interstitial pores; about 10 percent pebbles; medium acid (pH 5.6); abrupt smooth boundary.

A12—3 to 8 inches; brown (10YR 4/3) silt loam, very dark brown (10YR 2/2) moist; weak coarse and medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine tubular pores and common very fine interstitial pores; about 10 percent pebbles and cobbles; strongly acid (pH 5.5); clear wavy boundary.

A2—8 to 14 inches; pale brown (10YR 6/3) very cobbly loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; hard, very friable, slightly sticky and slightly plastic; common very fine, fine, and medium roots and few coarse roots; many very fine tubular pores and few very fine interstitial pores; about 20 percent pebbles and 15 percent cobbles; strongly acid (pH 5.5); clear wavy boundary.

B&A—14 to 21 inches; light yellowish brown (10YR 6/4) clay loam, dark yellowish brown (10YR 4/6) moist; coatings of pale brown (10YR 6/3) A2 material on faces of peds, yellowish brown (10YR 4/4) moist; moderate medium and fine subangular blocky structure; hard, firm, sticky and plastic; common very fine, fine, and medium roots and few coarse roots; common very fine tubular pores; few thin clay films on faces of peds and in pores; about 10 percent pebbles and cobbles; strongly acid (pH 5.3); gradual wavy boundary.

B21t—21 to 34 inches; light yellowish brown (10YR 6/4) silty clay loam, dark yellowish brown (10YR 4/6) moist; strong coarse and medium angular blocky structure; hard, firm, sticky and plastic; common very fine and fine roots and few medium roots, mostly along faces of peds and in cracks; common very fine tubular pores; many strong brown (7.5YR 4/6) thick clay films on faces of peds and in pores; about 10 percent pebbles and cobbles; strongly acid (pH 5.2); diffuse wavy boundary.

B22t—34 to 60 inches; light yellowish brown (10YR 6/4) silty clay loam, dark yellowish brown (10YR 4/4) moist; strong coarse and medium angular blocky structure; hard, firm, sticky and plastic; common very fine and fine roots, mostly along faces of peds and in cracks; few very fine tubular pores; common strong brown (7.5YR 5/6) moderately thick clay films on faces of peds and in pores; about 10 percent pebbles and cobbles; strongly acid (pH 5.2).

Depth to bedrock and thickness of the solum are 60 inches or more.

A1 horizon: Rock fragment content is 0 to 10 percent. Clay content is 15 to 20 percent. Reaction is strongly acid or medium acid.

A2 horizon: Texture is very cobbly loam or stony silt loam. Rock fragment content is 15 to 40 percent. Clay content is 15 to 25 percent. Reaction is strongly acid or medium acid.

B2t horizon: Texture is clay loam, silty clay loam, or cobbly silty clay. Rock fragment content is 5 to 30 percent. Clay content is 35 to 55 percent. Reaction is very strongly acid to slightly acid.

Holmes Series

The Holmes series consists of very deep, well drained soils on stream terraces. These soils formed in mixed alluvium derived from various kinds of sedimentary and metasedimentary rock. Extremely gravelly loamy coarse sand is at a depth of 20 to 40 inches. Slope is 1 to 10 percent. Elevation is 5,000 to 6,200 feet. Average annual precipitation is 16 to 20 inches, and average annual air temperature is 40 to 45 degrees F.

Typical pedon of a Holmes very cobbly loam in an area of Hades-Holmes complex, 1 to 10 percent slopes, about 2 miles east of Cottonwood Peak, about 100 feet north and 2,290 feet west of the southeast corner of sec. 5, T. 12 S., R. 39 E.

A11—0 to 3 inches; dark grayish brown (10YR 4/2) very cobbly loam, very dark gray (10YR 3/1) moist; weak medium subangular blocky structure parting to weak fine granular; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium roots; many very fine interstitial pores; about 35 percent cobbles and 15 percent pebbles; neutral (pH 7.2); abrupt smooth boundary.

A12—3 to 8 inches; dark brown (10YR 4/3) very cobbly loam, very dark grayish brown (10YR 3/2) moist; weak coarse and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine roots, common fine roots, and few medium roots; common very fine tubular and interstitial pores; about 35 percent cobbles and 20 percent pebbles; neutral (pH 7.2); clear smooth boundary.

B1—8 to 16 inches; dark yellowish brown (10YR 4/4) very cobbly loam, dark brown (7.5YR 3/2) moist; weak coarse and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots and few medium roots; common very fine tubular pores; about 35 percent cobbles and 20 percent pebbles; neutral (pH 7.3); clear wavy boundary.

B2t—16 to 28 inches; yellowish brown (10YR 5/4) very cobbly clay loam, brown (7.5YR 4/4) moist; moderate medium and fine subangular blocky structure; hard, firm, sticky and plastic; common very fine and fine roots and few medium roots; common very fine tubular pores; few thin clay films on the faces of peds and in pores; about 35 percent cobbles and 25 percent pebbles; neutral (pH 7.1); clear wavy boundary.

IIC—28 to 60 inches; multicolored extremely gravelly loamy coarse sand; single grain; loose; common very fine and fine roots and few medium roots; about 25 percent cobbles and 45 percent pebbles.

Depth to the IIC Horizon is 20 to 40 inches. The control section averages 50 to 60 percent rock fragments. Clay content in the control section averages 22 to 30 percent.

A horizon: Texture is gravelly loam or very cobbly loam. Rock fragment content is 20 to 55 percent. Reaction is slightly acid or neutral.

B2t horizon: Texture is very gravelly loam or very cobbly clay loam. Clay content is 22 to 30 percent. Rock fragment content is 50 to 60 percent. Reaction is slightly acid or neutral.

IIC horizon: Rock fragment content is 65 to 75 percent.

Hondoho Series

The Hondoho series consists of very deep, well drained soils on foothills, mountainsides, and fan terraces. These soils formed in mixed alluvium. Slope is 4 to 60 percent. Elevation is 4,500 to 6,700 feet. Average annual precipitation is 12 to 18 inches, and average annual air temperature is 40 to 45 degrees F.

Typical pedon of a Hondoho cobbly silt loam in an area of Hondoho-Arbone-Ririe complex, 20 to 50 percent slopes, about 3 miles southeast of Downey, about 2,285 feet west and 2,527 feet south of the northeast corner of sec. 12, T. 12 S., R. 37 E.

A1—0 to 8 inches; grayish brown (10YR 5/2) cobbly silt loam, very dark grayish brown (10YR 3/2) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many fine and very fine roots; many very fine interstitial pores; about 20 percent pebbles and 15 percent cobbles; mildly alkaline (pH 7.4); clear smooth boundary.

B2—8 to 15 inches; brown (10YR 5/3) cobbly silt loam, dark brown (10YR 3/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine and very fine roots; many very fine tubular pores; about 20 percent pebbles and 15 percent cobbles; slightly effervescent; mildly alkaline (pH 7.8); clear smooth boundary.

C1ca—15 to 31 inches; light yellowish brown (10YR 6/4) very cobbly sandy clay loam, very pale brown (10YR 7/4) crushed and yellowish brown (10YR 5/6) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; many very fine tubular pores; about 35

percent pebbles and 25 percent cobbles; moderately thick lime coatings on all sides of coarse fragments; strongly effervescent; moderately alkaline (pH 7.9); gradual smooth boundary.

C2ca—31 to 60 inches; pale brown (10YR 6/3) very cobbly sandy clay loam, very pale brown (10YR 7/3) crushed and yellowish brown (10YR 5/4) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; many very fine tubular pores; about 35 percent pebbles and 25 percent cobbles; thin lime coatings on undersides of coarse fragments; strongly effervescent; moderately alkaline (pH 7.9).

Secondary lime is at a depth of 8 to 15 inches. Bedrock is at a depth of 60 inches or more. Rock fragment content in the control section averages 35 to 45 percent.

A horizon: Texture is cobbly silt loam or gravelly silt loam. Rock fragment content is 25 to 35 percent. Reaction is neutral or mildly alkaline.

B2 horizon: Texture is gravelly silt loam, very gravelly silt loam, cobbly silt loam, or very cobbly loam. Rock fragment content is 20 to 45 percent. Reaction is neutral to moderately alkaline.

IIC horizon: Texture is very gravelly loam, very gravelly silt loam, very cobbly loam, or very cobbly sandy clay loam. Rock fragment content is 50 to 60 percent. Reaction is mildly alkaline or moderately alkaline.

Inkom Series

The Inkom series consists of very deep, poorly drained soils on stream terraces and flood plains. The drainage of these soils has been altered to moderately well drained in some areas. These soils formed in silty alluvium derived from mixed sources. Slope is 0 to 1 percent. Elevation is 4,500 to 5,400 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 42 to 45 degrees F.

Typical pedon of Inkom silt loam, 0 to 1 percent slopes, about 1 mile south and 1 mile east of the town of Inkom, about 2,150 feet south and 1,350 feet east of the northwest corner of sec. 27, T. 7 S., R. 36 E.

A11g—0 to 3 inches; grayish brown (2.5Y 5/2) silt loam, very dark grayish brown (2.5Y 3/2) moist; weak fine platy structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine roots; many very fine interstitial pores; strongly effervescent; mildly alkaline (pH 7.8); abrupt smooth boundary.

A12g—3 to 7 inches; grayish brown (2.5Y 5/2) silt loam, very dark grayish brown (2.5Y 3/2) moist; common fine prominent dark yellowish brown (10YR 3/4) mottles; moderate coarse and medium platy structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine roots; many very fine interstitial pores and few fine tubular pores; strongly effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

B21g—7 to 13 inches; gray (5Y 5/1) silt loam, very dark gray (5Y 3/1) moist; weak coarse and medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; many very fine roots; common fine tubular pores; strongly effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

B22g—13 to 27 inches; grayish brown (2.5Y 5/2) silt loam, very dark grayish brown (2.5Y 3/2) moist; weak coarse subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine roots; many very fine and few medium tubular pores; strongly effervescent; moderately alkaline (pH 8.3); clear wavy boundary.

B23g—27 to 43 inches; gray (5Y 5/1) silt loam, dark gray (5Y 4/1) moist; weak coarse subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine roots; many very fine tubular pores; strongly effervescent; moderately alkaline (pH 7.9); gradual smooth boundary.

B24g—43 to 60 inches; light gray (5Y 6/1) silt loam, dark gray (5Y 4/1) moist; weak coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; many very fine tubular pores; strongly effervescent; mildly alkaline (pH 7.8).

The mollic epipedon is 24 to 31 inches thick. A buried A or B horizon, or both, is in some pedons. Clay content in the control section averages 18 to 27 percent.

A horizon: Clay content is 12 to 20 percent. Reaction is mildly alkaline or moderately alkaline.

B horizon: Clay content is 18 to 27 percent. Reaction is mildly alkaline or moderately alkaline.

Ireland Series

The Ireland series consists of moderately deep, well drained soils on mountainsides and ridges. These soils formed in alluvium, colluvium, and residuum derived dominantly from interbedded dolomite, limestone, and sandstone. Slope is 20 to 60 percent. Elevation is 5,200 to 8,000 feet. Average annual precipitation is 16 to 20 inches, and average annual air temperature is 41 to 45 degrees F.

Typical pedon of an Ireland extremely stony silt loam in an area of Ireland-Camelback-Rock outcrop complex, 30 to 60 percent slopes, about 6 miles east of Virginia, about 975 feet north and 1,390 feet west of the southeast corner of sec. 5, T. 11 S., R. 38 E.

A1—0 to 7 inches; brown (10YR 5/3) extremely stony silt loam, dark brown (10YR 3/3) moist; weak medium and fine subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky

and slightly plastic; many fine and very fine roots and common coarse and medium roots; many very fine interstitial pores and few very fine tubular pores; about 10 percent pebbles, 25 percent cobbles, and 20 percent stones; neutral (pH 7.1); clear wavy boundary.

B21—7 to 12 inches; brown (10YR 5/3) very stony silt loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; soft, very friable, slightly sticky and slightly plastic; common coarse, medium, fine, and very fine roots; many very fine interstitial pores and few very fine tubular pores; about 10 percent pebbles, 20 percent cobbles, and 20 percent stones; mildly alkaline (pH 7.4); gradual irregular boundary.

B22ca—12 to 30 inches; brown (10YR 5/3) extremely stony silt loam, brown (10YR 4/3) moist; weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common coarse, medium, fine, and very fine roots; many very fine interstitial pores; about 5 percent pebbles, 15 percent cobbles, and 60 percent stones; rock fragments have moderately thick lime coatings; strongly effervescent; mildly alkaline (pH 7.4); abrupt irregular boundary.

R—30 inches; interbedded dolomite and limestone.

Bedrock is at a depth of 20 to 40 inches. Lime is at a depth of 12 to 24 inches. A Cca horizon is present in some pedons.

A horizon: Rock fragment content is 45 to 60 percent. Reaction is neutral or mildly alkaline.

B horizon: Texture is very stony silt loam or extremely stony silt loam. Rock fragment content is 50 to 85 percent. Reaction is mildly alkaline or moderately alkaline.

Joes Series

The Joes series consists of very deep, well drained soils on fan terraces. These soils formed in loess and in silty alluvium derived from loess. Slope is 1 to 12 percent. Elevation is 4,500 to 6,000 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 41 to 45 degrees F.

Typical pedon of Joes silt loam, 4 to 12 percent slopes, about 3.5 miles southwest of McCammon, about 2,315 feet north and 85 feet east of the southwest corner of sec. 21, T. 9 S., R. 36 E.

Ap—0 to 6 inches; dark grayish brown (10YR 4/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure parting to weak coarse granular; slightly hard, friable, slightly sticky and slightly plastic; many fine and very fine roots; many very fine interstitial pores; slightly effervescent; mildly alkaline (pH 7.6); abrupt smooth boundary.

B2—6 to 13 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; common very fine tubular pores; slightly effervescent; mildly alkaline (pH 7.6); abrupt smooth boundary.

C1ca—13 to 21 inches; very pale brown (10YR 7/3) silt loam, yellowish brown (10YR 5/4) moist; massive; hard, friable, slightly sticky and slightly plastic; common very fine roots; common fine and very fine tubular pores; strongly effervescent; mildly alkaline (pH 7.6); gradual smooth boundary.

C2ca—21 to 36 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine roots; many fine and very fine tubular pores; strongly effervescent; mildly alkaline (pH 7.6); gradual smooth boundary.

C3—36 to 43 inches; pale brown (10YR 6/3) silt loam, dark yellowish brown (10YR 4/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; many fine and very fine tubular pores; slightly effervescent; mildly alkaline (pH 7.7); abrupt smooth boundary.

C4—43 to 60 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist; massive; slightly hard, firm, slightly sticky and slightly plastic; few very fine roots; many fine and very fine tubular pores; slightly effervescent; mildly alkaline (pH 7.7).

Bedrock is at a depth of 60 inches or more. Secondary lime is at a depth of 11 to 18 inches. Clay content in the control section averages 18 to 22 percent.

A and B horizons: Reaction is neutral or mildly alkaline.

C horizon: Reaction is mildly alkaline or moderately alkaline.

Joevar Series

The Joevar series consists of very deep, well drained soils on terraces. These soils formed in silty alluvium derived dominantly from loess. Slope is 0 to 3 percent. Elevation is 4,500 to 5,400 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 42 to 45 degrees F.

Typical pedon of Joevar silt loam, 0 to 3 percent slopes, about 1 mile north of Virginia, about 2,000 feet east and 2,320 feet north of the southwest corner of sec. 32, T. 10 S., R. 37 E.

Ap1—0 to 4 inches; brown (10YR 4/3) silt loam, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure; hard, very friable, slightly sticky and slightly plastic; many very fine and fine roots,

common medium roots, and few coarse roots; many very fine tubular pores; slightly effervescent; mildly alkaline (pH 7.8); abrupt smooth boundary.

Ap2—4 to 10 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure; hard, very friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium roots; many very fine tubular pores; slightly effervescent; moderately alkaline (pH 8.0); abrupt smooth boundary.

B21—10 to 25 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure; hard, friable, slightly sticky and slightly plastic; many very fine roots and common fine and medium roots; many very fine tubular pores; slightly effervescent; moderately alkaline (pH 7.9); clear wavy boundary.

B22—25 to 33 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; moderate coarse prismatic structure; very hard, friable, slightly sticky and slightly plastic; common very fine and fine roots and few medium roots; many very fine tubular pores; slightly effervescent; mildly alkaline (pH 7.8); clear smooth boundary.

B23bca—33 to 37 inches; pale brown (10YR 6/3) silt loam, dark brown (10YR 3/3) moist; weak coarse prismatic structure parting to moderate medium angular blocky; extremely hard, firm, slightly sticky and slightly plastic; common very fine roots and few fine roots; many very fine tubular pores; lime coatings on faces of peds and in pores; strongly effervescent; moderately alkaline (pH 7.9); abrupt smooth boundary.

B24bca—37 to 60 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure parting to moderate medium subangular blocky; extremely hard, firm, slightly sticky and slightly plastic; about 5 percent cicada krotovinas; few very fine and fine roots; many very fine tubular pores; lime coatings on faces of peds and in pores; violently effervescent; moderately alkaline (pH 8.1).

Secondary lime is at a depth of 33 to 40 inches. The mollic epipedon is 26 to 45 inches thick. Clay content in the control section averages 15 to 18 percent.

A horizon: Reaction is neutral to moderately alkaline.

B horizon: Reaction is mildly alkaline or moderately alkaline.

Lanoak Series

The Lanoak series consists of very deep, well drained soils on foothills, ridges, fan terraces, and mountainsides. These soils formed in loess and in silty alluvium derived from loess. Slope is 1 to 50 percent. Elevation is 4,700 to 6,600 feet. Average annual precipitation is 16 to 18 inches, and average annual air temperature is 41 to 45 degrees F.

Typical pedon of Lanoak silt loam, 12 to 20 percent slopes (fig. 12), about 2 miles south of Inkom, about 1,050 feet south and 1,260 feet east of the northwest corner of sec. 33, T. 7 S., R. 36 E.

Ap—0 to 11 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak fine subangular blocky structure; soft, friable, slightly sticky and slightly plastic; many very fine and few medium roots; few very fine interstitial pores; neutral (pH 6.6); abrupt smooth boundary.

A12—11 to 22 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak fine subangular blocky structure; soft, friable, slightly sticky and slightly plastic; many very fine and few fine roots; common very fine interstitial pores; neutral (pH 6.8); gradual smooth boundary.

B1—22 to 26 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and few fine roots; many very fine and few fine tubular pores; neutral (pH 7.0); clear smooth boundary.

B2—26 to 35 inches; pale brown (10YR 6/3) silt loam, dark brown (10YR 4/3) moist; weak coarse prismatic structure parting to moderate medium subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; common very fine and few fine tubular pores; neutral (pH 7.2); clear smooth boundary.

B3—35 to 44 inches; pale brown (10YR 6/3) silt loam, dark brown (10YR 4/3) moist; weak medium and coarse prismatic structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine tubular pores; mildly alkaline (pH 7.4); abrupt irregular boundary.

C1ca—44 to 60 inches; light gray (10YR 7/2) silt loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; common fine tubular pores; strongly effervescent; mildly alkaline (pH 7.4).

The mollic epipedon is 20 to 35 inches thick. Lime is at a depth of 43 to 60 inches. Clay content in the control section averages 19 to 22 percent.

A horizon: Reaction is slightly acid to mildly alkaline.

B and C horizons: Reaction is neutral or mildly alkaline.

Lonigan Series

The Lonigan series consists of well drained soils on mountainsides and foothills. These soils are moderately deep to paralithic contact. They formed in alluvium and

Figure 12.—Profile of Lanoak silt loam, l2 to 20 percent slopes.

residuum derived from consolidated volcanic ash. Slope is 12 to 50 percent. Elevation is 4,800 to 6,500 feet. Average annual precipitation is 16 to 18 inches, and average annual air temperature is 42 to 45 degrees F.

Typical pedon of a Lonigan cobbly silt loam in an area of Coalbank-Trailcreek-Lonigan complex, 20 to 50 percent slopes, about 1.5 miles southwest of Hawkins Reservoir, about 220 feet south and 1,100 feet east of the northwest corner of sec. 3, T. 11 S., R. 35 E.

A11—0 to 3 inches; dark grayish brown (10YR 4/2) cobbly silt loam, very dark grayish brown (10YR 3/2) moist; weak very fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine interstitial pores; about 15 percent pebbles and 15 percent cobbles; mildly alkaline (pH 7.5); abrupt smooth boundary.

A12—3 to 7 inches; grayish brown (10YR 5/2) cobbly silt loam, very dark grayish brown (10YR 3/2) moist; weak very fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine interstitial pores; about 15 percent pebbles and 15 percent cobbles; mildly alkaline (pH 7.6); clear smooth boundary.

B2—7 to 12 inches; brown (10YR 5/3) very cobbly silt loam, dark brown (10YR 3/3) moist; weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine interstitial pores; about 20 percent pebbles and 25 percent cobbles; slightly effervescent; mildly alkaline (pH 7.6); clear wavy boundary.

C1ca—12 to 19 inches; pale brown (10YR 6/3) very cobbly loam, brown (10YR 4/3) moist; massive; soft, very friable, slightly sticky and slightly plastic; many very fine roots, common fine and medium roots, and few coarse roots; many very fine interstitial pores; about 25 percent pebbles and 30 percent cobbles; violently effervescent; mildly alkaline (pH 7.5); clear wavy boundary.

C2ca—19 to 27 inches; white (10YR 8/2) extremely cobbly loam, light yellowish brown (10YR 6/4) moist; massive; soft, very friable, nonsticky and slightly plastic; common very fine, fine, and medium roots and few coarse roots; many very fine interstitial pores; about 30 percent pebbles and 35 percent cobbles; violently effervescent; moderately alkaline (pH 8.1); abrupt irregular boundary.

Cr—27 inches; fractured consolidated volcanic ash.

Paralithic contact is at a depth of 20 to 40 inches. Vitric volcanic ash content in the control section averages 65 to 75 percent. Rock fragment content in the control section is 35 to 70 percent.

A horizon: Rock fragment content is 15 to 35 percent. Reaction is neutral or mildly alkaline.

B horizon: Rock fragment content is 35 to 50 percent. Reaction is mildly alkaline or moderately alkaline.

C horizon: Texture is very cobbly loam or extremely cobbly loam. Rock fragment content is 50 to 70 percent. Reaction is mildly alkaline or moderately alkaline.

Manila Series

The Manila series consists of very deep, well drained soils on foothills, fan terraces, and mountain foot slopes. These soils formed in alluvium derived from sedimentary and metasedimentary rock and loess. Slope is 6 to 50 percent. Elevation is 5,000 to 6,300 feet. Average annual precipitation is 15 to 20 inches, and average annual air temperature is 40 to 45 degrees F.

Typical pedon of a Manila silt loam in an area of Manila-Bancroft complex, 6 to 15 percent slopes, about 2 miles southwest of Cottonwood Peak, about 2,165 feet north and 1,160 feet east of the southwest corner of sec. 14, T. 12 S., R. 38 E.

A1—0 to 7 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak thick platy structure parting to weak fine subangular blocky; hard, friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine and common fine tubular pores; about 5 percent pebbles; slightly acid (pH 6.1); clear smooth boundary.

A3—7 to 15 inches; grayish brown (10YR 5/2) silty clay loam, very dark grayish brown (10YR 3/2) moist; moderate coarse angular blocky structure parting to moderate fine angular blocky; hard, firm, sticky and plastic; common very fine, fine, and medium roots and few coarse roots; many very fine tubular pores; about 5 percent pebbles; slightly acid (pH 6.1); clear smooth boundary.

B21t—15 to 25 inches; yellowish brown (10YR 5/4) silty clay, dark brown (10YR 3/3) moist; moderate coarse angular blocky structure parting to moderate fine angular blocky; very hard, very firm, very sticky and very plastic; common very fine, fine, and medium roots; many very fine tubular pores; many moderately thick clay films in pores and on faces of peds; about 5 percent pebbles; slightly acid (pH 6.2); gradual wavy boundary.

B22t—25 to 36 inches; yellowish brown (10YR 5/4) silty clay loam, dark brown (7.5YR 4/4) moist; moderate coarse prismatic structure parting to moderate medium and fine angular blocky; very hard, very firm, sticky and plastic; common very fine roots and few fine and medium roots; many very fine tubular pores; many moderately thick clay films in pores and on faces of peds; about 5 percent pebbles; slightly acid (pH 6.1); gradual wavy boundary.

B23t—36 to 44 inches; dark brown (10YR 4/3) silty clay loam, dark yellowish brown (10YR 4/4) moist; moderate coarse prismatic structure parting to moderate medium subangular blocky; hard, friable, sticky and plastic; common very fine roots and few fine and medium roots; many very fine and few fine tubular pores; common thin clay films in pores and on faces of peds; about 5 percent pebbles; neutral (pH 6.7); clear wavy boundary.

B3—44 to 48 inches; yellowish brown (10YR 5/4) silty clay loam, brown (7.5YR 4/4) moist; moderate coarse angular blocky structure parting to moderate medium angular blocky; slightly hard, friable, sticky and plastic; few very fine and fine roots; many very fine tubular pores; about 5 percent pebbles; slightly acid (pH 6.4); abrupt wavy boundary.

C1ca—48 to 55 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; moderate coarse angular blocky structure parting to moderate medium angular blocky; hard, firm, slightly sticky and slightly plastic; few very fine and fine roots; many very fine tubular pores; strongly effervescent; common fine lime seams; about 5 percent pebbles; neutral (pH 7.3); gradual wavy boundary.

C2ca—55 to 60 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist; common fine and medium angular blocky structure; hard, firm, slightly sticky and slightly plastic; few very fine roots; common very fine tubular pores; strongly effervescent; common fine lime seams; about 5 percent pebbles; neutral (pH 7.2).

Bedrock is at a depth of 60 inches or more. Lime is at a depth of 45 to 60 inches or more. Clay content in the control section is 35 to 50 percent.

A horizon: The upper part of the horizon is silt loam, and the lower part is silt loam or silty clay loam. Clay content is 15 to 32 percent. Rock fragment content ranges from 0 to 5 percent. Reaction is slightly acid or neutral.

B2t horizon: Texture is silty clay loam, silty clay or clay. Clay content is 35 to 50 percent. Rock fragment content ranges from 0 to 5 percent. Reaction is slightly acid or neutral.

C horizon: Texture is silt loam or loam. Clay content is 12 to 18 percent. Rock fragment content ranges from 0 to 5 percent. Reaction is neutral or mildly alkaline.

McCarey Series

The McCarey series consists of moderately deep, well drained soils on basalt flows. These soils formed in loess, silty alluvium, and material weathered from basalt. Slope is 1 to 12 percent. Elevation is 4,500 to 4,800 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 43 to 45 degrees F.

Typical pedon of a McCarey silt loam in an area of Lava flows-McCarey-McCarey Variant complex, 1 to 8 percent slopes, about 2 miles northwest of McCammon, about 920 feet south and 1,490 feet east of the northwest corner of sec. 35, T. 8 S., R. 36 E.

A11—0 to 7 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak fine subangular blocky structure parting to weak medium and fine granular; slightly hard, very friable, slightly sticky and slightly plastic; many coarse, medium, fine, and very fine roots; common very fine interstitial pores and few very fine tubular pores; about 5 percent basalt pebbles; slightly acid (pH 6.2); gradual smooth boundary.

A12—7 to 12 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common medium, fine, and very fine roots and few coarse roots; common very fine interstitial pores and few very fine tubular pores; about 5 percent basalt pebbles; slightly acid (pH 6.3); clear smooth boundary.

B2t—12 to 17 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; moderate medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common medium, fine, and very fine roots; few very fine tubular pores; few thin clay films on faces of peds and in pores; about 5 percent basalt pebbles; neutral (pH 6.6); abrupt smooth boundary.

Cca—17 to 28 inches; light gray (10YR 7/2) silt loam, brown (10YR 5/3) moist; massive; hard, firm, slightly sticky and slightly plastic; common fine and very fine roots and few medium roots; few very fine tubular pores; about 5 percent basalt pebbles; violently effervescent; neutral (pH 7.0); abrupt smooth boundary.

R—28 inches; lime-coated, fractured basalt.

Bedrock is at a depth of 20 to 40 inches. Secondary lime is at a depth of 15 to 25 inches. Clay content in the control section is 20 to 30 percent.

A horizon: Rock fragment content is 0 to 5 percent. Reaction is slightly acid or neutral.

B2t horizon: Texture is silt loam or silty clay loam. Clay content is 20 to 30 percent. Rock fragment content is 0 to 5 percent.

Cca horizon: Texture is silt loam or loam. Rock fragment content is 0 to 5 percent. Reaction is neutral to moderately alkaline.

McCarey Variant

The McCarey Variant consists of shallow, well drained soils on basalt flows. These soils formed in loess, silty alluvium, and material weathered from basalt. Slope is 1 to 8 percent. Elevation is 4,500 to 4,800 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 43 to 45 degrees F.

Typical pedon of a McCarey Variant extremely stony silt loam in an area of Lava flows-McCarey-McCarey Variant complex, 1 to 8 percent slopes, about 3 miles northwest of McCammon, about 1,635 feet north and 1,265 feet east of the southwest corner of sec. 26, T. 8 S., R. 36 E.

A1—0 to 8 inches; brown (10YR 4/3) extremely stony silt loam, very dark brown (10YR 2/2) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine and very fine roots; many very fine tubular pores; about 50 percent stones and 5 percent pebbles; slightly acid (pH 6.2); clear smooth boundary.

B2t—8 to 13 inches; brown (10YR 5/3) very stony silt loam, dark brown (10YR 3/3) moist; moderate medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine and very fine roots; common very fine tubular pores; few thin clay films on faces of peds and in pores; about 50 percent stones and 5 percent pebbles; slightly acid (pH 6.2); abrupt irregular boundary.

R—13 inches; fractured basalt.

Bedrock is at a depth of 10 to 20 inches. A thin Cca horizon is present in some pedons.

A horizon: Rock fragment content is 40 to 60 percent. Reaction is slightly acid or neutral.

B2t horizon: Texture is very stony silt loam or very stony loam. Rock fragment content is 40 to 60 percent. Clay content is 20 to 27 percent. Reaction is slightly acid or neutral.

McDole Series

The McDole series consists of very deep, well drained soils on low stream terraces. These soils formed in alluvium derived dominantly from loess. Slope is 0 to 2 percent. Elevation is 4,350 to 4,500 feet. Average annual precipitation is 10 to 13 inches, and average annual air temperature is 46 to 48 degrees F.

Typical pedon of a McDole silt loam in an area of McDole-McDole Variant complex, 0 to 2 percent slopes, about 0.25 mile south of Pocatello, about 1,320 feet south and 115 feet east of the northwest corner of sec. 17, T. 7 S., R. 35 E.

A11—0 to 4 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium platy structure; slightly hard, friable, slightly sticky and nonplastic; many very fine and fine roots and few medium and coarse roots; many

very fine tubular pores; slightly effervescent; mildly alkaline (pH 7.4); abrupt smooth boundary.

A12—4 to 21 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; many very fine and fine roots; many very fine tubular pores; slightly effervescent; mildly alkaline (pH 7.5); abrupt wavy boundary.

C1—21 to 48 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; massive; hard, firm, slightly sticky and slightly plastic; few very fine and fine roots; few very fine tubular pores; strongly effervescent; mildly alkaline (pH 7.5); gradual wavy boundary.

C2—48 to 74 inches; pale brown (10YR 6/3) silt loam, dark yellowish brown (10YR 4/4) moist; massive; hard, firm, slightly sticky and slightly plastic; few very fine and fine roots; many very fine tubular pores; strongly effervescent; mildly alkaline (pH 7.5).

The mollic epipedon is 20 to 35 inches thick. Clay content in the control section averages 10 to 17 percent.

A and C horizons: Reaction is mildly alkaline or moderately alkaline.

These soils are taxadjunct to the McDole series because they have a thicker mollic epipedon. This difference, however, does not significantly affect use and management.

McDole Variant

The McDole Variant consists of very deep, well drained soils on flood plains. These soils formed in alluvium derived dominantly from loess. Slope is 0 to 2 percent. Elevation is 4,350 to 4,500 feet. Average annual precipitation is 10 to 13 inches, and average annual air temperature is 46 to 48 degrees F.

Typical pedon of a McDole Variant silt loam in an area of McDole-McDole Variant complex, 0 to 2 percent slopes, about 0.25 mile south of Pocatello, about 935 feet north and 855 feet west of the southeast corner of sec. 35, T. 6 S., R. 34 E.

A11—0 to 2 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak coarse platy structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; few very fine tubular pores; strongly effervescent; mildly alkaline (pH 7.6); abrupt smooth boundary.

A12—2 to 14 inches; dark grayish brown (10YR 4/2) silt loam, very dark gray (10YR 3/1) moist; moderate medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine tubular pores; strongly effervescent; mildly alkaline (pH 7.5); clear smooth boundary.

A13—14 to 22 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; moderate medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; few very fine and fine tubular pores; strongly effervescent; mildly alkaline (pH 7.6); clear smooth boundary.

A14—22 to 34 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots and few medium and coarse roots; common very fine and fine tubular pores; strongly effervescent; mildly alkaline (pH 7.6); clear wavy boundary.

C1—34 to 60 inches; pale brown (10YR 6/3) fine sandy loam, dark grayish brown (10YR 4/2) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few very fine, fine, medium, and coarse roots; many very fine interstitial pores; many small shells and shell fragments; strongly effervescent; mildly alkaline (pH 7.8).

The mollic epipedon is 20 to 35 inches thick. Clay content in the control section averages 10 to 18 percent.

A horizon: Reaction is mildly alkaline or moderately alkaline.

C horizon: Texture is fine sandy loam or loam. Reaction is mildly alkaline or moderately alkaline.

Mikesell Series

The Mikesell series consists of very deep, well drained soils on mountainsides. These soils formed in alluvium and colluvium derived dominantly from quartzite and sandstone. Slope is 20 to 50 percent. Elevation is 6,000 to 8,000 feet. Average annual precipitation is 22 to 32 inches, and average annual air temperature is 34 to 39 degrees F.

Typical pedon of a Mikesell silt loam in an area of Harkness-Sedgway-Mikesell complex, 20 to 50 percent slopes, about 3.5 miles southeast of Sedgwick Peak, about 1,450 feet north and 1,600 feet east of the southwest corner of sec. 16, T. 11 S., R. 39 E.

O1—1.5 inches to 0.5 inch; undecomposed needles, twigs, and branches.

O2—0.5 inch to 0; decomposed and partly decomposed needles, leaves, and twigs.

A21—0 to 3 inches; pinkish gray (7.5YR 6/2) silt loam, brown (10YR 4/3) moist; weak medium and fine subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine roots, common fine roots,

and few medium and coarse roots; few fine vesicular pores, common very fine tubular pores, and many very fine interstitial pores; about 10 percent pebbles and cobbles; strongly acid (pH 5.1); abrupt smooth boundary.

A22—3 to 6 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine, common fine, and few medium and coarse roots; many very fine and fine tubular pores; about 10 percent pebbles and cobbles; strongly acid (pH 5.2); abrupt wavy boundary.

A23—6 to 11 inches; very pale brown (10YR 7/3) silt loam, dark yellowish brown (10YR 4/4) moist; moderate coarse and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots and few medium and coarse roots; many very fine and fine tubular pores; about 10 percent pebbles and cobbles; strongly acid (pH 5.2); clear wavy boundary.

B&A—11 to 17 inches; 75 percent light yellowish brown (10YR 6/4) gravelly silty clay, dark brown (10YR 4/3) moist, and 25 percent very pale brown (10YR 7/3) silt loam A2 material, dark yellowish brown (10YR 4/4) moist; moderate medium angular blocky structure; hard, firm, sticky and plastic; common very fine and fine roots and few medium and coarse roots; many very fine and fine tubular pores; many moderately thick clay films on the faces of peds and in pores; about 15 percent pebbles and 5 percent cobbles; strongly acid (pH 5.3); clear wavy boundary.

B21t—17 to 25 inches; pale brown (10YR 6/3) gravelly silty clay, brown (10YR 4/3) moist; strong coarse prismatic structure; very hard, firm, sticky and plastic; common very fine and fine roots and few medium and coarse roots; many very fine and fine tubular pores; continuous moderately thick clay films on the faces of peds and in pores; about 10 percent pebbles and 5 percent cobbles; strongly acid (pH 5.3); clear wavy boundary.

B22t—25 to 31 inches; light yellowish brown (10YR 6/4) gravelly silty clay, dark yellowish brown (10YR 4/4) moist; moderate coarse prismatic structure; very hard, firm, sticky and plastic; common very fine and fine roots and few medium and coarse roots; many very fine and fine tubular pores; continuous moderately thick clay films on faces of peds and in pores; about 15 percent pebbles and 5 percent cobbles; medium acid (pH 5.6); abrupt wavy boundary.

B23t—31 to 60 inches; light yellowish brown (10YR 6/4) very cobbly silty clay, brown (10YR 4/3) moist; moderate medium angular blocky structure; hard, firm, sticky and plastic; common very fine and fine roots and few medium roots; many very fine and fine tubular pores; many moderately thick clay films on the faces of peds and in pores; about 25 percent pebbles and 30 percent cobbles; medium acid (pH 5.7).

Depth to bedrock and thickness of the solum are 60 inches or more. Clay content in the control section is 40 to 55 percent.

A2 horizon: Clay content is 15 to 25 percent. Rock fragment content is 5 to 15 percent. Reaction is strongly acid to slightly acid.

B2t horizon: Texture is gravelly silty clay, gravelly clay, very cobbly silty clay, or very stony clay. Clay content is 40 to 55 percent. The upper part of the horizon is 15 to 30 percent rock fragments, and the lower part is 35 to 55 percent. Reaction is strongly acid to slightly acid.

Moonlight Series

The Moonlight series consists of very deep, well drained soils in concave areas on mountainsides. These soils formed in alluvium derived from loess and various kinds of sedimentary and metasedimentary rock. Slope is 20 to 60 percent. Elevation is 5,000 to 7,500 feet. Average annual precipitation is 16 to 22 inches, and average annual air temperature is 36 to 41 degrees F.

Typical pedon of a Moonlight silt loam in an area of Moonlight-Pavohroo complex, 30 to 60 percent slopes, about 6 miles east of Pocatello, about 365 feet south and 650 feet west of the northeast corner of sec. 23, T. 6 S., R. 35 E.

O1—2 inches to 1 inch; undecomposed leaves, twigs, and grasses.

O2—1 inch to 0; decomposed and partly decomposed leaves, twigs, and grasses.

A11—0 to 3 inches; very dark grayish brown (10YR 3/2) silt loam, very dark brown (10YR 2/2) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; many fine and very fine roots and common coarse and medium roots; many very fine interstitial pores; about 10 percent pebbles; neutral (pH 6.8); clear smooth boundary.

A12—3 to 9 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak coarse and medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common medium, fine, and very fine roots and few coarse roots; many very fine interstitial pores; about 10 percent pebbles; neutral (pH 6.8); clear smooth boundary.

A13—9 to 24 inches; dark brown (10YR 4/3) silt loam, very dark brown (10YR 2/2) moist; weak coarse and medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common fine and very fine roots and few medium roots; many

very fine interstitial pores and common medium and fine tubular pores; about 10 percent pebbles; neutral (pH 6.7); gradual smooth boundary.

B1—24 to 39 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; weak coarse and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine and very fine roots and few medium roots; common very fine and few fine tubular pores; about 10 percent pebbles; neutral (pH 6.7); gradual irregular boundary.

B2—39 to 54 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist; weak coarse and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few medium, fine, and very fine roots; common very fine and few fine tubular pores; about 10 percent pebbles; neutral (pH 6.7); clear smooth boundary.

B3—54 to 60 inches; light yellowish brown (10YR 6/4) silt loam, brown (10YR 4/3) moist; weak coarse and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few medium, fine, and very fine roots; many very fine tubular pores; about 5 percent pebbles; neutral (pH 6.9).

The mollic epipedon is 30 to 45 inches thick. Depth to bedrock and thickness of the solum are 60 inches or more. Rock fragment content in the control section averages 5 to 10 percent. Clay content in the control section averages 12 to 18 percent.

A and B horizons: Rock fragment content is 5 to 10 percent. Reaction is medium acid to neutral.

Oxford Series

The Oxford series consists of very deep, moderately well drained soils on lake terraces. These soils formed in lake sediment and in alluvium derived from lake sediment. Slope is 2 to 12 percent. Elevation is 4,750 to 5,150 feet. Average annual precipitation is 15 to 18 inches, and average annual air temperature is 43 to 45 degrees F.

Typical pedon of an Oxford silty clay loam in an area of Oxford-Banida complex, 2 to 4 percent slopes, about 7 miles southeast of Swan Lake, about 2,400 feet east and 600 feet south of the northwest corner of sec. 18, T. 14 S., R. 39 E.

Ap—0 to 5 inches; reddish brown (5YR 5/3) silty clay loam, reddish brown (5YR 4/3) moist; weak fine subangular blocky structure parting to moderate fine granular; soft, friable, sticky and plastic; few fine and very fine roots; few fine and very fine tubular pores; moderately effervescent; mildly alkaline (pH 7.8); clear smooth boundary.

B1—5 to 11 inches; reddish brown (5YR 5/3) silty clay, reddish brown (5YR 4/3) moist; weak medium subangular blocky structure parting to moderate medium granular; hard, firm, very sticky and very plastic; few fine and very fine roots; few fine and very fine tubular pores; few 3/8- to 1/2-inch-wide vertical cracks filled with Ap material; moderately effervescent; mildly alkaline (pH 7.8); clear wavy boundary.

B21—11 to 16 inches; light reddish brown (5YR 6/3) silty clay, reddish brown (5YR 4/4) moist; strong fine subangular blocky structure; very hard, very firm, very sticky and very plastic; few fine and very fine roots; few fine and very fine tubular pores; common 3/8- to 1/2-inch-wide vertical cracks filled with Ap material; moderately effervescent; moderately alkaline (pH 7.9); clear smooth boundary.

B22—16 to 26 inches; light reddish brown (5YR 6/3) silty clay, reddish brown (5YR 4/4) moist; strong fine subangular blocky structure parting to moderate fine angular blocky; extremely hard, very firm, very sticky and very plastic; few fine roots; few fine and very fine tubular pores; common 3/8- to 1-inch-wide vertical cracks filled with Ap material; moderately effervescent; moderately alkaline (pH 8.1); clear smooth boundary.

B23—26 to 38 inches; light reddish brown (5YR 6/3) clay, reddish brown (5YR 4/4) moist; moderate medium and fine angular blocky structure; extremely hard, very firm, very sticky and very plastic; few fine and very fine tubular pores; common 3/8- to 1 1/8-inch-wide vertical cracks filled with Ap material; large pressure faces with very dark gray (5YR 3/1) organic stains; few fine distinct red (2.5YR 4/6) mottles; strongly effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

B3—38 to 47 inches; light yellowish brown (5YR 6/3) clay, reddish brown (5YR 4/4) moist; strong medium angular blocky structure; extremely hard, very firm, very sticky and very plastic; few fine and very fine tubular pores; common 3/4- to 1 1/8-inch-wide vertical cracks extending to a depth of 44 inches and filled with Ap material; cracks and pressure faces have very dark gray (5YR 3/1) stains; few fine prominent red (2.5YR 4/6) mottles; moderately effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

C—47 to 63 inches; pinkish gray (5YR 7/2) silty clay, reddish brown (5YR 5/3) moist; massive; extremely hard, very firm, very sticky and very plastic; few fine and very fine tubular pores; few very dark gray (5YR 3/1) organic stains along pressure faces; common fine gypsum crystals in veins; common medium distinct dark reddish brown (2.5YR 3/4) mottles; moderately effervescent in matrix; moderately alkaline (pH 8.0).

Bedrock is at a depth of 60 inches or more. The solum is 40 to 55 inches thick. Clay content in the control section averages 40 to 58 percent.

B and C horizons: Texture is silty clay or clay. Reaction is mildly alkaline or moderately alkaline.

Pavohroo Series

The Pavohroo series consists of very deep, well drained soils on mountainsides. These soils formed in silty alluvium and colluvium derived from loess and various kinds of sedimentary and metasedimentary rock. Slope is 8 to 60 percent. Elevation is 5,500 to 8,000 feet. Average annual precipitation is 22 to 28 inches, and average annual air temperature is 36 to 41 degrees F.

Typical pedon of a Pavohroo silt loam in an area of Pavohroo-Moonlight complex, 30 to 60 percent slopes, about 6 miles east of Pocatello, about 2,480 feet north and 420 feet west of the southeast corner of sec. 25, T. 6 S., R. 35 E.

O1—3 to 2 inches; partly decomposed needles, twigs, and leaves.

02—2 inches to 0; decomposed needles, twigs, and leaves.

A11—0 to 3 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; many fine and very fine roots, common medium roots, and few coarse roots; many very fine interstitial pores; about 10 percent pebbles; neutral (pH 6.9); abrupt smooth boundary.

A12—3 to 10 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak medium and fine subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many fine and very fine roots, common medium roots, and few coarse roots; many very fine interstitial pores; about 10 percent pebbles; neutral (pH 6.9); clear smooth boundary.

A13—10 to 17 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak coarse subangular blocky structure parting to weak medium and fine subangular blocky; soft, very friable, slightly sticky and slightly plastic; many fine and very fine roots, common medium roots, and few coarse roots; common very fine tubular pores; about 10 percent pebbles; neutral (pH 6.8); clear wavy boundary.

A14—17 to 26 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak coarse subangular blocky structure parting to weak medium and fine subangular blocky; soft, very friable, slightly sticky and slightly plastic; many fine and very fine roots and few coarse and medium roots; many very fine and few fine tubular pores; about 5 percent pebbles and 5 percent cobbles; neutral (pH 6.9); abrupt irregular boundary.

B2—26 to 60 inches; pale brown (10YR 6/3) stony loam, brown (10YR 4/3) moist; weak medium and fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common very fine roots and few medium and fine roots; many very fine tubular pores; about 10 percent pebbles, 10 percent cobbles, and 5 percent stones; neutral (pH 7.3).

Bedrock is at a depth of 60 inches or more. The mollic epipedon is 20 to 30 inches thick. Rock fragment content commonly increases with depth, but it averages less than 35 percent by volume in the 10- to 40-inch control section. Clay content in the control section averages 18 to 25 percent.

A horizon: Rock fragment content is 0 to 10 percent. Reaction is slightly acid or neutral.

B horizon: Texture is loam, gravelly loam, or stony loam. Rock fragment content is 10 to 30 percent. Reaction is neutral to moderately alkaline.

Pocatello Series

The Pocatello series consists of very deep, well drained soils on foothills and fan terraces. These soils formed in loess and silty alluvium derived from loess. Slope is 1 to 50 percent. Elevation is 4,400 to 5,200 feet. Average annual precipitation is 10 to 13 inches, and average annual air temperature is 45 to 51 degrees F.

Typical pedon of Pocatello silt loam, 1 to 4 percent slopes, about 3.5 miles north of Pocatello, about 2,610 feet north and 2,460 feet west of the southeast corner of sec. 25, T. 5 S., R. 34 E.

A1—0 to 8 inches; grayish brown (10YR 5/2) silt loam, brown (10YR 4/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many fine and very fine roots; common very fine tubular pores; slightly effervescent; mildly alkaline (pH 7.6); clear smooth boundary.

C1—8 to 21 inches; pale brown (10YR 6/3) silt loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many fine and very fine roots; common very fine tubular pores; slightly effervescent; moderately alkaline (pH 7.9); gradual smooth boundary.

C2ca—21 to 40 inches; very pale brown (10YR 7/3) silt loam, pale brown (10YR 6/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; common very fine tubular pores; about 10 to 15 percent hard rounded cicada krotovinas; strongly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

C3—40 to 60 inches; pale brown (10YR 6/3) silt loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, slightly sticky and slightly plastic; few

very fine roots; common very fine tubular pores; strongly effervescent; strongly alkaline (pH 8.7).

Clay content in the control section averages 5 to 15 percent.

A horizon: Reaction is neutral to moderately alkaline.

C horizon: Texture is silt loam or silt. The upper part of the horizon is moderately alkaline or strongly alkaline, and the lower part is moderately alkaline to very strongly alkaline and moderately saline or strongly saline.

Portino Series

The Portino series consists of moderately deep, well drained soils on lava flows. These soils formed in loess, in silty alluvium derived from loess, and in material weathered from basalt. Slope is 0 to 2 percent. Elevation is 4,500 to 4,600 feet. Average annual precipitation is 11 to 13 inches, and average annual air temperature is 46 to 48 degrees F.

Typical pedon of a Portino silt loam in an area of Portino-Thornock complex, 0 to 2 percent slopes, about 0.25 mile south of Pocatello, about 1,760 feet north and 900 feet east of the southwest corner of sec. 6, T. 7 S., R. 35 E.

A1—0 to 3 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium and fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine and common fine roots; many very fine tubular and interstitial pores; 5 percent or less rock fragments, mostly pebbles; slightly effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

B2—3 to 9 inches; pale brown (10YR 6/3) silt loam, dark brown (10YR 4/3) moist; weak coarse and medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and few fine roots; many very fine tubular pores; strongly effervescent; moderately alkaline (pH 8.1); clear smooth boundary.

C1ca—9 to 22 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) moist; massive; hard, friable, slightly sticky and slightly plastic; many very fine roots; many very fine tubular pores; about 10 percent hard cicada krotovinas; violently effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

C2—22 to 29 inches; pale brown (10YR 6/3) silt loam, brown (10YR 5/3) moist; massive; hard, friable, slightly sticky and slightly plastic; common very fine roots; common very fine tubular pores; about 3 percent pebbles; strongly effervescent; moderately alkaline (pH 8.1); abrupt wavy boundary.

IIR—29 inches; basalt.

Bedrock is at a depth of 20 to 40 inches. Secondary lime is at a depth of 6 to 15 inches. Clay content in the control section averages 10 to 16 percent.

A and B horizons: Reaction is mildly alkaline or moderately alkaline. Rock fragment content is 0 to 5 percent.

C horizon: Reaction is moderately alkaline or strongly alkaline. Rock fragment content is 0 to 5 percent.

These soils are taxadjunct to the Portino series because the moisture control section is moist for a longer period than is typical for the series. This difference, however, does not significantly affect use and management.

Rexburg Series

The Rexburg series consists of very deep, well drained soils on foothills and fan terraces. These soils formed in loess and in silty alluvium derived from loess. Slope is 1 to 50 percent. Elevation is 5,000 to 6,200 feet. Average annual precipitation is 14 to 16 inches, and average annual air temperature is 40 to 45 degrees F.

Typical pedon of Rexburg silt loam, 1 to 4 percent slopes (fig. 13), about 1.5 miles southeast of Arimo, about 2,000 feet east and 150 feet north of the southwest corner of sec. 20, T. 10 S., R. 37 E.

A11—0 to 4 inches; grayish brown (10YR 5/2) silt loam, very dark brown (10YR 2/2) moist; moderate medium and fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; many fine and medium roots; common fine and very fine interstitial pores; neutral (pH 7.2); clear smooth boundary.

A12—4 to 10 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; moderate medium granular structure; slightly hard, friable, slightly sticky and slightly plastic; many fine and medium roots; many fine and very fine tubular pores; mildly alkaline (pH 7.6); clear smooth boundary.

B1—10 to 18 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine and medium roots; common fine and very fine tubular pores; mildly alkaline (pH 7.4); gradual smooth boundary.

B2—18 to 26 inches; grayish brown (10YR 5/2) silt loam, dark grayish brown (10YR 4/2) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine and medium roots; common fine and very fine tubular pores; neutral (pH 7.2); clear smooth boundary.

C1ca—26 to 46 inches; pale brown (10YR 6/3) silt loam, brown (10YR 5/3) moist; massive; slightly hard,

Figure 13.—Profile of Rexburg silt loam, 1 to 4 percent slopes.

friable, slightly sticky and slightly plastic; few fine and medium roots; common fine and very fine tubular pores; violently effervescent; mildly alkaline (pH 7.8); gradual smooth boundary.

C2ca—46 to 60 inches; light gray (10YR 7/2) silt loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few fine and medium roots; common fine and very fine tubular pores; strongly effervescent; moderately alkaline (pH 7.6).

The solum is 18 to 35 inches thick. Secondary lime is at a depth of 18 to 35 inches. Clay content in the control section averages 13 to 16 percent.

A horizon: Reaction is slightly acid to mildly alkaline.

B horizon: Reaction is neutral or mildly alkaline.

C horizon: Reaction is mildly alkaline or moderately alkaline.

Ricrest Series

The Ricrest series consists of very deep, well drained soils on foothills and mountainsides. These soils formed in colluvium and alluvium derived from mixed sources, dominantly quartzite and limestone. Slope is 20 to 50 percent. Elevation is 5,500 to 6,500 feet. Average annual precipitation is 16 to 20 inches, and average annual air temperature is 41 to 45 degrees F.

Typical pedon of a Ricrest gravelly silt loam in an area of Cedarhill, high precipitation-Hades-Ricrest complex, 20 to 50 percent slopes, about 5 miles south of Lava Hot Springs, about 500 feet south and 2,440 feet east of the northwest corner of sec. 22, T. 10 S., R. 38 E.

A11—0 to 3 inches; dark grayish brown (10YR 4/2) gravelly silt loam, very dark brown (10YR 2/2) moist; moderate fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; many fine roots; many very fine interstitial pores; about 15 percent pebbles; mildly alkaline (pH 7.5); abrupt smooth boundary.

A12—3 to 10 inches; dark brown (10YR 4/3) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; moderate medium and fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; many fine roots and common coarse and medium roots; many very fine interstitial pores; about 15 percent pebbles; mildly alkaline (pH 7.7); clear smooth boundary.

B21—10 to 14 inches; brown (10YR 5/3) gravelly silt loam, dark brown (10YR 3/3) moist; weak medium and fine subangular blocky structure; hard, firm, slightly sticky and slightly plastic; common medium and fine roots and few coarse roots; few fine tubular pores; about 15 percent pebbles; mildly alkaline (pH 7.7); clear smooth boundary.

B22—14 to 24 inches; brown (10YR 5/3) gravelly silt loam, dark brown (10YR 3/3) moist; weak medium and fine subangular blocky structure; hard, firm, slightly sticky and slightly plastic; common medium and fine roots; many very fine, common fine, and few medium tubular pores; about 15 percent pebbles; slightly effervescent; mildly alkaline (pH 7.8); clear smooth boundary.

C1ca—24 to 31 inches; pale brown (10YR 6/3) gravelly silt loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common medium and fine roots; about 20 percent pebbles and 5 percent cobbles; violently effervescent; moderately alkaline (pH 8.0); clear smooth boundary.

C2ca—31 to 60 inches; very pale brown (10YR 7/3) gravelly silt loam, light yellowish brown (10YR 6/4) moist; massive; hard, firm, slightly sticky and slightly plastic; common fine and few medium roots; about 20 percent pebbles and 5 percent cobbles; strongly effervescent; moderately alkaline (pH 8.1).

Bedrock is at a depth of 60 inches or more. The mollic epipedon is 20 to 30 inches thick. Lime is at a depth of 12 to 20 inches. Rock fragment content commonly increases with depth, but it averages less than 35 percent by volume in the 10-to 40-inch control section. Clay content in the control section averages 18 to 22 percent.

A and B horizons: Rock fragment content is 15 to 20 percent.

C horizon: Rock fragment content is 15 to 35 percent. Reaction is mildly alkaline or moderately alkaline.

Ridgecrest Series

The Ridgecrest series consists of moderately deep, well drained soils on foothills and mountainsides. These soils formed in alluvium and colluvium derived dominantly from limestone. Slope is 20 to 50 percent. Elevation is 5,100 to 6,500 feet. Average annual precipitation is 14 to 18 inches, and average annual air temperature is 42 to 45 degrees F.

Typical pedon of a Ridgecrest extremely stony silt loam in an area of Cedarhill, high precipitation-Hondoho-Ridgecrest complex, 20 to 50 percent slopes, about 6 miles northwest of Hawkins Reservoir, about 140 feet north and 1,855 feet west of the southeast corner of sec. 32, T. 9 S., R. 35 E.

A11—0 to 4 inches; dark grayish brown (10YR 4/2) extremely stony silt loam, very dark brown (10YR 2/2) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine and common fine roots; many very fine interstitial pores; about 30 percent pebbles, 20 percent cobbles, and 15 percent stones; thick lime coatings on the underside of rock fragments; slightly effervescent; mildly alkaline (pH 7.6); clear wavy boundary.

A12—4 to 14 inches; brown (10YR 5/3) extremely stony silt loam, dark brown (10YR 3/3) moist; weak fine subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and few fine roots; many very fine interstitial pores; about 30 percent pebbles, 10 percent cobbles, and 25 percent stones; thick lime coatings on the underside of rock fragments; strongly effervescent; mildly alkaline (pH 7.6); clear irregular boundary.

C1ca—14 to 19 inches; pale brown (10YR 6/3) extremely stony silt loam, dark brown (10YR 4/3) moist; weak medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and few fine roots; many very fine interstitial pores; about 10 percent pebbles, 15 percent cobbles, and 45 percent stones; thick lime coatings on the underside of rock fragments; violently effervescent; mildly alkaline (pH 7.5); gradual irregular boundary.

C2ca—19 to 27 inches; pale brown (10YR 6/3) extremely stony silt loam, dark brown (10YR 4/3) moist; massive; slightly hard, very friable, slightly sticky, and slightly plastic; common very fine and few fine roots that follow the wide cracks in the weathered and fractured limestone; many very fine interstitial pores; about 10 percent pebbles, 20 percent cobbles, and 55 percent stones; thick lime coatings on the underside of rock fragments; violently effervescent; mildly alkaline (pH 7.5); abrupt irregular boundary.

R—27 inches; gray limestone.

Bedrock is at a depth of 20 to 40 inches. Lime content in the control section averages 40 to 70 percent.

A horizon: Rock fragment content is 60 to 70 percent.

C horizon: Texture is extremely stony silt loam or extremely stony loam. Rock fragments, dominantly stones, make up 70 to 90 percent of the horizon. Reaction is mildly alkaline or moderately alkaline.

These soils are taxadjunct to the Ridgecrest series because a concentration of secondary lime is in the C horizon. This difference, however, does not significantly affect use and management.

Ririe Series

The Ririe series consists of very deep, well drained soils on mountainsides, foothills, and fan terraces. These soils formed in loess and in silty alluvium derived from loess. Slope is 1 to 60 percent. Elevation is 4,600 to 6,500 feet. Average annual precipitation is 13 to 16 inches, and average annual air temperature is 40 to 46 degrees F.

Typical pedon of Ririe silt loam, 4 to 12 percent slopes, about 5.5 miles southwest of Downey, about 1,950 feet south and 865 feet west of the northeast corner of sec. 10, T. 12 S., R. 36 E.

Ap—0 to 5 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; weak medium and thick platy structure; slightly hard, friable, slightly sticky and slightly plastic; many fine and very fine roots; few very fine interstitial pores; neutral (pH 7.2); clear smooth boundary.

A12—5 to 12 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; few very fine tubular and interstitial pores; neutral (pH 7.1); clear smooth boundary.

C1ca—12 to 26 inches; pale brown (10YR 6/3) silt loam, brown (10YR 5/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; few very fine tubular and interstitial pores; 15 to 20 percent slightly hard cicada krotovinas; violently effervescent; mildly alkaline (pH 7.4); gradual smooth boundary.

C2ca—26 to 43 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine tubular pores; violently effervescent; 10 percent slightly hard cicada krotovinas; mildly alkaline (pH 7.6); clear smooth boundary.

C3ca—43 to 60 inches; pale brown (10YR 6/3) silt loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine tubular pores; violently effervescent; moderately alkaline (pH 8.0).

The mollic epipedon is 7 to 16 inches thick. Lime is at a depth of 7 to 16 inches. Clay content in the control section averages 12 to 18 percent.

A horizon: Reaction is neutral to moderately alkaline.

C horizon: Reaction is mildly alkaline to strongly alkaline.

Scout Variant

The Scout Variant consists of very deep, well drained soils on mountainsides. These soils formed in alluvium and colluvium derived dominantly from quartzite. Slope is 30 to 60 percent. Elevation is 7,500 to 9,200 feet. Average annual precipitation is 25 to 35 inches, and average annual air temperature is 35 to 39 degrees F.

Typical pedon of a Scout Variant gravelly silt loam in an area of Scout Variant-Camelback Variant association, 30 to 60 percent slopes, about 1 mile west of Baldy Mountain, about 2,300 feet north and 2,200 feet west of the southeast corner of sec. 13, T. 10 S., R. 38 E.

O1—2 inches to 1 inch; partly decomposed organic material.

O2—1 inch to 0; decomposed organic material.

A1—0 to 3 inches; brown (10YR 5/3) gravelly silt loam, dark brown (7.5YR 3/2) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine, fine, medium, and coarse roots; many very fine interstitial pores; about 15 percent pebbles and 5 percent cobbles; medium acid (pH 5.8); abrupt smooth boundary.

A2—3 to 16 inches; pale brown (10YR 6/3) very cobbly silt loam, brown (10YR 4/3) moist; weak coarse and medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine, fine, medium, and coarse roots; many very fine and fine tubular pores; about 15 percent pebbles, 30 percent cobbles, and 10 percent stones; medium acid (pH 5.6); gradual wavy boundary.

B21—16 to 30 inches; light yellowish brown (10YR 6/4) extremely stony silt loam, dark yellowish brown (10YR 4/4) moist; weak coarse and medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine, fine, medium, and coarse roots; many very fine and fine tubular pores; about 20 percent pebbles, 35 percent cobbles, and 20 percent stones; medium acid (pH 5.9); clear wavy boundary.

B22—30 to 60 inches; light yellowish brown (10YR 6/4) extremely cobbly loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine and fine roots and few medium and coarse roots; common very fine and fine tubular pores; about 20 percent pebbles, 35 percent cobbles, and 10 percent stones; strongly acid (pH 5.5).

The control section is 45 to 75 percent rock fragments. Clay content is 10 to 20 percent. Bedrock is at a depth of 60 inches or more.

A1 horizon: Rock fragment content is 15 to 25 percent. Reaction is strongly acid to slightly acid.

A2 horizon: Texture is very cobbly silt loam or very cobbly loam. Rock fragment content is 40 to 60 percent. Reaction is strongly acid to slightly acid.

B2 horizon: Texture is extremely stony silt loam, extremely cobbly loam, or very cobbly silt loam. Rock fragment content is 55 to 80 percent. Reaction is strongly acid to slightly acid.

Sedgway Series

The Sedgway series consists of very deep, well drained soils on mountainsides. These soils formed in alluvium and colluvium derived from sedimentary and metasedimentary rock. Slope is 8 to 60 percent. Elevation is 6,000 to 8,000 feet. Average annual

precipitation is 22 to 30 inches, and average annual air temperature is 36 to 41 degrees F.

Typical pedon of a Sedgway gravelly silt loam in an area of Sedgway-Beaverdam complex, 30 to 60 percent slopes, about 5.5 miles southeast of Arimo, about 100 feet north and 945 feet west of the southeast corner of sec. 19, T. 10 S., R. 38 E.

O1—2 inches to 1 inch; undecomposed needles, leaves, twigs, and grass.

O2—1 inch to 0; decomposed and partly decomposed needles, leaves, twigs, and grass.

A11—0 to 5 inches; very dark grayish brown (10YR 3/2) gravelly silt loam, black (10YR 2/1) moist; weak coarse subangular blocky structure parting to weak fine subangular blocky; soft, very friable, slightly sticky and slightly plastic; many fine and very fine roots and common coarse and medium roots; many very fine tubular pores and common very fine interstitial pores; about 15 percent pebbles and 5 percent cobbles; medium acid (pH 5.7); abrupt smooth boundary.

A12—5 to 12 inches; dark grayish brown (10YR 4/2) very cobbly silt loam, very dark brown (10YR 2/2) moist; weak coarse and medium subangular blocky structure parting to weak fine subangular blocky; soft, very friable, slightly sticky and slightly plastic; common coarse, fine, and very fine roots and few medium roots; many very fine tubular pores and few very fine interstitial pores; about 15 percent pebbles, 20 percent cobbles, and 10 percent stones; medium acid (pH 5.7); clear smooth boundary.

A2—12 to 21 inches; pale brown (10YR 6/3) very cobbly loam, brown (10YR 4/3) moist; weak coarse and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common coarse roots and few medium, fine, and very fine roots; common very fine tubular pores; about 15 percent pebbles, 30 percent cobbles, and 10 percent stones; medium acid (pH 6.0); clear wavy boundary.

B&A—21 to 27 inches; 80 percent yellowish brown (10YR 5/4) very cobbly clay loam, dark yellowish brown (10YR 3/4) moist; 20 percent pale brown (10YR 6/3) very cobbly loam, dark yellowish brown (10YR 4/4) moist, A2 material is in pockets and as coatings on the faces of peds; moderate coarse and medium angular blocky structure; hard, firm, very sticky and very plastic; common coarse roots and few medium, fine, and very fine roots; common very fine and few fine tubular pores; common moderately thick clay films on the faces of peds and in pores; about 20 percent pebbles, 25 percent cobbles, and 10 percent stones; medium acid (pH 6.0); gradual wavy boundary.

B21t—27 to 32 inches; yellowish brown (10YR 5/4) very cobbly clay loam, dark yellowish brown (10YR 3/4) moist; moderate coarse and medium angular blocky structure; hard, firm, very sticky and very plastic; few medium, fine, and very fine roots; common very fine tubular pores; many moderately thick clay films on the faces of peds and in pores; about 20 percent pebbles, 25 percent cobbles, and 10 percent stones; slightly acid (pH 6.3); gradual wavy boundary.

B22t—32 to 60 inches; yellowish brown (10YR 5/4) very cobbly clay loam, dark yellowish brown (10YR 4/4) moist; moderate medium angular blocky structure; hard, firm, sticky and plastic; few medium, fine, and very fine roots; common very fine tubular pores; continuous moderately thick clay films on the faces of peds and in pores; about 15 percent pebbles, 25 percent cobbles, and 10 percent stones; slightly acid (pH 6.3).

Depth to bedrock and thickness of the solum are 60 inches or more. The control section is 40 to 60 percent rock fragments. Clay content in the control section is 27 to 34 percent.

A1 horizon: The upper part of the horizon is 15 to 25 percent rock fragments, and the lower part is 35 to 55 percent. Clay content is 15 to 25 percent. Reaction is medium acid or slightly acid.

A2 horizon: The horizon is 35 to 55 percent rock fragments and 15 to 25 percent clay. Reaction is medium acid or slightly acid.

B2t horizon: The horizon is 40 to 60 percent rock fragments and 27 to 34 percent clay. Reaction is medium acid or slightly acid.

Swanner Series

The Swanner series consists of shallow, well drained soils on mountainsides and ridges. These soils formed in loess, silty alluvium, and material weathered from andesite or other related igneous rock. Slope is 12 to 80 percent. Elevation is 4,500 to 6,000 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 42 to 45 degrees F.

Typical pedon of a Swanner extremely stony loam in an area of Watercanyon-Swanner-Rock outcrop complex, 20 to 50 percent slopes, about 2 miles west of Pocatello, about 1,735 feet east and 1,860 feet north of the southwest corner of sec. 20, T. 6 S., R. 34 E.

A11—0 to 9 inches; dark brown (10YR 4/3) extremely stony loam, very dark grayish brown (10YR 3/2) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many coarse, medium, and fine roots and common very fine roots; many very fine interstitial pores; about 30 percent pebbles, 20 percent cobbles, and 15 percent stones; mildly alkaline (pH 7.5); clear smooth boundary.

B2—9 to 17 inches; yellowish brown (10YR 5/4) extremely stony loam, dark brown (10YR 3/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many coarse, medium, and fine roots and few very fine roots; many very fine interstitial pores and common very fine tubular pores; about 30 percent pebbles, 20 percent cobbles, and 15 percent stones; thin lime coatings on some rock fragments and spots of slightly calcareous soil material; mildly alkaline (pH 7.5); abrupt irregular boundary.
R—17 inches; andesite with thin lime coatings at soil contact.

Bedrock is at a depth of 10 to 20 inches. Lime is at a depth of 9 to 20 inches.

A1 horizon: Rock fragment content is 60 to 80 percent. Reaction is mildly alkaline or moderately alkaline.

B horizon: Texture is extremely stony loam or very stony loam. Rock fragment content is 50 to 75 percent. Reaction is mildly alkaline or moderately alkaline.

Cca horizon: This horizon is present only in some pedons. Texture is very stony loam or extremely stony loam. Rock fragment content is 50 to 75 percent. Calcium carbonate equivalent is 3 to 15 percent. Reaction is mildly alkaline or moderately alkaline.

Tendoy Series

The Tendoy series consists of very deep, very poorly drained soils on flood plains. These soils formed in organic material derived dominantly from herbaceous plants. Slope is 0 to 1 percent. Elevation is 4,550 to 4,750 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 41 to 45 degrees F.

Typical pedon of Tendoy muck, drained, 0 to 1 percent slopes, about 4.5 miles northwest of Downey, about 2,450 feet south and 800 feet east of the northwest corner of sec. 24, T. 11 S., R. 36 E.

C—0 to 2 inches; grayish brown (10YR 5/2, silt loam) very dark grayish brown (2.5Y 3/2) moist; weak fine platy structure; soft, very friable, slightly sticky and slightly plastic; many very fine, fine, and medium roots; many very fine interstitial pores; slightly effervescent; mildly alkaline (pH 7.7); abrupt smooth boundary.
Oa1—2 to 7 inches; black (N 2/0, on broken face and rubbed) sapric material; about 10 percent fibers, about 5 percent after rubbing; weak medium granular structure; many very fine, fine, and medium roots; slightly effervescent; slightly acid (pH 6.4); abrupt smooth boundary.
Oa2—7 to 10 inches; black (10YR 2/1, on broken face and rubbed) sapric material; about 30 percent fibers, about 10 percent after rubbing; massive; many very fine, fine, and medium roots; neutral (pH 7.0); gradual smooth boundary.
Oa3—10 to 15 inches; black (N 2/0, on broken face and rubbed) sapric material; about 25 percent fibers, about 5 percent after rubbing; massive; common very fine, fine, and medium roots; slightly acid (pH 6.5); abrupt smooth boundary.
Oa4—15 to 19 inches; black (N 2/0, on broken face and rubbed) sapric material; about 25 percent fibers, about 10 percent after rubbing; common very fine, fine, and medium roots; slightly acid (pH 6.5); abrupt smooth boundary.
Oa5—19 to 23 inches; black (10YR 2/1, on broken face and rubbed) sapric material; about 30 percent fibers, about 15 percent after rubbing; massive; common very fine, fine, and medium roots; neutral (pH 6.6); abrupt smooth boundary.
Oa6—23 to 41 inches; black (N 2/0, on broken face and rubbed) sapric material; about 10 percent fibers, less than 5 percent after rubbing; massive; few very fine, fine, and medium roots; slightly acid (pH 6.1); clear smooth boundary.
Oa7—41 to 47 inches; black (N 2/0, on broken face and rubbed) sapric material; about 10 percent fibers, less than 5 percent after rubbing; massive; few very fine roots; medium acid (pH 5.6); abrupt smooth boundary.
Oa8—47 to 60 inches; black (N 2/0, on broken face and rubbed) sapric material; about 5 percent fibers, less than 5 percent after rubbing; massive; few very fine roots; medium acid (pH 6.0).

The organic material is more than 60 inches thick. Lime is generally present in the upper part of the surface tier.

Surface tier: Generally a thin mineral layer of recent alluvium 1 to 3 inches thick is on the surface. The surface tier is mostly sapric material, but in some pedons it has thin layers of hemic or fibric material. Reaction is slightly acid to mildly alkaline.

Subsurface tier: The subsurface tier is mostly sapric material, but some pedons have a thin layer of hemic or fibric material or a thin discontinuous, mineral layer. Reaction is slightly acid or neutral.

Bottom tier: The bottom tier is mostly sapric material, but some pedons have a thin layer of hemic or fibric material or a thin, discontinuous mineral layer. Reaction is medium acid or slightly acid.

Thornock Series

The Thornock series consists of shallow, well drained soils on basalt flows. These soils formed in a mixture of loess, silty alluvium derived from loess, and material weathered from basalt. Slope is 0 to 2 percent. Elevation is 4,500 to 4,600 feet. Average annual precipitation is 11

to 13 inches, and average annual air temperature is 46 to 48 degrees F.

Typical pedon of a Thornock stony silt loam in an area of Portino-Thornock complex, 0 to 2 percent slopes, about 1 mile southeast of Pocatello, about 1,980 feet north and 900 feet east of the southwest corner of sec. 6, T. 7 S., R. 35 E.

A11—0 to 2 inches; grayish brown (10YR 5/2) stony silt loam, dark brown (10YR 3/3) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots; many very fine interstitial pores; slightly effervescent; about 15 percent stones on the surface; mildly alkaline (pH 7.8); abrupt smooth boundary.

A12—2 to 7 inches; light brownish gray (10YR 6/2) silt loam, dark brown (10YR 3/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common very fine and fine tubular pores; about 5 percent pebbles; slightly effervescent; moderately alkaline (pH 7.9); clear smooth boundary.

C—7 to 14 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; few very fine and fine tubular pores; about 5 percent pebbles; slightly effervescent; moderately alkaline (pH 8.0); abrupt irregular boundary.

R—14 inches; basalt.

Bedrock is at a depth of 10 to 20 inches. The control section averages 5 to 10 percent rock fragments.

A11 horizon: The horizon is 10 to 20 percent stones, which are concentrated on the surface. Reaction is mildly alkaline or moderately alkaline.

A12 horizon: Reaction is mildly alkaline or moderately alkaline. Rock fragment content is 5 to 10 percent.

C horizon: Reaction is mildly alkaline or moderately alkaline. Rock fragment content is 5 to 10 percent.

These soils are taxadjunct to the Thornock series because they do not have a calcic horizon. This difference, however, does not significantly affect use and management.

Toponce Series

The Toponce series consists of very deep, well drained soils on mountainsides, foothills, and fan terraces. These soils formed in alluvium derived dominantly from sedimentary and metasedimentary rock, predominantly sandstone and quartzite. Slope is 6 to 30 percent. Elevation is 5,500 to 6,900 feet. Average annual precipitation is 20 to 28 inches, and average annual air temperature is 37 to 41 degrees F.

Typical pedon of a Toponce silt loam in an area of Toponce-Broadhead association, 6 to 30 percent slopes, about 2 miles northeast of Cottonwood Peak, about 2,450 feet east and 300 feet north of the southwest corner of sec. 29, T. 11 S., R. 39 E.

A1—0 to 3 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; moderate fine granular structure; soft, friable, slightly sticky and slightly plastic; many very fine and fine roots; many very fine interstitial pores; about 10 percent rock fragments, mostly pebbles; slightly acid (pH 6.3); clear smooth boundary.

A3—3 to 14 inches; dark grayish brown (10YR 4/2) silty clay loam, very dark brown (10YR 2/2) moist; strong medium, fine, and very fine subangular blocky structure; hard, firm, sticky and plastic; many very fine and fine roots and few medium roots; many very fine tubular pores and interstitial pores; about 5 percent gravel; slightly acid (pH 6.3); clear smooth boundary.

B1t—14 to 21 inches; dark brown (10YR 4/3) silty clay loam, very dark grayish brown (10YR 3/2) moist; strong fine and very fine subangular blocky structure; hard, firm, sticky and plastic; common very fine and fine roots and few medium roots; common very fine tubular pores and few interstitial pores; few thin clay films in pores and on faces of peds; about 5 percent rock fragments, mostly pebbles; medium acid (pH 5.8); clear smooth boundary.

B21t—21 to 28 inches; brown (10YR 5/3) silty clay, dark yellowish brown (10YR 4/4) moist; moderate medium prismatic structure parting to strong medium angular blocky; very hard, very firm, sticky and plastic; common very fine roots and few fine and medium roots, mostly along faces of peds and in cracks; common very fine tubular pores; many moderately thick clay films in pores and on faces of peds; about 5 percent rock fragments, mostly pebbles; medium acid (pH 5.8); clear smooth boundary.

B22t—28 to 60 inches; brown (10YR 5/3) clay, dark yellowish brown (10YR 4/4) moist; moderate coarse prismatic structure; extremely hard, extremely firm, very sticky and very plastic; few very fine, fine, and medium roots along faces of peds and in cracks; common very fine tubular pores; many moderately thick clay films in pores and on faces of peds; about 2 percent rock fragments, mostly pebbles; medium acid (pH 5.9).

The mollic epipedon is 18 to 25 inches thick. Depth to bedrock and thickness of the solum are 60 inches or more. Clay content in the control section averages 35 to 55 percent.

A1 horizon: Clay content is 15 to 25 percent. Rock fragment content is 0 to 10 percent. Reaction is medium acid or slightly acid.

A3 horizon: Texture is silt loam or silty clay loam. Clay content is 20 to 30 percent. Rock fragment content is 0 to 10 percent. Reaction is medium acid or slightly acid.

Bt horizon: Texture is silty clay loam, silty clay, or clay. Clay content is 35 to 55 percent. Rock fragment content is 0 to 10 percent. Reaction is medium acid or slightly acid.

Trailcreek Series

The Trailcreek series consists of well drained soils on mountainsides, foothills, and terraces. These soils are moderately deep to paralithic contact. They formed in alluvium and residuum derived from consolidated volcanic ash. Slope is 12 to 50 percent. Elevation is 4,800 to 6,000 feet. Average annual precipitation is 14 to 18 inches, and average annual air temperature is 41 to 45 degrees F.

Typical pedon of a Trailcreek very fine sandy loam in an area of Coalbank-Trailcreek-Lonigan complex, 20 to 50 percent slopes, about 9.5 miles west of Arimo, about 2,000 feet east and 900 feet south of the northwest corner of sec. 15, T. 10 S., R. 35 E.

A1—0 to 4 inches; grayish brown (10YR 5/2) very fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium and fine subangular blocky structure parting to weak fine granular; soft, very friable, nonsticky and slightly plastic; many very fine, common fine, and few medium roots; many very fine interstitial pores and many very fine tubular pores; neutral (pH 6.6); abrupt wavy boundary.

B1—4 to 12 inches; grayish brown (10YR 5/2) very fine sandy loam, dark brown (10YR 3/3) moist; weak medium and fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and fine roots and few medium roots; many very fine interstitial pores and common very fine tubular pores; neutral (pH 6.8); clear wavy boundary.

B2—12 to 20 inches; grayish brown (10YR 5/2) very fine sandy loam, dark brown (10YR 3/3) moist; weak coarse and medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine and fine roots and few medium roots; many very fine interstitial pores and common fine tubular pores; neutral (pH 6.8); clear wavy boundary.

B3—20 to 26 inches; light brownish gray (10YR 6/2) very fine sandy loam, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; 20 to 45 percent pebble- and cobble-sized fragments of weakly consolidated volcanic ash; many very fine, common fine, and few medium roots; many very fine interstitial pores and many very fine tubular pores; neutral (pH 6.7); abrupt wavy boundary.

Cr—26 inches; light gray (2.5Y 7/0) consolidated volcanic ash, gray (2.5Y 6/0) moist.

Paralithic contact is at a depth of 20 to 40 inches. Vitric volcanic ash content in the control section averages 70 to 90 percent.

A horizon: Reaction is neutral or mildly alkaline.

B horizon: Reaction is neutral to moderately alkaline.

Valmar Series

The Valmar series consists of moderately deep, well drained soils on mountainsides and ridges. These soils formed in alluvium, colluvium, and residuum derived dominantly from quartzite and other related metasedimentary rock. Slope is 20 to 80 percent. Elevation is 4,500 to 7,000 feet. Average annual precipitation is 16 to 20 inches, and average annual air temperature is 39 to 45 degrees F.

Typical pedon of a Valmar very cobbly silt loam in an area of Valmar-Camelback-Hades complex, 30 to 60 percent slopes, about 1.5 miles southwest of Pocatello, about 630 feet south and 2,055 feet east of the northwest corner of sec. 4, T. 7 S., R. 34 E.

A11—0 to 4 inches; dark brown (10YR 4/3) very cobbly silt loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and few fine roots; many very fine interstitial pores; about 15 percent pebbles, 20 percent cobbles, and 5 percent stones; neutral (pH 7.3); clear smooth boundary.

A12—4 to 9 inches; brown (10YR 5/3) very cobbly silt loam, dark brown (10YR 3/3) moist; weak fine subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and few fine roots; many very fine interstitial pores; about 25 percent pebbles, 20 percent cobbles, and 5 percent stones; neutral (pH 7.3); clear smooth boundary.

B2t—9 to 14 inches; yellowish brown (10YR 5/4) very cobbly silt loam, dark yellowish brown (10YR 3/4) moist; moderate medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; many very fine interstitial pores and few very fine tubular pores; few thin clay films in pores and on faces of peds; about 25 percent pebbles, 20 percent cobbles, and 5 percent stones; mildly alkaline (pH 7.6); abrupt irregular boundary.

B3—14 to 24 inches; yellowish brown (10YR 5/4) extremely stony silt loam, dark yellowish brown (10YR 3/4) moist; moderate medium and fine subangular blocky structure; slightly hard, friable,

slightly sticky and slightly plastic; few fine and very fine roots; few very fine tubular pores; about 5 percent pebbles, 5 percent cobbles, and 75 percent stones; soil material and roots are restricted to vertical and horizontal fractures through the weathered rock; few thin lime coatings on rock fragments; mildly alkaline (pH 7.7); abrupt irregular boundary.

R—24 inches; quartzite.

Depth to bedrock and thickness of the solum are 20 to 40 inches.

A horizon: Rock fragment content is 35 to 50 percent. Clay content is 13 to 20 percent. Texture is extremely stony or very cobbly silt loam. Reaction is slightly acid or neutral.

B horizon: Rock fragment content is 50 to 85 percent. The upper part of the horizon is very cobbly silt loam or very stony silt loam, and the lower part is extremely stony silt loam or extremely flaggy silt loam. Clay content is 20 to 27 percent. Reaction is neutral or mildly alkaline.

Valmar Variant

The Valmar Variant consists of moderately deep, well drained soils on the upper part of mountainsides and on ridgetops. These soils formed in residuum, alluvium, and colluvium derived from various kinds of sedimentary and metasedimentary rock, dominantly quartzite and sandstone. Slope is 20 to 60 percent. Elevation is 7,000 to 9,200 feet. Average annual precipitation is 18 to 22 inches, and average annual air temperature is 37 to 41 degrees F.

Typical pedon of a Valmar Variant very stony silt loam in an area of Camelback Variant-Valmar Variant complex, 20 to 60 percent slopes, about 0.5 mile south of Baldy Mountain, about 1,850 feet north and 1,175 feet west of the southeast corner of sec. 19, T. 10 S., R. 39 E.

A11—0 to 4 inches; dark brown (10YR 3/3) very stony silt loam, very dark grayish brown (10YR 3/2) moist; weak medium platy structure parting to weak very fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine and fine interstitial pores and common very fine tubular pores; about 15 percent pebbles, 10 percent cobbles, and 10 percent stones; slightly acid (pH 6.4); clear smooth boundary.

A12—4 to 9 inches; dark brown (10YR 3/3) very stony silt loam, very dark grayish brown (10YR 3/2) moist; weak coarse and medium subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine and fine interstitial pores and common very fine tubular pores; about 15 percent pebbles, 10 percent cobbles, and 20 percent stones; slightly acid (pH 6.5); clear smooth boundary.

B21—9 to 14 inches; dark yellowish brown (10YR 4/4) very stony loam, dark brown (10YR 3/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine and fine interstitial pores and common very fine tubular pores; about 25 percent pebbles, 10 percent cobbles, and 20 percent stones; slightly acid (pH 6.5); abrupt wavy boundary.

B22—14 to 24 inches; light yellowish brown (10YR 6/4) extremely stony loam, brown (10YR 4/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots and few medium and coarse roots; many very fine and fine interstitial pores and common very fine tubular pores; about 25 percent pebbles, 20 percent cobbles, and 20 percent stones; slightly acid (pH 6.5); abrupt irregular boundary.

R—24 inches; fractured quartzite.

Depth to bedrock and thickness of the solum are 20 to 40 inches.

A horizon: Clay content is 10 to 15 percent. Rock fragment content is 35 to 45 percent.

B2 horizon: Texture is very stony loam and extremely stony loam. Clay content is 15 to 25 percent. Rock fragment content is 55 to 70 percent. Reaction is slightly acid or neutral.

Watercanyon Series

The Watercanyon series consists of very deep, well drained soils on foothills, mountainsides, and fan terraces. These soils formed in loess and in alluvium derived from loess. Slope is 4 to 60 percent. Elevation is 4,500 to 6,500 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 42 to 45 degrees F.

Typical pedon of a Watercanyon silt loam in an area of Ririe-Watercanyon complex, 12 to 20 percent slopes, about 2 miles northeast of Downey, about 660 feet east and 5 feet north of the southwest corner of sec. 25, T. 11 S., R. 37 E.

Ap—0 to 7 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak medium subangular blocky structure parting to weak very fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots; many very fine interstitial pores; slightly effervescent; mildly alkaline (pH 7.8); abrupt smooth boundary.

B2—7 to 16 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak medium subangular

blocky structure parting to weak very fine granular; soft, very friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine interstitial pores; slightly effervescent; mildly alkaline (pH 7.8); clear smooth boundary.

C1ca—16 to 24 inches; pale brown (10YR 6/3) silt loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots and few fine roots; many very fine and few fine tubular pores; strongly effervescent; moderately alkaline (pH 7.9); clear smooth boundary.

C2ca—24 to 41 inches; light gray (10YR 7/2) silt loam, pale brown (10YR 6/3) moist; massive; hard, firm, slightly sticky and slightly plastic; few very fine roots; few very fine tubular pores; about 5 percent slightly hard cicada krotovinas; violently effervescent; moderately alkaline (pH 7.9); gradual smooth boundary.

C3ca—41 to 60 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) moist; massive; few very fine roots; common very fine tubular pores; strongly effervescent; moderately alkaline (pH 8.3).

Secondary lime is at a depth of 15 to 20 inches. Clay content in the control section averages 8 to 18 percent.

B horizon: Reaction is mildly alkaline or moderately alkaline.

C horizon: Texture is silt loam or silt. Reaction is moderately alkaline or strongly alkaline.

Watercanyon Variant

The Watercanyon Variant consists of very deep, well drained soils on terrace breaks. These soils formed in silty sediment. Slope is 12 to 40 percent. Elevation is 4,600 to 5,000 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 42 to 45 degrees F.

Typical pedon of a Watercanyon Variant silt loam in an area of Wursten-Watercanyon Variant-Hondoho complex, 12 to 40 percent slopes, about 2.5 miles southwest of Virginia, about 1,210 feet west and 2,090 feet north of the southeast corner of sec. 11, T. 11 S., R. 36 E.

A1—0 to 4 inches; pale brown (10YR 6/3) silt loam, brown (10YR 5/3) moist; moderate coarse and medium platy structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots, common medium roots, and few coarse roots; many very fine and fine interstitial pores and common very fine and fine tubular pores; about 10 percent pebbles; strongly effervescent; moderately alkaline (pH 8.0); clear smooth boundary.

C1ca—4 to 11 inches; white (10YR 8/2) silt loam, very pale brown (10YR 7/3) moist; moderate medium platy structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots and few medium and coarse roots; few very fine and fine tubular pores and few very fine interstitial pores; less than 5 percent pebbles; violently effervescent; moderately alkaline (pH 8.0); clear smooth boundary.

C2ca—11 to 28 inches; very pale brown (10YR 7/3) silt loam, light yellowish brown (10YR 6/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots matted in vertical cracks; few very fine tubular and interstitial pores; about 5 percent pebbles; violently effervescent; moderately alkaline (pH 7.9); clear smooth boundary.

C3ca—28 to 38 inches; very pale brown (10YR 7/3) silt loam, very pale brown (10YR 7/4) moist; massive; hard, firm, slightly sticky and slightly plastic; few very fine and fine roots matted in vertical cracks; few very fine tubular and interstitial pores; about 5 percent pebbles; violently effervescent; mildly alkaline (pH 7.8); diffuse wavy boundary.

C4ca—38 to 61 inches; very pale brown (10YR 7/3) silt loam, light yellowish brown (10YR 6/4) moist; massive; hard, firm, slightly sticky and slightly plastic; few very fine and fine roots matted in vertical cracks; common very fine and fine tubular pores and few very fine interstitial pores; about 5 percent pebbles; violently effervescent; fine gypsum veins along vertical cracks; mildly alkaline (pH 7.7).

The control section is 0 to 5 percent rock fragments. Clay content in the control section averages 12 to 18 percent.

A horizon: Reaction is mildly alkaline or moderately alkaline. Calcium carbonate equivalent is 45 to 60 percent. Conductivity of the saturation extract is 4 to 8 millimhos per centimeter.

C horizon: Reaction is mildly alkaline or moderately alkaline. Calcium carbonate equivalent is 45 to 100 percent. Conductivity of the saturation extract is 16 to 30 millimhos per centimeter.

Wursten Series

The Wursten series consists of very deep, well drained soils on terraces. These soils formed in alluvium derived from mixed sources. Slope is 1 to 40 percent. Elevation is 4,600 to 5,000 feet. Average annual precipitation is 12 to 16 inches, and average annual air temperature is 42 to 46 degrees F.

Typical pedon of a Wursten gravelly silt loam in an area of Wursten-Watercanyon Variant-Hondoho complex, 12 to 40 percent slopes, about 1.5 miles northwest of Virginia, about 500 feet north and 150 feet east of the southwest corner of sec. 5, T. 10 S., R. 37 E.

A11—0 to 3 inches; grayish brown (10YR 5/2) gravelly silt loam, dark brown (10YR 3/3) moist; weak fine

platy structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots and common medium and coarse roots; many very fine interstitial pores and common very fine tubular pores; about 1 percent cobbles and 15 percent pebbles; slightly effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

A12—3 to 9 inches; grayish brown (10YR 5/2) gravelly silt loam, dark brown (10YR 3/3) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine roots and common fine, medium, and coarse roots; many very fine tubular pores; about 15 percent pebbles and 5 percent cobbles; slightly effervescent; moderately alkaline (pH 7.9); abrupt smooth boundary.

C1ca—9 to 22 inches; light gray (10YR 7/2) gravelly loam, very pale brown (10YR 6/3) moist; weak medium and fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine and fine roots and few medium and coarse roots; many very fine tubular pores; about 5 percent cobbles and 30 percent pebbles; few thin lime coatings on the undersides of rock fragments and around pores; strongly effervescent; moderately alkaline (pH 7.9); abrupt smooth boundary.

C2ca—22 to 33 inches; very pale brown (10YR 7/3) gravelly loam, pale brown (10YR 6/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots and few medium roots; many very fine tubular pores; about 5 percent cobbles and 25 percent pebbles; few thin lime coatings on the undersides of rock fragments and around pores; violently effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

C3ca—33 to 39 inches; very pale brown (10YR 7/3) gravelly silt loam, brown (10YR 5/3) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; many very fine tubular pores; about 5 percent cobbles and 15 percent pebbles; few thin lime coatings on the undersides of rock fragments and around pores; violently effervescent; strongly alkaline (pH 8.8); clear smooth boundary.

C4ca—39 to 60 inches; very pale brown (10YR 7/3) gravelly silt loam, light yellowish brown (10YR 4/3) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine tubular pores; about 5 percent cobbles and 15 percent pebbles; strongly effervescent; strongly alkaline (pH 9.0).

Secondary lime is at a depth of 8 to 18 inches. The control section is 15 to 35 percent rock fragments. Clay content in the control section averages 13 to 18 percent.

A horizon: Rock fragment content is 15 to 30 percent. Reaction is mildly alkaline or moderately alkaline.

C horizon: Texture is gravelly silt loam or gravelly loam. Rock fragment content is 20 to 35 percent. Reaction is moderately alkaline or strongly alkaline.

Yago Series

The Yago series consists of very deep, well drained soils on mountainsides and fan terraces. These soils formed in mixed alluvium and colluvium derived dominantly from sandstone and quartzite. Slope is 4 to 20 percent. Elevation is 5,600 to 7,000 feet. Average annual precipitation is 16 to 22 inches, and average annual air temperature is 40 to 44 degrees F.

Typical pedon of a Yago extremely stony silty clay loam in an area of Broadhead-Yago complex, 12 to 20 percent slopes, about 3 miles northeast of Lava Hot Springs, about 860 feet south and 900 feet west of the northeast corner of sec. 24, T. 9 S., R. 38 E.

A1—0 to 10 inches; dark grayish brown (10YR 4/2) extremely stony silty clay loam, very dark grayish brown (10YR 3/2) moist; moderate medium and fine subangular blocky structure; hard, firm, sticky and plastic; common very fine, fine, and medium roots and few coarse roots; many very fine interstitial pores along the faces of peds and common very fine and fine tubular pores; about 10 percent pebbles, 30 percent cobbles, and 20 percent stones; slightly acid (pH 6.5); abrupt irregular boundary.

B21t—10 to 16 inches; brown (7.5YR 5/4) very stony clay loam, dark brown (7.5YR 4/4) moist; moderate medium and fine angular blocky structure; very hard, very firm, very sticky and very plastic; common very fine and fine roots; common very fine interstitial pores along the faces of peds and common very fine and fine tubular pores; few thin clay films on the faces of peds and in pores; about 10 percent pebbles, 30 percent cobbles, and 20 percent stones; slightly acid (pH 6.5); gradual irregular boundary.

B22t—16 to 37 inches; brown (7.5YR 5/4) very stony clay loam, dark brown (7.5YR 4/4) moist; moderate coarse and medium angular blocky structure; extremely hard, very firm, very sticky and very plastic; common very fine and few fine roots; common very fine interstitial pores along faces of peds and few very fine tubular pores; many moderately thick clay films on faces of peds and in pores; about 10 percent pebbles, 30 percent cobbles, and 20 percent stones; neutral (pH 6.7); abrupt irregular boundary.

B23tca—37 to 45 inches; light brown (7.5YR 6/4) very stony clay loam, brown (7.5YR 5/4) moist; moderate

coarse and medium angular blocky structure; extremely hard, very firm, very sticky and very plastic; common very fine roots; common very fine interstitial pores along faces of peds and few very fine tubular pores; common moderately thick clay films on faces of peds and in pores; about 10 percent pebbles, 30 percent cobbles, and 20 percent stones; common thin coatings of calcium carbonate on faces of peds; neutral (pH 7.2); clear wavy boundary.

Cca—45 to 60 inches; reddish yellow (7.5YR 6/6) very stony silty clay loam, strong brown (7.5YR 5/6) moist; massive; slightly hard, friable, sticky and slightly plastic; few very fine and fine roots; few very fine tubular pores; about 10 percent pebbles, 30 percent cobbles, and 20 percent stones; many fine rounded iron and manganese concretions; strongly effervescent; mildly alkaline (pH 7.4).

Bedrock is at a depth of 60 inches or more. Lime is at a depth of 36 to 60 inches or more. Rock fragment content in the control section averages 40 to 60 percent. Clay content in the control section averages 35 to 50 percent.

A horizon: Clay content is 27 to 34 percent. Rock fragment content is 35 to 65 percent. Reaction is medium acid or slightly acid.

Bt horizon: Texture is very stony clay loam, very stony silty clay loam, or very stony clay. Clay content is 35 to 50 percent. Rock fragment content is 40 to 60 percent. Reaction is slightly acid or neutral.

Cca horizon: Texture is very stony silt loam or very stony silty clay loam. Clay content is 23 to 34 percent. Rock fragment content is 40 to 60 percent. Reaction is neutral or mildly alkaline.

Formation of the Soils

Soil is a natural, three-dimensional body on the surface of the Earth that supports or is capable of supporting plants. It is a mixture of minerals, organic matter, water, and air, all of which occur in varying proportions (*15*). Soils differ in their appearance, productivity, and management requirements in different areas and even within short distances. The characteristics and properties of a soil are determined by the interaction of the five soil forming factors. These five factors are parent material, climate, living organisms, relief, and time. The influence of any one of these factors varies from place to place, but the interaction of all of them determines the kind of soil that forms.

Parent Material

The soils in the survey area formed in residual, colluvial, alluvial, lacustrine, and eolian parent materials. These parent materials are derived from material ranging in age from the Precambrian Pocatello Formation to Recent alluvium (*8*). The Bonneville Flood of late Pleistocene time (*13*) also had tremendous influence on the parent materials and soil development in Marsh Valley and in the Portneuf River Valley, downstream from a point near McCammon.

The soils in the mountains and foothills developed in parent materials derived primarily from Precambrian and Paleozoic quartzite, sandstone, limestone, dolomite, and related sedimentary and metasedimentary rock. There is tremendous variability in the degree of development expressed in these soils, primarily because of the kinds of parent material they formed in and also because of the other soil forming factors. These soils formed mostly in alluvium and colluvium; the only residual soils are on relatively stable positions on the landscape. The soils that formed in parent material derived from quartzite and sandstone exhibit more soil development than those that formed in parent material derived from limestone and dolomite. This is primarily because the lime in these materials must be leached before the formation and translocation of clay can take place. The soils that formed in material derived from sandstone and quartzite have no lime and have a well developed, medium textured to fine textured subsoil. Valmar, Camelback, and Hades are examples of soils that have a medium textured or moderately fine textured subsoil. Beaverdam, Harkness, and Mikesell are examples of soils that have a fine textured subsoil. The soils that formed in material derived from limestone and dolomite are either calcareous to the surface or are leached to some degree and have horizons of lime accumulation. They generally have a very weakly developed subsoil. Cedarhill, Ridgecrest, Ireland, and Ricrest soils are typical of these soils.

A very small percentage of the soils in the survey area formed in parent material derived from volcanics, including ash, tuff, and andesite of the Starlight Formation of middle Pliocene age and the Portneuf Basalt of late Pleistocene age. The volcanic ash and tuff deposits are scattered throughout the survey area. It appears that these deposits may have been extensive below an elevation of about 6,000 feet and were probably several tens of feet thick. Most of the ash and tuff has been eroded away. The areas currently present were probably covered by loess and alluvium, and thus protected, but they are now being exhumed through erosion. Coalbank, Trailcreek, and Lonigan soils formed in volcanic ash and tuff. The andesite is located at the extreme north end of the Bannock Range, west of the city of Pocatello. The only soils directly related to the andesite are those of the Swanner series, which are on steep and very steep side slopes and on ridgetops. The rest of the andesite is covered with deep deposits of loess. The Portneuf Basalt was scoured by the catastrophic Bonneville Flood. Soils such as those of the McCarey, McCarey Variant, Portino, and Thornock series formed in silty alluvium deposited as the flood abated and in loess deposited after the flood. The only influence from the basalt is the rock fragments in the soil profile.

The exact origin of the Portneuf Basalt is not known, but it is hypothesized that it originated east of the survey area and flowed down the ancient channel of the Portneuf River (*12*). This basalt also entered the ancient channel of Marsh Creek at its confluence with the Portneuf River, near McCammon. This blocked Marsh Creek, causing the formation of shallow lakes in Marsh Valley. Most of the resulting lake sediment has been buried or eroded away by the Bonneville Flood. The medium textured, carbonatic Watercanyon Variant soils formed in remnants of this sediment.

The coalesced fan terraces that border Marsh Valley and the Portneuf River at Pocatello originally were graded to a base level higher than the present level. The base level has been lowered several times but most dramatically by the Bonneville Flood. This downcutting

episode brought the base level to near its present level. Because of the lower base level, the fan terraces have been deeply dissected by the present-day drainageways.

Most of these fan terraces have been covered with loess. The origin of the loess is in question, but it probably is primarily from the Raft Formation on the Snake River Plain. Some of the loess in Marsh Valley may be derived from the pluvial lakes created by the Portneuf Basalt dam and from the flood plain of Marsh Creek. The medium textured Rexburg, Ririe, Lanoak, Watercanyon, and Pocatello soils formed in these loess deposits. Soils such as those of the Broadhead, Manila, and Yago series formed in areas of fan terraces that received a very thin layer of loess or none at all.

During Pleistocene time, Lake Bonneville covered the extreme southern part of the survey area. The fine textured Oxford and Banida soils formed in the lake sediment. Lake Bonneville overtopped at Red Rock Pass, south of Downey, creating a catastrophic flood that poured down Marsh Valley into the Portneuf River and finally into ancient American Falls Lake, which was on the Snake River, near Pocatello. A huge delta was formed where the floodwater entered ancient American Falls Lake. This deltaic material, called the Michaud Gravels, ranges from sand particles to boulders 8 feet in diameter or more. As the floodwater abated, finer textured material was deposited on the Michaud Gravels. Bahem, Broxon, and Broncho soils formed in this flood-deposited material. Farther upstream the floodwater scoured and cut channels through the Portneuf Basalt. It also reworked and redeposited sand and gravel in the Downey, Virginia, and Arimo areas and laid a thin layer of silty alluvium over the sand and gravel. The Downey and Arimo soils formed in this material.

The majority of the recent alluvium is silty and is derived from the loess-covered uplands. Joevar, Inkom, Downata, and Bear Lake soils formed in this silty alluvium. Tendoy soils formed in organic material deposited in areas gouged out by the Bonneville Flood and formerly occupied by ponds and lakes.

Climate

Climate has had a strong influence on soil formation in the survey area. Temperature and precipitation affect the weathering of rock; the decomposition of minerals; the processes of leaching, illuviation, and eluviation; the kinds and amount of vegetation; and the accumulation and decomposition of organic matter.

The climate in the survey area generally is characterized by warm, dry summers and cold, moist winters. Temperature and precipitation are strongly influenced by the topography of the area. Generally, average annual precipitation increases and average annual temperature decreases as elevation increases. The warmest and driest part of the survey area is at the lowest elevation, which is in the northwestern corner, north of Pocatello. This part receives about 10 inches of precipitation annually and has an average annual temperature of about 47 degrees F. The greatest amount of precipitation and the coldest temperatures occur in the mountains in the east-central part of the survey area. This part receives about 25 to 35 inches of precipitation annually and has an average annual temperature of about 36 to 41 degrees.

The soils in the driest and warmest parts of the survey area have a light-colored surface layer. These soils also have calcium carbonate in the surface layer because there is not enough water moving through the soils to leach the calcium carbonate. Vegetation is somewhat sparse because of the limited precipitation. Examples of these soils are those of the Bahem, Broxon, and Pocatello series.

In areas that receive about 13 to 16 inches of precipitation, the calcium carbonate has been leached from the surface layer. With the increase in precipitation, vegetation, especially grasses, is more abundant. The grasses produce very extensive fibrous root systems. Large amounts of organic matter are incorporated into the soils from the annual dieback of the roots; therefore, the soils have a dark-colored surface layer. Examples of these soils are those of the Ririe, Rexburg, and Arimo series.

At higher elevations, precipitation is about 16 to 20 inches and the average annual temperatures are cooler. The rate of evapotranspiration is lower in these areas; thus, more water is available for soil forming processes. Calcium carbonate has been leached to a depth of 40 inches or more in the soils. The additional water aids in the decomposition of minerals to form clay and in the translocation of this clay. The vegetation on these soils is quite lush and is dominated by grasses. Organic matter has built up in the soils because the cool temperatures slow the microbial breakdown of organic matter. Camelback, Hades, and Broadhead soils have a deep, dark-colored surface layer and an accumulation of clay in the subsoil.

Soils in the coolest and wettest parts of the survey area support native vegetation dominated by an overstory of conifers and a very sparse understory. This kind of vegetation does not produce the thick, fibrous root system that grasses do, so large amounts of organic matter are not incorporated into the soils. Tree litter falls on the top of the soils and is not directly incorporated into them. Because of the cool temperatures, microbial activity that aids in the decomposition of the tree litter is retarded. The soils in these parts of the area are leached of calcium carbonate and have an accumulation of clay in the subsoil. The Harkness and Mikesell soils are examples. The surface layer of these soils is low in organic matter content, and the subsoil is fine textured.

Living Organisms

Plant and animal life is an important factor in the process of soil formation. The kinds and amount of vegetation have had a strong influence on the development of the soils in the survey area.

The poorly drained and very poorly drained soils on the flood plains developed under water-tolerant grasses, sedges, and forbs. Organic soils have developed in areas that have a permanent high water table because the growth of aerobic micro-organisms is inhibited. Tendoy muck is an example. Soils such as those in the Downata, Bear Lake, and Inkom series have developed in areas where the water table drops sufficiently in summer to allow organic matter to decompose. The dark color of the surface layer of these soils indicates that a large amount of organic matter is decomposing and is being incorporated into the soil.

The kind and amount of vegetation on the well drained soils are directly related to the amount of effective moisture received. The vegetation in the areas that receive less precipitation is mainly shrubs and grasses. In the areas that receive the most precipitation, the vegetation is mainly an overstory of coniferous trees and a very sparse understory of grasses and forbs.

On the lower terraces and foothills at the north end of the survey area, precipitation is about 10 to 12 inches. Vegetation is sparse in these areas, and the annual additions of organic matter are relatively small. Soils such as those in the Bahem, Broxon, and Pocatello series developed in these areas. They have a light-colored surface layer.

The soils at the intermediate elevations in the survey area formed under shrubs and grasses. In these areas, however, precipitation is higher and the amount of vegetation, especially grasses, is much greater. The abundance of fibrous roots has added much humus to the soils, and a dark-colored surface layer has formed in them. Micro-organisms and earthworms are very active in these soils. Soils such as those in the Bancroft, Rexburg, Ririe, and Lanoak series formed in these areas.

At the higher elevations, effective moisture is highest. The soils in these areas formed under an overstory of conifers and a sparse understory of mainly grasses and forbs. Since this type of plant community does not produce an abundant fibrous root system, the majority of the organic material comes from needles, leaves, and twigs. Because of the colder temperatures, which retard microbial activity, the organic material does not decompose as rapidly as at lower elevations. The soils in these areas generally have a layer of organic litter over a very thin, dark-colored surface layer, such as that of the Harkness soils, or a light-colored surface layer, such as that of the Mikesell soils.

Relief

The relief of the survey area has been determined mainly by its past geologic activity. Relief influences the formation of soils by its effect on natural soil drainage, erosion, air drainage, precipitation or effective moisture received, and exposure to the sun and wind. The survey area is characterized by steep mountainsides, gently rolling to steep foothills, deeply dissected fan terraces, flood plains, and terraces.

The soils of the mountains and foothills dramatically exhibit the effects of relief on soil development. These soils are steep and well drained. The soils on convex, south- and west-facing ridges and summits are subject to geologic erosion, and they receive less moisture because the wind blows the snow off. Because these areas receive more direct sunlight, the soil temperature is warmer and the soils dry out faster. These soils are generally moderately deep and have a relatively thin surface layer. Examples of these moderately deep, steep soils are those of the Ireland, Ridgecrest, and Valmar series. These soils have a high percentage of rock fragments.

Soils in concave positions and on foot slopes generally receive moisture from runoff and snow drifting from convex areas. Because of the extra moisture received, these soils produce more vegetation, which in turn reduces erosion. The deep and very deep Camelback, Hades, and Ricrest soils are examples of soils in these areas. These soils have a thick, dark-colored surface layer.

Soils at higher elevations on north- and east-facing side slopes receive less direct sunlight and have colder soil temperatures, and they receive more precipitation and retain moisture longer. Soils in the Harkness, Mikesell, and Beaverdam series are examples. These soils have a strongly developed, fine textured subsoil.

Soils on loess-covered fan terraces are very deep and well drained. The Watercanyon soils are on south- and west-facing side slopes of fan terraces. Because the snow blows off these soils, they receive less precipitation than do soils such as the Ririe and Rexburg soils that are in more nearly plane areas. The Watercanyon soils also receive more direct sunlight, dry out quicker, and are subject to a greater hazard of erosion. They exhibit very little soil development; whereas the Ririe and Rexburg soils have a dark-colored surface layer. The Lanoak soils are on north- and east-facing side slopes. They receive additional moisture from drifting snow, have cooler soil temperatures, and retain moisture longer. These soils have a very thick, dark-colored surface layer because of the increased organic matter produced by the more luxuriant vegetation.

The soils on terraces and flood plains are nearly level to gently sloping. Those on the higher terraces have better drainage than do those on the lower terraces and flood plains. The Arimo, Bahem, Broxon, Downey, and

Joevar soils are on the higher terraces and are well drained. Because of the nearly level topography of the lower terraces and flood plains and the shallow natural stream channels, drainage is poor in these areas. The soils in these areas have a high or fluctuating water table. The Inkom, Downata, and Bear Lake soils formed on flood plains and low terraces. These soils are gleyed and mottled because of poor drainage.

Time

The soils in the survey area vary considerably in age. The length of time the parent material has been subjected to the effects of climate and living organisms and modified by relief is important in the formation of soils. The relative age of soils is expressed in the differentiation and degree of expression of horizons within each soil.

In general, soils on the flood plains and low terraces are young. The Downata, Inkom, and Joevar soils formed in Recent alluvium. They have accumulated organic matter only in the surface layer and have developed a weak B2 horizon.

Soils on the terraces formed by the Bonneville Flood and on the loess-covered fan terraces appear to be nearly the same age. The soils on these positions that receive more precipitation have accumulated organic matter in the surface layer and have developed a B2 horizon. Lime has been leached downward in these soils. The Rexburg, Arimo, Hondoho, Arbone, and Lanoak soils are examples. The soils in the drier areas have accumulated less organic matter and are leached of lime to a lesser depth. These soils are calcareous to the surface, but they exhibit some translocation of lime. The Pocatello, Bahem, and Broxon soils are examples.

Soils on the higher fan terraces and mountain foot slopes that are not covered with loess are old enough for the total amount of clay to increase through weathering and to accumulate in the subsoil. The Yago, Manila, and Broadhead soils are on these positions. They have a well developed, fine textured B2t horizon.

Soils on the mountains and foothills differ greatly in degree of development. Young soils such as those of the Cedarhill and Ridgecrest series have steep slopes and south or west aspects. Since the natural vegetation tends to be somewhat sparse and the slopes steep, these soils have lost soil material by erosion. They are moderately deep to very deep but have only a thin A horizon and are calcareous to the surface. The Camelback and Valmar soils have more plant cover and thus are better protected from erosion. These soils have a much greater accumulation of organic matter in the surface layer and have some accumulation of clay in the subsoil. Soils such as those in the Toponce, Beaverdam, Harkness, and Mikesell series have been developing long enough for the total amount of clay to increase through weathering and to accumulate in the subsoil, forming a very well developed, fine textured B2t horizon.

On the basis of the relative age of the volcanic ash and tuff, the soils that formed in this material should exhibit much more development than they actually do. The Trailcreek, Coalbank, and Lonigan soils have an accumulation of organic matter in the A horizon only and have a very weakly developed B horizon. There are two possible explanations for this lack of soil development. The first is that after the parent material was deposited, it was buried by loess and alluvium. Volcanic ash and tuff have been found in several areas beneath an overburden of loess and alluvium. Through geologic and accelerated erosion it is now being exhumed and hence has been exposed to the soil forming processes for a relatively short period of time. The other explanation is that since this volcanic material is extremely erodible, these soils have lost soil material through erosion nearly as fast as soil development has taken place. It appears to be a combination of these two situations that has determined the degree of soil development that has taken place in the volcanic ash and tuff parent materials.

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Glossary

Alluvium. Material, such as sand, silt, or clay, deposited on land by streams.

Animal-unit-month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Area reclaim (in tables). An area difficult to reclaim after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

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—

Low	0 to 3.75
Moderate	3.75 to 7.5
High	More than 7.5

Back slope. The geomorphic component that forms the steepest inclined surface and principal element of many hillsides. Back slopes in profile are commonly steep, are linear, and may or may not include cliff segments.

Basal area. The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bottom land. The normal flood plain of a stream, subject to flooding.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Breaks. The steep to very steep broken land at the border of an upland summit that is dissected by ravines.

Breast height. An average height of 4 1/2 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

Brush management. Use of mechanical, chemical, or biological methods to reduce or eliminate competition of woody vegetation to allow understory grasses and forbs to recover, or to make conditions favorable for reseeding. It increases production of forage, which reduces erosion. Brush management may improve the habitat for some species of wildlife.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

Canopy. The leafy crown of trees or shrubs. (See crown.)

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Chiseling. Tillage with an implement having one or more soil-penetrating points that loosen the subsoil and bring clods to the surface. A form of emergency tillage to control soil blowing.

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.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Claypan. A slowly permeable soil horizon that contains much more clay than the horizons above it. A claypan is commonly hard when dry and plastic or stiff when wet.

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 centimeters) in diameter.

Cobbly soil material. Material that is 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.5 to 25 centimeters) 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 slope. Irregular or variable slope. Planning or constructing terraces, diversions, and other water-control measures on a complex slope is difficult.

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.

Compressible (in tables). Excessive decrease in volume of soft soil under load.

Concretions. Grains, pellets, or nodules of various sizes, shapes, and colors consisting of concentrated compounds or cemented soil grains. The composition of most concretions is unlike that of the surrounding soil. Calcium carbonate and iron oxide are common compounds in concretions.

Conglomerate. A coarse grained, clastic rock composed of rounded to subangular rock fragments more than 2 millimeter in diameter. It commonly has a matrix of sand and finer material. Conglomerate is the consolidated equivalent of gravel.

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.

Contour stripcropping (or contour farming). Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

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 and 40 or 80 inches.

Corrosive. High risk of corrosion to uncoated steel or deterioration of concrete.

Crop residue management. Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Cropping system. Growing crops using a planned system of rotation and management practices.

Cross-slope farming. Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

Cutbanks cave (in tables). The walls of excavations tend to cave in or slough.

Decreasers. The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.

Deferred grazing. Postponing grazing or arresting grazing for a prescribed period.

Depth to rock (in tables). Bedrock is too near the surface for the specified use.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

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 low water holding capacity. They are not suited to crop production unless irrigated.
Somewhat excessively drained.—These soils have high hydraulic conductivity and low water holding capacity. Without irrigation, only a narrow range of crops can be grown and yields are low.
Well drained.—These soils have 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 artificial drainage is provided. 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 artificial drainage is

provided. 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. They are wet enough to prevent the growth of important crops (except rice) unless artificially drained.

Drainage, surface. Runoff, or surface flow of water, from an area.

Duff. A term used to identify a generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

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.

Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of the activities of man or other animals or of a catastrophe in nature; for example, fire that exposes the surface.

Escarpment. A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and produced by erosion or faulting. Synonym: scarp.

Excess alkali (in tables). Excess exchangeable sodium in the soil. The resulting poor physical properties restrict the growth of plants.

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.

Excess lime (in tables). Excess carbonates in the soil that restrict the growth of some plants.

Excess salts (in tables). Excess water-soluble salts in the soil that restrict the growth of most plants.

Extrusive rock. Igneous rock derived from deep-seated molten matter (magma) emplaced on the earth's surface.

Fallow. Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

Fan terrace. A relict alluvial fan, no longer a site of active deposition, incised by younger and lower alluvial surfaces.

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.

Fine textured soil. Sandy clay, silty clay, and clay.

Flaggy soil material. Material that is, by volume, 15 to 35 percent flagstones. Very flaggy soil material is 35 to 60 percent flagstones, and extremely flaggy soil material is more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

Flood plain. A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.

Foothill. A steeply sloping upland that has relief of as much as 1,000 feet (or 300 meters) and fringes a mountain range or high-plateau escarpment.

Foot slope. The inclined surface at the base of a hill.

Forb. Any herbaceous plant not a grass or a sedge.

Forest cover. All trees and other woody plants (underbrush) covering the ground in a forest.

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 cropland.

Gravel. Rounded or angular fragments of rock up to 3 inches (2 millimeters to 7.6 centimeters) 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, up to 3 inches (7.6 centimeters) in diameter.

Ground water (geology). Water filling all the unblocked pores of underlying material below the water table.

Gully. A miniature valley with steep sides cut by running water and through which water ordinarily runs only after rainfall. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.

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 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 is 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 upper case letter represents the major horizons. Numbers or lower case letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the *Soil Survey Manual*. 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, cost 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, alluminum, 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.

R layer.—Consolidated rock beneath the soil. The rock 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. In group A are soils having a high infiltration rate when thoroughly wet and having a low runoff potential. They are mainly deep, well drained, and sandy or gravelly. In group D, at the other extreme, are soils having a very slow infiltration rate and thus a high runoff potential. 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.

Igneous rock. Rock formed by solidification from a molten or partially molten state. Major varieties include plutonic and volcanic rock. Examples are andesite, basalt, and granite.

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.

Increasers. Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasers commonly are the shorter plants and the less palatable to livestock.

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.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Intermittent stream. A stream, or reach of a stream, that flows for prolonged periods only when it receives ground water discharge or long, continued

contributions from melting snow or other surface and shallow subsurface sources.

Invaders. On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are—
Border.—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.
Basin.—Water is applied rapidly to nearly level plains surrounded by levees or dikes.
Controlled flooding.—Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.
Corrugation.—Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.
Drip (or trickle).—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.
Furrow.—Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.
Sprinkler.—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.
Subirrigation.—Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.
Wild flooding.—Water, released at high points, is allowed to flow onto an area without controlled distribution.

Lacustrine deposit (geology). Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Large stones (in tables). Rock fragments 3 inches (7.5 centimeters) 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.

Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.

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. Nearly all such rocks are crystalline.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minimum tillage. Only the tillage essential to crop production and prevention of soil damage.

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, and fine sandy loam.

Moderately fine textured soil. Clay loam, sandy clay loam, and 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 above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides and considerable bare-rock surface. A mountain can occur as a single, isolated mass or in a group forming a chain or range.

Muck. Dark colored, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Munsell notation. A designation of color by degrees of the three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color of 10YR hue, value of 6, and chroma of 4.

Neutral soil. A soil having a pH value between 6.6 and 7.3. (See Reaction, soil.)

Organic matter. Plant and animal residue in the soil in various stages of decomposition.

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.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

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 meter to 10 square meters), depending on the variability of the soil.

Percs slowly (in tables). The slow movement of water through the soil adversely affecting the specified use.

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 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 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 pipelike cavities by water moving through the soil.

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.

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Ponding. Standing water on soils in closed depressions. The water can be removed only by percolation or 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.

Poor outlets (in tables). Refers to areas where surface or subsurface drainage outlets are difficult or expensive to install.

Potential native plant community. The plant community on a given site that will be established if present environmental conditions continue to prevail and the site is properly managed. (See climax plant community.)

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This increases the vigor and reproduction of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

Rangeland. Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

Range condition. The present composition of the plant community on a range site in relation to the potential natural plant community for that site. Range condition is expressed as excellent, good, fair, or poor on the basis of how much the present plant community has departed from the potential.

Range site. An area of rangeland where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. A range site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other range sites in kind or proportion of species or total production.

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 degree of acidity or alkalinity is expressed as—

	pH
Extremely acid	Below 4.5
Very strongly acid	4.5 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

Relief. The elevations or inequalities of a land surface, considered collectively.

Residuum (residual soil material). Unconsolidated, weathered, or partly weathered mineral material that accumulated as consolidated rock disintegrated in place.

Rill. A steep sided channel resulting from accelerated erosion. A rill is generally a few inches deep and not wide enough to be an obstacle to farm machinery.

Rippable. Bedrock or hardpan can be excavated using a single-tooth ripping attachment mounted on a tractor with a 200-300 draw bar horsepower rating.

Road cut. A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

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.

Sandstone. Sedimentary rock containing dominantly sand-size particles.

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.

Saprolite (soil science). Unconsolidated residual material underlying the soil and grading to hard bedrock below.

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.

Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and runoff water.

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.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

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.

Site class. A grouping of site indexes into 5 to 7 production capability levels. Each level can be represented by a site curve.

Site curve (50-year). A set of related curves on a graph that shows the average height of dominant trees for the range of ages on soils that differ in productivity. each level is represented by a curve. The basis of the curves is the height of dominant trees that are 50 years old or are 50 years old at breast height.

Site curve (100-year). A set of related curves on a graph that show the average height of dominant and codominant trees for a range of ages on soils that differ in productivity. Each level is represented by a curve. The basis of the curves is the height of dominant and codominant trees that are 100 years old or are 100 years old at breast height.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75 feet.

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 a hundred feet of horizontal distance. In this survey the following slope classes are recognized:

	Percent
Nearly level	0 to 2
Gently sloping	2 to 5
Strongly sloping	5 to 15
Moderately steep	15 to 25
Steep	25 to 50
Very steep	50 and higher

Slope (in tables). Slope is great enough that special practices are required to insure 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 (7.5 centimeters) 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 mm in equivalent diameter and ranging between specified size limits. The names and sizes of separates recognized in the United States are as follows:

	Millimeters
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 60 centimeters) in diameter if rounded or 6 to 15 inches (15 to 38 centimeters) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

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 grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling. Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum. The part of the soil below the solum.

Subsurface layer. Technically, the E horizon. generally refers to a leached horizon lighter in color and lower in content of organic matter than the overlying surface layer.

Summer fallow. The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.

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 centimeters). Frequently designated as the "plow layer," or the "Ap horizon."

Talus. Rock fragments of any size or shape, commonly coarse and angular, derived from and lying at the base of a cliff or very steep, rock slope. The accumulated mass of such loose, broken rock formed chiefly by falling, rolling, or sliding.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior.

Terrace. An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field is generally built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geologic). An old alluvial plain, ordinarily flat or undulating, bordering a river, a lake, or the 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.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toe slope. The outermost inclined surface at the base of a hill; part of a foot slope.

Too arid (in tables). The soil is dry most of the time, and vegetation is difficult to establish.

Topsoil. The upper part of the soil, which 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.

Tuff. A compacted deposit that is 50 percent or more volcanic ash and dust.

Unstable fill (in tables). Risk of caving or sloughing on banks of fill material.

Upland (geology). Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Valley fill. In glaciated regions, material deposited in stream valleys by glacial melt water. In nonglaciated regions, alluvium deposited by heavily loaded streams.

Variant, soil. A soil having properties sufficiently different from those of other known soils to justify a new series name, but occurring in such a limited geographic area that creation of a new series is not justified.

Water bars. Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

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.

Windthrow. The action of uprooting and tipping over trees by the wind.

Tables

TABLE 1.--TEMPERATURE AND PRECIPITATION

[Recorded in the period 1962-79 at Arbon, Idaho]

Month	Temperature						Precipitation				
	Average daily maximum	Average daily minimum	Average	2 years in 10 will have-- Maximum temperature higher than--	2 years in 10 will have-- Minimum temperature lower than--	Average number of growing degree days*	Average	2 years in 10 will have-- Less than--	2 years in 10 will have-- More than--	Average number of days with 0.10 inch or more	Average snowfall
	°F	°F	°F	°F	°F	Units	In	In	In		In
January----	30.8	14.5	22.7	49	-19	0	1.72	0.84	2.48	8	16.7
February---	36.8	19.3	28.1	51	-10	14	1.32	0.53	1.98	5	15.9
March------	43.3	22.6	33.0	67	-5	40	1.28	0.68	1.80	5	6.4
April------	54.2	29.3	41.8	75	12	122	1.34	0.47	2.05	5	3.9
May--------	66.9	36.2	51.6	85	18	360	1.24	0.55	1.83	5	0.6
June-------	75.8	43.5	59.7	94	29	591	1.78	0.87	2.56	5	0.0
July-------	86.7	49.4	68.1	97	34	871	0.84	0.18	1.36	2	0.0
August-----	84.5	47.8	66.2	97	30	812	0.84	0.19	1.33	3	0.0
September--	75.0	39.4	57.2	91	21	516	0.90	0.15	1.46	3	0.1
October----	62.5	30.7	46.6	80	10	228	1.08	0.30	1.71	4	1.9
November---	43.9	23.5	33.7	64	-4	16	1.48	0.56	2.24	5	8.8
December---	32.8	15.5	24.2	48	-15	6	1.80	0.48	2.86	5	14.4
Yearly:											
Average--	57.8	31.0	44.4	---	---	---	---	---	---	---	---
Extreme--	---	---	---	98	-24	---	---	---	---	---	---
Total----	---	---	---	---	---	3,576	15.62	12.41	18.62	55	68.7

*A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principle crops in the area (40° F).

TABLE 2.--FREEZE DATES IN SPRING AND FALL

[Recorded in the period 1962-79
at Arbon, Idaho]

Probability	Temperature		
	24° F or lower	28° F or lower	32° F or lower
Last freezing temperature in spring:			
1 year in 10 later than--	May 27	June 8	June 29
2 years in 10 later than--	May 20	June 1	June 22
5 years in 10 later than--	May 6	May 19	June 7
First freezing temperature in fall:			
1 year in 10 earlier than--	September 17	September 4	August 6
2 years in 10 earlier than--	September 23	September 9	August 16
5 years in 10 earlier than--	Ocotber 5	September 20	September 4

TABLE 3.--GROWING SEASON

[Recorded in the period 1962-79
at Arbon, Idaho]

Probability	Length of growing season if daily minimum temperature exceeds--		
	24° F	28° F	32° F
	Days	Days	Days
9 years in 10	127	93	43
8 years in 10	135	103	58
5 years in 10	152	123	87
2 years in 10	170	145	119
1 year in 10	183	159	140

TABLE 4.--ACREAGE AND PROPORTIONATE EXTENT OF THE SOILS

Map symbol	Soil name	Bannock County	Power County	Total--	
				Area	Extent
		Acres	Acres	Acres	Pct
1	Arbone silt loam, 1 to 4 percent slopes	2,416	0	2,416	0.5
2	Arbone silt loam, 4 to 12 percent slopes	1,715	0	1,715	0.3
3	Arbone-Hondoho complex, 12 to 20 percent slopes	2,402	0	2,402	0.5
4	Arbone-McCarey-Lava flows complex, 4 to 12 percent slopes	840	0	840	0.2
5	Arbone-Rubble land complex, 2 to 8 percent slopes	290	0	290	0.1
6	Arimo silt loam, 0 to 3 percent slopes	2,188	0	2,188	0.4
7	Bahem silt loam, 0 to 2 percent slopes	4,351	0	4,351	0.9
8	Bahem silt loam, 2 to 4 percent slopes	709	0	709	0.1
9	Bancroft silt loam, 4 to 12 percent slopes	4,362	0	4,362	0.9
10	Bancroft silt loam, 12 to 20 percent slopes	1,776	0	1,776	0.4
11	Bancroft-Manila complex, 15 to 30 percent slopes	1,535	0	1,535	0.3
12	Banida silty clay loam, 0 to 2 percent slopes	253	0	253	0.1
13	Bear Lake-Bear Lake Variant complex, drained, 0 to 1 percent slopes	649	0	649	0.1
14	Broadhead-Hades-Yago complex, 4 to 20 percent slopes	1,332	0	1,332	0.3
15	Broadhead-Yago complex, 4 to 12 percent slopes	2,085	0	2,085	0.4
16	Broadhead-Yago complex, 12 to 20 percent slopes	1,330	0	1,330	0.3
17	Broncho cobbly loam, 1 to 8 percent slopes	642	0	642	0.1
18	Broncho extremely stony loam, 4 to 20 percent slopes	673	100	773	0.2
19	Broncho Variant-Pocatello complex, 20 to 50 percent slopes	1,418	0	1,418	0.3
20	Broncho Variant-Ririe-Pocatello complex, 20 to 50 percent slopes	665	0	665	0.1
21	Broxon silt loam, 0 to 2 percent slopes	1,893	347	2,240	0.4
22	Broxon silt loam, 2 to 4 percent slopes	1,358	0	1,358	0.3
23	Camelback-Cedarhill, high precipitation-Lanoak complex, 20 to 50 percent slopes	14,948	0	14,948	3.0
24	Camelback-Greys complex, 20 to 30 percent slopes	1,447	0	1,447	0.3
25	Camelback-Hades complex, 6 to 20 percent slopes	5,379	0	5,379	1.1
26	Camelback-Valmar-Hades complex, 20 to 30 percent slopes	1,332	0	1,332	0.3
27	Camelback Variant-Valmar Variant complex, 20 to 60 percent slopes	1,805	0	1,805	0.4
28	Cedarhill very cobbly silt loam, 30 to 60 percent slopes	3,589	0	3,589	0.7
29	Cedarhill-Ireland-Rock outcrop complex, 30 to 60 percent slopes	6,682	0	6,682	1.3
30	Cedarhill-Ririe-Watercanyon complex, 30 to 60 percent slopes	28,100	1,055	29,155	5.8
31	Cedarhill-Rock outcrop complex, 30 to 60 percent slopes	5,380	0	5,380	1.1
32	Cedarhill, high precipitation-Camelback-Moonlight complex, 20 to 50 percent slopes	5,825	0	5,825	1.2
33	Cedarhill, high precipitation-Hades-Ricrest complex, 20 to 50 percent slopes	9,869	0	9,869	2.0
34	Cedarhill, high precipitation-Hondoho-Arbone complex, 20 to 50 percent slopes	2,480	0	2,480	0.5
35	Cedarhill, high precipitation-Hondoho-Ridgecrest complex, 20 to 50 percent slopes	5,236	0	5,236	1.0
36	Cedarhill, high precipitation-Manila complex, 30 to 50 percent slopes	579	0	579	0.1
37	Cedarhill, high precipitation-Trailcreek-Coalbank complex, 20 to 50 percent slopes	4,630	0	4,630	0.9
38	Coalbank very fine sandy loam, 4 to 12 percent slopes	565	0	565	0.1
39	Coalbank-Trailcreek-Lonigan complex, 12 to 20 percent slopes	1,491	0	1,491	0.3
40	Coalbank-Trailcreek-Lonigan complex, 20 to 50 percent slopes	2,123	0	2,123	0.4
41	Downata-Bear Lake complex, drained, 0 to 1 percent slopes	6,169	0	6,169	1.2
42	Downey-Arimo complex, 0 to 3 percent slopes	9,328	0	9,328	1.8
43	Downey-Arimo complex, 3 to 8 percent slopes	5,104	0	5,104	1.0
44	Enochville-Enochville Variant complex, 0 to 1 percent slopes	621	0	621	0.1
45	Greys-Pavohroo-Sedgway association, 8 to 20 percent slopes	1,137	0	1,137	0.2
46	Hades gravelly silt loam, 6 to 15 percent slopes	863	0	863	0.2
47	Hades-Camelback-Hondoho complex, 30 to 60 percent slopes	4,761	0	4,761	0.9
48	Hades-Holmes complex, 1 to 10 percent slopes	1,533	0	1,533	0.3
49	Hades-Lanoak complex, 4 to 12 percent slopes	1,220	0	1,220	0.2
50	Hades-Lanoak-Camelback complex, 20 to 50 percent slopes	8,938	0	8,938	1.8
51	Harkness-Sedgway-Mikesell complex, 20 to 50 percent slopes	14,776	0	14,776	2.9

See footnote at end of table.

TABLE 4.--ACREAGE AND PROPORTIONATE EXTENT OF THE SOILS--Continued

Map symbol	Soil name	Bannock County	Power County	Total--	
				Area	Extent
		Acres	Acres	Acres	Pct
52	Holmes gravelly loam, 1 to 4 percent slopes	1,725	0	1,725	0.3
53	Hondoho-Arbone complex, 4 to 12 percent slopes	6,559	30	6,589	1.3
54	Hondoho-Arbone-Ririe complex, 20 to 50 percent slopes	8,707	0	8,707	1.7
55	Hondoho-Hades complex, 4 to 12 percent slopes	630	0	630	0.1
56	Hondoho-Lanoak-Camelback complex, 20 to 50 percent slopes	4,840	0	4,840	1.0
57	Inkom silt loam, 0 to 1 percent slopes	883	0	883	0.2
58	Inkom silt loam, drained, 0 to 1 percent slopes	4,905	0	4,905	1.0
59	Ireland-Camelback-Rock outcrop complex, 30 to 60 percent slopes	14,357	0	14,357	2.8
60	Ireland-Dateman-Pavohroo association, 20 to 60 percent slopes	12,451	0	12,451	2.5
61	Ireland-Hades-Cedarhill complex, 20 to 60 percent slopes	997	0	997	0.2
62	Joes silt loam, 1 to 4 percent slopes	643	0	643	0.1
63	Joes silt loam, 4 to 12 percent slopes	3,135	0	3,135	0.6
64	Joevar silt loam, 0 to 3 percent slopes	3,650	0	3,650	0.7
65	Lanoak silt loam, 1 to 4 percent slopes	237	0	237	*
66	Lanoak silt loam, 4 to 12 percent slopes	3,549	0	3,549	0.7
67	Lanoak silt loam, 12 to 20 percent slopes	5,230	0	5,230	1.0
68	Lanoak silt loam, 20 to 30 percent slopes	1,840	0	1,840	0.4
69	Lanoak-Camelback complex, 20 to 50 percent slopes	4,434	0	4,434	0.9
70	Lanoak-Greys association, 4 to 12 percent slopes	2,090	0	2,090	0.4
71	Lanoak-Greys association, 12 to 20 percent slopes	1,027	0	1,027	0.2
72	Lanoak-Hades complex, 6 to 20 percent slopes	4,592	0	4,592	0.9
73	Lanoak-Watercanyon-Rexburg complex, 12 to 20 percent slopes	4,045	0	4,045	0.8
74	Lava flows-McCarey-McCarey Variant complex, 1 to 8 percent slopes	7,162	0	7,162	1.4
75	Manila-Bancroft complex, 6 to 15 percent slopes	1,749	0	1,749	0.3
76	Manila-Cedarhill, high precipitation complex, 20 to 30 percent slopes	667	0	667	0.1
77	McDole-McDole Variant complex, 0 to 2 percent slopes	1,962	45	2,007	0.4
78	Moonlight silt loam, 30 to 60 percent slopes	1,201	0	1,201	0.2
79	Moonlight-Camelback association, 30 to 60 percent slopes	10,132	125	10,257	2.0
80	Moonlight-Pavohroo complex, 30 to 60 percent slopes	2,664	0	2,664	0.5
81	Oxford silty clay loam, 4 to 12 percent slopes	635	0	635	0.1
82	Oxford-Banida complex, 2 to 4 percent slopes	446	0	446	0.1
83	Pavohroo-Moonlight complex, 30 to 60 percent slopes	4,833	0	4,833	1.0
84	Pavohroo-Sedgway-Toponce complex, 20 to 50 percent slopes	5,455	0	5,455	1.1
85	Pits, gravel	818	50	868	0.2
86	Pits, quarry	64	45	109	*
87	Pocatello silt loam, 1 to 4 percent slopes	2,400	0	2,400	0.5
88	Pocatello silt loam, 4 to 8 percent slopes	3,386	50	3,436	0.7
89	Pocatello silt loam, 8 to 12 percent slopes	2,542	155	2,697	0.5
90	Pocatello silt loam, 12 to 20 percent slopes	1,901	235	2,136	0.4
91	Pocatello silt loam, 20 to 30 percent slopes	737	30	767	0.2
92	Portino-Thornock complex, 0 to 2 percent slopes	800	0	800	0.2
93	Rexburg silt loam, 1 to 4 percent slopes	5,736	0	5,736	1.1
94	Rexburg silt loam, 4 to 12 percent slopes	16,239	0	16,239	3.2
95	Rexburg silt loam, 12 to 20 percent slopes	3,857	0	3,857	0.8
96	Rexburg silt loam, 20 to 40 percent slopes	555	0	555	0.1
97	Ririe silt loam, 1 to 4 percent slopes	8,055	0	8,055	1.6
98	Ririe silt loam, 4 to 12 percent slopes	13,798	250	14,048	2.8
99	Ririe silt loam, 12 to 20 percent slopes	1,159	0	1,159	0.2
100	Ririe-Watercanyon complex, 4 to 12 percent slopes	11,637	0	11,637	2.3
101	Ririe-Watercanyon complex, 12 to 20 percent slopes	22,186	0	22,186	4.4
102	Ririe-Watercanyon complex, 20 to 30 percent slopes	1,292	0	1,292	0.3
103	Ririe-Watercanyon-Cedarhill complex, 12 to 30 percent slopes	8,116	0	8,116	1.6
104	Rock outcrop	620	0	620	0.1
105	Rubble land-Haploxerolls complex, steep	1,093	0	1,093	0.2
106	Scout Variant-Camelback Variant association, 30 to 60 percent slopes	3,330	0	3,330	0.7
107	Sedgway-Beaverdam complex, 30 to 60 percent slopes	10,284	0	10,284	2.0
108	Slickens	0	261	261	0.1
109	Swanner-Hondoho complex, 12 to 20 percent slopes	142	362	504	0.1
110	Swanner-Rock outcrop complex, 50 to 80 percent slopes	112	350	462	0.1

See footnote at end of table.

TABLE 4.--ACREAGE AND PROPORTIONATE EXTENT OF THE SOILS--Continued

Map symbol	Soil name	Bannock County	Power County	Total--	
				Area	Extent
		Acres	Acres	Acres	Pct
111	Tendoy muck, drained, 0 to 1 percent slopes	1,337	0	1,337	0.3
112	Toponce-Broadhead association, 6 to 30 percent slopes	2,237	0	2,237	0.4
113	Urban land-Bahem-Broxon complex, 0 to 3 percent slopes	4,983	0	4,983	1.0
114	Urban land-Bahem-Broxon complex, 3 to 6 percent slopes	723	0	723	0.1
115	Valmar very cobbly silt loam, low precipitation, 40 to 80 percent slopes	2,578	0	2,578	0.5
116	Valmar-Camelback-Hades complex, 30 to 60 percent slopes	29,580	130	29,710	5.8
117	Valmar-Hades complex, 20 to 50 percent slopes	268	0	268	0.1
118	Valmar, cool-Rock outcrop complex, 20 to 60 percent slopes	2,551	0	2,551	0.5
119	Valmar, low precipitation-Watercanyon-Hondoho complex, 20 to 50 percent slopes	7,833	615	8,448	1.7
120	Watercanyon silt loam, 12 to 20 percent slopes	438	0	438	0.1
121	Watercanyon-Swanner-Rock outcrop complex, 20 to 50 percent slopes	1,788	85	1,873	0.4
122	Wursten gravelly silt loam, 1 to 4 percent slopes	1,111	0	1,111	0.2
123	Wursten-Watercanyon Variant-Hondoho complex, 12 to 40 percent slopes	5,506	0	5,506	1.1
	Water	274	0	274	0.1
	Total	500,290	4,320	504,610	100.0

* Less than 0.1 percent.

TABLE 5.--YIELDS PER ACRE OF CROPS AND PASTURE

[Yields in the N columns are for nonirrigated soils; those in the I columns are for irrigated soils. Yields are those that can be expected under a high level of management. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil. Only the soils suited to crops and pasture are listed]

Soil name and map symbol	Wheat		Barley		Irish potatoes		Alfalfa hay		Pasture	
	N	I	N	I	N	I	N	I	N	I
	Bu	Bu	Bu	Bu	Cwt	Cwt	Tons	Tons	AUM*	AUM*
1---- Arbone	27	55	32	60	---	---	1.5	4.0	---	10.0
2---- Arbone	25	50	30	60	---	---	1.0	3.0	---	7.5
3---- Arbone-Hondoho	18	---	22	---	---	---	---	---	---	---
6---- Arimo	25	70	30	80	---	---	---	4.0	---	10.0
7---- Bahem	---	90	---	100	---	270	---	5.0	---	12.0
8---- Bahem	---	80	---	90	---	260	---	4.0	---	10.0
9---- Bancroft	30	---	35	---	---	---	2.0	---	---	---
10---- Bancroft	25	---	30	---	---	---	1.5	---	---	---
11---- Bancroft-Manila	27	---	32	---	---	---	1.5	---	---	---
12---- Banida	35	70	40	---	---	---	2.0	3.5	---	---
13---- Bear Lake-Bear Lake Variant	---	---	---	---	---	---	---	---	7.0	10.0
15---- Broadhead-Yago	---	---	---	---	---	---	2.0	4.0	---	10.0
17---- Broncho	---	30	---	35	---	140	---	2.5	---	6.0
21---- Broxon	---	80	---	90	---	250	---	5.0	---	12.0
22---- Broxon	---	70	---	80	---	240	---	4.0	---	10.0
38---- Coalbank	25	---	30	---	---	---	---	---	---	---
39---- Coalbank-Trailcreek-Lonigan	17	---	19	---	---	---	---	---	---	---
41---- Downata-Bear Lake	---	---	---	---	---	---	---	---	7.0	10.0
42---- Downey-Arimo	22	65	26	75	---	---	---	4.0	---	8.0
43---- Downey-Arimo	17	57	21	67	---	---	---	3.0	---	7.0

See footnotes at end of table.

TABLE 5.--YIELDS PER ACRE OF CROPS AND PASTURE--Continued

Soil name and map symbol	Wheat		Barley		Irish potatoes		Alfalfa hay		Pasture	
	N	I	N	I	N	I	N	I	N	I
	Bu	Bu	Bu	Bu	Cwt	Cwt	Tons	Tons	AUM*	AUM*
46---------- Hades	25	---	30	---	---	---	2.0	---	---	---
49---------- Hades-Lanoak	31	---	37	---	---	---	2.0	---	---	---
52---------- Holmes	25	60	30	65	---	---	1.5	4.0	---	---
53---------- Hondoho-Arbone	20	---	24	---	---	---	1.0	---	---	---
55---------- Hondoho-Hades	21	---	24	---	---	---	---	---	---	---
57---------- Inkom	---	45	---	55	---	---	---	---	7.0	10.0
58---------- Inkom	30	80	35	90	---	---	2.5	4.5	6.0	11.0
62---------- Joes	30	---	35	---	---	---	---	---	---	---
63---------- Joes	30	---	35	---	---	---	---	---	---	---
64---------- Joevar	35	80	40	90	---	---	2.0	5.5	---	13.0
65---------- Lanoak	38	---	45	---	---	---	2.0	---	---	---
66---------- Lanoak	38	---	45	---	---	---	2.0	---	---	---
67---------- Lanoak	35	---	42	---	---	---	1.5	---	---	---
68---------- Lanoak	33	---	40	---	---	---	1.5	---	---	---
70**:										
Lanoak----------	38	---	45	---	---	---	2.0	---	---	---
Greys----------	23	---	28	---	---	---	2.0	---	---	---
71**:										
Lanoak----------	35	---	42	---	---	---	1.5	---	---	---
Greys----------	23	---	28	---	---	---	2.0	---	---	---
72---------- Lanoak-Hades	32	---	38	---	---	---	2.0	---	---	---
73---------- Lanoak-Watercanyon-Rexburg	30	---	36	---	---	---	---	---	---	---
75---------- Manila-Bancroft	33	---	38	---	---	---	2.1	---	---	---

See footnotes at end of table.

TABLE 5.--YIELDS PER ACRE OF CROPS AND PASTURE--Continued

Soil name and map symbol	Wheat		Barley		Irish potatoes		Alfalfa hay		Pasture	
	N	I	N	I	N	I	N	I	N	I
	Bu	Bu	Bu	Bu	Cwt	Cwt	Tons	Tons	AUM*	AUM*
77--- McDole-McDole Variant	---	90	---	100	---	---	---	5.1	---	12.0
81--- Oxford	25	---	30	---	---	---	1.5	---	---	---
82--- Oxford-Banida	30	---	35	---	---	---	2.1	---	---	---
87--- Pocatello	25	90	---	100	---	270	---	4.0	---	10.0
88--- Pocatello	25	75	---	85	---	250	---	3.0	---	7.5
89--- Pocatello	20	60	---	65	---	---	---	3.0	---	7.5
90--- Pocatello	20	---	---	---	---	---	---	---	---	---
91--- Pocatello	20	---	---	---	---	---	---	---	---	---
93--- Rexburg	35	80	40	90	---	250	2.0	5.0	---	---
94--- Rexburg	35	70	40	80	---	230	2.0	4.0	---	---
95--- Rexburg	35	---	40	---	---	---	2.0	---	---	---
97--- Ririe	30	70	35	80	---	240	2.0	5.0	---	---
98--- Ririe	30	70	35	80	---	220	2.0	4.0	---	---
99--- Ririe	25	60	30	75	---	---	1.5	3.0	---	---
100--- Ririe-Watercanyon	28	---	30	---	---	---	---	---	---	---
101--- Ririe-Watercanyon	23	---	25	---	---	---	---	---	---	---
102--- Ririe-Watercanyon	19	---	21	---	---	---	---	---	---	---
111--- Tendoy	---	---	---	---	---	---	---	---	7.0	10.0
120--- Watercanyon	15	---	15	---	---	---	---	---	---	---
122--- Wursten	25	55	30	60	---	---	---	4.0	---	---

* Animal-unit-month: The amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

** See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES

[Only the soils that support rangeland vegetation suitable for grazing are listed]

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
1, 2---------- Arbone	Loamy 13-16" Ppt (013XY001I)	Favorable Normal Unfavorable	1,800 1,200 800	Bluebunch wheatgrass---------- Mountain big sagebrush-------- Prairie junegrass---------- Antelope bitterbrush---------- Nevada bluegrass---------- Letterman needlegrass--------- Arrowleaf balsamroot---------- Lupine----------	30 10 5 5 5 5 5 5
3*:					
Arbone----------	Loamy 13-16" Ppt (013XY001I)	Favorable Normal Unfavorable	1,800 1,200 800	Bluebunch wheatgrass---------- Mountain big sagebrush-------- Prairie junegrass---------- Nevada bluegrass---------- Letterman needlegrass--------- Arrowleaf balsamroot---------- Lupine---------- Antelope bitterbrush----------	30 10 5 5 5 5 5 5
Hondoho----------	Loamy 13-16" Ppt (013XY001I)	Favorable Normal Unfavorable	1,800 1,200 800	Bluebunch wheatgrass---------- Letterman needlegrass--------- Mountain big sagebrush-------- Nevada bluegrass---------- Prairie junegrass---------- Columbia needlegrass---------- Slender wheatgrass---------- Arrowleaf balsamroot---------- Sticky geranium---------- Antelope bitterbrush----------	30 10 10 5 5 5 5 5 5 5
4*:					
Arbone----------	Loamy 13-16" Ppt (013XY001I)	Favorable Normal Unfavorable	1,800 1,200 800	Bluebunch wheatgrass---------- Mountain big sagebrush-------- Prairie junegrass---------- Antelope bitterbrush---------- Nevada bluegrass---------- Letterman needlegrass--------- Arrowleaf balsamroot---------- Lupine----------	30 10 5 5 5 5 5 5
McCarey----------	Loamy 13-16" Ppt (013XY001I)	Favorable Normal Unfavorable	1,800 1,200 800	Bluebunch wheatgrass---------- Mountain big sagebrush-------- Nevada bluegrass---------- Arrowleaf balsamroot---------- Antelope bitterbrush---------- Western wheatgrass---------- Prairie junegrass---------- Slender wheatgrass----------	30 10 5 5 5 5 5 5
Lava flows.					
5*:					
Arbone----------	Loamy 13-16" Ppt (013XY001I)	Favorable Normal Unfavorable	1,800 1,200 800	Bluebunch wheatgrass---------- Mountain big sagebrush-------- Prairie junegrass---------- Antelope bitterbrush---------- Nevada bluegrass---------- Letterman needlegrass--------- Arrowleaf balsamroot---------- Lupine----------	30 10 5 5 5 5 5 5
Rubble land.					

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
6---------- Arimo	Loamy 12-16" Ppt (013XY036I)	Favorable Normal Unfavorable	1,600 1,000 600	Bluebunch wheatgrass---------- Wyoming big sagebrush---------- Streambank wheatgrass---------- Arrowleaf balsamroot---------- Sandberg bluegrass---------- Prairie junegrass---------- Nevada bluegrass----------	30 20 10 10 5 5 5
9, 10---------- Bancroft	Loamy 13-16" Ppt (013XY001I)	Favorable Normal Unfavorable	1,800 1,200 800	Bluebunch wheatgrass---------- Arrowleaf balsamroot---------- Mountain big sagebrush--------- Slender wheatgrass---------- Letterman needlegrass---------- Prairie junegrass---------- Nevada bluegrass----------	35 10 10 5 5 5 5
11*: Bancroft----------	Loamy 13-16" Ppt (013XY001I)	Favorable Normal Unfavorable	1,800 1,200 800	Bluebunch wheatgrass---------- Arrowleaf balsamroot---------- Mountain big sagebrush--------- Slender wheatgrass---------- Letterman needlegrass---------- Prairie junegrass---------- Nevada bluegrass----------	35 10 10 5 5 5 5
Manila----------	Loamy 16-22" Ppt (013XY005I)	Favorable Normal Unfavorable	2,400 2,000 1,400	Bluebunch wheatgrass---------- Mountain big sagebrush--------- Nevada bluegrass---------- Columbia needlegrass---------- Prairie junegrass---------- Arrowleaf balsamroot---------- Antelope bitterbrush---------- Slender wheatgrass---------- Geranium----------	40 10 5 5 5 5 5 5 5
13*: Bear Lake----------	Wet Meadow (013XY038I)	Favorable Normal Unfavorable	4,500 3,600 3,000	Sedge---------- Nebraska sedge---------- Tufted hairgrass---------- Redtop---------- Meadow foxtail---------- Kentucky bluegrass---------- Cinquefoil---------- Clover----------	20 20 20 5 5 5 5 5
Bear Lake Variant-	Wet Meadow (013XY038I)	Favorable Normal Unfavorable	4,500 3,600 3,600	Sedge---------- Nebraska sedge---------- Tufted hairgrass---------- Kentucky bluegrass---------- Redtop---------- Meadow foxtail---------- Cinquefoil---------- Clover----------	20 20 20 5 5 5 5 5
14*: Broadhead----------	Loamy 16-22" Ppt (013XY005I)	Favorable Normal Unfavorable	2,400 2,000 1,400	Bluebunch wheatgrass---------- Columbia needlegrass---------- Slender wheatgrass---------- Prairie junegrass---------- Arrowleaf balsamroot---------- Geranium---------- Mountain big sagebrush---------	40 10 5 5 5 5 5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
14*:					
Hades	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass	45
		Normal	2,000	Slender wheatgrass	10
		Unfavorable	1,400	Nevada bluegrass	5
				Arrowleaf balsamroot	5
				Mountain big sagebrush	5
				Antelope bitterbrush	5
Yago	Stony 16-22" Ppt (013XY019I)	Favorable	1,800	Bluebunch wheatgrass	35
		Normal	1,100	Columbia needlegrass	5
		Unfavorable	600	Mountain brome	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Mountain big sagebrush	5
				Antelope bitterbrush	5
				Western snowberry	5
				Saskatoon serviceberry	5
15*, 16*:					
Broadhead	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass	40
		Normal	2,000	Columbia needlegrass	10
		Unfavorable	1,400	Slender wheatgrass	5
				Prairie junegrass	5
				Arrowleaf balsamroot	5
				Geranium	5
				Mountain big sagebrush	5
Yago	Stony 16-22" Ppt (013XY019I)	Favorable	1,800	Bluebunch wheatgrass	35
		Normal	1,100	Columbia needlegrass	5
		Unfavorable	600	Mountain brome	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Mountain big sagebrush	5
				Antelope bitterbrush	5
				Western snowberry	5
				Saskatoon serviceberry	5
18 Broncho	Stony 8-12" Ppt (011BY003I)	Favorable	1,200	Bluebunch wheatgrass	30
		Normal	800	Wyoming big sagebrush	15
		Unfavorable	400	Thurber needlegrass	10
				Western wheatgrass	5
				Needleandthread	5
				Arrowleaf balsamroot	5
				Tapertip hawksbeard	5
				Nevada bluegrass	5
				Sandberg bluegrass	5
19*:					
Broncho Variant	Stony 8-12" Ppt (011BY003I)	Favorable	1,200	Bluebunch wheatgrass	30
		Normal	800	Wyoming big sagebrush	15
		Unfavorable	400	Arrowleaf balsamroot	10
				Sandberg bluegrass	5
				Bottlebrush squirreltail	5
				Nevada bluegrass	5
				Needleandthread	5
				Hood phlox	5
Pocatello	South Slope Loamy 11-13" Ppt (011BY012I)	Favorable	800	Bluebunch wheatgrass	30
		Normal	500	Wyoming big sagebrush	15
		Unfavorable	300	Arrowleaf balsamroot	10
				Thurber needlegrass	5
				Sandberg bluegrass	5
				Tapertip hawksbeard	5
				Needlegrass	5
				Phlox	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
20*:					
Broncho Variant---	Stony 8-12" Ppt (011BY003I)	Favorable	1,200	Bluebunch wheatgrass----------	30
		Normal	800	Wyoming big sagebrush---------	15
		Unfavorable	400	Arrowleaf balsamroot----------	10
				Sandberg bluegrass-----------	5
				Bottlebrush squirreltail------	5
				Nevada bluegrass-------------	5
				Needleandthread--------------	5
				Hood phlox-------------------	5
Ririe-------------	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass----------	20
		Normal	1,100	Mountain big sagebrush--------	15
		Unfavorable	600	Western snowberry-------------	10
				Slender wheatgrass------------	5
				Needlegrass-------------------	5
				Nevada bluegrass--------------	5
				Prairie junegrass-------------	5
				Western wheatgrass------------	5
				Arrowleaf balsamroot----------	5
				Antelope bitterbrush----------	5
Pocatello---------	South Slope Loamy 11-13" Ppt (011BY012I)	Favorable	800	Bluebunch wheatgrass----------	30
		Normal	500	Wyoming big sagebrush---------	15
		Unfavorable	300	Arrowleaf balsamroot----------	10
				Thurber needlegrass-----------	5
				Sandberg bluegrass------------	5
				Tapertip hawksbeard-----------	5
				Needlegrass-------------------	5
				Phlox-------------------------	5
23*:					
Camelback---------	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass----------	25
		Normal	1,500	Mountain big sagebrush--------	10
		Unfavorable	900	Nevada bluegrass--------------	5
				Kentucky bluegrass------------	5
				Slender wheatgrass------------	5
				Arrowleaf balsamroot----------	5
				Cutleaf balsamroot------------	5
				Antelope bitterbrush----------	5
				Western snowberry------------	5
				Saskatoon serviceberry--------	5
Cedarhill---------	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass----------	25
		Normal	1,100	Mountain big sagebrush--------	20
		Unfavorable	600	Nevada bluegrass--------------	5
				Arrowleaf balsamroot----------	5
				Antelope bitterbrush----------	5
				Slender wheatgrass------------	5
				Western wheatgrass------------	5
				Letterman needlegrass---------	5
Lanoak------------	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass----------	25
		Normal	1,500	Mountain big sagebrush--------	15
		Unfavorable	900	Western snowberry-------------	10
				Arrowleaf balsamroot----------	5
				Antelope bitterbrush----------	5
				Saskatoon serviceberry--------	5
				Sticky geranium---------------	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
24*:					
Camelback	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	25
		Normal	1,500	Mountain big sagebrush	10
		Unfavorable	900	Nevada bluegrass	5
				Kentucky bluegrass	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Antelope bitterbrush	5
				Western snowberry	5
				Saskatoon serviceberry	5
Greys.					
25*:					
Camelback	Stony 16-22" Ppt (013XY019I)	Favorable	1,800	Bluebunch wheatgrass	25
		Normal	1,100	Nevada bluegrass	5
		Unfavorable	600	Kentucky bluegrass	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Mountain big sagebrush	5
				Antelope bitterbrush	5
				Western snowberry	5
				Saskatoon serviceberry	5
Hades	Loamy 16-22" Ppt (013X005I)	Favorable	2,400	Bluebunch wheatgrass	45
		Normal	2,000	Slender wheatgrass	10
		Unfavorable	1,400	Nevada bluegrass	5
				Arrowleaf balsamroot	5
				Mountain big sagebrush	5
				Antelope bitterbrush	5
26*:					
Camelback	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	25
		Normal	1,500	Mountain big sagebrush	10
		Unfavorable	900	Nevada bluegrass	5
				Kentucky bluegrass	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Antelope bitterbrush	5
				Western snowberry	5
				Saskatoon serviceberry	5
Valmar	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	20
		Normal	1,500	Mountain big sagebrush	15
		Unfavorable	900	Nevada bluegrass	10
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
				Western snowberry	5
Hades	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	20
		Normal	1,500	Mountain big sagebrush	15
		Unfavorable	900	Nevada bluegrass	8
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
				Western snowberry	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
27*:					
Camelback Variant-	Subalpine Loamy 16-22" Ppt (013XY022I)	Favorable	1,800	Slender wheatgrass	15
		Normal	1,400	Mountain brome	10
		Unfavorable	1,000	Spike-fescue	10
				Needlegrass	10
				Subalpine big sagebrush	10
				Nevada bluegrass	5
				Lupine	5
				Mountain snowberry	5
Valmar Variant----	Subalpine Loamy 16-22" Ppt (013XY022I)	Favorable	1,400	Slender wheatgrass	15
		Normal	1,000	Mountain brome	10
		Unfavorable	750	Spike-fescue	10
				Needlegrass	10
				Subalpine big sagebrush	10
				Nevada bluegrass	5
				Lupine	5
				Mountain snowberry	5
29*:					
Cedarhill.					
Ireland----------	Steep Stony 16-22" Ppt (013XY015I)	Favorable	1,800	Bluebunch wheatgrass	20
		Normal	1,400	Curlleaf mountainmahogany	20
		Unfavorable	1,100	Mountain big sagebrush	10
				Nevada bluegrass	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Tapertip hawksbeard	5
				Western snowberry	5
Rock outcrop.					
30*:					
Cedarhill.					
Ririe----------	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	20
		Normal	1,100	Mountain big sagebrush	15
		Unfavorable	600	Western snowberry	10
				Slender wheatgrass	5
				Needlegrass	5
				Nevada bluegrass	5
				Prairie junegrass	5
				Western wheatgrass	5
				Arrowleaf balsamroot	5
				Antelope bitterbrush	5
Watercanyon-------	South Slope Loamy 12-16" Ppt (013XY035I)	Favorable	1,300	Bluebunch wheatgrass	25
		Normal	800	Mountain big sagebrush	15
		Unfavorable	500	Thurber needlegrass	10
				Arrowleaf balsamroot	10
				Nevada bluegrass	5
				Sandberg bluegrass	5
				Western wheatgrass	5
				Wyoming big sagebrush	5
				Antelope bitterbrush	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
32*:					
Cedarhill	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	25
		Normal	1,100	Mountain big sagebrush	20
		Unfavorable	600	Nevada bluegrass	5
				Slender wheatgrass	5
				Western wheatgrass	5
				Letterman needlegrass	5
				Arrowleaf balsamroot	5
				Antelope bitterbrush	5
Camelback	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	25
		Normal	1,500	Mountain big sagebrush	10
		Unfavorable	900	Nevada bluegrass	5
				Kentucky bluegrass	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Antelope bitterbrush	5
				Western snowberry	5
				Saskatoon serviceberry	5
Moonlight	Loamy Tall Brush 16-22" Ppt (013XY020I)	Favorable	2,500	Rocky mountain maple	15
		Normal	1,800	Quaking aspen	15
		Unfavorable	1,000	Mountain brome	10
				Common chokecherry	10
				Blue wildrye	5
				Pine reedgrass	5
				Bearded wheatgrass	5
				Sedge	5
				Sticky geranium	5
33*:					
Cedarhill	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	25
		Normal	1,100	Mountain big sagebrush	20
		Unfavorable	600	Nevada bluegrass	5
				Slender wheatgrass	5
				Western wheatgrass	5
				Letterman needlegrass	5
				Arrowleaf balsamroot	5
				Antelope bitterbrush	5
Hades	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	20
		Normal	1,500	Mountain big sagebrush	15
		Unfavorable	900	Nevada bluegrass	8
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
				Western snowberry	5
Ricrest	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	30
		Normal	1,300	Mountain big sagebrush	15
		Unfavorable	800	Western snowberry	10
				Nevada bluegrass	5
				Mountain brome	5
				Arrowleaf balsamroot	5
				Saskatoon serviceberry	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
34*:					
Cedarhill	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	25
		Normal	1,100	Mountain big sagebrush	20
		Unfavorable	600	Nevada bluegrass	5
				Arrowleaf balsamroot	5
				Antelope bitterbrush	5
				Slender wheatgrass	5
				Western wheatgrass	5
				Letterman needlegrass	5
Hondoho	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	30
		Normal	1,100	Mountain big sagebrush	10
		Unfavorable	600	Prairie junegrass	5
				Wheatgrass	5
				Sandberg bluegrass	5
				Letterman needlegrass	5
				Arrowleaf balsamroot	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
Arbone	Loamy 13-16" Ppt (013XY001I)	Favorable	1,800	Bluebunch wheatgrass	30
		Normal	1,200	Mountain big sagebrush	10
		Unfavorable	800	Prairie junegrass	5
				Nevada bluegrass	5
				Letterman needlegrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Antelope bitterbrush	5
35*:					
Cedarhill	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	25
		Normal	1,100	Mountain big sagebrush	20
		Unfavorable	600	Nevada bluegrass	5
				Arrowleaf balsamroot	5
				Antelope bitterbrush	5
				Slender wheatgrass	5
				Western wheatgrass	5
				Letterman needlegrass	5
Hondoho	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	30
		Normal	1,100	Mountain big sagebrush	10
		Unfavorable	600	Prairie junegrass	5
				Wheatgrass	5
				Sandberg bluegrass	5
				Letterman needlegrass	5
				Arrowleaf balsamroot	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
Ridgecrest	Steep Stony 12-16" Ppt (013XY026I)	Favorable	1,300	Bluebunch wheatgrass	30
		Normal	900	Mountain big sagebrush	15
		Unfavorable	500	Bluegrass	10
				Needlegrass	5
				Aster	5
				Antelope bitterbrush	5
36*:					
Cedarhill	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	25
		Normal	1,100	Mountain big sagebrush	20
		Unfavorable	600	Nevada bluegrass	5
				Arrowleaf balsamroot	5
				Antelope bitterbrush	5
				Slender wheatgrass	5
				Western wheatgrass	5
				Letterman needlegrass	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
36*:					
Manila	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass	40
		Normal	2,000	Mountain big sagebrush	10
		Unfavorable	1,400	Nevada bluegrass	5
				Columbia needlegrass	5
				Prairie junegrass	5
				Arrowleaf balsamroot	5
				Antelope bitterbrush	5
				Slender wheatgrass	5
				Geranium	5
37*:					
Cedarhill	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	25
		Normal	1,100	Mountain big sagebrush	20
		Unfavorable	600	Nevada bluegrass	5
				Arrowleaf balsamroot	5
				Antelope bitterbrush	5
				Slender wheatgrass	5
				Western wheatgrass	5
				Letterman needlegrass	5
Trailcreek	Ashy 13-16" Ppt (013XY009I)	Favorable	1,300	Bluebunch wheatgrass	20
		Normal	800	Mountain big sagebrush	15
		Unfavorable	400	Thurber needlegrass	10
				Arrowleaf balsamroot	10
				Sandberg bluegrass	5
				Indian ricegrass	5
				Needleandthread	5
				Antelope bitterbrush	5
Coalbank	Loamy 13-16" Ppt (013XY001I)	Favorable	1,800	Bluebunch wheatgrass	35
		Normal	1,200	Mountain big sagebrush	15
		Unfavorable	800	Prairie junegrass	5
				Nevada bluegrass	5
				Letterman needlegrass	5
				Wheatgrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Antelope bitterbrush	5
38---------- Coalbank	Loamy 13-16" Ppt (013XY001I)	Favorable	1,800	Bluebunch wheatgrass	35
		Normal	1,200	Mountain big sagebrush	15
		Unfavorable	800	Prairie junegrass	5
				Nevada bluegrass	5
				Letterman needlegrass	5
				Wheatgrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Antelope bitterbrush	5
39*, 40*:					
Coalbank	Loamy 13-16" Ppt (013XY001I)	Favorable	1,800	Bluebunch wheatgrass	35
		Normal	1,200	Mountain big sagebrush	15
		Unfavorable	800	Prairie junegrass	5
				Nevada bluegrass	5
				Letterman needlegrass	5
				Wheatgrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Antelope bitterbrush	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
39*, 40*:					
Trailcreek	Ashy 13-16" Ppt (013XY009I)	Favorable	1,300	Bluebunch wheatgrass	20
		Normal	800	Mountain big sagebrush	15
		Unfavorable	400	Thurber needlegrass	10
				Arrowleaf balsamroot	10
				Sandberg bluegrass	5
				Indian ricegrass	5
				Needleandthread	5
				Antelope bitterbrush	5
Lonigan	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	25
		Normal	1,100	Mountain big sagebrush	25
		Unfavorable	600	Nevada bluegrass	5
				Letterman needlegrass	5
				Slender wheatgrass	5
				Western wheatgrass	5
				Arrowleaf balsamroot	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
41*:					
Downata	Wet Meadow (013XY038I)	Favorable	4,500	Sedge	25
		Normal	3,600	Tufted hairgrass	20
		Unfavorable	3,000	Nebraska sedge	20
				Redtop	5
				Meadow foxtail	5
				Kentucky bluegrass	5
				Cinquefoil	5
				Clover	5
Bear Lake	Wet Meadow (013XY038I)	Favorable	4,500	Sedge	20
		Normal	3,600	Nebraska sedge	20
		Unfavorable	3,000	Tufted hairgrass	20
				Redtop	5
				Meadow foxtail	5
				Kentucky bluegrass	5
				Cinquefoil	5
				Clover	5
42*, 43*:					
Downey	Loamy 11-13" Ppt (013XY018I)	Favorable	1,100	Bluebunch wheatgrass	30
		Normal	800	Wyoming big sagebrush	20
		Unfavorable	500	Thurber needlegrass	10
				Arrowleaf balsamroot	10
				Nevada bluegrass	5
				Sandberg bluegrass	5
				Prairie junegrass	5
Arimo	Loamy 12-16" Ppt (013XY036I)	Favorable	1,600	Bluebunch wheatgrass	30
		Normal	1,000	Wyoming big sagebrush	20
		Unfavorable	600	Arrowleaf balsamroot	10
				Streambank wheatgrass	10
				Sandberg bluegrass	5
				Prairie junegrass	5
				Nevada bluegrass	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
44*:					
Enochville	Semiwet Meadow (013XY039I)	Favorable	3,500	Sedge	15
		Normal	2,300	Slender wheatgrass	15
		Unfavorable	1,500	Basin wildrye	10
				Kentucky bluegrass	5
				Streambank wheatgrass	5
				Nevada bluegrass	5
				Western wheatgrass	5
				Bluebunch wheatgrass	5
				Willow	5
				Silver sagebrush	5
				Clover	5
Enochville Variant	Semiwet Meadow (013XY039I)	Favorable	3,500	Sedge	15
		Normal	2,300	Slender wheatgrass	15
		Unfavorable	1,500	Basin wildrye	10
				Kentucky bluegrass	5
				Streambank wheatgrass	5
				Nevada bluegrass	5
				Western wheatgrass	5
				Bluebunch wheatgrass	5
				Clover	5
				Willow	5
				Silver sagebrush	5
46---------- Hades	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass	45
		Normal	2,000	Slender wheatgrass	10
		Unfavorable	1,400	Nevada bluegrass	5
				Arrowleaf balsamroot	5
				Mountain big sagebrush	5
				Antelope bitterbrush	5
47*:					
Hades	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	20
		Normal	1,500	Mountain big sagebrush	15
		Unfavorable	900	Nevada bluegrass	8
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
				Western snowberry	5
Camelback	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	25
		Normal	1,500	Mountain big sagebrush	10
		Unfavorable	900	Nevada bluegrass	5
				Kentucky bluegrass	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Antelope bitterbrush	5
				Western snowberry	5
				Saskatoon serviceberry	5
Hondoho	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	30
		Normal	1,100	Mountain big sagebrush	10
		Unfavorable	600	Prairie junegrass	5
				Wheatgrass	5
				Sandberg bluegrass	5
				Letterman needlegrass	5
				Arrowleaf balsamroot	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
48*:					
Hades	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass	45
		Normal	2,000	Slender wheatgrass	10
		Unfavorable	1,400	Nevada bluegrass	5
				Arrowleaf balsamroot	5
				Mountain big sagebrush	5
				Antelope bitterbrush	5
Holmes	Stony 16-22" Ppt (013XY019I)	Favorable	1,800	Bluebunch wheatgrass	35
		Normal	1,100	Mountain big sagebrush	10
		Unfavorable	600	Nevada bluegrass	5
				Antelope bitterbrush	5
				Slender wheatgrass	5
				Letterman needlegrass	5
				Arrowleaf balsamroot	5
49*:					
Hades	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass	45
		Normal	2,000	Slender wheatgrass	10
		Unfavorable	1,400	Nevada bluegrass	5
				Arrowleaf balsamroot	5
				Mountain big sagebrush	5
				Antelope bitterbrush	5
Lanoak	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass	45
		Normal	2,000	Mountain big sagebrush	10
		Unfavorable	1,400	Prairie junegrass	5
				Arrowleaf balsamroot	5
				Columbia needlegrass	5
				Antelope bitterbrush	5
				Sticky geranium	5
				Western snowberry	5
50*:					
Hades	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	20
		Normal	1,500	Mountain big sagebrush	15
		Unfavorable	900	Nevada bluegrass	8
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
				Western snowberry	5
Lanoak	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	25
		Normal	1,500	Mountain big sagebrush	15
		Unfavorable	900	Western snowberry	10
				Arrowleaf balsamroot	5
				Antelope bitterbrush	5
				Saskatoon serviceberry	5
				Sticky geranium	5
Camelback	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	25
		Normal	1,500	Mountain big sagebrush	10
		Unfavorable	900	Nevada bluegrass	5
				Kentucky bluegrass	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Antelope bitterbrush	5
				Western snowberry	5
				Saskatoon serviceberry	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
52---------- Holmes	Stony 16-22" Ppt (013XY019I)	Favorable Normal Unfavorable	1,800 1,100 600	Bluebunch wheatgrass---------- Mountain big sagebrush-------- Nevada bluegrass---------- Antelope bitterbrush---------- Slender wheatgrass---------- Letterman needlegrass--------- Arrowleaf balsamroot----------	35 10 5 5 5 5 5
53*: Hondoho----------	Loamy 13-16" Ppt (013XY001I)	Favorable Normal Unfavorable	1,800 1,200 800	Bluebunch wheatgrass---------- Letterman needlegrass--------- Mountain big sagebrush-------- Nevada bluegrass---------- Prairie junegrass---------- Columbia needlegrass---------- Slender wheatgrass---------- Arrowleaf balsamroot---------- Sticky geranium---------- Antelope bitterbrush----------	30 10 10 5 5 5 5 5 5 5
Arbone----------	Loamy 13-16" Ppt (013XY001I)	Favorable Normal Unfavorable	1,800 1,200 800	Bluebunch wheatgrass---------- Mountain big sagebrush-------- Prairie junegrass---------- Nevada bluegrass---------- Letterman needlegrass--------- Arrowleaf balsamroot---------- Lupine---------- Antelope bitterbrush----------	30 10 5 5 5 5 5 5
54*: Hondoho----------	Steep Slopes 12-16" Ppt (013XY008I)	Favorable Normal Unfavorable	1,500 1,100 600	Bluebunch wheatgrass---------- Mountain big sagebrush-------- Prairie junegrass---------- Wheatgrass---------- Sandberg bluegrass---------- Letterman needlegrass--------- Arrowleaf balsamroot---------- Tapertip hawksbeard---------- Antelope bitterbrush----------	30 10 5 5 5 5 5 5 5
Arbone----------	Loamy 13-16" Ppt (013XY001I)	Favorable Normal Unfavorable	1,800 1,200 800	Bluebunch wheatgrass---------- Mountain big sagebrush-------- Prairie junegrass---------- Nevada bluegrass---------- Letterman needlegrass--------- Arrowleaf balsamroot---------- Lupine---------- Antelope bitterbrush----------	30 10 5 5 5 5 5 5
Ririe----------	Steep Slopes 12-16" Ppt (013XY008I)	Favorable Normal Unfavorable	1,500 1,100 600	Bluebunch wheatgrass---------- Mountain big sagebrush-------- Western snowberry---------- Slender wheatgrass---------- Needlegrass---------- Nevada bluegrass---------- Prairie junegrass---------- Western wheatgrass---------- Arrowleaf balsamroot---------- Antelope bitterbrush----------	20 15 10 5 5 5 5 5 5 5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
55*:					
Hondoho	Loamy 13-16" Ppt (013XY001I)	Favorable	1,800	Bluebunch wheatgrass	30
		Normal	1,200	Mountain big sagebrush	10
		Unfavorable	800	Prairie junegrass	5
				Sedge	5
				Wheatgrass	5
				Sandberg bluegrass	5
				Letterman needlegrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Antelope bitterbrush	5
Hades	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass	45
		Normal	2,000	Slender wheatgrass	10
		Unfavorable	1,400	Nevada bluegrass	5
				Arrowleaf balsamroot	5
				Mountain big sagebrush	5
				Antelope bitterbrush	5
56*:					
Hondoho	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	30
		Normal	1,100	Mountain big sagebrush	10
		Unfavorable	600	Prairie junegrass	5
				Wheatgrass	5
				Sandberg bluegrass	5
				Letterman needlegrass	5
				Arrowleaf balsamroot	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
Lanoak	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	25
		Normal	1,500	Mountain big sagebrush	15
		Unfavorable	900	Western snowberry	10
				Arrowleaf balsamroot	5
				Antelope bitterbrush	5
				Saskatoon serviceberry	5
				Sticky geranium	5
Camelback	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	25
		Normal	1,500	Mountain big sagebrush	10
		Unfavorable	900	Nevada bluegrass	5
				Kentucky bluegrass	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Antelope bitterbrush	5
				Western snowberry	5
				Saskatoon serviceberry	5
57 Inkom	Semiwet Meadow (013XY039I)	Favorable	4,000	Slender wheatgrass	20
		Normal	2,200	Sedge	15
		Unfavorable	1,600	Tufted hairgrass	10
				Basin wildrye	10
				Streambank wheatgrass	10
				Kentucky bluegrass	5
				Cinquefoil	5
				Clover	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
59*:					
Ireland	Steep Stony 16-22" Ppt (013XY015I)	Favorable	1,800	Bluebunch wheatgrass	20
		Normal	1,400	Curlleaf mountainmahogany	20
		Unfavorable	1,100	Mountain big sagebrush	10
				Nevada bluegrass	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Tapertip hawksbeard	5
				Western snowberry	5
Camelback	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	25
		Normal	1,500	Mountain big sagebrush	10
		Unfavorable	900	Nevada bluegrass	5
				Kentucky bluegrass	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Antelope bitterbrush	5
				Western snowberry	5
				Saskatoon serviceberry	5
Rock outcrop.					
60*:					
Ireland	Steep Stony 16-22" Ppt (013XY015I)	Favorable	1,800	Bluebunch wheatgrass	20
		Normal	1,400	Curlleaf mountainmahogany	20
		Unfavorable	1,100	Mountain big sagebrush	10
				Nevada bluegrass	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Tapertip hawksbeard	5
				Western snowberry	5
Dateman.					
Pavohroo.					
61*:					
Ireland	Steep Stony 16-22" Ppt (013XY015I)	Favorable	1,800	Bluebunch wheatgrass	20
		Normal	1,400	Curlleaf mountainmahogany	20
		Unfavorable	1,100	Mountain big sagebrush	10
				Nevada bluegrass	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Tapertip hawksbeard	5
				Western snowberry	5
Hades	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	20
		Normal	1,500	Mountain big sagebrush	15
		Unfavorable	900	Nevada bluegrass	8
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
				Western snowberry	5
Cedarhill.					

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
62, 63---------- Joes	Loamy 13-16" Ppt (013XY001I)	Favorable	1,800	Bluebunch wheatgrass----------	30
		Normal	1,200	Mountain big sagebrush--------	10
		Unfavorable	800	Slender wheatgrass----------	5
				Letterman needlegrass---------	5
				Nevada bluegrass----------	5
				Prairie junegrass----------	5
				Streambank wheatgrass---------	5
				Arrowleaf balsamroot----------	5
				Antelope bitterbrush----------	5
64---------- Joevar	Loamy 12-16" Ppt (013XY032I)	Favorable	1,800	Bluebunch wheatgrass----------	35
		Normal	1,200	Basin big sagebrush----------	15
		Unfavorable	800	Nevada bluegrass----------	10
				Streambank wheatgrass---------	5
				Prairie junegrass----------	5
				Needlegrass----------	5
				Arrowleaf balsamroot----------	5
				Antelope bitterbrush----------	5
65, 66, 67--------- Lanoak	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass----------	45
		Normal	2,000	Mountain big sagebrush--------	10
		Unfavorable	1,400	Prairie junegrass----------	5
				Arrowleaf balsamroot----------	5
				Columbia needlegrass----------	5
				Antelope bitterbrush----------	5
				Sticky geranium----------	5
				Western snowberry----------	5
68---------- Lanoak	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass----------	25
		Normal	1,500	Mountain big sagebrush--------	15
		Unfavorable	900	Western snowberry----------	10
				Arrowleaf balsamroot----------	5
				Antelope bitterbrush----------	5
				Saskatoon serviceberry--------	5
				Sticky geranium----------	5
69*:					
Lanoak----------	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass----------	25
		Normal	1,500	Mountain big sagebrush--------	15
		Unfavorable	900	Western snowberry----------	10
				Arrowleaf balsamroot----------	5
				Antelope bitterbrush----------	5
				Saskatoon serviceberry--------	5
				Sticky geranium----------	5
Camelback---------	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass----------	25
		Normal	1,500	Mountain big sagebrush--------	10
		Unfavorable	900	Nevada bluegrass----------	5
				Kentucky bluegrass----------	5
				Slender wheatgrass----------	5
				Arrowleaf balsamroot----------	5
				Cutleaf balsamroot----------	5
				Antelope bitterbrush----------	5
				Western snowberry----------	5
				Saskatoon serviceberry--------	5
70*, 71*:					
Lanoak----------	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass----------	45
		Normal	2,000	Mountain big sagebrush--------	10
		Unfavorable	1,400	Prairie junegrass----------	5
				Arrowleaf balsamroot----------	5
				Columbia needlegrass----------	5
				Antelope bitterbrush----------	5
				Sticky geranium----------	5
				Western snowberry----------	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
70*, 71*: Greys.					
72*: Lanoak	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass	45
		Normal	2,000	Mountain big sagebrush	10
		Unfavorable	1,400	Prairie junegrass	5
				Arrowleaf balsamroot	5
				Columbia needlegrass	5
				Antelope bitterbrush	5
				Sticky geranium	5
				Western snowberry	5
Hades	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass	45
		Normal	2,000	Slender wheatgrass	10
		Unfavorable	1,400	Nevada bluegrass	5
				Arrowleaf balsamroot	5
				Mountain big sagebrush	5
				Antelope bitterbrush	5
73*: Lanoak	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass	45
		Normal	2,000	Mountain big sagebrush	10
		Unfavorable	1,400	Prairie junegrass	5
				Arrowleaf balsamroot	5
				Columbia needlegrass	5
				Antelope bitterbrush	5
				Sticky geranium	5
				Western snowberry	5
Watercanyon	South Slope Loamy 12-16" Ppt (013XY035I)	Favorable	1,300	Bluebunch wheatgrass	25
		Normal	800	Mountain big sagebrush	15
		Unfavorable	500	Thurber needlegrass	10
				Arrowleaf balsamroot	10
				Nevada bluegrass	5
				Sandberg bluegrass	5
				Western wheatgrass	5
				Wyoming big sagebrush	5
				Antelope bitterbrush	5
Rexburg	Loamy 13-16" Ppt (013XY001I)	Favorable	1,800	Bluebunch wheatgrass	30
		Normal	1,200	Mountain big sagebrush	10
		Unfavorable	800	Prairie junegrass	5
				Nevada bluegrass	5
				Needlegrass	5
				Western wheatgrass	5
				Arrowleaf balsamroot	5
				Antelope bitterbrush	5
74*: Lava flows.					
McCarey	Loamy 13-16" Ppt (013XY001I)	Favorable	1,800	Bluebunch wheatgrass	30
		Normal	1,200	Mountain big sagebrush	10
		Unfavorable	800	Nevada bluegrass	5
				Arrowleaf balsamroot	5
				Antelope bitterbrush	5
				Western wheatgrass	5
				Prairie junegrass	5
				Slender wheatgrass	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
74*:					
McCarey Variant---	Shallow Loamy 13-16" Ppt (013XY004I)	Favorable	1,000	Bluebunch wheatgrass----------	30
		Normal	700	Mountain big sagebrush--------	15
		Unfavorable	400	Nevada bluegrass--------------	5
				Bottlebrush squirreltail------	5
				Sandberg bluegrass------------	5
				Western wheatgrass------------	5
				Arrowleaf balsamroot----------	5
				Tapertip hawksbeard-----------	5
				Threetip sagebrush------------	5
75*:					
Manila------------	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass----------	40
		Normal	2,000	Mountain big sagebrush--------	10
		Unfavorable	1,400	Nevada bluegrass--------------	5
				Columbia needlegrass----------	5
				Prairie junegrass-------------	5
				Arrowleaf balsamroot----------	5
				Antelope bitterbrush----------	5
				Slender wheatgrass------------	5
				Geranium----------------------	5
Bancroft----------	Loamy 13-16" Ppt (013XY001I)	Favorable	1,800	Bluebunch wheatgrass----------	35
		Normal	1,200	Arrowleaf balsamroot----------	10
		Unfavorable	800	Mountain big sagebrush--------	10
				Slender wheatgrass------------	5
				Letterman needlegrass---------	5
				Prairie junegrass-------------	5
				Nevada bluegrass--------------	5
76*:					
Manila------------	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass----------	40
		Normal	2,000	Mountain big sagebrush--------	10
		Unfavorable	1,400	Nevada bluegrass--------------	5
				Columbia needlegrass----------	5
				Prairie junegrass-------------	5
				Arrowleaf balsamroot----------	5
				Antelope bitterbrush----------	5
				Slender wheatgrass------------	5
				Geranium----------------------	5
Cedarhill---------	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass----------	25
		Normal	1,100	Mountain big sagebrush--------	20
		Unfavorable	600	Nevada bluegrass--------------	5
				Arrowleaf balsamroot----------	5
				Antelope bitterbrush----------	5
				Slender wheatgrass------------	5
				Western wheatgrass------------	5
				Letterman needlegrass---------	5
78----------	Loamy Tall Brush 16-22" Ppt	Favorable	2,500	Rocky mountain maple----------	15
Moonlight	(013XY020I)	Normal	1,800	Quaking aspen-----------------	15
		Unfavorable	1,000	Mountain brome----------------	10
				Common chokecherry------------	10
				Blue wildrye------------------	5
				Pine reedgrass----------------	5
				Bearded wheatgrass------------	5
				Sedge-------------------------	5
				Sticky geranium---------------	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
79*:					
Moonlight	Loamy Tall Brush 16-22" Ppt (013XY020I)	Favorable	2,500	Rocky mountain maple	15
		Normal	1,800	Quaking aspen	15
		Unfavorable	1,000	Mountain brome	10
				Common chokecherry	10
				Blue wildrye	5
				Pine reedgrass	5
				Bearded wheatgrass	5
				Sedge	5
				Sticky geranium	5
Camelback	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	25
		Normal	1,500	Mountain big sagebrush	10
		Unfavorable	900	Nevada bluegrass	5
				Kentucky bluegrass	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Antelope bitterbrush	5
				Western snowberry	5
				Saskatoon serviceberry	5
80*:					
Moonlight	Loamy Tall Brush 16-22" Ppt (013XY020I)	Favorable	2,500	Rocky mountain maple	15
		Normal	1,800	Quaking aspen	15
		Unfavorable	1,000	Mountain brome	10
				Common chokecherry	10
				Blue wildrye	5
				Pine reedgrass	5
				Bearded wheatgrass	5
				Sedge	5
				Sticky geranium	5
Pavohroo.					
83*:					
Pavohroo.					
Moonlight	Loamy Tall Brush 16-22" Ppt (013XY020I)	Favorable	2,500	Rocky mountain maple	15
		Normal	1,800	Quaking aspen	15
		Unfavorable	1,000	Mountain brome	10
				Common chokecherry	10
				Blue wildrye	5
				Pine reedgrass	5
				Bearded wheatgrass	5
				Sedge	5
				Sticky geranium	5
87, 88, 89, 90, 91-Pocatello	Loamy 11-13" Ppt (013XY018I)	Favorable	1,300	Bluebunch wheatgrass	30
		Normal	800	Wyoming big sagebrush	15
		Unfavorable	400	Thurber needlegrass	10
				Arrowleaf balsamroot	10
				Sandberg bluegrass	5
				Tapertip hawksbeard	5
				Threetip sagebrush	5
92*:					
Portino	Loamy 8-12" Ppt (011BY001I)	Favorable	1,300	Bluebunch wheatgrass	25
		Normal	800	Wyoming big sagebrush	20
		Unfavorable	400	Thurber needlegrass	10
				Sandberg bluegrass	10
				Arrowleaf balsamroot	10
				Threetip sagebrush	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
92*:					
Thornock----------	Shallow Loam 8-12" Ppt (011BY002I)	Favorable	1,200	Bluebunch wheatgrass----------	30
		Normal	800	Wyoming big sagebrush---------	15
		Unfavorable	500	Thurber needlegrass----------	10
				Arrowleaf balsamroot----------	10
				Sandberg bluegrass----------	5
				Tapertip hawksbeard----------	5
				Threetip sagebrush----------	5
				Basin big sagebrush----------	5
93, 94, 95--------- Rexburg	Loamy 13-16" Ppt (013XY001I)	Favorable	1,800	Bluebunch wheatgrass----------	30
		Normal	1,200	Mountain big sagebrush--------	10
		Unfavorable	800	Prairie junegrass----------	5
				Nevada bluegrass----------	5
				Needlegrass----------	5
				Western wheatgrass----------	5
				Arrowleaf balsamroot----------	5
				Antelope bitterbrush----------	5
96---------- Rexburg	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass----------	20
		Normal	1,100	Mountain big sagebrush--------	15
		Unfavorable	600	Prairie junegrass----------	5
				Nevada bluegrass----------	5
				Needlegrass----------	5
				Western wheatgrass----------	5
				Arrowleaf balsamroot----------	5
				Antelope bitterbrush----------	5
97, 98, 99--------- Ririe	Loamy 13-16" Ppt (013XY001I)	Favorable	1,800	Bluebunch wheatgrass----------	30
		Normal	1,200	Mountain big sagebrush--------	10
		Unfavorable	800	Slender wheatgrass----------	5
				Needlegrass----------	5
				Nevada bluegrass----------	5
				Prairie junegrass----------	5
				Western wheatgrass----------	5
				Arrowleaf balsamroot----------	5
				Antelope bitterbrush----------	5
100*, 101*:					
Ririe----------	Loamy 13-16" Ppt (013XY001I)	Favorable	1,800	Bluebunch wheatgrass----------	30
		Normal	1,200	Mountain big sagebrush--------	10
		Unfavorable	800	Slender wheatgrass----------	5
				Needlegrass----------	5
				Nevada bluegrass----------	5
				Prairie junegrass----------	5
				Western wheatgrass----------	5
				Arrowleaf balsamroot----------	5
				Antelope bitterbrush----------	5
Watercanyon-------	South Slope Loamy 12-16" Ppt (013XY035I)	Favorable	1,300	Bluebunch wheatgrass----------	25
		Normal	800	Mountain big sagebrush--------	15
		Unfavorable	500	Thurber needlegrass----------	10
				Arrowleaf balsamroot----------	10
				Nevada bluegrass----------	5
				Sandberg bluegrass----------	5
				Western wheatgrass----------	5
				Wyoming big sagebrush---------	5
				Antelope bitterbrush----------	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
102*:					
Ririe	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	20
		Normal	1,100	Mountain big sagebrush	15
		Unfavorable	600	Western snowberry	10
				Slender wheatgrass	5
				Needlegrass	5
				Nevada bluegrass	5
				Prairie junegrass	5
				Western wheatgrass	5
				Arrowleaf balsamroot	5
				Antelope bitterbrush	5
Watercanyon	South Slope Loamy 12-16" Ppt (013XY035I)	Favorable	1,300	Bluebunch wheatgrass	25
		Normal	800	Mountain big sagebrush	15
		Unfavorable	500	Thurber needlegrass	10
				Arrowleaf balsamroot	10
				Nevada bluegrass	5
				Sandberg bluegrass	5
				Western wheatgrass	5
				Wyoming big sagebrush	5
				Antelope bitterbrush	5
103*:					
Ririe	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	20
		Normal	1,100	Mountain big sagebrush	15
		Unfavorable	600	Western snowberry	10
				Slender wheatgrass	5
				Needlegrass	5
				Nevada bluegrass	5
				Prairie junegrass	5
				Western wheatgrass	5
				Arrowleaf balsamroot	5
				Antelope bitterbrush	5
Watercanyon	South Slope Loamy 12-16" Ppt (013XY035I)	Favorable	1,300	Bluebunch wheatgrass	25
		Normal	800	Mountain big sagebrush	15
		Unfavorable	500	Thurber needlegrass	10
				Arrowleaf balsamroot	10
				Nevada bluegrass	5
				Sandberg bluegrass	5
				Western wheatgrass	5
				Wyoming big sagebrush	5
				Antelope bitterbrush	5
Cedarhill.					
106*:					
Scout Variant.					
Camelback Variant	Subalpine Loamy 16-22" Ppt (013XY022I)	Favorable	1,800	Slender wheatgrass	15
		Normal	1,400	Mountain brome	10
		Unfavorable	1,000	Spike-fescue	10
				Needlegrass	10
				Subalpine big sagebrush	10
				Nevada bluegrass	5
				Lupine	5
				Mountain snowberry	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
109*:					
Swanner	Shallow Stony 12-16" Ppt (013XY014I)	Favorable	1,000	Bluebunch wheatgrass	35
		Normal	600	Low sagebrush	10
		Unfavorable	300	Sandberg bluegrass	5
				Needleandthread	5
				Arrowleaf balsamroot	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
				Dwarf green rabbitbrush	5
Hondoho	Loamy 13-16" Ppt (013XY001I)	Favorable	1,800	Bluebunch wheatgrass	30
		Normal	1,200	Mountain big sagebrush	10
		Unfavorable	800	Prairie junegrass	5
				Sedge	5
				Wheatgrass	5
				Sandberg bluegrass	5
				Letterman needlegrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Antelope bitterbrush	5
110*:					
Swanner	Shallow Stony 12-16" Ppt (013XY014I)	Favorable	1,000	Bluebunch wheatgrass	35
		Normal	600	Low sagebrush	10
		Unfavorable	300	Sandberg bluegrass	5
				Needleandthread	5
				Arrowleaf balsamroot	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
				Dwarf green rabbitbrush	5
Rock outcrop.					
111 Tendoy	Wet Meadow (013XY038I)	Favorable	4,500	Sedge	25
		Normal	3,600	Nebraska sedge	20
		Unfavorable	3,000	Tufted hairgrass	15
				Redtop	5
				Rush	5
				Meadow foxtail	5
				Clover	5
				Cinquefoil	5
112*:					
Toponce.					
Broadhead	Loamy 16-22" Ppt (013XY005I)	Favorable	2,400	Bluebunch wheatgrass	40
		Normal	2,000	Columbia needlegrass	10
		Unfavorable	1,400	Slender wheatgrass	5
				Prairie junegrass	5
				Arrowleaf balsamroot	5
				Geranium	5
				Mountain big sagebrush	5
115 Valmar	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	25
		Normal	1,100	Mountain big sagebrush	20
		Unfavorable	600	Nevada bluegrass	10
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
116*:					
Valmar	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	20
		Normal	1,500	Mountain big sagebrush	15
		Unfavorable	900	Nevada bluegrass	10
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
				Western snowberry	5
Camelback	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	25
		Normal	1,500	Mountain big sagebrush	10
		Unfavorable	900	Nevada bluegrass	5
				Kentucky bluegrass	5
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Antelope bitterbrush	5
				Western snowberry	5
				Saskatoon serviceberry	5
Hades	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	20
		Normal	1,500	Mountain big sagebrush	15
		Unfavorable	900	Nevada bluegrass	8
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
				Western snowberry	5
117*:					
Valmar	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	20
		Normal	1,500	Mountain big sagebrush	15
		Unfavorable	900	Nevada bluegrass	10
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
				Western snowberry	5
Hades	Steep Slopes 16-22" Ppt (013XY003I)	Favorable	2,000	Bluebunch wheatgrass	20
		Normal	1,500	Mountain big sagebrush	15
		Unfavorable	900	Nevada bluegrass	8
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Lupine	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
				Western snowberry	5
118*:					
Valmar	Steep Stony 16-22" Ppt (013XY015I)	Favorable	1,800	Curlleaf mountainmahogany	20
		Normal	1,400	Bluebunch wheatgrass	15
		Unfavorable	1,100	Nevada bluegrass	10
				Slender wheatgrass	10
				Mountain big sagebrush	10
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Tapertip hawksbeard	5
				Western snowberry	5
Rock outcrop.					

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
119*:					
Valmar	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	25
		Normal	1,100	Mountain big sagebrush	20
		Unfavorable	600	Nevada bluegrass	10
				Slender wheatgrass	5
				Arrowleaf balsamroot	5
				Cutleaf balsamroot	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
Watercanyon	South Slope Loamy 12-16" Ppt (013XY035I)	Favorable	1,300	Bluebunch wheatgrass	25
		Normal	800	Mountain big sagebrush	15
		Unfavorable	500	Thurber needlegrass	10
				Arrowleaf balsamroot	10
				Nevada bluegrass	5
				Sandberg bluegrass	5
				Western wheatgrass	5
				Wyoming big sagebrush	5
				Antelope bitterbrush	5
Hondoho	Steep Slopes 12-16" Ppt (013XY008I)	Favorable	1,500	Bluebunch wheatgrass	30
		Normal	1,100	Mountain big sagebrush	10
		Unfavorable	600	Prairie junegrass	5
				Wheatgrass	5
				Sandberg bluegrass	5
				Letterman needlegrass	5
				Arrowleaf balsamroot	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
120	South Slope Loamy 12-16" Ppt (013XY035I)	Favorable	1,300	Bluebunch wheatgrass	25
Watercanyon		Normal	800	Mountain big sagebrush	15
		Unfavorable	500	Thurber needlegrass	10
				Arrowleaf balsamroot	10
				Nevada bluegrass	5
				Sandberg bluegrass	5
				Western wheatgrass	5
				Wyoming big sagebrush	5
				Antelope bitterbrush	5
121*:					
Watercanyon	South Slope Loamy 12-16" Ppt (013XY035I)	Favorable	1,300	Bluebunch wheatgrass	25
		Normal	800	Mountain big sagebrush	15
		Unfavorable	500	Thurber needlegrass	10
				Arrowleaf balsamroot	10
				Nevada bluegrass	5
				Sandberg bluegrass	5
				Western wheatgrass	5
				Wyoming big sagebrush	5
				Antelope bitterbrush	5
Swanner	Shallow Stony 12-16" Ppt (013XY014I)	Favorable	1,000	Bluebunch wheatgrass	35
		Normal	600	Low sagebrush	10
		Unfavorable	300	Sandberg bluegrass	5
				Needleandthread	5
				Arrowleaf balsamroot	5
				Tapertip hawksbeard	5
				Antelope bitterbrush	5
				Dwarf green rabbitbrush	5
Rock outcrop.					

See footnote at end of table.

TABLE 6.--RANGELAND PRODUCTIVITY AND CHARACTERISTIC PLANT COMMUNITIES--Continued

Soil name and map symbol	Range site	Total production		Characteristic vegetation	Composition
		Kind of year	Dry weight		
			Lb/acre		Pct
122---------- Wursten	Loamy 12-16" Ppt (013XY036I)	Favorable Normal Unfavorable	1,600 1,000 600	Bluebunch wheatgrass---------- Wyoming big sagebrush--------- Streambank wheatgrass--------- Prairie junegrass---------- Nevada bluegrass---------- Sandberg bluegrass---------- Arrowleaf balsamroot---------- Antelope bitterbrush----------	30 15 10 5 5 5 5 5
123*: Wursten----------	Loamy 12-16" Ppt (013XY036I)	Favorable Normal Unfavorable	1,600 1,000 600	Bluebunch wheatgrass---------- Wyoming big sagebrush--------- Streambank wheatgrass--------- Prairie junegrass---------- Nevada bluegrass---------- Sandberg bluegrass---------- Arrowleaf balsamroot---------- Antelope bitterbrush----------	30 15 10 5 5 5 5 5
Watercanyon Variant----------	Loamy 13-16" Ppt (013XY037I)	Favorable Normal Unfavorable	1,100 700 400	Bluegrass---------- Wyoming big sagebrush--------- Needleandthread---------- Bottlebrush squirreltail------ Indian ricegrass---------- Bluebunch wheatgrass---------- Tall gray rabbitbrush--------- Black greasewood----------	20 20 10 5 5 5 5 5
Hondoho----------	Loamy 13-16" Ppt (013XY001I)	Favorable Normal Unfavorable	1,800 1,200 800	Bluebunch wheatgrass---------- Mountain big sagebrush--------- Prairie junegrass---------- Sedge---------- Wheatgrass---------- Sandberg bluegrass---------- Letterman needlegrass--------- Arrowleaf balsamroot---------- Lupine---------- Antelope bitterbrush----------	30 10 5 5 5 5 5 5 5 5

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 7.--WOODLAND MANAGEMENT AND PRODUCTIVITY

[Only the soils suitable for production of commercial trees are listed. Absence of an entry indicates that information was not available]

Soil name and map symbol	Ordination symbol	Management concerns				Potential productivity		Trees to plant
		Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	
24*:								
Camelback.								
Greys	2R	Moderate	Slight	Slight	Moderate	Quaking aspen	65	
28--Cedarhill	3R	Severe	Severe	Slight	Moderate	Utah juniper	105	Utah juniper.
29*:								
Cedarhill	3R	Severe	Severe	Slight	Moderate	Utah juniper	105	Utah juniper.
Ireland.								
Rock outcrop.								
30*:								
Cedarhill	3R	Severe	Severe	Slight	Moderate	Utah juniper	105	Utah juniper.
Ririe.								
Watercanyon.								
31*:								
Cedarhill	3R	Severe	Severe	Slight	Moderate	Utah juniper	105	Utah juniper.
Rock outcrop.								
45*:								
Greys	2R	Moderate	Slight	Slight	Moderate	Quaking aspen	65	
Pavohroo	6A	Slight	Moderate	Slight	Severe	Douglas-fir	65	Douglas-fir.
Sedgway	6R	Slight	Moderate	Slight	Severe	Douglas-fir	65	Douglas-fir.
51*:								
Harkness	7R	Severe	Slight	Slight	Severe	Lodgepole pine Douglas-fir Subalpine fir	80 70 70	Lodgepole pine, Douglas-fir.
Sedgway	6R	Moderate	Moderate	Slight	Severe	Douglas-fir	65	Douglas-fir.
Mikesell	5R	Severe	Slight	Moderate	Severe	Lodgepole pine Subalpine fir Douglas-fir	90 75 75	Lodgepole pine, Douglas-fir.
60*:								
Ireland.								
Dateman	5R	Severe	Moderate	Slight	Moderate	Douglas-fir	60	Douglas-fir.
Pavohroo	6R	Severe	Moderate	Slight	Severe	Douglas-fir	65	Douglas-fir.
61*:								
Ireland.								
Hades.								
Cedarhill	3R	Severe	Severe	Slight	Moderate	Utah juniper	105	Utah juniper.

See footnote at end of table.

TABLE 7.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns				Potential productivity		Trees to plant
		Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	
70*, 71*: Lanoak.								
Greys	2R	Moderate	Slight	Slight	Moderate	Quaking aspen	65	
80*: Moonlight.								
Pavohroo	6R	Severe	Moderate	Slight	Severe	Douglas-fir	65	Douglas-fir.
83*:								
Pavohroo	6R	Severe	Moderate	Slight	Severe	Douglas-fir	65	Douglas-fir.
Moonlight.								
84*:								
Pavohroo	6R	Severe	Moderate	Slight	Severe	Douglas-fir	65	Douglas-fir.
Sedgway	6R	Moderate	Moderate	Slight	Severe	Douglas-fir	65	Douglas-fir.
Toponce	2R	Moderate	Slight	Slight	Severe	Quaking aspen	65	Quaking aspen.
103*: Ririe.								
Watercanyon.								
Cedarhill	3R	Moderate	Moderate	Slight	Moderate	Utah juniper	105	Utah juniper.
106*:								
Scout Variant	4R	Severe	Moderate	Slight	Moderate	Subalpine fir Lodgepole pine Douglas-fir	70 --- ---	Lodgepole pine, Douglas-fir.
Camelback Variant.								
107*:								
Sedgway	6R	Severe	Moderate	Slight	Severe	Douglas-fir	65	Douglas-fir.
Beaverdam	7R	Severe	Slight	Slight	Severe	Douglas-fir	70	Douglas-fir.
112*:								
Toponce	2R	Moderate	Slight	Slight	Severe	Quaking aspen	65	Quaking aspen.
Broadhead.								

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 8.--WOODLAND UNDERSTORY VEGETATION

[Only the soils suitable for production of commercial trees are listed]

Soil name and map symbol	Total production		Characteristic vegetation	Composition
	Kind of year	Dry weight		
		Lb/acre		Pct
23*:				
Camelback.				
Cedarhill---------	Favorable	500	Bluebunch wheatgrass----------	25
	Normal	300	Indian ricegrass----------	15
	Unfavorable	100	Utah juniper----------	10
			Nevada bluegrass----------	5
			Bottlebrush squirreltail----------	5
			Arrowleaf balsamroot----------	5
			Mountain big sagebrush----------	5
			Antelope bitterbrush----------	5
24*:				
Camelback.				
Greys----------	Favorable	2,500	Pine reedgrass----------	35
	Normal	1,500	Blue wildrye----------	5
	Unfavorable	900	Mountain brome----------	5
			Common snowberry----------	5
			Elk sedge----------	5
			Kentucky bluegrass----------	5
			Edible valerian----------	5
			Woods rose----------	5
			Sticky geranium----------	5
			Quaking aspen----------	5
28----------	Favorable	500	Bluebunch wheatgrass----------	25
Cedarhill	Normal	300	Indian ricegrass----------	15
	Unfavorable	100	Utah juniper----------	10
			Nevada bluegrass----------	5
			Bottlebrush squirreltail----------	5
			Arrowleaf balsamroot----------	5
			Mountain big sagebrush----------	5
			Antelope bitterbrush----------	5
29*:				
Cedarhill---------	Favorable	500	Bluebunch wheatgrass----------	25
	Normal	300	Indian ricegrass----------	15
	Unfavorable	100	Utah juniper----------	10
			Nevada bluegrass----------	5
			Bottlebrush squirreltail----------	5
			Arrowleaf balsamroot----------	5
			Mountain big sagebrush----------	5
			Antelope bitterbrush----------	5
Ireland.				
Rock outcrop.				
30*:				
Cedarhill---------	Favorable	500	Bluebunch wheatgrass----------	25
	Normal	300	Indian ricegrass----------	15
	Unfavorable	100	Utah juniper----------	10
			Nevada bluegrass----------	5
			Bottlebrush squirreltail----------	5
			Arrowleaf balsamroot----------	5
			Mountain big sagebrush----------	5
			Antelope bitterbrush----------	5
Ririe.				
Watercanyon.				

See footnote at end of table.

TABLE 8.--WOODLAND UNDERSTORY VEGETATION--Continued

Soil name and map symbol	Total production		Characteristic vegetation	Composition
	Kind of year	Dry weight		
		Lb/acre		Pct
31*:				
Cedarhill	Favorable	500	Bluebunch wheatgrass	25
	Normal	300	Indian ricegrass	15
	Unfavorable	100	Utah juniper	10
			Nevada bluegrass	5
			Bottlebrush squirreltail	5
			Arrowleaf balsamroot	5
			Mountain big sagebrush	5
			Antelope bitterbrush	5
Rock outcrop.				
34*:				
Cedarhill	Favorable	500	Bluebunch wheatgrass	25
	Normal	300	Indian ricegrass	15
	Unfavorable	100	Utah juniper	10
			Nevada bluegrass	5
			Bottlebrush squirreltail	5
			Arrowleaf balsamroot	5
			Mountain big sagebrush	5
			Antelope bitterbrush	5
Hondoho.				
Arbone.				
35*:				
Cedarhill	Favorable	500	Bluebunch wheatgrass	25
	Normal	300	Indian ricegrass	15
	Unfavorable	100	Utah juniper	10
			Nevada bluegrass	5
			Bottlebrush squirreltail	5
			Arrowleaf balsamroot	5
			Mountain big sagebrush	5
			Antelope bitterbrush	5
Hondoho.				
Ridgecrest.				
36*:				
Cedarhill	Favorable	500	Bluebunch wheatgrass	25
	Normal	300	Indian ricegrass	15
	Unfavorable	100	Utah juniper	10
			Nevada bluegrass	5
			Bottlebrush squirreltail	5
			Arrowleaf balsamroot	5
			Mountain big sagebrush	5
			Antelope bitterbrush	5
Manila.				
37*:				
Cedarhill	Favorable	500	Bluebunch wheatgrass	25
	Normal	300	Indian ricegrass	15
	Unfavorable	100	Utah juniper	10
			Nevada bluegrass	5
			Bottlebrush squirreltail	5
			Arrowleaf balsamroot	5
			Mountain big sagebrush	5
			Antelope bitterbrush	5
Trailcreek.				
Coalbank.				

See footnote at end of table.

TABLE 8.--WOODLAND UNDERSTORY VEGETATION--Continued

Soil name and map symbol	Total production		Characteristic vegetation	Composition
	Kind of year	Dry weight		
		Lb/acre		Pct
45*:				
Greys	Favorable	2,500	Pine reedgrass	35
	Normal	1,500	Blue wildrye	5
	Unfavorable	900	Mountain brome	5
			Common snowberry	5
			Elk sedge	5
			Kentucky bluegrass	5
			Edible valerian	5
			Woods rose	5
			Sticky geranium	5
			Quaking aspen	5
Pavohroo	Favorable	500	Mountain snowberry	20
	Normal	400	Pine reedgrass	10
	Unfavorable	200	Heartleaf arnica	10
			Elk sedge	5
			Blue wildrye	5
			Bearded wheatgrass	5
			Western meadowrue	5
			Sticky geranium	5
			Woods rose	5
			Myrtle pachystima	5
			Low Oregon-grape	5
Sedgway	Favorable	700	Pine reedgrass	45
	Normal	500	Elk sedge	5
	Unfavorable	300	Blue wildrye	5
			Bearded wheatgrass	5
			Mountain snowberry	5
			Low Oregon-grape	5
51*:				
Harkness	Favorable	700	Pine reedgrass	45
	Normal	500	Elk sedge	5
	Unfavorable	300	Blue wildrye	5
			Bearded wheatgrass	5
			Mountain snowberry	5
			Low Oregon-grape	5
Sedgway	Favorable	700	Pine reedgrass	45
	Normal	500	Elk sedge	5
	Unfavorable	300	Blue wildrye	5
			Bearded wheatgrass	5
			Mountain snowberry	5
			Low Oregon-grape	5
Mikesell	Favorable	700	Pine reedgrass	55
	Normal	500	Elk sedge	5
	Unfavorable	300	Heartleaf arnica	5
			Mountain snowberry	5
			Woods rose	5
			Blue wildrye	5
60*:				
Ireland.				

See footnote at end of table.

TABLE 8.--WOODLAND UNDERSTORY VEGETATION--Continued

Soil name and map symbol	Total production		Characteristic vegetation	Composition
	Kind of year	Dry weight		
		Lb/acre		Pct
60*:				
Dateman	Favorable	500	Mountain snowberry	15
	Normal	400	Pinegrass	10
	Unfavorable	200	Mountain brome	5
			Blue wildrye	5
			Elk sedge	5
			Blueleaf strawberry	5
			Sticky geranium	5
			Western meadowrue	5
			Heartleaf arnica	5
			Mountainlover	5
			Quaking aspen	5
			Woods rose	5
Pavohroo	Favorable	500	Mountain snowberry	20
	Normal	400	Pine reedgrass	10
	Unfavorable	200	Heartleaf arnica	10
			Elk sedge	5
			Blue wildrye	5
			Bearded wheatgrass	5
			Western meadowrue	5
			Sticky geranium	5
			Woods rose	5
			Myrtle pachystima	5
			Low Oregon-grape	5
61*:				
Ireland.				
Hades.				
Cedarhill	Favorable	500	Bluebunch wheatgrass	25
	Normal	300	Indian ricegrass	15
	Unfavorable	100	Utah juniper	10
			Nevada bluegrass	5
			Bottlebrush squirreltail	5
			Arrowleaf balsamroot	5
			Mountain big sagebrush	5
			Antelope bitterbrush	5
70*, 71*:				
Lanoak.				
Greys	Favorable	2,500	Pine reedgrass	35
	Normal	1,500	Blue wildrye	5
	Unfavorable	900	Mountain brome	5
			Common snowberry	5
			Elk sedge	5
			Kentucky bluegrass	5
			Edible valerian	5
			Woods rose	5
			Sticky geranium	5
			Quaking aspen	5
76*:				
Manila.				
Cedarhill	Favorable	500	Bluebunch wheatgrass	25
	Normal	300	Indian ricegrass	15
	Unfavorable	100	Utah juniper	10
			Nevada bluegrass	5
			Bottlebrush squirreltail	5
			Arrowleaf balsamroot	5
			Mountain big sagebrush	5
			Antelope bitterbrush	5

See footnote at end of table.

TABLE 8.--WOODLAND UNDERSTORY VEGETATION--Continued

Soil name and map symbol	Total production		Characteristic vegetation	Composition
	Kind of year	Dry weight		
		Lb/acre		Pct
80*: Moonlight.				
Pavohroo	Favorable	500	Mountain snowberry	20
	Normal	400	Pine reedgrass	10
	Unfavorable	200	Heartleaf arnica	10
			Elk sedge	5
			Blue wildrye	5
			Bearded wheatgrass	5
			Western meadowrue	5
			Sticky geranium	5
			Woods rose	5
			Myrtle pachystima	5
			Low Oregon-grape	5
83*:				
Pavohroo	Favorable	500	Mountain snowberry	20
	Normal	400	Pine reedgrass	10
	Unfavorable	200	Heartleaf arnica	10
			Elk sedge	5
			Blue wildrye	5
			Bearded wheatgrass	5
			Western meadowrue	5
			Sticky geranium	5
			Woods rose	5
			Myrtle pachystima	5
			Low Oregon-grape	5
Moonlight.				
84*:				
Pavohroo	Favorable	500	Mountain snowberry	20
	Normal	400	Pine reedgrass	10
	Unfavorable	200	Heartleaf arnica	10
			Elk sedge	5
			Blue wildrye	5
			Bearded wheatgrass	5
			Western meadowrue	5
			Sticky geranium	5
			Woods rose	5
			Myrtle pachystima	5
			Low Oregon-grape	5
Sedgway	Favorable	700	Pine reedgrass	45
	Normal	500	Elk sedge	5
	Unfavorable	300	Blue wildrye	5
			Bearded wheatgrass	5
			Mountain snowberry	5
			Low Oregon-grape	5
Toponce	Favorable	2,500	Pine reedgrass	30
	Normal	1,500	Kentucky bluegrass	10
	Unfavorable	900	Mountain brome	5
			Blue wildrye	5
			Elk sedge	5
			Sticky geranium	5
			Groundsel	5
			Woods rose	5
			Common snowberry	5
			Quaking aspen	5
103*: Ririe.				
Watercanyon.				

See footnote at end of table.

TABLE 8.--WOODLAND UNDERSTORY VEGETATION--Continued

Soil name and map symbol	Total production		Characteristic vegetation	Composition
	Kind of year	Dry weight		
		LB/acre		Pct
103*:				
Cedarhill	Favorable	500	Bluebunch wheatgrass	25
	Normal	300	Indian ricegrass	15
	Unfavorable	100	Utah juniper	10
			Nevada bluegrass	5
			Bottlebrush squirreltail	5
			Arrowleaf balsamroot	5
			Mountain big sagebrush	5
			Antelope bitterbrush	5
106*:				
Scout Variant	Favorable	700	Pine reedgrass	55
	Normal	500	Elk sedge	5
	Unfavorable	300	Heartleaf arnica	5
			Mountain snowberry	5
			Woods rose	5
			Blue wildrye	5
Camelback Variant.				
107*:				
Sedgway	Favorable	700	Pine reedgrass	45
	Normal	500	Elk sedge	5
	Unfavorable	300	Blue wildrye	5
			Bearded wheatgrass	5
			Mountain snowberry	5
			Low Oregon-grape	5
Beaverdam	Favorable	700	Pine reedgrass	45
	Normal	500	Elk sedge	5
	Unfavorable	300	Blue wildrye	5
			Bearded wheatgrass	5
			Mountain snowberry	5
			Low Oregon-grape	5
112*:				
Toponce	Favorable	2,500	Pine reedgrass	30
	Normal	1,500	Kentucky bluegrass	10
	Unfavorable	900	Mountain brome	5
			Blue wildrye	5
			Elk sedge	5
			Sticky geranium	5
			Groundsel	5
			Woods rose	5
			Common snowberry	5
			Quaking aspen	5
Broadhead.				

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 9.--WINDBREAKS AND ENVIRONMENTAL PLANTINGS

[The symbol < means less than. Absence of an entry indicates that trees generally do not grow to the given height on that soil. Only the soils suited to windbreaks and enviromental plantings are listed]

Soil name and map symbol	Trees having predicted 20-year average height, in feet, of--			
	<8	8-15	16-25	26-35
6---------- Arimo	Nanking cherry, Peking cotoneaster, European privet.	Lilac, Rocky Mountain juniper, Siberian peashrub.	Blue spruce, Scotch pine, Norway spruce.	Golden willow, idahybrid poplar, Russian-olive.
7, 8---------- Bahem	Peking cotoneaster----	Tatarian honeysuckle, Rocky Mountain juniper, Siberian peashrub, lilac.	Norway spruce, Scotch pine, blue spruce.	Idahybrid poplar, Russian-olive, golden willow.
17---------- Broncho	Peking cotoneaster, Nanking cherry.	Siberian peashrub, Rocky Mountain juniper.	Russian-olive, Scotch pine.	Idahybrid poplar, golden willow.
21, 22---------- Broxon	Peking cotoneaster----	Rocky Mountain juniper, Siberian peashrub, lilac, Tatarian honeysuckle.	Norway spruce, Scotch pine, blue spruce.	Idahybrid poplar, golden willow, Russian-olive.
42*:				
Downey----------	Nanking cherry, Peking cotoneaster, European privet.	Lilac, Rocky Mountain juniper, Siberian peashrub.	Blue spruce, Scotch pine, Norway spruce.	Golden willow, idahybrid poplar, Russian-olive.
Arimo----------	Nanking cherry, Peking cotoneaster, European privet.	Lilac, Rocky Mountain juniper, Siberian peashrub.	Blue spruce, Scotch pine, Norway spruce.	Golden willow, idahybrid poplar, Russian-olive.
77*:				
McDole----------	Peking cotoneaster, Nanking cherry.	Siberian peashrub, lilac, Tatarian honeysuckle, Rocky Mountain juniper.	Green ash, Scotch pine, blue spruce.	Russian-olive, golden willow, idahybrid poplar.
McDole Variant---	Peking cotoneaster, Nanking cherry.	Tatarian honeysuckle, Siberian peashrub, lilac, Rocky Mountain juniper.	Blue spruce, Scotch pine.	Russian-olive, golden willow, idahybrid poplar.
87, 88, 89-------- Pocatello	Nanking cherry--------	Siberian peashrub, lilac, Rocky Mountain juniper, Tatarian honeysuckle.	Green ash, Austrian pine, Scotch pine, blue spruce.	Russian-olive, idahybrid poplar, golden willow.
113*, 114*: Urban land.				
Bahem----------	Peking cotoneaster----	Tatarian honeysuckle, Rocky Mountain juniper, Siberian peashrub, lilac.	Norway spruce, Scotch pine, blue spruce.	Idahybrid poplar, Russian-olive, golden willow.
Broxon----------	Peking cotoneaster----	Rocky Mountain juniper, Siberian peashrub, lilac, Tatarian honeysuckle.	Norway spruce, Scotch pine, blue spruce.	Idahybrid poplar, golden willow, Russian-olive.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 10.--RECREATIONAL DEVELOPMENT

[Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "moderate," and "severe." Absence of an entry indicates that the soil was not rated]

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
1---------- Arbone	Moderate: dusty.	Moderate: dusty.	Moderate: slope, dusty.	Severe: erodes easily.	Slight.
2---------- Arbone	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
3*: Arbone----------	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Moderate: slope, dusty.	Severe: slope.
Hondoho----------	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Moderate: slope, dusty.	Severe: slope.
4*: Arbone----------	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
McCarey---------- Lava flows.	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope, thin layer.
5*: Arbone----------	Moderate: dusty.	Moderate: dusty.	Moderate: slope, dusty.	Severe; erodes easily.	Slight.
Rubble land.					
6---------- Arimo	Slight----------	Slight----------	Moderate: small stones.	Severe: erodes easily.	Slight.
7---------- Bahem	Moderate: dusty.	Moderate: dusty.	Moderate: dusty.	Severe: erodes easily.	Slight.
8---------- Bahem	Moderate: dusty.	Moderate: dusty.	Moderate: slope, dusty.	Severe: erodes easily.	Slight.
9---------- Bancroft	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
10---------- Bancroft	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
11*: Bancroft----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
Manila----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
12---------- Banida	Severe: percs slowly.	Severe: percs slowly.	Severe: percs slowly.	Severe: erodes easily.	Slight.

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
13*:					
Bear Lake	Severe: flooding, wetness.	Severe: wetness.	Severe: wetness, flooding.	Severe: wetness, erodes easily.	Severe: wetness, flooding.
Bear Lake Variant	Severe: flooding, wetness.	Severe: wetness.	Severe: wetness, flooding.	Severe: wetness.	Severe: wetness, flooding.
14*:					
Broadhead	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Moderate: dusty.	Moderate: slope.
Hades	Moderate: slope, small stones, dusty.	Moderate: slope, small stones, dusty.	Severe: slope, small stones.	Moderate: dusty.	Moderate: small stones, slope.
Yago	Severe: large stones.	Severe: large stones.	Severe: large stones, slope, small stones.	Severe: large stones.	Severe: large stones.
15*:					
Broadhead	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Moderate: dusty.	Moderate: slope.
Yago	Severe: large stones.	Severe: large stones.	Severe: large stones, slope, small stones.	Severe: large stones.	Severe: large stones.
16*:					
Broadhead	Severe: slope.	Severe: slope.	Severe: slope.	Moderate: slope, dusty.	Severe: slope.
Yago	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope, small stones.	Severe: large stones.	Severe: large stones, slope.
17--- Broncho	Moderate: large stones, dusty.	Moderate: large stones, dusty.	Severe: large stones.	Moderate: large stones, dusty.	Severe: large stones, droughty.
18--- Broncho	Severe: large stones.	Severe: large stones.	Severe: large stones, slope, small stones.	Moderate: large stones, dusty.	Severe: large stones, droughty.
19*:					
Broncho Variant	Severe: slope, small stones.	Severe: slope, small stones.	Severe: slope, small stones.	Severe: slope.	Severe: small stones, slope.
Pocatello	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
20*:					
Broncho Variant	Severe: slope, small stones.	Severe: slope, small stones.	Severe: slope, small stones.	Severe: slope.	Severe: small stones, slope.
Ririe	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Pocatello	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
21--- Broxon	Moderate: dusty.	Moderate: dusty.	Moderate: dusty.	Severe: erodes easily.	Slight.
22--- Broxon	Moderate: dusty.	Moderate: dusty.	Moderate: slope, dusty.	Severe: erodes easily.	Slight.
23*:					
Camelback	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
Cedarhill	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: slope.
Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
24*:					
Camelback	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
Greys	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
25*:					
Camelback	Severe: large stones.	Severe: large stones.	Severe: large stones, slope, small stones.	Severe: large stones.	Severe: large stones.
Hades	Moderate: slope, small stones, dusty.	Moderate: slope, small stones, dusty.	Severe: slope, small stones.	Moderate: dusty.	Moderate: small stones, slope.
26*:					
Camelback	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
Valmar	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
26*:					
Hades	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
27*:					
Camelback Variant	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
Valmar Variant	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
28					
Cedarhill	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: slope.
29*:					
Cedarhill	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: slope.
Ireland	Severe: slope, large stones, small stones.	Severe: slope, large stones, small stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: small stones, large stones, slope.
Rock outcrop.					
30*:					
Cedarhill	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: slope.
Ririe	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
31*:					
Cedarhill	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: slope.
Rock outcrop.					
32*:					
Cedarhill	Severe: slope, small stones.	Severe: slope, small stones.	Severe: slope, small stones.	Severe: slope.	Severe: small stones, slope.
Camelback	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
32*:					
Moonlight	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
33*:					
Cedarhill	Severe: slope, small stones.	Severe: slope, small stones.	Severe: slope, small stones.	Severe: slope.	Severe: small stones, slope.
Hades	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
Ricrest	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
34*:					
Cedarhill	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: slope.
Hondoho	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
Arbone	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
35*:					
Cedarhill	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: slope.
Hondoho	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
Ridgecrest	Severe: slope, small stones.	Severe: slope, small stones.	Severe: large stones, slope, small stones.	Severe: large stones, slope.	Severe: small stones, large stones.
36*:					
Cedarhill	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: slope.
Manila	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
37*:					
Cedarhill	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: slope.

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
37*:					
Trailcreek	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Coalbank	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
38--- Coalbank	Moderate: slope.	Moderate: slope.	Severe: slope.	Severe: erodes easily.	Moderate: droughty, slope.
39*:					
Coalbank	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
Trailcreek	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
Lonigan	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Moderate: large stones, slope.	Severe: slope.
40*:					
Coalbank	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Trailcreek	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Lonigan	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: slope.
41*:					
Downata	Severe: flooding, wetness.	Severe: wetness.	Severe: wetness, flocding.	Severe: wetness.	Severe: wetness, flooding.
Bear Lake	Severe: flooding, wetness.	Severe: wetness.	Severe: wetness, flooding.	Severe: wetness, erodes easily.	Severe: wetness, flooding.
42*:					
Downey	Moderate: small stones, dusty.	Moderate: small stones, dusty.	Severe: small stones.	Severe: erodes easily.	Moderate: small stones, droughty.
Arimo	Slight	Slight	Moderate: small stones.	Severe: erodes easily.	Slight.
43*:					
Downey	Moderate: small stones, dusty.	Moderate: small stones, dusty.	Severe: small stones.	Severe: erodes easily.	Moderate: small stones, droughty.
Arimo	Slight	Slight	Moderate: slope, small stones.	Severe: erodes easily.	Slight.

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
44*:					
Enochville	Severe: flooding, wetness.	Moderate: flooding, wetness, percs slowly.	Severe: wetness, flooding.	Moderate: wetness, flooding.	Severe: flooding.
Enochville Variant	Severe: flooding, wetness.	Moderate: flooding, wetness, small stones.	Severe: small stones, wetness, flooding.	Moderate: wetness, flooding.	Severe: flooding.
45*:					
Greys	Moderate: slope.	Moderate: slope.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
Pavohroo	Moderate: slope.	Moderate: slope.	Severe: slope.	Slight	Moderate: slope.
Sedgway	Moderate: slope, percs slowly, small stones.	Moderate: slope, percs slowly, small stones.	Severe: slope.	Severe: erodes easily.	Moderate: droughty, slope, small stones.
46 Hades	Moderate: slope, small stones, dusty.	Moderate: slope, small stones, dusty.	Severe: slope, small stones.	Moderate: dusty.	Moderate: small stones, slope.
47*:					
Hades	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
Camelback	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
Hondoho	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
48*:					
Hades	Moderate: small stones, dusty.	Moderate: small stones, dusty.	Severe: small stones.	Moderate: dusty.	Moderate: small stones.
Holmes	Severe: large stones.	Severe: large stones.	Severe: large stones, slope, small stones.	Severe: large stones.	Severe: large stones.
49*:					
Hades	Moderate: slope, small stones, dusty.	Moderate: slope, small stones, dusty.	Severe: slope, small stones.	Moderate: dusty.	Moderate: small stones, slope.
Lanoak	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
50*:					
Hades	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
50*:					
Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Camelback	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
51*:					
Harkness	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Sedgway	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Mikesell	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
52--- Holmes	Moderate: small stones.	Moderate: small stones.	Severe: small stones.	Slight	Moderate: small stones, droughty.
53*:					
Hondoho	Moderate: slope, small stones, dusty.	Moderate: slope, small stones, dusty.	Severe: slope, small stones.	Moderate: dusty.	Moderate: small stones, large stones, slope.
Arbone	Moderate: slope, small stones, dusty.	Moderate: slope, small stones, dusty.	Severe: slope, small stones.	Moderate: dusty.	Moderate: small stones, slope.
54*:					
Hondoho	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
Arbone	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
Ririe	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
55*:					
Hondoho	Moderate: large stones, dusty, slope.	Moderate: large stones, dusty, slope.	Severe: large stones, slope, small stones.	Moderate: large stones, dusty.	Severe: large stones.
Hades	Moderate: slope, small stones, dusty.	Moderate: slope, small stones, dusty.	Severe: slope, small stones.	Moderate: dusty.	Moderate: small stones, slope.

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
56*:					
Hondoho	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
Lanoak	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope, erodes easily.	Severe: slope.
Camelback	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
57 Inkom	Severe: flooding, wetness.	Severe: wetness.	Severe: wetness, flooding.	Severe: wetness, erodes easily.	Severe: wetness, flooding.
58 Inkom	Severe: flooding.	Moderate: wetness.	Moderate: wetness, flooding.	Severe: erodes easily.	Moderate: flooding.
59*:					
Ireland	Severe: slope, large stones, small stones.	Severe: slope, large stones, small stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: small stones, large stones, slope.
Camelback	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
Rock outcrop.					
60*:					
Ireland	Severe: slope, large stones, small stones.	Severe: slope, large stones, small stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: small stones, large stones, slope.
Dateman	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: slope.
Pavohroo	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
61*:					
Ireland	Severe: slope, large stones, small stones.	Severe: slope, large stones, small stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: small stones, large stones, slope.
Hades	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
Cedarhill	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: slope.

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
62--Joes	Moderate: dusty.	Moderate: dusty.	Moderate: slope, dusty.	Severe: erodes easily.	Slight.
63--Joes	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
64--Joevar	Severe: flooding.	Moderate: dusty.	Moderate: dusty.	Severe: erodes easily.	Slight.
65--Lanoak	Moderate: dusty.	Moderate: dusty.	Moderate: slope, dusty.	Severe: erodes easily.	Slight.
66--Lanoak	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
67--Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
68--Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
69*:					
Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Camelback	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
70*:					
Lanoak	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
Greys	Moderate: slope.	Moderate: slope.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
71*:					
Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
Greys	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
72*:					
Lanoak	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
Hades	Moderate: slope, small stones, dusty.	Moderate: slope, small stones, dusty.	Severe: slope, small stones.	Moderate: dusty.	Moderate: small stones, slope.
73*:					
Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
73*:					
Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
Rexburg	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
74*:					
Lava flows.					
McCarey	Moderate: dusty.	Moderate: dusty.	Moderate: slope, depth to rock, dusty.	Severe: erodes easily.	Moderate: thin layer.
McCarey Variant	Severe: large stones, depth to rock.	Severe: large stones, depth to rock.	Severe: large stones, small stones.	Severe: large stones.	Severe: large stones, thin layer.
75*:					
Manila	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
Bancroft	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
76*:					
Manila	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Cedarhill	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: slope.
77*:					
McDole	Severe: flooding.	Moderate: dusty.	Moderate: dusty.	Severe: erodes easily.	Slight.
McDole Variant	Severe: flooding.	Slight	Moderate: flooding.	Severe: erodes easily.	Slight.
78 Moonlight	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
79*:					
Moonlight	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Camelback	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
80*:					
Moonlight	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Pavohroo	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
81--- Oxford	Moderate: slope, percs slowly.	Moderate: slope, percs slowly.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
82*: Oxford---	Moderate: percs slowly.	Moderate: percs slowly.	Moderate: slope, percs slowly.	Severe: erodes easily.	Slight.
Banida---	Severe: percs slowly.	Severe: percs slowly.	Severe: percs slowly.	Severe: erodes easily.	Slight.
83*: Pavohroo---	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Moonlight---	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
84*: Pavohroo---	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Sedgway---	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Toponce---	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
85*, 86*. Pits					
87--- Pocatello	Moderate: dusty.	Moderate: dusty.	Moderate: slope, dusty.	Severe: erodes easily.	Slight.
88--- Pocatello	Moderate: dusty.	Moderate: dusty.	Severe: slope.	Severe: erodes easily.	Slight.
89--- Pocatello	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
90--- Pocatello	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
91--- Pocatello	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
92*: Portino---	Moderate: dusty.	Moderate: dusty.	Moderate: dusty.	Severe: erodes easily.	Moderate: large stones, thin layer.
Thornock---	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Moderate: large stones, dusty.	Severe: thin layer.
93--- Rexburg	Moderate: dusty.	Moderate: dusty.	Moderate: slope, dusty.	Severe: erodes easily.	Slight.

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
94---------- Rexburg	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
95---------- Rexburg	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
96---------- Rexburg	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
97---------- Ririe	Moderate: dusty.	Moderate: dusty.	Moderate: slope, dusty.	Severe: erodes easily.	Slight.
98---------- Ririe	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
99---------- Ririe	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
100*: Ririe----------	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
Watercanyon----------	Moderate: slope, dusty.	Moderate: slope, dusty.	Severe: slope.	Severe: erodes easily.	Moderate: slope.
101*: Ririe----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
Watercanyon----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
102*: Ririe----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Watercanyon----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
103*: Ririe----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
Watercanyon----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
Cedarhill----------	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Moderate: large stones, slope, dusty.	Severe: slope.
104*. Rock outcrop					
105*: Rubble land.					

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
105*: Haploxerolls.					
106*: Scout Variant	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
Camelback Variant	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
107*: Sedgway	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Beaverdam	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
108*. Slickens					
109*: Swanner	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: large stones, slope.	Severe: large stones.	Severe: large stones, slope, thin layer.
Hondoho	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Moderate: large stones, slope, dusty.	Severe: large stones, slope.
110*: Swanner	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: large stones, slope.	Severe: large stones, slope.	Severe: large stones, slope, thin layer.
Rock outcrop.					
111--- Tendoy	Severe: flooding, ponding.	Severe: ponding.	Severe: ponding, flooding.	Severe: ponding, erodes easily.	Severe: ponding, flooding.
112*: Toponce	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.
Broadhead	Severe: slope.	Severe: slope.	Severe: slope.	Moderate: slope, dusty.	Severe: slope.
113*: Urban land.					
Bahem	Moderate: dusty.	Moderate: dusty.	Moderate: dusty.	Severe: erodes easily.	Slight.
Broxon	Moderate: dusty.	Moderate: dusty.	Moderate: dusty.	Severe: erodes easily.	Slight.

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
114*: Urban land.					
Bahem	Moderate: dusty.	Moderate: dusty.	Moderate: slope, dusty.	Severe: erodes easily.	Slight.
Broxon	Moderate: dusty.	Moderate: dusty.	Moderate: slope, dusty.	Severe: erodes easily.	Slight.
115--- Valmar	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
116*: Valmar	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
Camelback	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
Hades	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
117*: Valmar	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
Hades	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
118*: Valmar	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
Rock outcrop.					
119*: Valmar	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Hondoho	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
120--- Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: erodes easily.	Severe: slope.

See footnote at end of table.

TABLE 10.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
121*: Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Swanner	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: large stones, slope.	Severe: large stones, slope.	Severe: large stones, slope, thin layer.
Rock outcrop.					
122 Wursten	Moderate: small stones.	Moderate: small stones.	Severe: small stones.	Slight	Moderate: small stones, large stones.
123*: Wursten	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
Watercanyon Variant	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, erodes easily.	Severe: slope.
Hondoho	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 11.--WILDLIFE HABITAT

[See text for definitions of "good," "fair," "poor," and "very poor." Absence of an entry indicates that the soil was not rated]

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
1---------- Arbone	Fair	Fair	Good	---	Good	Poor	Very poor.	Fair	---	Very poor.	Good.
2---------- Arbone	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
3*:											
Arbone----------	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Hondoho----------	Fair	Good	Good	---	Good	Very poor.	Very poor.	Good	---	Very poor.	Good.
4*:											
Arbone----------	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
McCarey----------	Poor	Poor	Good	---	Fair	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Lava flows.											
5*:											
Arbone----------	Fair	Fair	Good	---	Good	Poor	Very poor.	Fair	---	Very poor.	Good.
Rubble land.											
6---------- Arimo	Fair	Good	Good	---	Good	Very poor.	Very poor.	Good	---	Very poor.	Good.
7, 8---------- Bahem	Good	Good	Good	---	Good	Poor	Very poor.	Good	---	Very poor.	Good.
9---------- Bancroft	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
10---------- Bancroft	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
11*:											
Bancroft----------	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Manila----------	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
12---------- Banida	Fair	Fair	Good	---	Good	Poor	Poor	Fair	---	Poor	Good.
13*:											
Bear Lake----------	Very poor.	Poor	Good	---	Poor	Good	Good	Poor	---	Good	Fair.
Bear Lake Variant-	Very poor.	Poor	Good	---	Poor	Good	Good	Poor	---	Good	Fair.
14*:											
Broadhead----------	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.

See footnote at end of table.

TABLE 11.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
14*:											
Hades	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Yago	Very poor.	Very poor.	Good	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
15*, 16*:											
Broadhead	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Yago	Very poor.	Very poor.	Good	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
17--- Broncho	Poor	Fair	Fair	---	Fair	Very poor.	Very poor.	Fair	---	Very poor.	Fair.
18--- Broncho	Very poor.	Very poor.	Very poor.	---	Poor	Very poor.	Very poor.	Very poor.	---	Very poor.	Very poor.
19*:											
Broncho Variant	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Pocatello	Poor	Poor	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
20*:											
Broncho Variant	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Ririe	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Pocatello	Poor	Poor	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
21, 22--- Broxon	Good	Good	Good	---	Good	Poor	Very poor.	Good	---	Very poor.	Good.
23*:											
Camelback	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Cedarhill	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair
Lanoak	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
24*:											
Camelback	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Greys	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.	---
25*:											
Camelback	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Hades	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.

See footnote at end of table.

TABLE 11.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
26*:											
Camelback	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Valmar	Poor	Poor	Good	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Hades	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
27*:											
Camelback Variant	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Valmar Variant	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
28---------- Cedarhill	Very poor.	Very poor.	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.	---
29*:											
Cedarhill	Very poor.	Very poor.	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.	---
Ireland	Very poor.	Very poor.	Fair	---	Poor	Very poor.	Very poor.	Poor	---	Very poor.	Poor.
Rock outcrop.											
30*:											
Cedarhill	Very poor.	Very poor.	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.	---
Ririe	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Watercanyon	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
31*:											
Cedarhill	Very poor.	Very poor.	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.	---
Rock outcrop.											
32*:											
Cedarhill	Poor	Poor	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Camelback	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Moonlight	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
33*:											
Cedarhill	Poor	Poor	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Hades	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.

See footnote at end of table.

TABLE 11.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
33*:											
Ricrest	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
34*:											
Cedarhill	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Hondoho	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Arbone	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
35*:											
Cedarhill	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Hondoho	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Ridgecrest	Very poor.	Very poor.	Fair	---	Poor	Very poor.	Very poor.	Poor	---	Very poor.	Poor.
36*:											
Cedarhill	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Manila	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
37*:											
Cedarhill	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Trailcreek	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Coalbank	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
38---- Coalbank	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
39*:											
Coalbank	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Trailcreek	Poor	Fair	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Lonigan	Poor	Poor	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
40*:											
Coalbank	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Trailcreek	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Lonigan	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.

See footnote at end of table.

TABLE 11.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
41*:											
Downata	Very poor.	Poor	Good	---	Poor	Good	Good	Poor	---	Good	Fair.
Bear Lake	Very poor.	Poor	Good	---	Poor	Good	Good	Poor	---	Good	Fair.
42*:											
Downey	Good	Good	Good	---	Good	Very poor.	Very poor.	Good	---	Very poor.	Good.
Arimo	Fair	Good	Good	---	Good	Very poor.	Very poor.	Good	---	Very poor.	Good.
43*:											
Downey	Poor	Poor	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Arimo	Poor	Poor	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
44*:											
Enochville	Very poor.	Poor	Good	---	Good	Good	Good	Poor	---	Good	Good.
Enochville Variant	Very poor.	Poor	Good	---	Good	Good	Good	Poor	---	Good	Good.
45*:											
Greys	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.	---
Pavohroo	Poor	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.	---
Sedgway	Poor	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.	---
46--- Hades	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
47*:											
Hades	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Camelback	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Hondoho	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
48*:											
Hades	Poor	Fair	Good	---	Good	Poor	Very poor.	Fair	---	Very poor.	Good.
Holmes	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
49*:											
Hades	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Lanoak	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.

See footnote at end of table.

TABLE 11.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
50*:											
Hades	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Lanoak	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Camelback	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
51*:											
Harkness	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.	---
Sedgway	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.	---
Mikesell	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.	---
52--- Holmes	Poor	Poor	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
53*:											
Hondoho	Fair	Good	Good	---	Good	Very poor.	Very poor.	Good	---	Very poor.	Good.
Arbone	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
54*:											
Hondoho	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Arbone	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Ririe	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
55*:											
Hondoho	Poor	Poor	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Hades	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
56*:											
Hondoho	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Lanoak	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Camelback	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
57--- Inkom	Poor	Fair	Good	---	Good	Good	Good	Fair	---	Good	Good.
58--- Inkom	Fair	Fair	Good	---	Good	Good	Good	Fair	---	Good	Good.

See footnote at end of table.

TABLE 11.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
59*:											
Ireland	Very poor.	Very poor.	Fair	---	Poor	Very poor.	Very poor.	Poor	---	Very poor.	Poor.
Camelback	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Rock outcrop.											
60*:											
Ireland	Very poor.	Very poor.	Fair	---	Poor	Very poor.	Very poor.	Poor	---	Very poor.	Poor.
Dateman	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.	---
Pavohroo	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.	---
61*:											
Ireland	Very poor.	Very poor.	Fair	---	Poor	Very poor.	Very poor.	Poor	---	Very poor.	Poor.
Hades	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Cedarhill	Very poor.	Very poor.	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.	---
62, 63 Joes	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
64 Joevar	Fair	Fair	Good	---	Good	Poor	Very poor.	Fair	---	Very poor.	Good.
65 Lanoak	Fair	Fair	Good	---	Good	Poor	Very poor.	Fair	---	Very poor.	Good.
66, 67 Lanoak	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
68 Lanoak	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
69*:											
Lanoak	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Camelback	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
70*, 71*:											
Lanoak	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Greys	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.	---
72*:											
Lanoak	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Hades	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.

See footnote at end of table.

TABLE 11.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
73*:											
Lanoak	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Watercanyon	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Rexburg	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
74*:											
Lava flows.											
McCarey	Poor	Poor	Good	---	Fair	Very poor.	Very poor.	Fair	---	Very poor.	Good.
McCarey Variant	Very poor.	Very poor.	Poor	---	Poor	Poor	Very poor.	Very poor.	---	Very poor.	Poor.
75*:											
Manila	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Bancroft	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
76*:											
Manila	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Cedarhill	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
77*:											
McDole	Good	Good	Good	---	Good	Poor	Very poor.	Good	---	Very poor.	Good.
McDole Variant	Good	Good	Good	---	Good	Poor	Very poor.	Good	---	Very poor.	Good.
78---------- Moonlight	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
79*:											
Moonlight	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Camelback	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
80*:											
Moonlight	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Pavohroo	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.	---
81---------- Oxford	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
82*:											
Oxford	Fair	Fair	Good	---	Good	Poor	Very poor.	Fair	---	Very poor.	Good.

See footnote at end of table.

TABLE 11.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
82*:											
Banida	Fair	Fair	Good	---	Good	Poor	Very poor.	Fair	---	Very poor.	Good.
83*:											
Pavohroo	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.	---
Moonlight	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
84*:											
Pavohroo	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.	---
Sedgway	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.	---
Toponce	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.	---
85*, 86*. Pits											
87--- Pocatello	Good	Good	Good	---	Good	Poor	Poor	Good	---	Poor	Good.
88, 89--- Pocatello	Fair	Good	Good	---	Good	Very poor.	Very poor.	Good	---	Very poor.	Good.
90, 91--- Pocatello	Poor	Poor	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
92*:											
Portino	Poor	Poor	Poor	---	Poor	Poor	Very poor.	Poor	---	Very poor.	Poor.
Thornock	Very poor.	Very poor.	Poor	---	Poor	Very poor.	Very poor.	Very poor.	---	Very poor.	Poor.
93--- Rexburg	Fair	Fair	Good	---	Good	Poor	Very poor.	Fair	---	Very poor.	Good.
94, 95--- Rexburg	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
96--- Rexburg	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
97--- Ririe	Fair	Fair	Good	---	Good	Poor	Very poor.	Fair	---	Very poor.	Good.
98, 99--- Ririe	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
100*:											
Ririe	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Watercanyon	Fair	Good	Good	---	Good	Very poor.	Very poor.	Good	---	Very poor.	Good.
101*:											
Ririe	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.

See footnote at end of table.

TABLE 11.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
101*: Watercanyon-------	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
102*: Ririe-------------	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Watercanyon-------	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
103*: Ririe-------------	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Watercanyon-------	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Cedarhill---------	Very poor.	Very poor.	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.	---
104*. Rock outcrop											
105*: Rubble land. Haploxerolls.											
106*: Scout Variant-----	Very poor.	Very poor.	Good	Fair	Good	Very poor.	Very poor.	Poor	Good	Very poor.	---
Camelback Variant-	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
107*: Sedgway-----------	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.	---
Beaverdam---------	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.	---
108*. Slickens											
109*: Swanner-----------	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Hondoho-----------	Poor	Poor	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
110*: Swanner-----------	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Rock outcrop.											
111---------- Tendoy	Very poor.	Poor	Good	---	Poor	Good	Good	Poor	---	Good	Fair.

See footnote at end of table.

TABLE 11.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
112*:											
Toponce	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.	---
Broadhead	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
113*, 114*: Urban land.											
Bahem	Good	Good	Good	---	Good	Poor	Very poor.	Good	---	Very poor.	Good.
Broxon	Good	Good	Good	---	Good	Poor	Very poor.	Good	---	Very poor.	Good.
115--- Valmar	Very poor.	Very poor.	Good	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
116*:											
Valmar	Very poor.	Very poor.	Good	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Camelback	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Hades	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
117*:											
Valmar	Very poor.	Very poor.	Good	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Hades	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
118*:											
Valmar	Very poor.	Very poor.	Good	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Rock outcrop.											
119*:											
Valmar	Very poor.	Very poor.	Good	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Watercanyon	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Hondoho	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
120--- Watercanyon	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
121*:											
Watercanyon	Very poor.	Very poor.	Good	---	Good	Very poor.	Very poor.	Poor	---	Very poor.	Good.
Swanner	Very poor.	Very poor.	Fair	---	Fair	Very poor.	Very poor.	Poor	---	Very poor.	Fair.
Rock outcrop.											

See footnote at end of table.

TABLE 11.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
122---------- Wursten	Fair	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
123*: Wursten----------	Poor	Fair	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.
Watercanyon Variant----------	Poor	Poor	Very poor.	---	Very poor.	Very poor.	Very poor.	Very poor.	---	Very poor.	Very poor.
Hondoho----------	Poor	Poor	Good	---	Good	Very poor.	Very poor.	Fair	---	Very poor.	Good.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 12.--BUILDING SITE DEVELOPMENT

[Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "moderate," and "severe." Absence of an entry indicates that the soil was not rated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation]

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
1---------- Arbone	Slight---------	Slight---------	Slight---------	Slight---------	Moderate: frost action.	Slight.
2---------- Arbone	Moderate: slope.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope, frost action.	Moderate: slope.
3*: Arbone----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Hondoho----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
4*: Arbone----------	Moderate: slope.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope, frost action.	Moderate: slope.
McCarey---------- Lava flows.	Severe: depth to rock.	Moderate: slope, depth to rock.	Severe: depth to rock.	Severe: slope.	Moderate: depth to rock, slope, frost action.	Moderate: slope, thin layer.
5*: Arbone----------	Slight---------	Slight---------	Slight---------	Moderate: slope.	Moderate: frost action.	Slight.
Rubble land.						
6---------- Arimo	Severe: cutbanks cave.	Slight---------	Slight---------	Slight---------	Moderate: frost action.	Slight.
7, 8---------- Bahem	Severe: cutbanks cave.	Slight---------	Slight---------	Slight---------	Moderate: frost action.	Slight.
9---------- Bancroft	Moderate: slope.	Moderate: slope.	Moderate: slope.	Severe: slope.	Severe: low strength, frost action.	Moderate: slope.
10---------- Bancroft	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: low strength, slope, frost action.	Severe: slope.
11*: Bancroft---------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: low strength, slope, frost action.	Severe: slope.
Manila----------	Severe: slope.	Severe: shrink-swell, slope.	Severe: slope, shrink-swell.	Severe: shrink-swell, slope.	Severe: low strength, slope, shrink-swell.	Severe: slope.

See footnote at end of table.

TABLE 12.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
12---------- Banida	Moderate: too clayey.	Severe: shrink-swell.	Severe: shrink-swell.	Severe: shrink-swell.	Severe: low strength, shrink-swell.	Slight.
13*:						
Bear Lake--------	Severe: wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: wetness, flooding, frost action.	Severe: wetness, flooding.
Bear Lake Variant	Severe: wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: wetness, flooding, frost action.	Severe: wetness, flooding.
14*:						
Broadhead--------	Moderate: too clayey, slope.	Severe: shrink-swell.	Severe: shrink-swell.	Severe: shrink-swell, slope.	Severe: low strength, shrink-swell.	Moderate: slope.
Hades----------	Moderate: slope.	Moderate: shrink-swell, slope.	Moderate: slope, shrink-swell.	Severe: slope.	Moderate: low strength, slope, frost action.	Moderate: small stones, slope.
Yago----------	Severe: large stones.	Severe: shrink-swell, large stones.	Severe: shrink-swell, large stones.	Severe: shrink-swell, slope, large stones.	Severe: low strength, shrink-swell.	Severe: large stones.
15*:						
Broadhead--------	Moderate: too clayey, slope.	Severe: shrink-swell.	Severe: shrink-swell.	Severe: shrink-swell, slope.	Severe: low strength, shrink-swell.	Moderate: slope.
Yago----------	Severe: large stones.	Severe: shrink-swell, large stones.	Severe: shrink-swell, large stones.	Severe: shrink-swell, slope, large stones.	Severe: low strength, shrink-swell.	Severe: large stones.
16*:						
Broadhead--------	Severe: slope.	Severe: shrink-swell, slope.	Severe: slope, shrink-swell.	Severe: shrink-swell, slope.	Severe: low strength, slope, shrink-swell.	Severe: slope.
Yago----------	Severe: large stones, slope.	Severe: shrink-swell, slope, large stones.	Severe: slope, shrink-swell, large stones.	Severe: shrink-swell, slope, large stones.	Severe: low strength, slope, shrink-swell.	Severe: large stones, slope.
17---------- Broncho	Severe: cutbanks cave, large stones.	Severe: large stones.	Severe: large stones.	Severe: large stones.	Severe: large stones.	Severe: large stones, droughty.
18---------- Broncho	Severe: cutbanks cave, large stones.	Severe: large stones.	Severe: large stones.	Severe: slope, large stones.	Severe: large stones.	Severe: large stones, droughty.
19*:						
Broncho Variant--	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: small stones, slope.

See footnote at end of table.

TABLE 12.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
19*:						
Pocatello	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
20*:						
Broncho Variant	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: small stones, slope.
Ririe	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
Pocatello	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
21, 22--- Broxon	Severe: cutbanks cave.	Slight	Slight	Slight	Moderate: frost action.	Slight.
23*:						
Camelback	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: large stones, slope.
Cedarhill	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: low strength, slope, frost action.	Severe: slope.
24*:						
Camelback	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Greys	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: low strength, slope, frost action.	Severe: slope.
25*:						
Camelback	Severe: large stones.	Severe: large stones.	Severe: large stones.	Severe: slope, large stones.	Severe: large stones.	Severe: large stones.
Hades	Moderate: slope.	Moderate: shrink-swell, slope.	Moderate: slope, shrink-swell.	Severe: slope.	Moderate: low strength, slope, frost action.	Moderate: small stones, slope.
26*:						
Camelback	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Valmar	Severe: depth to rock, large stones, slope.	Severe: slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.
Hades	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.

See footnote at end of table.

TABLE 12.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
27*:						
Camelback Variant	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
Valmar Variant---	Severe: depth to rock, slope.	Severe: slope.	Severe: depth to rock, slope.	Severe: slope.	Severe: slope.	Severe: large stones, slope.
28---------- Cedarhill	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
29*:						
Cedarhill--------	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
Ireland----------	Severe: depth to rock, slope.	Severe: slope.	Severe: depth to rock, slope.	Severe: slope.	Severe: slope.	Severe: small stones, large stones, slope.
Rock outcrop.						
30*:						
Cedarhill--------	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
Ririe----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
Watercanyon------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
31*:						
Cedarhill--------	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
Rock outcrop.						
32*:						
Cedarhill--------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: small stones, slope.
Camelback--------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Moonlight--------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
33*:						
Cedarhill--------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: small stones, slope.
Hades----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.

See footnote at end of table.

TABLE 12.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
33*:						
Ricrest	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
34*:						
Cedarhill	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
Hondoho	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.
Arbone	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
35*:						
Cedarhill	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
Hondoho	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.
Ridgecrest	Severe: depth to rock, large stones, slope.	Severe: slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: small stones, large stones.
36*:						
Cedarhill	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
Manila	Severe: slope.	Severe: shrink-swell, slope.	Severe: slope, shrink-swell.	Severe: shrink-swell, slope.	Severe: low strength, slope, shrink-swell.	Severe: slope.
37*:						
Cedarhill	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
Trailcreek	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
Coalbank	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
38---------- Coalbank	Moderate: slope.	Moderate: slope.	Moderate: slope.	Severe: slope.	Severe: frost action.	Moderate: droughty, slope.
39*, 40*:						
Coalbank	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
Trailcreek	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.

See footnote at end of table.

TABLE 12.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
39*, 40*: Lonigan	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
41*: Downata	Severe: wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: low strength, wetness, flooding.	Severe: wetness, flooding.
Bear Lake	Severe: wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: wetness, flooding, frost action.	Severe: wetness, flooding.
42*: Downey	Severe: cutbanks cave.	Slight	Slight	Slight	Moderate: frost action.	Moderate: small stones, droughty.
Arimo	Severe: cutbanks cave.	Slight	Slight	Slight	Moderate: frost action.	Slight.
43*: Downey	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Moderate: frost action.	Moderate: small stones, droughty.
Arimo	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Moderate: frost action.	Slight.
44*: Enochville	Severe: wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: low strength, flooding, frost action.	Severe: flooding.
Enochville Variant	Severe: wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, frost action.	Severe: flooding.
45*: Greys	Moderate: slope.	Moderate: shrink-swell, slope.	Moderate: slope, shrink-swell.	Severe: slope.	Severe: low strength, frost action.	Moderate: slope.
Pavohroo	Moderate: slope.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: low strength, slope, frost action.	Moderate: slope.
Sedgway	Moderate: large stones, slope.	Moderate: shrink-swell, slope, large stones.	Moderate: slope, shrink-swell, large stones.	Severe: slope.	Moderate: slope, frost action, shrink-swell.	Moderate: droughty, slope, small stones.
46--- Hades	Moderate: slope.	Moderate: shrink-swell, slope.	Moderate: slope, shrink-swell.	Severe: slope.	Moderate: low strength, slope, frost action.	Moderate: small stones, slope.
47*: Hades	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.

See footnote at end of table.

TABLE 12.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
47*:						
Camelback	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Hondoho	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.
48*:						
Hades	Slight	Moderate: shrink-swell.	Moderate: shrink-swell.	Moderate: shrink-swell.	Moderate: low strength, frost action.	Moderate: small stones.
Holmes	Severe: cutbanks cave, large stones.	Severe: large stones.	Severe: large stones.	Severe: slope, large stones.	Severe: large stones.	Severe: large stones.
49*:						
Hades	Moderate: slope.	Moderate: shrink-swell, slope.	Moderate: slope, shrink-swell.	Severe: slope.	Moderate: low strength, slope, frost action.	Moderate: small stones, slope.
Lanoak	Moderate: slope.	Moderate: shrink-swell, slope.	Moderate: slope, shrink-swell.	Severe: slope.	Severe: low strength, frost action.	Moderate: slope.
50*:						
Hades	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: low strength, slope, frost action.	Severe: slope.
Camelback	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
51*:						
Harkness	Severe: slope.	Severe: shrink-swell, slope.	Severe: slope, shrink-swell.	Severe: shrink-swell, slope.	Severe: low strength, slope, frost action.	Severe: slope.
Sedgway	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Mikesell	Severe: slope.	Severe: shrink-swell, slope.	Severe: slope, shrink-swell.	Severe: shrink-swell, slope.	Severe: low strength, slope, shrink-swell.	Severe: slope.
52--- Holmes	Severe: cutbanks cave.	Moderate: large stones.	Moderate: large stones.	Moderate: large stones.	Moderate: frost action, large stones.	Moderate: small stones, droughty.
53*:						
Hondoho	Moderate: large stones, slope.	Moderate: slope, large stones.	Moderate: slope, large stones.	Severe: slope.	Moderate: slope, frost action, large stones.	Moderate: small stones, large stones, slope.

See footnote at end of table.

TABLE 12.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
53*: Arbone	Moderate: slope.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope, frost action.	Moderate: small stones, slope.
54*: Hondoho	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.
Arbone	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Ririe	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
55*: Hondoho	Severe: large stones.	Severe: large stones.	Severe: large stones.	Severe: slope, large stones.	Severe: large stones.	Severe: large stones.
Hades	Moderate: slope.	Moderate: shrink-swell, slope.	Moderate: slope, shrink-swell.	Severe: slope.	Moderate: low strength, slope, frost action.	Moderate: small stones, slope.
56*: Hondoho	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.
Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: low strength, slope, frost action.	Severe: slope.
Camelback	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
57--- Inkom	Severe: wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: wetness, flooding, frost action.	Severe: wetness, flooding.
58--- Inkom	Severe: wetness.	Severe: flooding.	Severe: flooding, wetness.	Severe: flooding.	Severe: flooding, frost action.	Moderate: flooding.
59*: Ireland	Severe: depth to rock, slope.	Severe: slope.	Severe: depth to rock, slope.	Severe: slope.	Severe: slope.	Severe: small stones, large stones, slope.
Camelback	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: large stones, slope.
Rock outcrop.						
60*: Ireland	Severe: depth to rock, slope.	Severe: slope.	Severe: depth to rock, slope.	Severe: slope.	Severe: slope.	Severe: small stones, large stones, slope.

See footnote at end of table.

TABLE 12.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
60*:						
Dateman	Severe: depth to rock, large stones, slope.	Severe: slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
Pavohroo	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
61*:						
Ireland	Severe: depth to rock, slope.	Severe: slope.	Severe: depth to rock, slope.	Severe: slope.	Severe: slope.	Severe: small stones, large stones, slope.
Hades	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Cedarhill	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
62--- Joes	Slight	Slight	Slight	Slight	Severe: frost action.	Slight.
63--- Joes	Moderate: slope.	Moderate: slope.	Moderate: slope.	Severe: slope.	Severe: frost action.	Moderate: slope.
64--- Joevar	Moderate: wetness.	Severe: flooding.	Severe: flooding.	Severe: flooding.	Severe: frost action.	Slight.
65--- Lanoak	Slight	Moderate: shrink-swell.	Moderate: shrink-swell.	Moderate: shrink-swell.	Severe: low strength, frost action.	Slight.
66--- Lanoak	Moderate: slope.	Moderate: shrink-swell, slope.	Moderate: slope, shrink-swell.	Severe: slope.	Severe: low strength, frost action.	Moderate: slope.
67, 68--- Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: low strength, slope, frost action.	Severe: slope.
69*:						
Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: low strength, slope, frost action.	Severe: slope.
Camelback	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
70*:						
Lanoak	Moderate: slope.	Moderate: shrink-swell, slope.	Moderate: slope, shrink-swell.	Severe: slope.	Severe: low strength, frost action.	Moderate: slope.
Greys	Moderate: slope.	Moderate: shrink-swell, slope.	Moderate: slope, shrink-swell.	Severe: slope.	Severe: low strength, frost action.	Moderate: slope.

See footnote at end of table.

TABLE 12.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
71*:						
Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: low strength, slope, frost action.	Severe: slope.
Greys	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: low strength, slope, frost action.	Severe: slope.
72*:						
Lanoak	Moderate: slope.	Moderate: shrink-swell, slope.	Moderate: slope, shrink-swell.	Severe: slope.	Severe: low strength, frost action.	Moderate: slope.
Hades	Moderate: slope.	Moderate: shrink-swell, slope.	Moderate: slope, shrink-swell.	Severe: slope.	Moderate: low strength, slope, frost action.	Moderate: small stones, slope.
73*:						
Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: low strength, slope, frost action.	Severe: slope.
Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
Rexburg	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
74*: Lava flows.						
McCarey	Severe: depth to rock.	Moderate: depth to rock.	Severe: depth to rock.	Moderate: slope, depth to rock.	Moderate: depth to rock, frost action.	Moderate: thin layer.
McCarey Variant	Severe: depth to rock, large stones.	Severe: depth to rock, large stones.	Severe: depth to rock, large stones.	Severe: depth to rock, large stones.	Severe: depth to rock, large stones.	Severe: large stones, thin layer.
75*:						
Manila	Moderate: too clayey, slope.	Severe: shrink-swell.	Severe: shrink-swell.	Severe: shrink-swell, slope.	Severe: low strength, shrink-swell.	Moderate: slope.
Bancroft	Moderate: slope.	Moderate: slope.	Moderate: slope.	Severe: slope.	Severe: low strength, frost action.	Moderate: slope.
76*:						
Manila	Severe: slope.	Severe: shrink-swell, slope.	Severe: slope, shrink-swell.	Severe: shrink-swell, slope.	Severe: low strength, slope, shrink-swell.	Severe: slope.
Cedarhill	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.

See footnote at end of table.

TABLE 12.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
77*:						
McDole	Slight	Severe: flooding.	Severe: flooding.	Severe: flooding.	Moderate: flooding, frost action.	Slight.
McDole Variant	Moderate: flooding.	Severe: flooding.	Severe: flooding.	Severe: flooding.	Severe: flooding.	Moderate: flooding.
78--- Moonlight	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
79*:						
Moonlight	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
Camelback	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
80*:						
Moonlight	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
Pavohroo	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
81--- Oxford	Moderate: too clayey, slope.	Severe: shrink-swell.	Severe: shrink-swell.	Severe: shrink-swell, slope.	Severe: low strength, shrink-swell.	Moderate: slope.
82*:						
Oxford	Moderate: too clayey.	Severe: shrink-swell.	Severe: shrink-swell.	Severe: shrink-swell.	Severe: low strength, shrink-swell.	Slight.
Banida	Moderate: too clayey.	Severe: shrink-swell.	Severe: shrink-swell.	Severe: shrink-swell.	Severe: low strength, shrink-swell.	Slight.
83*:						
Pavohroo	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Moonlight	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
84*:						
Pavohroo	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Sedgway	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Toponce	Severe: slope.	Severe: shrink-swell, slope.	Severe: slope, shrink-swell.	Severe: shrink-swell, slope.	Severe: low strength, slope, shrink-swell.	Severe: slope.
85*, 86*. Pits						

See footnote at end of table.

TABLE 12.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
87---------- Pocatello	Slight---------	Slight---------	Slight---------	Slight---------	Moderate: frost action.	Slight.
88---------- Pocatello	Slight---------	Slight---------	Slight---------	Moderate: slope.	Moderate: frost action.	Slight.
89---------- Pocatello	Moderate: slope.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope, frost action.	Moderate: slope.
90, 91---------- Pocatello	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
92*: Portino----------	Severe: depth to rock.	Moderate: depth to rock.	Severe: depth to rock.	Moderate: depth to rock.	Moderate: depth to rock, frost action.	Moderate: large stones, thin layer.
Thornock---------	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: thin layer.
93---------- Rexburg	Slight---------	Slight---------	Slight---------	Slight---------	Severe: frost action.	Slight.
94---------- Rexburg	Moderate: slope.	Moderate: slope.	Moderate: slope.	Severe: slope.	Severe: frost action.	Moderate: slope.
95, 96---------- Rexburg	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
97---------- Ririe	Slight---------	Slight---------	Slight---------	Slight---------	Severe: frost action.	Slight.
98---------- Ririe	Moderate: slope.	Moderate: slope.	Moderate: slope.	Severe: slope.	Severe: frost action.	Moderate: slope.
99---------- Ririe	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
100*: Ririe----------	Moderate: slope.	Moderate: slope.	Moderate: slope.	Severe: slope.	Severe: frost action.	Moderate: slope.
Watercanyon------	Moderate: slope.	Moderate: slope.	Moderate: slope.	Severe: slope.	Severe: frost action.	Moderate: slope.
101*, 102*: Ririe----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
Watercanyon------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
103*: Ririe----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.

See footnote at end of table.

TABLE 12.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
103*:						
Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
Cedarhill	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
104*. Rock outcrop						
105*: Rubble land.						
Haploxerolls.						
106*:						
Scout Variant	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
Camelback Variant	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.
107*:						
Sedgway	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Beaverdam	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: low strength, slope, frost action.	Severe: slope.
108*. Slickens						
109*:						
Swanner	Severe: depth to rock, large stones, slope.	Severe: slope, depth to rock, large stones.	Severe: depth to rock, slope, large stones.	Severe: slope, depth to rock, large stones.	Severe: depth to rock, slope, large stones.	Severe: large stones, slope, thin layer.
Hondoho	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.
110*:						
Swanner	Severe: depth to rock, large stones, slope.	Severe: slope, depth to rock, large stones.	Severe: depth to rock, slope, large stones.	Severe: slope, depth to rock, large stones.	Severe: depth to rock, slope, large stones.	Severe: large stones, slope, thin layer.
Rock outcrop.						
111 Tendoy	Severe: excess humus, ponding.	Severe: flooding, ponding, shrink-swell.	Severe: flooding, ponding, shrink-swell.	Severe: flooding, ponding, shrink-swell.	Severe: ponding, flooding, frost action.	Severe: ponding, flooding.

See footnote at end of table.

TABLE 12.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
112*:						
Toponce	Severe: slope.	Severe: shrink-swell, slope.	Severe: slope, shrink-swell.	Severe: shrink-swell, slope.	Severe: low strength, slope, shrink-swell.	Severe: slope.
Broadhead	Severe: slope.	Severe: shrink-swell, slope.	Severe: slope, shrink-swell.	Severe: shrink-swell, slope.	Severe: low strength, slope, shrink-swell.	Severe: slope.
113*:						
Urban land.						
Bahem	Severe: cutbanks cave.	Slight	Slight	Slight	Moderate: frost action.	Slight.
Broxon	Severe: cutbanks cave.	Slight	Slight	Slight	Moderate: frost action.	Slight.
114*:						
Urban land.						
Bahem	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Moderate: frost action.	Slight.
Broxon	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Moderate: frost action.	Slight.
115 Valmar	Severe: depth to rock, large stones, slope.	Severe: slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.
116*:						
Valmar	Severe: depth to rock, large stones, slope.	Severe: slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.
Camelback	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Hades	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
117*:						
Valmar	Severe: depth to rock, large stones, slope.	Severe: slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.
Hades	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
118*:						
Valmar	Severe: depth to rock, large stones, slope.	Severe: slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.
Rock outcrop.						

See footnote at end of table.

TABLE 12.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
119*:						
Valmar	Severe: depth to rock, large stones, slope.	Severe: slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.
Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
Hondoho	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.
120--- Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
121*:						
Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
Swanner	Severe: depth to rock, large stones, slope.	Severe: slope, depth to rock, large stones.	Severe: depth to rock, slope, large stones.	Severe: slope, depth to rock, large stones.	Severe: depth to rock, slope, large stones.	Severe: large stones, slope, thin layer.
Rock outcrop.						
122--- Wursten	Slight	Slight	Slight	Slight	Moderate: frost action.	Moderate: small stones, large stones.
123*:						
Wursten	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Watercanyon Variant	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
Hondoho	Severe: large stones, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 13.--SANITARY FACILITIES

[Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "good," and other terms. Absence of an entry indicates that the soil was not rated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation]

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
1 Arbone	Moderate: percs slowly.	Moderate: seepage, slope.	Slight	Slight	Good.
2 Arbone	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: slope.
3*: Arbone	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Hondoho	Severe: slope.	Severe: slope.	Severe: slope, large stones.	Severe: slope.	Poor: small stones, slope.
4*: Arbone	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: slope.
McCarey	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.	Poor: area reclaim.
Lava flows.					
5*: Arbone	Moderate: percs slowly.	Moderate: seepage, slope.	Slight	Slight	Good.
Rubble land.					
6 Arimo	Severe: poor filter.	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
7, 8 Bahem	Moderate: percs slowly.	Severe: seepage.	Slight	Slight	Fair: thin layer.
9 Bancroft	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: slope.
10 Bancroft	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
11*: Bancroft	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Manila	Severe: percs slowly, slope.	Severe: slope.	Severe: slope, too clayey.	Severe: slope.	Poor: too clayey, hard to pack, slope.

See footnote at end of table.

TABLE 13.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
12---------- Banida	Severe: percs slowly.	Slight----------	Severe: too clayey.	Slight----------	Poor: too clayey, hard to pack.
13*: Bear Lake----------	Severe: flooding, wetness, percs slowly.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Poor: wetness.
Bear Lake Variant--	Severe: flooding, depth to rock, wetness.	Severe: depth to rock, flooding, wetness.	Severe: flooding, depth to rock, wetness.	Severe: flooding, depth to rock, wetness.	Poor: area reclaim, wetness.
14*: Broadhead----------	Severe: percs slowly.	Severe: slope.	Severe: too clayey.	Moderate: slope.	Poor: too clayey, hard to pack.
Hades----------	Severe: percs slowly.	Severe: slope.	Moderate: slope, too clayey.	Moderate: slope.	Fair: too clayey, small stones, slope.
Yago----------	Severe: percs slowly, large stones.	Severe: slope, large stones.	Severe: too clayey, large stones.	Moderate: slope.	Poor: too clayey, hard to pack, large stones.
15*: Broadhead----------	Severe: percs slowly.	Severe: slope.	Severe: too clayey.	Moderate: slope.	Poor: too clayey, hard to pack.
Yago----------	Severe: percs slowly, large stones.	Severe: slope, large stones.	Severe: too clayey, large stones.	Moderate: slope.	Poor: too clayey, hard to pack, large stones.
16*: Broadhead----------	Severe: percs slowly, slope.	Severe: slope.	Severe: slope, too clayey.	Severe: slope.	Poor: too clayey, hard to pack, slope.
Yago----------	Severe: percs slowly, slope, large stones.	Severe: slope, large stones.	Severe: slope, too clayey, large stones.	Severe: slope.	Poor: too clayey, hard to pack, large stones.
17---------- Broncho	Severe: poor filter, large stones.	Severe: seepage, large stones.	Severe: too sandy, large stones.	Slight----------	Poor: seepage, too sandy, small stones.
18---------- Broncho	Severe: poor filter, large stones.	Severe: seepage, slope, large stones.	Severe: too sandy, large stones.	Moderate: slope.	Poor: seepage, too sandy, small stones.

See footnote at end of table.

TABLE 13.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
19*:					
Broncho Variant	Severe: slope.	Severe: seepage, slope.	Severe: seepage, slope, large stones.	Severe: seepage, slope.	Poor: seepage, small stones, slope.
Pocatello	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
20*:					
Broncho Variant	Severe: slope.	Severe: seepage, slope.	Severe: seepage, slope, large stones.	Severe: seepage, slope.	Poor: seepage, small stones, slope.
Ririe	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Pocatello	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
21, 22 Broxon	Severe: poor filter.	Severe: seepage.	Severe: too sandy.	Slight	Poor: seepage, too sandy, small stones.
23*:					
Camelback	Severe: slope.	Severe: slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: slope.	Poor: small stones, slope.
Cedarhill	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
24*:					
Camelback	Severe: slope.	Severe: slope.	Severe: slope, large stones.	Severe: slope.	Poor: small stones, slope.
Greys	Severe: percs slowly, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
25*:					
Camelback	Severe: large stones.	Severe: slope, large stones.	Severe: large stones.	Moderate: slope.	Poor: small stones.
Hades	Severe: percs slowly.	Severe: slope.	Moderate: slope, too clayey.	Moderate: slope.	Fair: too clayey, small stones, slope.
26*:					
Camelback	Severe: slope.	Severe: slope.	Severe: depth to rock, slope.	Severe: slope.	Poor: small stones, slope.

See footnote at end of table.

TABLE 13.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
26*:					
Valmar	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, large stones, slope.
Hades	Severe: percs slowly, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
27*:					
Camelback Variant	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
Valmar Variant	Severe: depth to rock, slope.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, small stones, slope.
28 Cedarhill	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
29*:					
Cedarhill	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
Ireland	Severe: depth to rock, slope.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, small stones, slope.
Rock outcrop.					
30*:					
Cedarhill	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
Ririe	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
31*:					
Cedarhill	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
Rock outcrop.					
32*:					
Cedarhill	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: small stones, slope.
Camelback	Severe: slope.	Severe: slope.	Severe: depth to rock, slope.	Severe: slope.	Poor: small stones, slope.
Moonlight	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.

See footnote at end of table.

TABLE 13.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
33*:					
Cedarhill	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: small stones, slope.
Hades	Severe: percs slowly, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Ricrest	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: small stones, slope.
34*:					
Cedarhill	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
Hondoho	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: small stones, slope.
Arbone	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
35*:					
Cedarhill	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
Hondoho	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: small stones, slope.
Ridgecrest	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, small stones, slope.
36*:					
Cedarhill	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
Manila	Severe: percs slowly, slope.	Severe: slope.	Severe: slope, too clayey.	Severe: slope.	Poor: too clayey, hard to pack, slope.
37*:					
Cedarhill	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
Trailcreek	Severe: depth to rock, slope.	Severe: seepage, depth to rock, slope.	Severe: depth to rock, seepage, slope.	Severe: depth to rock, seepage, slope.	Poor: area reclaim, slope.
Coalbank	Severe: slope.	Severe: seepage, slope.	Severe: seepage, slope.	Severe: seepage, slope.	Poor: slope.

See footnote at end of table.

TABLE 13.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
38---------- Coalbank	Moderate: slope.	Severe: seepage, slope.	Severe: seepage.	Severe: seepage.	Fair: slope.
39*, 40*: Coalbank----------	Severe: slope.	Severe: seepage, slope.	Severe: seepage, slope.	Severe: seepage, slope.	Poor: slope.
Trailcreek---------	Severe: depth to rock, slope.	Severe: seepage, depth to rock, slope.	Severe: depth to rock, seepage, slope.	Severe: depth to rock, seepage, slope.	Poor: area reclaim, slope.
Lonigan----------	Severe: depth to rock, slope.	Severe: seepage, depth to rock, slope.	Severe: depth to rock, seepage, slope.	Severe: depth to rock, seepage, slope.	Poor: area reclaim, small stones, slope.
41*: Downata----------	Severe: flooding, wetness, percs slowly.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Poor: wetness.
Bear Lake----------	Severe: flooding, wetness, percs slowly.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Poor: wetness.
42*, 43*: Downey----------	Severe: poor filter.	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
Arimo----------	Severe: poor filter.	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
44*: Enochville---------	Severe: flooding, wetness, percs slowly.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Poor: wetness.
Enochville Variant-	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Poor: small stones, wetness.
45*: Greys----------	Severe: percs slowly.	Severe: slope.	Moderate: slope, too clayey.	Moderate: slope.	Fair: too clayey, slope.
Pavohroo----------	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Poor: small stones.
Sedgway----------	Severe: percs slowly.	Severe: slope, large stones.	Severe: large stones.	Moderate: slope.	Poor: large stones.

See footnote at end of table.

TABLE 13.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
46---------- Hades	Severe: percs slowly.	Severe: slope.	Moderate: slope, too clayey.	Moderate: slope.	Fair: too clayey, small stones, slope.
47*:					
Hades----------	Severe: percs slowly, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Camelback----------	Severe: slope.	Severe: slope.	Severe: slope, large stones.	Severe: slope.	Poor: small stones, slope.
Hondoho----------	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: small stones, slope.
48*:					
Hades----------	Severe: percs slowly.	Slight----------	Moderate: too clayey.	Slight----------	Fair: too clayey, small stones.
Holmes----------	Severe: poor filter, large stones.	Severe: seepage, slope, large stones.	Severe: seepage, large stones.	Severe: seepage.	Poor: seepage, small stones.
49*:					
Hades----------	Severe: percs slowly.	Severe: slope.	Moderate: slope, too clayey.	Moderate: slope.	Fair: too clayey, small stones, slope.
Lanoak----------	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: slope.
50*:					
Hades----------	Severe: percs slowly, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Lanoak----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Camelback----------	Severe: slope.	Severe: slope.	Severe: depth to rock, slope.	Severe: slope.	Poor: small stones, slope.
51*:					
Harkness----------	Severe: percs slowly, slope.	Severe: slope.	Severe: slope, too clayey.	Severe: slope.	Poor: too clayey, hard to pack, slope.
Sedgway----------	Severe: percs slowly, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
Mikesell----------	Severe: percs slowly, slope.	Severe: slope.	Severe: slope, too clayey.	Severe: slope.	Poor: too clayey, hard to pack, small stones.

See footnote at end of table.

TABLE 13.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
52---------- Holmes	Severe: poor filter.	Severe: seepage.	Severe: seepage, large stones.	Severe: seepage.	Poor: seepage, small stones.
53*: Hondoho----------	Moderate: percs slowly, slope, large stones.	Severe: slope.	Severe: large stones.	Moderate: slope.	Poor: small stones.
Arbone----------	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: small stones, slope.
54*: Hondoho----------	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: small stones, slope.
Arbone----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Ririe----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
55*: Hondoho----------	Severe: large stone.	Severe: slope, large stones.	Severe: large stone.	Moderate: slope.	Poor: small stones.
Hades----------	Severe: percs slowly.	Severe: slope.	Moderate: slope, too clayey.	Moderate: slope.	Fair: too clayey, small stones, slope.
56*: Hondoho----------	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: small stones, slope.
Lanoak----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Camelback----------	Severe: slope.	Severe: slope.	Severe: slope, large stones.	Severe: slope.	Poor: small stones, slope.
57---------- Inkom	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Poor: wetness.
58---------- Inkom	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Fair: wetness.
59*: Ireland----------	Severe: depth to rock, slope.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, small stones, slope.
Camelback----------	Severe: slope.	Severe: slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: slope.	Poor: small stones, slope.

See footnote at end of table.

TABLE 13.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
59*: Rock outcrop.					
60*: Ireland	Severe: depth to rock, slope.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, small stones, slope.
Dateman	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, large stones, slope.
Pavohroo	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: small stones, slope.
61*: Ireland	Severe: depth to rock, slope.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, small stones, slope.
Hades	Severe: percs slowly, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Cedarhill	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
62--- Joes	Moderate: percs slowly.	Moderate: seepage, slope.	Slight	Slight	Good.
63--- Joes	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: slope.
64--- Joevar	Moderate: flooding, wetness, percs slowly.	Severe: flooding.	Severe: wetness.	Moderate: flooding.	Good.
65--- Lanoak	Moderate: percs slowly.	Moderate: seepage, slope.	Slight	Slight	Good.
66--- Lanoak	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: slope.
67, 68--- Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
69*: Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Camelback	Severe: slope.	Severe: slope.	Severe: depth to rock, slope.	Severe: slope.	Poor: small stones, slope.

See footnote at end of table.

TABLE 13.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
70*:					
Lanoak	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: slope.
Greys	Severe: percs slowly.	Severe: slope.	Moderate: slope, too clayey.	Moderate: slope.	Fair: too clayey, slope.
71*:					
Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Greys	Severe: percs slowly, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
72*:					
Lanoak	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: slope.
Hades	Severe: percs slowly.	Severe: slope.	Moderate: slope, too clayey.	Moderate: slope.	Fair: too clayey, small stones, slope.
73*:					
Lanoak	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Rexburg	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
74*: Lava flows.					
McCarey	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Poor: area reclaim.
McCarey Variant	Severe: depth to rock, large stones.	Severe: depth to rock, large stones.	Severe: depth to rock, large stones.	Severe: depth to rock.	Poor: area reclaim, large stones.
75*:					
Manila	Severe: percs slowly.	Severe: slope.	Severe: too clayey.	Moderate: slope.	Poor: too clayey, hard to pack.
Bancroft	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: slope.
76*:					
Manila	Severe: percs slowly, slope.	Severe: slope.	Severe: slope, too clayey.	Severe: slope.	Poor: too clayey, hard to pack, slope.
Cedarhill	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.

See footnote at end of table.

TABLE 13.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
77*:					
McDole	Moderate: flooding, percs slowly.	Severe: flooding.	Moderate: flooding.	Moderate: flooding.	Good.
McDole Variant	Severe: flooding.	Severe: flooding.	Severe: flooding.	Severe: flooding.	Good.
78--- Moonlight	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
79*:					
Moonlight	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Camelback	Severe: slope.	Severe: slope.	Severe: depth to rock, slope.	Severe: slope.	Poor: small stones, slope.
80*:					
Moonlight	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Pavohroo	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: small stones, slope.
81--- Oxford	Severe: percs slowly.	Severe: slope.	Severe: too clayey.	Moderate: slope.	Poor: too clayey, hard to pack.
82*:					
Oxford	Severe: percs slowly.	Moderate: slope.	Severe: too clayey.	Slight	Poor: too clayey, hard to pack.
Banida	Severe: percs slowly.	Moderate: slope.	Severe: too clayey.	Slight	Poor: too clayey, hard to pack.
83*:					
Pavohroo	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: small stones, slope.
Moonlight	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
84*:					
Pavohroo	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: small stones, slope.
Sedgway	Severe: percs slowly, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
Toponce	Severe: percs slowly, slope.	Severe: slope.	Severe: slope, too clayey.	Severe: slope.	Poor: too clayey, hard to pack, slope.
85*, 86*. Pits					

See footnote at end of table.

TABLE 13.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
87, 88--- Pocatello	Moderate: percs slowly.	Moderate: seepage, slope.	Slight---	Slight---	Good.
89--- Pocatello	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: slope.
90, 91--- Pocatello	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
92*: Portino---	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Poor: area reclaim.
Thornock---	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Poor: area reclaim.
93--- Rexburg	Moderate: percs slowly.	Moderate: seepage, slope.	Slight---	Slight---	Good.
94--- Rexburg	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: slope.
95, 96--- Rexburg	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
97--- Ririe	Moderate: percs slowly.	Moderate: seepage, slope.	Slight---	Slight---	Good.
98--- Ririe	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: slope.
99--- Ririe	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
100*: Ririe---	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: slope.
Watercanyon---	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: slope.
101*, 102*: Ririe---	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Watercanyon---	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
103*: Ririe---	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Watercanyon---	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Cedarhill---	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.

See footnote at end of table.

TABLE 13.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
104*. Rock outcrop					
105*: Rubble land.					
Haploxerolls.					
106*: Scout Variant------	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
Camelback Variant--	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
107*: Sedgway----------	Severe: percs slowly, slope.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: large stones, slope.
Beaverdam----------	Severe: percs slowly, slope.	Severe: slope.	Severe: slope, too clayey.	Severe: slope.	Poor: too clayey, slope.
108*. Slickens					
109*: Swanner----------	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, large stones, slope.
Hondoho----------	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: small stones, slope.
110*: Swanner----------	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, large stones, slope.
Rock outcrop.					
111----------	Severe: flooding, ponding.	Severe: flooding, excess humus, ponding.	Severe: flooding, ponding, excess humus.	Severe: flooding, ponding.	Poor: ponding, excess humus.
Tendoy					
112*: Toponce----------	Severe: percs slowly, slope.	Severe: slope.	Severe: slope, too clayey.	Severe: slope.	Poor: too clayey, hard to pack, slope.
Broadhead----------	Severe: percs slowly, slope.	Severe: slope.	Severe: slope, too clayey.	Severe: slope.	Poor: too clayey, hard to pack, slope.

See footnote at end of table.

TABLE 13.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
113*, 114*: Urban land.					
Bahem	Moderate: percs slowly.	Severe: seepage.	Slight	Slight	Fair: thin layer.
Broxon	Severe: poor filter.	Severe: seepage.	Severe: too sandy.	Slight	Poor: seepage, too sandy, small stones.
115 Valmar	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, large stones, slope.
116*: Valmar	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, large stones, slope.
Camelback	Severe: slope.	Severe: slope.	Severe: depth to rock, slope.	Severe: slope.	Poor: small stones, slope.
Hades	Severe: percs slowly, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
117*: Valmar	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, large stones, slope.
Hades	Severe: percs slowly, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
118*: Valmar	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, large stones, slope.
Rock outcrop.					
119*: Valmar	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, large stones, slope.
Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Hondoho	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: small stones, slope.
120 Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.

See footnote at end of table.

TABLE 13.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
121*:					
Watercanyon	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Swanner	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, slope.	Poor: area reclaim, large stones, slope.
Rock outcrop.					
122 Wursten	Moderate: percs slowly.	Moderate: seepage, slope.	Slight	Slight	Poor: small stones.
123*:					
Wursten	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: small stones, slope.
Watercanyon Variant	Severe: slope.	Severe: slope.	Severe: slope, excess salt.	Severe: slope.	Poor: slope, excess salt.
Hondoho	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope, large stones.	Severe: slope.	Poor: small stones, slope.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 14.--CONSTRUCTION MATERIALS

[Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "good," "fair," and other terms. Absence of an entry indicates that the soil was not rated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation]

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
1---------- Arbone	Good----------	Improbable: excess fines.	Improbable: excess fines.	Fair: small stones.
2---------- Arbone	Good----------	Improbable: excess fines.	Improbable: excess fines.	Fair: small stones, slope.
3*: Arbone----------	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
Hondoho----------	Fair: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, area reclaim, slope.
4*: Arbone----------	Good----------	Improbable: excess fines.	Improbable: excess fines.	Fair: small stones, slope.
McCarey----------	Poor: area reclaim.	Improbable: excess fines.	Improbable: excess fines.	Fair: area reclaim, small stones, thin layer.
Lava flows.				
5*: Arbone----------	Good----------	Improbable: excess fines.	Improbable: excess fines.	Fair: small stones.
Rubble land.				
6---------- Arimo	Good----------	Improbable: small stones.	Probable----------	Poor: small stones, area reclaim.
7, 8---------- Bahem	Good----------	Probable----------	Probable----------	Poor: area reclaim.
9---------- Bancroft	Good----------	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.
10---------- Bancroft	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
11*: Bancroft----------	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Manila----------	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer, slope.
12---------- Banida	Poor: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer.

See footnote at end of table.

TABLE 14.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
13*:				
Bear Lake	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness.
Bear Lake Variant	Poor: area reclaim, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness.
14*:				
Broadhead	Poor: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer.
Hades	Fair: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
Yago	Poor: large stones.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim.
15*:				
Broadhead	Poor: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer.
Yago	Poor: large stones.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim.
16*:				
Broadhead	Poor: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer, slope.
Yago	Poor: large stones.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
17, 18 Broncho	Poor: large stones.	Improbable: large stones.	Improbable: large stones.	Poor: small stones, area reclaim.
19*:				
Broncho Variant	Poor: slope.	Improbable: small stones.	Probable	Poor: small stones, area reclaim, slope.
Pocatello	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
20*:				
Broncho Variant	Poor: slope.	Improbable: small stones.	Probable	Poor: small stones, area reclaim, slope.
Ririe	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Pocatello	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.

See footnote at end of table.

TABLE 14.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
21, 22---------- Broxon	Good----------	Probable----------	Probable----------	Poor: small stones, area reclaim.
23*:				
Camelback----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
Cedarhill----------	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
Lanoak----------	Poor: low strength, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
24*:				
Camelback----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
Greys----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
25*:				
Camelback----------	Poor: large stones.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, area reclaim.
Hades----------	Fair: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
26*:				
Camelback----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
Valmar----------	Poor: area reclaim, large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, slope.
Hades----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
27*:				
Camelback Variant----	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
Valmar Variant-------	Poor: area reclaim, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, slope.

See footnote at end of table.

TABLE 14.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
28---------- Cedarhill	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
29*:				
Cedarhill----------	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
Ireland----------	Poor: area reclaim, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
Rock outcrop.				
30*:				
Cedarhill----------	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
Ririe----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Watercanyon----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
31*:				
Cedarhill----------	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
Rock outcrop.				
32*:				
Cedarhill----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
Camelback----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
Moonlight----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
33*:				
Cedarhill----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
Hades----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
Ricrest----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.

See footnote at end of table.

TABLE 14.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
34*:				
Cedarhill	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
Hondoho	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, area reclaim, slope.
Arbone	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
35*:				
Cedarhill	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
Hondoho	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, area reclaim, slope.
Ridgecrest	Poor: area reclaim, large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, slope.
36*:				
Cedarhill	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
Manila	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer, slope.
37*:				
Cedarhill	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
Trailcreek	Poor: area reclaim, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Coalbank	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
38--- Coalbank	Good	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.
39*:				
Coalbank	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Trailcreek	Poor: area reclaim.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.

See footnote at end of table.

TABLE 14.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
39*:				
Lonigan	Poor: area reclaim.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, slope.
40*:				
Coalbank	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Trailcreek	Poor: area reclaim, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Lonigan	Poor: area reclaim, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, slope.
41*:				
Downata	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness.
Bear Lake	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness.
42*, 43*:				
Downey	Good	Improbable: small stones.	Probable	Poor: small stones, area reclaim.
Arimo	Good	Improbable: small stones.	Probable	Poor: small stones, area reclaim.
44*:				
Enochville	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Good.
Enochville Variant	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
45*:				
Greys	Good	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.
Pavohroo	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
Sedgway	Fair: large stones, shrink-swell.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim.
46 Hades	Fair: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
47*:				
Hades	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.

See footnote at end of table.

TABLE 14.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
47*:				
Camelback	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
Hondoho	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, area reclaim, slope.
48*:				
Hades	Fair: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
Holmes	Poor: large stones.	Probable	Probable	Poor: small stones, area reclaim.
49*:				
Hades	Fair: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
Lanoak	Poor: low strength.	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.
50*:				
Hades	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
Lanoak	Poor: low strength, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Camelback	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
51*:				
Harkness	Poor: low strength, slope, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: large stones, area reclaim, slope.
Sedgway	Poor: slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
Mikesell	Poor: low strength, slope, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
52--- Holmes	Fair: large stones.	Probable	Probable	Poor: small stones, area reclaim.

See footnote at end of table.

TABLE 14.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
53*:				
Hondoho	Fair: large stones.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, area reclaim.
Arbone	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
54*:				
Hondoho	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, area reclaim, slope.
Arbone	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
Ririe	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
55*:				
Hondoho	Poor: large stones.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, area reclaim.
Hades	Fair: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
56*:				
Hondoho	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, area reclaim, slope.
Lanoak	Poor: low strength, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Camelback	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
57--- Inkom	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness.
58--- Inkom	Fair: low strength, wetness.	Improbable: excess fines.	Improbable: excess fines.	Good.
59*:				
Ireland	Poor: area reclaim, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
Camelback	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
Rock outcrop.				

See footnote at end of table.

TABLE 14.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
60*:				
Ireland	Poor: area reclaim, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
Dateman	Poor: area reclaim, large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, slope.
Pavohroo	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
61*:				
Ireland	Poor: area reclaim, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
Hades	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
Cedarhill	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
62--- Joes	Good	Improbable: excess fines.	Improbable: excess fines.	Good.
63--- Joes	Good	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.
64--- Joevar	Good	Improbable: excess fines.	Improbable: excess fines.	Good.
65--- Lanoak	Poor: low strength.	Improbable: excess fines.	Improbable: excess fines.	Good.
66--- Lanoak	Poor: low strength.	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.
67--- Lanoak	Poor: low strength.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
68--- Lanoak	Poor: low strength, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
69*:				
Lanoak	Poor: low strength, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Camelback	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
70*:				
Lanoak	Poor: low strength.	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.

See footnote at end of table.

TABLE 14.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
70*:				
Greys	Good	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.
71*:				
Lanoak	Poor: low strength.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Greys	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
72*:				
Lanoak	Poor: low strength.	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.
Hades	Fair: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
73*:				
Lanoak	Poor: low strength.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Watercanyon	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Rexburg	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
74*: Lava flows.				
McCarey	Poor: area reclaim.	Improbable: excess fines.	Improbable: excess fines.	Fair: area reclaim, small stones, thin layer.
McCarey Variant	Poor: area reclaim, large stones.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: area reclaim, large stones.
75*:				
Manila	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer.
Bancroft	Good	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.
76*:				
Manila	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer, slope.
Cedarhill	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
77*:				
McDole	Good	Improbable: excess fines.	Improbable: excess fines.	Good.
McDole Variant	Good	Improbable: excess fines.	Improbable: excess fines.	Good.

See footnote at end of table.

TABLE 14.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
78--- Moonlight	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
79*: Moonlight---	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Camelback---	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
80*: Moonlight---	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Pavohroo---	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
81--- Oxford	Poor: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Fair: too clayey, slope.
82*: Oxford---	Poor: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Fair: too clayey.
Banida---	Poor: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer.
83*: Pavohroo---	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
Moonlight---	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
84*: Pavohroo---	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
Sedgway---	Poor: slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
Toponce---	Poor: low strength, slope, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer, slope.
85*, 86*. Pits				
87, 88--- Pocatello	Good---	Improbable: excess fines.	Improbable: excess fines.	Fair: thin layer.

See footnote at end of table.

TABLE 14.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
89---------- Pocatello	Good----------	Improbable: excess fines.	Improbable: excess fines.	Fair: thin layer, slope.
90---------- Pocatello	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
91---------- Pocatello	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
92*: Portino----------	Poor: area reclaim.	Improbable: excess fines.	Improbable: excess fines.	Fair: area reclaim, large stones.
Thornock----------	Poor: area reclaim.	Improbable: excess fines.	Improbable: excess fines.	Poor: area reclaim, small stones.
93---------- Rexburg	Good----------	Improbable: excess fines.	Improbable: excess fines.	Good.
94---------- Rexburg	Good----------	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.
95---------- Rexburg	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
96---------- Rexburg	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
97---------- Ririe	Good----------	Improbable: excess fines.	Improbable: excess fines.	Good.
98---------- Ririe	Good----------	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.
99---------- Ririe	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
100*: Ririe----------	Good----------	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.
Watercanyon----------	Good----------	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.
101*: Ririe----------	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Watercanyon----------	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
102*: Ririe----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Watercanyon----------	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
103*: Ririe----------	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.

See footnote at end of table.

TABLE 14.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
103*:				
Watercanyon	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Cedarhill	Poor: large stones.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
104*. Rock outcrop				
105*: Rubble land.				
Haploxerolls.				
106*:				
Scout Variant	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
Camelback Variant	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
107*:				
Sedgway	Poor: slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, area reclaim, slope.
Beaverdam	Poor: low strength, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer, slope.
108*. Slickens				
109*:				
Swanner	Poor: area reclaim, large stones.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: area reclaim, large stones, slope.
Hondoho	Poor: large stones.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, area reclaim, slope.
110*:				
Swanner	Poor: area reclaim, large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: area reclaim, large stones, slope.
Rock outcrop.				
111 Tendoy	Poor: wetness, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer, wetness.

See footnote at end of table.

TABLE 14.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
112*:				
Toponce	Poor: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer, slope.
Broadhead	Poor: low strength, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer, slope.
113*, 114*: Urban land.				
Bahem	Good	Probable	Probable	Poor: area reclaim.
Broxon	Good	Probable	Probable	Poor: small stones, area reclaim.
115 Valmar	Poor: area reclaim, large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, slope.
116*:				
Valmar	Poor: area reclaim, large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, slope.
Camelback	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
Hades	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
117*:				
Valmar	Poor: area reclaim, large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, slope.
Hades	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
118*:				
Valmar	Poor: area reclaim, large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, slope.
Rock outcrop.				
119*:				
Valmar	Poor: area reclaim, large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: large stones, slope.

See footnote at end of table.

TABLE 14.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
119*:				
Watercanyon	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Hondoho	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, area reclaim, slope.
120--- Watercanyon	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
121*:				
Watercanyon	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
Swanner	Poor: area reclaim, large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: area reclaim, large stones, slope.
Rock outcrop.				
122--- Wursten	Good---	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
123*:				
Wursten	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
Watercanyon Variant	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer, slope.
Hondoho	Poor: large stones, slope.	Improbable: excess fines, large stones.	Improbable: excess fines, large stones.	Poor: small stones, area reclaim, slope.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 15.--WATER MANAGEMENT

[Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "moderate," and "severe." Absence of an entry indicates that the soil was not evaluated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation]

Soil name and map symbol	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
1---------- Arbone	Moderate: seepage.	Severe: piping.	Deep to water	Erodes easily	Erodes easily	Erodes easily.
2---------- Arbone	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
3*: Arbone----------	Severe: slope.	Severe: piping.	Deep to water	Slope----------	Slope----------	Slope.
Hondoho----------	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
4*: Arbone----------	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
McCarey----------	Severe: slope.	Severe: piping.	Deep to water	Depth to rock, slope, erodes easily.	Slope, depth to rock, erodes easily.	Slope, erodes easily, depth to rock.
Lava flows.						
5*: Arbone----------	Moderate: seepage, slope.	Severe: piping.	Deep to water	Slope----------	Erodes easily	Erodes easily.
Rubble land.						
6---------- Arimo	Severe: seepage.	Severe: seepage.	Deep to water	Erodes easily	Erodes easily, too sandy.	Erodes easily.
7---------- Bahem	Moderate: seepage.	Severe: piping.	Deep to water	Erodes easily	Erodes easily	Erodes easily.
8---------- Bahem	Moderate: seepage, slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Erodes easily	Erodes easily.
9, 10---------- Bancroft	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
11*: Bancroft---------	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Manila----------	Severe: slope.	Moderate: thin layer, hard to pack.	Deep to water	Percs slowly, slope, erodes easily.	Slope, erodes easily, percs slowly.	Slope, erodes easily, percs slowly.
12---------- Banida	Slight---------	Moderate: hard to pack.	Deep to water	Percs slowly, erodes easily.	Erodes easily, percs slowly.	Erodes easily, percs slowly.
13*: Bear Lake--------	Slight---------	Severe: piping, wetness.	Flooding, frost action.	Wetness, erodes easily, flooding.	Erodes easily, wetness.	Wetness, erodes easily.

See footnote at end of table.

TABLE 15.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
13*: Bear Lake Variant	Moderate: seepage, depth to rock.	Severe: piping, wetness.	Depth to rock, flooding, frost action.	Wetness, depth to rock, flooding.	Depth to rock, erodes easily, wetness.	Wetness, erodes easily, depth to rock.
14*: Broadhead	Severe: slope.	Moderate: hard to pack.	Deep to water	Percs slowly, slope.	Slope, percs slowly.	Slope, percs slowly.
Hades	Severe: slope.	Moderate: piping.	Deep to water	Slope	Slope	Slope.
Yago	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, percs slowly.	Slope, large stones, percs slowly.	Large stones, slope, droughty.
15*, 16*: Broadhead	Severe: slope.	Moderate: hard to pack.	Deep to water	Percs slowly, slope.	Slope, percs slowly.	Slope, percs slowly.
Yago	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, percs slowly.	Slope, large stones, percs slowly.	Large stones, slope, droughty.
17--- Broncho	Severe: seepage.	Severe: seepage, large stones.	Deep to water	Large stones, droughty, slope.	Large stones, too sandy.	Large stones, droughty.
18--- Broncho	Severe: seepage, slope.	Severe: seepage, large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones, too sandy.	Large stones, slope, droughty.
19*: Broncho Variant	Severe: seepage, slope.	Severe: seepage, large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Pocatello	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily, excess salt.	Slope, erodes easily.	Slope, erodes easily.
20*: Broncho Variant	Severe: seepage, slope.	Severe: seepage, large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Ririe	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Pocatello	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily, excess salt.	Slope, erodes easily.	Slope, erodes easily.
21--- Broxon	Severe: seepage.	Severe: seepage.	Deep to water	Erodes easily	Large stones, erodes easily, too sandy.	Large stones, erodes easily.
22--- Broxon	Severe: seepage.	Severe: seepage.	Deep to water	Slope, erodes easily.	Large stones, erodes easily, too sandy.	Large stones, erodes easily.
23*: Camelback	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.

See footnote at end of table.

TABLE 15.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
23*:						
Cedarhill	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Lanoak	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
24*:						
Camelback	Severe: slope.	Moderate: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Greys	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
25*:						
Camelback	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Hades	Severe: slope.	Moderate: piping.	Deep to water	Slope	Slope	Slope.
26*:						
Camelback	Severe: slope.	Moderate: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Valmar	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
Hades	Severe: slope.	Moderate: piping.	Deep to water	Slope	Slope	Slope.
27*:						
Camelback Variant	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Valmar Variant	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
28 Cedarhill	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
29*:						
Cedarhill	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Ireland	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
Rock outcrop.						
30*:						
Cedarhill	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.

See footnote at end of table.

TABLE 15.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
30*:						
Ririe	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Watercanyon	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
31*:						
Cedarhill	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Rock outcrop.						
32*:						
Cedarhill	Severe: slope.	Severe: seepage.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Camelback	Severe: slope.	Moderate: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Moonlight	Severe: slope.	Severe: piping.	Deep to water	Slope	Slope, erodes easily.	Slope, erodes easily.
33*:						
Cedarhill	Severe: slope.	Severe: seepage.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Hades	Severe: slope.	Moderate: piping.	Deep to water	Slope	Slope	Slope.
Ricrest	Severe: slope.	Severe: piping.	Deep to water	Slope	Slope	Slope.
34*:						
Cedarhill	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Hondoho	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Arbone	Severe: slope.	Severe: piping.	Deep to water	Slope	Slope	Slope.
35*:						
Cedarhill	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Hondoho	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Ridgecrest	Severe: slope.	Severe: seepage, large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.

See footnote at end of table.

TABLE 15.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
36*:						
Cedarhill	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Manila	Severe: slope.	Moderate: thin layer, hard to pack.	Deep to water	Percs slowly, slope, erodes easily.	Slope, erodes easily, percs slowly.	Slope, erodes easily, percs slowly.
37*:						
Cedarhill	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Trailcreek	Severe: seepage, slope.	Severe: piping.	Deep to water	Droughty, soil blowing, depth to rock.	Slope, depth to rock, erodes easily.	Slope, erodes easily, droughty.
Coalbank	Severe: seepage, slope.	Severe: piping.	Deep to water	Droughty, soil blowing, slope.	Slope, erodes easily, soil blowing.	Slope, erodes easily, droughty.
38--- Coalbank	Severe: seepage, slope.	Severe: piping.	Deep to water	Droughty, soil blowing, slope.	Slope, erodes easily, soil blowing.	Slope, erodes easily, droughty.
39*, 40*:						
Coalbank	Severe: seepage, slope.	Severe: piping.	Deep to water	Droughty, soil blowing, slope.	Slope, erodes easily, soil blowing.	Slope, erodes easily, droughty.
Trailcreek	Severe: seepage, slope.	Severe: piping.	Deep to water	Droughty, soil blowing, depth to rock.	Slope, depth to rock, erodes easily.	Slope, erodes easily, droughty.
Lonigan	Severe: seepage, slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
41*:						
Downata	Moderate: seepage.	Severe: thin layer, wetness.	Flooding, frost action.	Wetness, flooding.	Erodes easily, wetness.	Wetness, erodes easily.
Bear Lake	Slight	Severe: piping, wetness.	Flooding, frost action.	Wetness, erodes easily, flooding.	Erodes easily, wetness.	Wetness, erodes easily.
42*:						
Downey	Severe: seepage.	Severe: seepage.	Deep to water	Droughty, erodes easily.	Large stones, erodes easily, too sandy.	Large stones, erodes easily, droughty.
Arimo	Severe: seepage.	Severe: seepage.	Deep to water	Erodes easily	Erodes easily, too sandy.	Erodes easily.
43*:						
Downey	Severe: seepage.	Severe: seepage.	Deep to water	Droughty, slope, erodes easily.	Large stones, erodes easily, too sandy.	Large stones, erodes easily, droughty.
Arimo	Severe: seepage.	Severe: seepage.	Deep to water	Slope, erodes easily.	Erodes easily, too sandy.	Erodes easily.

See footnote at end of table.

TABLE 15.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
44*:						
Enochville	Slight	Severe: wetness.	Flooding, frost action.	Wetness, flooding.	Erodes easily, wetness.	Wetness, erodes easily.
Enochville Variant	Moderate: seepage.	Severe: seepage, wetness.	Flooding, large stones, frost action.	Wetness, droughty, flooding.	Large stones, wetness.	Large stones, wetness, droughty.
45*:						
Greys	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Pavohroo	Severe: slope.	Severe: piping.	Deep to water	Slope	Slope, large stones, erodes easily.	Slope, erodes easily.
Sedgway	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones, erodes easily.	Large stones, slope, erodes easily.
46--- Hades	Severe: slope.	Moderate: piping.	Deep to water	Slope	Slope	Slope.
47*:						
Hades	Severe: slope.	Moderate: piping.	Deep to water	Slope	Slope	Slope.
Camelback	Severe: slope.	Moderate: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Hondoho	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
48*:						
Hades	Slight	Moderate: piping.	Deep to water	Favorable	Favorable	Favorable.
Holmes	Severe: seepage, slope.	Severe: seepage, large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones, too sandy.	Large stones, slope, droughty.
49*:						
Hades	Severe: slope.	Moderate: piping.	Deep to water	Slope	Slope	Slope.
Lanoak	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
50*:						
Hades	Severe: slope.	Moderate: piping.	Deep to water	Slope	Slope	Slope.
Lanoak	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Camelback	Severe: slope.	Moderate: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.

See footnote at end of table.

TABLE 15.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
51*:						
Harkness	Severe: slope.	Moderate: hard to pack, large stones.	Deep to water	Large stones, percs slowly, slope.	Slope, large stones, erodes easily.	Large stones, slope, erodes easily.
Sedgway	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones, erodes easily.	Large stones, slope, erodes easily.
Mikesell	Severe: slope.	Moderate: hard to pack, large stones.	Deep to water	Percs slowly, slope, erodes easily.	Slope, large stones, erodes easily.	Large stones, slope, erodes easily.
52--- Holmes	Severe: seepage.	Severe: seepage, large stones.	Deep to water	Large stones, droughty.	Large stones, too sandy.	Large stones, droughty.
53*:						
Hondoho	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Arbone	Severe: slope.	Severe: piping.	Deep to water	Slope	Slope	Slope.
54*:						
Hondoho	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Arbone	Severe: slope.	Severe: piping.	Deep to water	Slope	Slope	Slope.
Ririe	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
55*:						
Hondoho	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Hades	Severe: slope.	Moderate: piping.	Deep to water	Slope	Slope	Slope.
56*:						
Hondoho	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Lanoak	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Camelback	Severe: slope.	Moderate: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
57--- Inkom	Moderate: seepage.	Severe: piping, wetness.	Flooding, frost action.	Wetness, erodes easily, flooding.	Erodes easily, wetness.	Wetness, erodes easily.
58--- Inkom	Moderate: seepage.	Severe: piping.	Flooding, frost action.	Wetness, erodes easily, flooding.	Erodes easily, wetness.	Erodes easily.

See footnote at end of table.

TABLE 15.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
59*:						
Ireland	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
Camelback	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Rock outcrop.						
60*:						
Ireland	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
Dateman	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
Pavohroo	Severe: slope.	Severe: piping.	Deep to water	Slope	Slope, large stones, erodes easily.	Slope, erodes easily.
61*:						
Ireland	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
Hades	Severe: slope.	Moderate: piping.	Deep to water	Slope	Slope	Slope.
Cedarhill	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
62--- Joes	Moderate: seepage.	Severe: piping.	Deep to water	Erodes easily	Erodes easily	Erodes easily.
63--- Joes	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
64--- Joevar	Moderate: seepage.	Severe: piping.	Deep to water	Erodes easily	Erodes easily	Erodes easily.
65--- Lanoak	Moderate: seepage.	Severe: piping.	Deep to water	Erodes easily.	Erodes easily	Erodes easily.
66, 67, 68 Lanoak	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
69*:						
Lanoak	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Camelback	Severe: slope.	Moderate: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
70*, 71*:						
Lanoak	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Greys	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.

See footnote at end of table.

TABLE 15.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
72*:						
Lanoak	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Hades	Severe: slope.	Moderate: piping.	Deep to water	Slope	Slope	Slope.
73*:						
Lanoak	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Watercanyon	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Rexburg	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
74*: Lava flows.						
McCarey	Moderate: seepage, depth to rock, slope.	Severe: piping.	Deep to water	Depth to rock, slope, erodes easily.	Depth to rock, erodes easily.	Erodes easily, depth to rock.
McCarey Variant	Severe: depth to rock.	Severe: piping, large stones.	Deep to water	Large stones, droughty, depth to rock.	Large stones, depth to rock.	Large stones, droughty, depth to rock.
75*:						
Manila	Severe: slope.	Moderate: thin layer, hard to pack.	Deep to water	Percs slowly, slope, erodes easily.	Slope, erodes easily, percs slowly.	Slope, erodes easily, percs slowly.
Bancroft	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
76*:						
Manila	Severe: slope.	Moderate: thin layer, hard to pack.	Deep to water	Percs slowly, slope, erodes easily.	Slope, erodes easily, percs slowly.	Slope, erodes easily, percs slowly.
Cedarhill	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
77*:						
McDole	Moderate: seepage.	Severe: piping.	Deep to water	Erodes easily	Erodes easily	Erodes easily.
McDole Variant	Moderate: seepage.	Severe: piping.	Deep to water, flooding.	Erodes easily, flooding.	Erodes easily	Erodes easily.
78--- Moonlight	Severe: slope.	Severe: piping.	Deep to water	Slope	Slope, erodes easily.	Slope, erodes easily.
79*:						
Moonlight	Severe: slope.	Severe: piping.	Deep to water	Slope	Slope, erodes easily.	Slope, erodes easily.
Camelback	Severe: slope.	Moderate: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.

See footnote at end of table.

TABLE 15.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
80*:						
Moonlight	Severe: slope.	Severe: piping.	Deep to water	Slope	Slope, erodes easily.	Slope, erodes easily.
Pavohroo	Severe: slope.	Severe: piping.	Deep to water	Slope	Slope, large stones, erodes easily.	Slope, erodes easily.
81--- Oxford	Severe: slope.	Moderate: hard to pack.	Deep to water	Percs slowly, slope.	Slope, erodes easily, percs slowly.	Slope, erodes easily, percs slowly.
82*:						
Oxford	Moderate: slope.	Moderate: hard to pack.	Deep to water	Percs slowly, slope.	Erodes easily, percs slowly.	Erodes easily, percs slowly.
Banida	Moderate: slope.	Moderate: hard to pack.	Deep to water	Percs slowly, slope, erodes easily.	Erodes easily, percs slowly.	Erodes easily, percs slowly.
83*:						
Pavohroo	Severe: slope.	Severe: piping.	Deep to water	Slope	Slope, large stones, erodes easily.	Slope, erodes easily.
Moonlight	Severe: slope.	Severe: piping.	Deep to water	Slope	Slope, erodes easily.	Slope, erodes easily.
84*:						
Pavohroo	Severe: slope.	Severe: piping.	Deep to water	Slope	Slope, large stones, erodes easily.	Slope, erodes easily.
Sedgway	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones, erodes easily.	Large stones, slope, erodes easily.
Toponce	Severe: slope.	Moderate: hard to pack.	Deep to water	Percs slowly, slope, erodes easily.	Slope, erodes easily, percs slowly.	Slope, erodes easily, percs slowly.
85*, 86*. Pits						
87--- Pocatello	Moderate: seepage.	Severe: piping.	Deep to water	Erodes easily, excess salt.	Erodes easily	Erodes easily.
88--- Pocatello	Moderate: seepage, slope.	Severe: piping.	Deep to water	Slope, erodes easily, excess salt.	Erodes easily	Erodes easily.
89, 90, 91--- Pocatello	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily, excess salt.	Slope, erodes easily.	Slope, erodes easily.
92*:						
Portino	Moderate: seepage, depth to rock.	Severe: piping.	Deep to water	Depth to rock, erodes easily.	Depth to rock, erodes easily.	Erodes easily, depth to rock.
Thornock	Severe: depth to rock.	Severe: piping.	Deep to water	Depth to rock	Depth to rock, erodes easily.	Erodes easily, depth to rock.
93--- Rexburg	Moderate: seepage.	Severe: piping.	Deep to water	Erodes easily	Erodes easily	Erodes easily.

See footnote at end of table.

TABLE 15.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
94, 95, 96-------- Rexburg	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
97---------- Ririe	Moderate: seepage.	Severe: piping.	Deep to water	Erodes easily	Erodes easily	Erodes easily.
98, 99---------- Ririe	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
100*, 101*, 102*: Ririe----------	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Watercanyon------	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
103*: Ririe----------	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Watercanyon------	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Cedarhill--------	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
104*. Rock outcrop						
105*: Rubble land.						
Haploxerolls.						
106*: Scout Variant----	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Camelback Variant	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
107*: Sedgway----------	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones, erodes easily.	Large stones, slope, erodes easily.
Beaverdam--------	Severe: slope.	Slight---------	Deep to water	Percs slowly, slope, erodes easily.	Slope, erodes easily, percs slowly.	Slope, erodes easily, percs slowly.
108*. Slickens						
109*: Swanner----------	Severe: depth to rock, slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
Hondoho----------	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.

See footnote at end of table.

TABLE 15.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
110*:						
Swanner	Severe: depth to rock, slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
Rock outcrop.						
111--- Tendoy	Moderate: seepage.	Severe: excess humus, ponding.	Ponding, flooding, subsides.	Ponding, erodes easily, flooding.	Erodes easily, ponding.	Wetness, erodes easily.
112*:						
Toponce	Severe: slope.	Moderate: hard to pack.	Deep to water	Percs slowly, slope, erodes easily.	Slope, erodes easily, percs slowly.	Slope, erodes easily, percs slowly.
Broadhead	Severe: slope.	Moderate: hard to pack.	Deep to water	Percs slowly, slope.	Slope, percs slowly.	Slope, percs slowly.
113*:						
Urban land.						
Bahem	Moderate: seepage.	Severe: piping.	Deep to water	Erodes easily	Erodes easily	Erodes easily.
Broxon	Severe: seepage.	Severe: seepage.	Deep to water	Erodes easily	Large stones, erodes easily, too sandy.	Large stones, erodes easily.
114*:						
Urban land.						
Bahem	Moderate: seepage, slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Erodes easily	Erodes easily.
Broxon	Severe: seepage.	Severe: seepage.	Deep to water	Slope, erodes easily.	Large stones, erodes easily, too sandy.	Large stones, erodes easily.
115--- Valmar	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
116*:						
Valmar	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
Camelback	Severe: slope.	Moderate: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
Hades	Severe: slope.	Moderate: piping.	Deep to water	Slope	Slope	Slope.
117*:						
Valmar	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
Hades	Severe: slope.	Moderate: piping.	Deep to water	Slope	Slope	Slope.

See footnote at end of table.

TABLE 15.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--		Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Drainage	Irrigation	Terraces and diversions	Grassed waterways
118*:						
Valmar	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
Rock outcrop.						
119*:						
Valmar	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
Watercanyon	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Hondoho	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.
120--- Watercanyon	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
121*:						
Watercanyon	Severe: slope.	Severe: piping.	Deep to water	Slope, erodes easily.	Slope, erodes easily.	Slope, erodes easily.
Swanner	Severe: depth to rock, slope.	Severe: large stones.	Deep to water	Large stones, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones, slope, droughty.
Rock outcrop.						
122--- Wursten	Moderate: seepage.	Severe: piping.	Deep to water	Favorable---	Favorable---	Favorable.
123*:						
Wursten	Severe: slope.	Severe: piping.	Deep to water	Slope---	Slope---	Slope.
Watercanyon Variant	Severe: slope.	Severe: piping, excess salt.	Deep to water	Droughty, slope, erodes easily.	Slope, erodes easily.	Slope, excess salt, erodes easily.
Hondoho	Severe: slope.	Severe: large stones.	Deep to water	Large stones, droughty, slope.	Slope, large stones.	Large stones, slope, droughty.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 16.--ENGINEERING INDEX PROPERTIES

[The symbol < means less than; > means more than. Absence of an entry indicates that data were not estimated]

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 3 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
1, 2----------	0-9	Silt loam--------	ML	A-4	0-5	90-100	90-100	80-90	55-75	20-35	NP-10
Arbone	9-60	Loam, silt loam	ML	A-4	0-5	90-100	85-100	80-90	55-75	20-35	NP-10
3*:											
Arbone----------	0-9	Gravelly silt loam.	ML	A-4	0-5	75-80	70-75	60-70	50-60	20-35	NP-10
	9-60	Gravelly silt loam.	ML, GM	A-4	0-5	60-80	55-75	50-70	40-60	20-35	NP-10
Hondoho---------	0-15	Gravelly silt loam.	ML, CL-ML	A-4	0-10	75-85	65-75	60-75	50-65	25-35	5-10
	15-60	Very gravelly loam, very cobbly loam, very gravelly silt loam.	GM, GM-GC	A-2, A-1	5-45	35-55	35-50	30-45	20-35	25-35	5-10
4*:											
Arbone----------	0-9	Silt loam--------	ML	A-4	0-5	90-100	90-100	80-90	55-75	20-35	NP-10
	9-60	Loam, silt loam	ML	A-4	0-5	90-100	85-100	80-90	55-75	20-35	NP-10
McCarey---------	0-12	Silt loam--------	ML	A-4	0-5	95-100	90-100	85-100	60-90	20-35	NP-10
	12-17	Clay loam, silty clay loam, silt loam.	CL, CL-ML	A-6, A-4	0-5	85-100	85-100	80-100	65-85	25-40	5-15
	17-28	Silt loam, loam	ML	A-4	0-5	85-100	85-100	80-100	65-85	20-35	NP-10
	28	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Lava flows.											
5*:											
Arbone----------	0-9	Silt loam--------	ML	A-4	0-5	90-100	90-100	80-90	55-75	20-35	NP-10
	9-60	Loam, silt loam	ML	A-4	0-5	90-100	85-100	80-90	55-75	20-35	NP-10
Rubble land.											
6----------	0-18	Silt loam--------	ML, CL-ML	A-4	0-5	80-95	75-90	70-85	65-80	20-30	NP-10
Arimo	18-33	Silt loam--------	ML, CL-ML	A-4	0-5	80-95	75-90	70-85	65-80	20-30	NP-10
	33-60	Extremely gravelly coarse sand.	GP	A-1	5-25	20-30	10-20	0-10	0-5	---	NP
7, 8----------	0-11	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	85-95	20-30	NP-10
Bahem	11-49	Silt loam, silt	ML, CL-ML	A-4	0	95-100	95-100	95-100	90-95	20-30	NP-10
	49-60	Extremely cobbly sand, extremely stony sand.	GP, GP-GM	A-1	50-60	40-60	20-40	5-10	0-5	---	NP
9, 10----------	0-7	Silt loam--------	ML, CL-ML	A-4	0	100	100	100	95-100	20-30	NP-10
Bancroft	7-37	Silt loam, silty clay loam.	CL	A-6	0	100	100	100	95-100	30-40	10-20
	37-60	Silt loam--------	ML, CL-ML	A-4	0	100	100	100	95-100	20-30	NP-10
11*:											
Bancroft--------	0-7	Silt loam--------	ML, CL-ML	A-4	0	100	100	100	95-100	20-30	NP-10
	7-37	Silt loam, silty clay loam.	CL	A-6	0	100	100	100	95-100	30-40	10-20
	37-60	Silt loam--------	ML, CL-ML	A-4	0	100	100	100	95-100	20-30	NP-10

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 3 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
11*:											
Manila----------	0-7	Silt loam--------	CL-ML, CL	A-4, A-6	0	95-100	90-100	85-95	70-90	25-35	5-15
	7-48	Clay, silty clay, silty clay loam.	CL, CH	A-7	0-5	100	95-100	85-100	75-90	40-60	20-35
	48-60	Silt loam, loam	ML, CL-ML	A-4	0-5	95-100	95-100	85-95	75-90	20-30	NP-10
12----------	0-6	Silty clay loam	CL	A-6, A-7	0	100	95-100	90-100	80-95	30-45	10-20
Banida	6-64	Silty clay, clay	CH, CL	A-7	0	100	100	95-100	90-100	40-60	20-40
13*:											
Bear Lake-------	0-12	Silt loam--------	CL-ML, ML	A-4	0	100	95-100	90-100	80-90	25-35	5-10
	12-60	Silty clay loam, silt loam.	CL-ML, CL	A-4, A-6	0	100	95-100	95-100	80-90	25-35	5-15
Bear Lake Variant--------	0-5	Silt loam--------	CL-ML, CL	A-4, A-6	0	95-100	90-100	85-95	80-90	20-30	5-15
	5-17	Silt loam, silty clay loam.	CL	A-6	0	95-100	95-100	90-100	85-95	25-35	10-20
	17-36	Silt loam--------	CL-ML, CL	A-4, A-6	0	95-100	95-100	90-100	80-90	20-30	5-15
	36	Weathered bedrock	---	---	---	---	---	---	---	---	---
14*:											
Broadhead-------	0-2	Silt loam--------	ML, CL-ML	A-4	0-5	95-100	90-100	85-95	80-90	25-35	5-10
	2-9	Silty clay loam, silt loam.	CL	A-6	0-5	95-100	90-100	85-95	80-90	30-40	10-15
	9-60	Silty clay loam, silty clay.	CL, CH	A-7	0-5	95-100	85-95	80-90	75-85	40-55	15-30
Hades----------	0-7	Gravelly silt loam.	CL-ML	A-4	0-5	65-80	60-75	55-75	50-60	20-30	5-10
	7-60	Gravelly silt loam, gravelly silty clay loam.	CL, GC	A-6	0-10	60-85	60-80	55-80	45-75	25-40	10-20
Yago----------	0-10	Extremely stony silty clay loam.	CL	A-6	40-65	70-85	65-80	60-75	55-70	30-40	10-20
	10-45	Very stony clay loam, very stony silty clay loam, very stony clay.	CL, CH, GC	A-7	50-65	60-75	55-70	50-65	45-60	40-55	20-35
	45-60	Very stony silt loam, very stony silty clay loam.	CL, GC	A-6	50-65	60-75	55-70	50-70	45-65	25-40	10-20
15*, 16*:											
Broadhead-------	0-2	Silt loam--------	ML, CL-ML	A-4	0-5	95-100	90-100	85-95	80-90	25-35	5-10
	2-9	Silty clay loam, silt loam.	CL	A-6	0-5	95-100	90-100	85-95	80-90	30-40	10-15
	9-60	Silty clay loam, silty clay.	CL, CH	A-7	0-5	95-100	85-95	80-90	75-85	40-55	15-30
Yago----------	0-10	Extremely stony silty clay loam.	CL	A-6	40-65	70-85	65-80	60-75	55-70	30-40	10-20
	10-45	Very stony clay loam, very stony silty clay loam, very stony clay.	CL, CH, GC	A-7	50-65	60-75	55-70	50-65	45-60	40-55	20-35
	45-60	Very stony silt loam, very stony silty clay loam.	CL, GC	A-6	50-65	60-75	55-70	50-70	45-65	25-40	10-20

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 3 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
17---------- Broncho	0-6	Cobbly loam------	ML, CL-ML, SM, SM-SC	A-4	15-40	85-95	80-90	65-75	45-55	20-30	NP-10
	6-13	Very stony loam, cobbly loam.	CL-ML, ML, GM, GM-GC	A-4	25-40	60-95	50-90	45-80	35-65	20-30	NP-10
	13-60	Extremely cobbly coarse sand, extremely stony coarse sand.	SP, GP	A-1	45-65	30-75	15-40	5-20	0-5	---	NP
18---------- Broncho	0-6	Extremely stony loam.	SM, SM-SC, GM, GM-GC	A-4	30-50	70-85	65-80	55-70	40-50	20-30	NP-10
	6-13	Very stony loam, cobbly loam.	CL-ML, ML, GM, GM-GC	A-4	25-40	60-95	50-90	45-80	35-65	20-30	NP-10
	13-60	Extremely cobbly coarse sand, extremely stony coarse sand.	SP, GP	A-1	45-65	30-75	15-40	5-20	0-5	---	NP
19*:											
Broncho Variant-	0-4	Very gravelly loam.	GM, GM-GC	A-2, A-4	10-15	50-65	45-60	40-55	30-40	20-30	NP-10
	4-28	Extremely gravelly loam, extremely gravelly clay loam, very gravelly loam.	GC, GM-GC	A-1, A-2	25-40	35-60	30-55	30-50	20-35	25-35	5-15
	28-60	Extremely gravelly sandy loam, extremely cobbly sandy loam.	GM, GP-GM	A-1	30-45	25-45	20-40	15-35	10-20	20-25	NP-5
Pocatello-------	0-8	Silt loam--------	ML	A-4	0	100	100	95-100	80-95	25-35	NP-10
	8-40	Silt loam--------	ML	A-4	0	100	100	95-100	80-95	25-35	NP-10
	40-60	Silt loam, silt	ML	A-4	0	100	100	95-100	80-95	25-35	NP-10
20*:											
Broncho Variant-	0-4	Very gravelly loam.	GM, GM-GC	A-2, A-4	10-15	50-65	45-60	40-55	30-40	20-30	NP-10
	4-28	Extremely gravelly loam, extremely gravelly clay loam, very gravelly loam.	GC, GM-GC	A-1, A-2	25-40	35-60	30-55	30-50	20-35	25-35	5-15
	28-60	Extremely gravelly sandy loam, extremely cobbly sandy loam.	GM, GP-GM	A-1	30-45	25-45	20-40	15-35	10-20	20-25	NP-5
Ririe----------	0-12	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	75-90	20-30	NP-10
	12-60	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	75-90	20-30	NP-10
Pocatello-------	0-8	Silt loam--------	ML	A-4	0	100	100	95-100	80-95	25-35	NP-10
	8-40	Silt loam--------	ML	A-4	0	100	100	95-100	80-95	25-35	NP-10
	40-60	Silt loam, silt	ML	A-4	0	100	100	95-100	80-95	25-35	NP-10
21, 22---------- Broxon	0-8	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	85-95	20-30	NP-10
	8-25	Silt loam, silt	ML, CL-ML	A-4	0	95-100	95-100	95-100	90-95	20-30	NP-10
	25-60	Extremely stony sand, extremely cobbly sand.	GP, SP	A-1	50-60	40-60	20-40	5-10	0-5	---	NP

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 3 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
23*:											
Camelback-------	0-21	Very cobbly silt loam.	GM-GC, GM, SM, ML	A-4	30-40	55-75	50-70	45-65	35-60	20-30	NP-10
	21-42	Extremely gravelly silt loam, extremely cobbly silt loam.	GM-GC, GC	A-2, A-1	15-55	25-50	20-45	20-40	15-35	25-35	5-15
	42	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Cedarhill-------	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	40-50	60-75	55-70	50-65	40-50	15-25	NP-10
	9-28	Very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4	40-65	55-75	50-70	45-65	35-50	20-30	NP-10
	28-60	Very cobbly loam, very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4, A-2	40-65	55-65	50-60	45-55	30-45	15-25	NP-10
Lanoak----------	0-22	Silt loam--------	ML	A-4	0	100	100	95-100	90-100	20-25	NP-5
	22-60	Silt loam--------	CL, CL-ML	A-6, A-4	0	100	100	95-100	90-100	25-35	5-15
24*:											
Camelback-------	0-21	Gravelly silt loam.	GM-GC, GM	A-4	0-5	55-70	50-65	45-60	35-50	20-30	NP-10
	21-60	Extremely gravelly silt loam, extremely cobbly silt loam.	GM-GC, GC	A-2, A-1	15-55	25-50	20-45	20-40	15-35	25-35	5-15
Greys-----------	0-19	Silt loam--------	ML, CL-ML	A-4	0	100	100	100	90-100	15-30	NP-10
	19-60	Silt loam, silty clay loam.	CL-ML, CL	A-4, A-6	0	100	100	100	90-100	25-35	5-15
25*:											
Camelback-------	0-21	Extremely stony silt loam.	ML, CL-ML	A-4	40-55	90-95	70-80	65-75	55-65	20-30	NP-10
	21-60	Extremely gravelly silt loam, extremely cobbly silt loam.	GM-GC, GC	A-2, A-1	15-55	25-50	20-45	20-40	15-35	25-35	5-15
Hades-----------	0-7	Gravelly silt loam.	CL-ML	A-4	0-5	65-80	60-75	55-75	50-60	20-30	5-10
	7-60	Gravelly silt loam, gravelly silty clay loam.	CL, GC	A-6	0-10	60-85	60-80	55-80	45-75	25-40	10-20
26*:											
Camelback-------	0-21	Gravelly silt loam.	GM-GC, GM	A-4	0-5	55-70	50-65	45-60	35-50	20-30	NP-10
	21-42	Extremely gravelly silt loam, extremely cobbly silt loam.	GM-GC, GC	A-2, A-1	15-55	25-50	20-45	20-40	15-35	25-35	5-15
	42	Unweathered bedrock.	---	---	---	---	---	---	---	---	---

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 3 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
26*:											
Valmar----------	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	30-45	55-75	50-70	45-65	40-50	20-30	NP-10
	9-14	Very stony silt loam, very cobbly silt loam.	GM-GC, GC	A-4, A-6	30-45	55-75	50-70	50-65	40-50	25-35	5-15
	14-24	Extremely stony silt loam, extremely flaggy silt loam.	GM-GC, GC	A-4, A-6, A-2	70-85	35-70	30-65	30-55	25-50	25-35	5-15
	24	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Hades----------	0-7	Gravelly silt loam.	CL-ML	A-4	0-5	65-80	60-75	55-75	50-60	20-30	5-10
	7-60	Gravelly silt loam, gravelly silty clay loam.	CL, GC	A-6	0-10	60-85	60-80	55-80	45-75	25-40	10-20
27*:											
Camelback Variant--------	0-10	Gravelly silt loam.	ML, CL-ML, GM, GM-GC	A-4	5-10	65-75	60-70	55-65	45-55	20-30	NP-10
	10-60	Very cobbly loam, extremely cobbly loam.	GM, GM-GC, GC	A-2	30-70	45-55	40-50	35-45	25-35	20-35	NP-15
Valmar Variant--	0-9	Very stony silt loam.	ML, CL-ML	A-4	20-35	70-85	65-80	60-75	55-65	20-30	NP-10
	9-24	Very stony loam, extremely stony loam.	GC, GM-GC	A-2, A-1	45-55	40-55	35-50	30-45	20-35	20-30	5-10
	24	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
28---------- Cedarhill	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	40-50	60-75	55-70	50-65	40-50	15-25	NP-10
	9-28	Very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4	40-65	55-75	50-70	45-65	35-50	20-30	NP-10
	28-60	Very cobbly loam, very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4, A-2	40-65	55-65	50-60	45-55	30-45	15-25	NP-10
29*:											
Cedarhill-------	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	40-50	60-75	55-70	50-65	40-50	15-25	NP-10
	9-28	Very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4	40-65	55-75	50-70	45-65	35-50	20-30	NP-10
	28-60	Very cobbly loam, very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4, A-2	40-65	55-65	50-60	45-55	30-45	15-25	NP-10

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 3 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
29*:											
Ireland---------	0-7	Extremely stony silt loam.	GM	A-2, A-4	40-50	45-70	40-65	35-55	30-50	20-25	NP-5
	7-30	Very stony silt loam, extremely stony silt loam.	GM-GC, GW-GC	A-1, A-2	40-50	20-55	15-50	15-40	10-35	25-30	5-10
	30	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Rock outcrop.											
30*:											
Cedarhill-------	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	40-50	60-75	55-70	50-65	40-50	15-25	NP-10
	9-28	Very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4	40-65	55-75	50-70	45-65	35-50	20-30	NP-10
	28-60	Very cobbly loam, very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4, A-2	40-65	55-65	50-60	45-55	30-45	15-25	NP-10
Ririe-----------	0-12	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	75-90	20-30	NP-10
	12-60	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	75-90	20-30	NP-10
Watercanyon-----	0-7	Silt loam--------	CL-ML, ML	A-4	0	100	100	95-100	90-100	15-30	NP-10
	7-16	Silt loam--------	CL-ML, ML	A-4	0	100	100	95-100	90-100	15-30	NP-10
	16-60	Silt loam, very fine sandy loam, silt.	ML	A-4	0	100	100	95-100	75-100	15-25	NP-5
31*:											
Cedarhill-------	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	40-50	60-75	55-70	50-65	40-50	15-25	NP-10
	9-28	Very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4	40-65	55-75	50-70	45-65	35-50	20-30	NP-10
	28-60	Very cobbly loam, very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4, A-2	40-65	55-65	50-60	45-55	30-45	15-25	NP-10
Rock outcrop.											
32*:											
Cedarhill-------	0-9	Very gravelly silt loam.	GM, GM-GC	A-2, A-4	0-20	40-60	35-50	30-45	25-40	15-25	NP-10
	9-28	Extremely gravelly silt loam, very gravelly silt loam.	GM, GM-GC	A-2, A-4	10-30	35-60	30-50	25-45	20-40	15-25	NP-10
	28-60	Extremely gravelly silt loam, extremely gravelly loam, very gravelly silt loam.	GM, GM-GC	A-1, A-2	15-30	30-55	25-45	20-40	15-30	15-25	NP-10

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 3 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
32*:											
Camelback-------	0-21	Gravelly silt loam.	GM-GC, GM	A-4	0-5	55-70	50-65	45-60	35-50	20-30	NP-10
	21-42	Extremely gravelly silt loam, extremely cobbly silt loam.	GM-GC, GC	A-2, A-1	15-55	25-50	20-45	20-40	15-35	25-35	5-15
	42	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Moonlight-------	0-24	Silt loam--------	ML, CL-ML	A-4	0	80-95	75-90	70-85	65-80	20-30	NP-10
	24-60	Silt loam--------	ML, CL-ML	A-4	0	80-95	75-90	70-85	65-80	20-30	NP-10
33*:											
Cedarhill-------	0-9	Very gravelly silt loam.	GM, GM-GC	A-2, A-4	0-20	40-60	35-50	30-45	25-40	15-25	NP-10
	9-28	Extremely gravelly silt loam, very gravelly silt loam.	GM, GM-GC	A-2, A-4	10-30	35-60	30-50	25-45	20-40	15-25	NP-10
	28-60	Extremely gravelly silt loam, extremely gravelly loam, very gravelly silt loam.	GM, GM-GC	A-1, A-2	15-30	30-55	25-45	20-40	15-30	15-25	NP-10
Hades-----------	0-7	Gravelly silt loam.	CL-ML	A-4	0-5	65-80	60-75	55-75	50-60	20-30	5-10
	7-60	Gravelly silt loam, gravelly silty clay loam.	CL, GC	A-6	0-10	60-85	60-80	55-80	45-75	25-40	10-20
Ricrest---------	0-10	Gravelly silt loam.	ML, CL-ML	A-4	0-5	80-100	70-95	70-90	55-70	15-25	NP-10
	10-24	Clay loam, silt loam, gravelly silt loam.	CL, CL-ML	A-4, A-6	0-5	75-100	70-95	70-95	60-75	25-35	5-15
	24-60	Gravelly loam, gravelly clay loam, gravelly silt loam.	CL, CL-ML, GC, GM-GC	A-4, A-2, A-6	0-10	50-80	50-75	45-70	30-60	25-35	5-15
34*:											
Cedarhill-------	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	40-50	60-75	55-70	50-65	40-50	15-25	NP-10
	9-28	Very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4	40-65	55-75	50-70	45-65	35-50	20-30	NP-10
	28-60	Very cobbly loam, very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4, A-2	40-65	55-65	50-60	45-55	30-45	15-25	NP-10
Hondoho---------	0-15	Cobbly silt loam	CL-ML, ML	A-4	25-40	70-90	70-85	55-80	50-70	25-35	5-10
	15-60	Very cobbly sandy clay loam, very cobbly loam, extremely cobbly loam.	GC, GM	A-2, A-1	45-60	20-50	15-45	15-35	5-20	30-40	5-15

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 3 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
34*:											
Arbone----------	0-9	Gravelly silt loam.	ML	A-4	0-5	75-80	70-75	60-70	50-60	20-35	NP-10
	9-60	Gravelly silt loam.	ML, GM	A-4	0-5	60-80	55-75	50-70	40-60	20-35	NP-10
35*:											
Cedarhill-------	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	40-50	60-75	55-70	50-65	40-50	15-25	NP-10
	9-28	Very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4	40-65	55-75	50-70	45-65	35-50	20-30	NP-10
	28-60	Very cobbly loam, very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4, A-2	40-65	55-65	50-60	45-55	30-45	15-25	NP-10
Hondoho---------	0-15	Cobbly silt loam	CL-ML, ML	A-4	25-40	70-90	70-85	55-80	50-70	25-35	5-10
	15-60	Very cobbly sandy clay loam, very cobbly loam, extremely cobbly loam.	GC, GM	A-2, A-1	45-60	20-50	15-45	15-35	5-20	30-40	5-15
Ridgecrest------	0-14	Extremely stony silt loam.	GM	A-2	40-55	40-50	35-45	30-40	25-35	20-25	NP-5
	14-27	Extremely stony loam, extremely stony silt loam.	GM	A-1	50-65	30-40	25-30	20-30	15-25	20-30	NP-5
	27	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
36*:											
Cedarhill-------	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	40-50	60-75	55-70	50-65	40-50	15-25	NP-10
	9-28	Very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4	40-65	55-75	50-70	45-65	35-50	20-30	NP-10
	28-60	Very cobbly loam, very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4, A-2	40-65	55-65	50-60	45-55	30-45	15-25	NP-10
Manila----------	0-7	Silt loam--------	CL-ML, CL	A-4, A-6	0	95-100	90-100	85-95	70-90	25-35	5-15
	7-48	Clay, silty clay, silty clay loam.	CL, CH	A-7	0-5	100	95-100	85-100	75-90	40-60	20-35
	48-60	Silt loam, loam	ML, CL-ML	A-4	0-5	95-100	95-100	85-95	75-90	20-30	NP-10
37*:											
Cedarhill-------	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	40-50	60-75	55-70	50-65	40-50	15-25	NP-10
	9-28	Very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4	40-65	55-75	50-70	45-65	35-50	20-30	NP-10
	28-60	Very cobbly loam, very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4, A-2	40-65	55-65	50-60	45-55	30-45	15-25	NP-10

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 3 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
37*:											
Trailcreek------	0-4	Very fine sandy loam.	ML	A-4	0	95-100	95-100	90-100	55-65	15-20	NP-5
	4-26	Very fine sandy loam.	ML	A-4	0	95-100	95-100	90-100	50-60	15-20	NP-5
	26	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Coalbank--------	0-33	Very fine sandy loam.	ML	A-4	0	95-100	95-100	90-100	55-65	15-20	NP-5
	33-60	Very fine sandy loam, fine sandy loam.	ML	A-4	0	95-100	95-100	90-100	50-60	15-20	NP-5
38---------- Coalbank	0-33	Very fine sandy loam.	ML	A-4	0	95-100	95-100	90-100	55-65	15-20	NP-5
	33-60	Very fine sandy loam, fine sandy loam.	ML	A-4	0	95-100	95-100	90-100	50-60	15-20	NP-5
39*, 40*:											
Coalbank--------	0-33	Very fine sandy loam.	ML	A-4	0	95-100	95-100	90-100	55-65	15-20	NP-5
	33-60	Very fine sandy loam, fine sandy loam.	ML	A-4	0	95-100	95-100	90-100	50-60	15-20	NP-5
Trailcreek------	0-4	Very fine sandy loam.	ML	A-4	0	95-100	95-100	90-100	55-65	15-20	NP-5
	4-26	Very fine sandy loam.	ML	A-4	0	95-100	95-100	90-100	50-60	15-20	NP-5
	26	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Lonigan---------	0-7	Cobbly silt loam	ML	A-4	15-30	75-95	70-90	65-85	50-65	15-20	NP-5
	7-12	Very cobbly silt loam.	GM	A-4	30-45	60-75	55-70	50-65	35-50	15-20	NP-5
	12-27	Very cobbly loam, extremely cobbly loam.	GM	A-2	40-55	40-55	35-50	30-50	25-35	15-20	NP-5
	27	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
41*:											
Downata---------	0-14	Silt loam--------	ML, CL-ML	A-4	0	100	95-100	95-100	80-90	20-30	NP-10
	14-40	Silty clay loam	CL	A-6	0	100	95-100	95-100	85-95	30-40	10-20
	40-60	Silt loam--------	CL-ML	A-4	0	100	95-100	95-100	80-90	25-30	5-10
Bear Lake-------	0-12	Silt loam--------	CL-ML, ML	A-4	0	100	95-100	90-100	80-90	25-35	5-10
	12-60	Silty clay loam, silt loam.	CL-ML, CL	A-4, A-6	0	100	95-100	95-100	80-90	25-35	5-15
42*, 43*:											
Downey----------	0-17	Gravelly silt loam.	CL-ML, ML	A-4	0-5	60-80	55-75	50-70	50-70	20-30	NP-10
	17-60	Very gravelly coarse sand, extremely gravelly coarse sand.	GP	A-1	5-25	20-35	10-30	0-10	0-5	---	NP
Arimo-----------	0-18	Silt loam--------	ML, CL-ML	A-4	0-5	80-95	75-90	70-85	65-80	20-30	NP-10
	18-33	Silt loam--------	ML, CL-ML	A-4	0-5	80-95	75-90	70-85	65-80	20-30	NP-10
	33-60	Extremely gravelly coarse sand.	GP	A-1	5-25	20-30	10-20	0-10	0-5	---	NP

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 3 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
44*:											
Enochville------	0-12	Silt loam--------	CL-ML, CL	A-4, A-6	0	95-100	95-100	95-100	85-95	20-35	5-15
	12-43	Silt loam, silty clay loam.	CL	A-6	0	95-100	95-100	95-100	85-90	25-40	10-25
	43-60	Very cobbly sandy loam, extremely cobbly sandy loam.	GM, GM-GC	A-1, A-2	30-50	35-65	30-60	25-55	15-35	15-25	NP-10
Enochville Variant--------	0-11	Gravelly silt loam.	CL-ML, ML	A-4	10-15	70-80	65-75	60-70	50-60	15-25	NP-10
	11-24	Gravelly silt loam, gravelly loam.	CL-ML, CL	A-6, A-4	10-15	80-90	75-85	65-80	50-70	25-35	5-15
	24-60	Very gravelly loam, extremely gravelly loam.	GM, GM-GC	A-1, A-2	10-30	35-50	25-40	20-35	15-25	15-25	NP-10
45*:											
Greys----------	0-19	Silt loam--------	ML, CL-ML	A-4	0	100	100	100	90-100	15-30	NP-10
	19-60	Silt loam, silty clay loam.	CL-ML, CL	A-4, A-6	0	100	100	100	90-100	25-35	5-15
Pavohroo--------	0-3	Silt loam--------	ML, CL-ML	A-4	0-5	90-95	85-90	80-85	70-75	15-25	NP-10
	3-26	Silt loam--------	CL, CL-ML	A-6, A-4	0-10	90-95	85-90	80-85	70-75	20-35	5-15
	26-60	Loam, gravelly loam, stony loam.	CL, CL-ML	A-6, A-4	10-25	75-95	70-90	65-85	50-60	20-35	5-15
Sedgway---------	0-5	Gravelly silt loam.	ML, CL-ML	A-4	0-5	75-80	70-75	65-75	60-70	25-35	5-10
	5-21	Very cobbly silt loam, very cobbly loam.	CL-ML, GM-GC, GM	A-4	40-55	65-85	60-80	55-75	45-65	25-35	5-10
	21-60	Very cobbly clay loam, very cobbly silty clay loam.	CL, GC	A-6	40-55	50-75	50-70	40-65	35-60	30-40	10-15
46---------- Hades	0-7	Gravelly silt loam.	CL-ML	A-4	0-5	65-80	60-75	55-75	50-60	20-30	5-10
	7-60	Gravelly silt loam, gravelly silty clay loam.	CL, GC	A-6	0-10	60-85	60-80	55-80	45-75	25-40	10-20
47*:											
Hades----------	0-7	Gravelly silt loam.	CL-ML	A-4	0-5	65-80	60-75	55-75	50-60	20-30	5-10
	7-60	Gravelly silt loam, gravelly silty clay loam.	CL, GC	A-6	0-10	60-85	60-80	55-80	45-75	25-40	10-20
Camelback-------	0-21	Gravelly silt loam.	GM-GC, GM	A-4	0-5	55-70	50-65	45-60	35-50	20-30	NP-10
	21-60	Extremely gravelly silt loam, extremely cobbly silt loam.	GM-GC, GC	A-2, A-1	15-55	25-50	20-45	20-40	15-35	25-35	5-15

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 3 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
47*:											
Hondoho---------	0-15	Cobbly silt loam	CL-ML, ML	A-4	25-40	70-90	70-85	55-80	50-70	25-35	5-10
	15-60	Very cobbly sandy clay loam, very cobbly loam, extremely cobbly loam.	GC, GM	A-2, A-1	45-60	20-50	15-45	15-35	5-20	30-40	5-15
48*:											
Hades-----------	0-7	Gravelly silt loam.	CL-ML	A-4	0-5	65-80	60-75	55-75	50-60	20-30	5-10
	7-60	Gravelly silt loam, gravelly silty clay loam.	CL, GC	A-6	0-10	60-85	60-80	55-80	45-75	25-40	10-20
Holmes----------	0-16	Very cobbly loam	GM, SM	A-2, A-4, A-1	30-40	55-70	50-65	30-55	20-45	20-30	NP-5
	16-28	Very gravelly loam, extremely gravelly sandy loam, very cobbly clay loam.	GM-GC, GC	A-1, A-2	10-40	35-60	25-50	20-45	15-35	20-35	5-15
	28-60	Extremely gravelly loamy coarse sand.	GP-GM	A-1	20-40	25-40	20-30	10-15	5-10	---	NP
49*:											
Hades-----------	0-7	Gravelly silt loam.	CL-ML	A-4	0-5	65-80	60-75	55-75	50-60	20-30	5-10
	7-60	Gravelly silt loam, gravelly silty clay loam.	CL, GC	A-6	0-10	60-85	60-80	55-80	45-75	25-40	10-20
Lanoak----------	0-22	Silt loam--------	ML	A-4	0	100	100	95-100	90-100	20-25	NP-5
	22-60	Silt loam--------	CL, CL-ML	A-6, A-4	0	100	100	95-100	90-100	25-35	5-15
50*:											
Hades-----------	0-7	Gravelly silt loam.	CL-ML	A-4	0-5	65-80	60-75	55-75	50-60	20-30	5-10
	7-60	Gravelly silt loam, gravelly silty clay loam.	CL, GC	A-6	0-10	60-85	60-80	55-80	45-75	25-40	10-20
Lanoak----------	0-22	Silt loam--------	ML	A-4	0	100	100	95-100	90-100	20-25	NP-5
	22-60	Silt loam--------	CL, CL-ML	A-6, A-4	0	100	100	95-100	90-100	25-35	5-15
Camelback-------	0-21	Gravelly silt loam.	GM-GC, GM	A-4	0-5	55-70	50-65	45-60	35-50	20-30	NP-10
	21-42	Extremely gravelly silt loam, extremely cobbly silt loam.	GM-GC, GC	A-2, A-1	15-55	25-50	20-45	20-40	15-35	25-35	5-15
	42	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
51*:											
Harkness--------	0-8	Silt loam--------	ML, CL-ML	A-4	0-10	95-100	90-100	85-95	75-85	25-35	5-10
	8-14	Very cobbly loam, stony silt loam.	ML, CL-ML	A-4	15-35	70-95	65-90	55-85	50-70	25-35	5-10
	14-60	Clay loam, silty clay loam, cobbly silty clay.	CL, CH	A-7	0-30	85-95	80-90	75-90	65-90	45-60	25-35

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 3 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
51*:											
Sedgway---------	0-5	Gravelly silt loam.	ML, CL-ML	A-4	0-5	75-80	70-75	65-75	60-70	25-35	5-10
	5-21	Very cobbly silt loam, very cobbly loam.	CL-ML, GM-GC, GM	A-4	40-55	65-85	60-80	55-75	45-65	25-35	5-10
	21-60	Very cobbly clay loam, very cobbly silty clay loam.	CL, GC	A-6	40-55	50-75	50-70	40-65	35-60	30-40	10-15
Mikesell--------	0-11	Silt loam--------	ML, CL-ML	A-4	0-5	85-95	80-90	75-85	65-75	25-35	5-10
	11-31	Gravelly silty clay, gravelly clay.	CL, CH	A-7	0-10	65-80	60-75	55-70	50-65	40-60	20-30
	31-60	Very cobbly silty clay, very stony clay.	CL, CH, GC	A-7	30-45	55-75	50-70	45-70	40-65	40-60	20-30
52---------- Holmes	0-16	Gravelly loam----	GM-GC, SM-SC	A-4	0-5	60-80	50-70	40-60	35-45	20-30	5-10
	16-28	Very gravelly loam, extremely gravelly sandy loam, very cobbly clay loam.	GM-GC, GC	A-1, A-2	10-40	35-60	25-50	20-45	15-35	20-35	5-15
	28-60	Extremely gravelly loamy coarse sand.	GP-GM	A-1	20-40	25-40	20-30	10-15	5-10	---	NP
53*:											
Hondoho---------	0-15	Gravelly silt loam.	ML, CL-ML	A-4	0-10	75-85	65-75	60-75	50-65	25-35	5-10
	15-60	Very gravelly loam, very cobbly loam, very gravelly silt loam.	GM, GM-GC	A-2, A-1	5-45	35-55	35-50	30-45	20-35	25-35	5-10
Arbone----------	0-9	Gravelly silt loam.	ML	A-4	0-5	75-80	70-75	60-70	50-60	20-35	NP-10
	9-60	Gravelly silt loam.	ML, GM	A-4	0-5	60-80	55-75	50-70	40-60	20-35	NP-10
54*:											
Hondoho---------	0-15	Cobbly silt loam	CL-ML, ML	A-4	25-40	70-90	70-85	55-80	50-70	25-35	5-10
	15-60	Very cobbly sandy clay loam, very cobbly loam, extremely cobbly loam.	GC, GM	A-2, A-1	45-60	20-50	15-45	15-35	5-20	30-40	5-15
Arbone----------	0-9	Gravelly silt loam.	ML	A-4	0-5	75-80	70-75	60-70	50-60	20-35	NP-10
	9-60	Gravelly silt loam.	ML, GM	A-4	0-5	60-80	55-75	50-70	40-60	20-35	NP-10
Ririe----------	0-12	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	75-90	20-30	NP-10
	12-60	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	75-90	20-30	NP-10

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 3 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
55*:											
Hondoho	0-15	Cobbly silt loam	CL-ML, ML	A-4	25-40	70-90	70-85	55-80	50-70	25-35	5-10
	15-60	Very cobbly sandy clay loam, very cobbly loam, extremely cobbly loam.	GC, GM	A-2, A-1	45-60	20-50	15-45	15-35	5-20	30-40	5-15
Hades	0-7	Gravelly silt loam.	CL-ML	A-4	0-5	65-80	60-75	55-75	50-60	20-30	5-10
	7-60	Gravelly silt loam, gravelly silty clay loam.	CL, GC	A-6	0-10	60-85	60-80	55-80	45-75	25-40	10-20
56*:											
Hondoho	0-15	Cobbly silt loam	CL-ML, ML	A-4	25-40	70-90	70-85	55-80	50-70	25-35	5-10
	15-60	Very cobbly sandy clay loam, very cobbly loam, extremely cobbly loam.	GC, GM	A-2, A-1	45-60	20-50	15-45	15-35	5-20	30-40	5-15
Lanoak	0-22	Silt loam	ML	A-4	0	100	100	95-100	90-100	20-25	NP-5
	22-60	Silt loam	CL, CL-ML	A-6, A-4	0	100	100	95-100	90-100	25-35	5-15
Camelback	0-21	Gravelly silt loam.	GM-GC, GM	A-4	0-5	55-70	50-65	45-60	35-50	20-30	NP-10
	21-60	Extremely gravelly silt loam, extremely cobbly silt loam.	GM-GC, GC	A-2, A-1	15-55	25-50	20-45	20-40	15-35	25-35	5-15
57, 58	0-7	Silt loam	ML, CL-ML	A-4	0	100	95-100	95-100	80-90	15-25	NP-10
Inkom	7-60	Silt loam	CL, CL-ML	A-4, A-6	0	100	95-100	95-100	80-90	25-35	5-15
59*:											
Ireland	0-7	Extremely stony silt loam.	GM	A-2, A-4	40-50	45-70	40-65	35-55	30-50	20-25	NP-5
	7-30	Very stony silt loam, extremely stony silt loam.	GM-GC, GW-GC	A-1, A-2	40-50	20-55	15-50	15-40	10-35	25-30	5-10
	30	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Camelback	0-21	Very cobbly silt loam.	GM-GC, GM, SM, ML	A-4	30-40	55-75	50-70	45-65	35-60	20-30	NP-10
	21-42	Extremely gravelly silt loam, extremely cobbly silt loam.	GM-GC, GC	A-2, A-1	15-55	25-50	20-45	20-40	15-35	25-35	5-15
	42	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Rock outcrop.											
60*:											
Ireland	0-7	Extremely stony silt loam.	GM	A-2, A-4	40-50	45-70	40-65	35-55	30-50	20-25	NP-5
	7-30	Very stony silt loam, extremely stony silt loam.	GM-GC, GW-GC	A-1, A-2	40-50	20-55	15-50	15-40	10-35	25-30	5-10
	30	Unweathered bedrock.	---	---	---	---	---	---	---	---	---

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 3 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
60*:											
Dateman---------	0-9	Cobbly silt loam	CL-ML, ML	A-4	15-25	75-95	70-90	65-85	60-80	20-30	NP-10
	9-35	Extremely cobbly silt loam.	GM-GC, GM	A-4, A-2	60-70	50-70	45-65	40-60	30-50	20-30	NP-10
	35	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Pavohroo--------	0-3	Silt loam--------	ML, CL-ML	A-4	0-5	90-95	85-90	80-85	70-75	15-25	NP-10
	3-26	Silt loam--------	CL, CL-ML	A-6, A-4	0-10	90-95	85-90	80-85	70-75	20-35	5-15
	26-60	Loam, gravelly loam, stony loam.	CL, CL-ML	A-6, A-4	10-25	75-95	70-90	65-85	50-60	20-35	5-15
61*:											
Ireland---------	0-7	Extremely stony silt loam.	GM	A-2, A-4	40-50	45-70	40-65	35-55	30-50	20-25	NP-5
	7-30	Very stony silt loam, extremely stony silt loam.	GM-GC, GW-GC	A-1, A-2	40-50	20-55	15-50	15-40	10-35	25-30	5-10
	30	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Hades-----------	0-7	Gravelly silt loam.	CL-ML	A-4	0-5	65-80	60-75	55-75	50-60	20-30	5-10
	7-60	Gravelly silt loam, gravelly silty clay loam.	CL, GC	A-6	0-10	60-85	60-80	55-80	45-75	25-40	10-20
Cedarhill-------	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	40-50	60-75	55-70	50-65	40-50	15-25	NP-10
	9-28	Very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4	40-65	55-75	50-70	45-65	35-50	20-30	NP-10
	28-60	Very cobbly loam, very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4, A-2	40-65	55-65	50-60	45-55	30-45	15-25	NP-10
62, 63----------	0-13	Silt loam--------	ML	A-4	0	95-100	95-100	85-95	85-90	20-30	NP-5
Joes	13-60	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	85-95	85-90	20-30	NP-10
64--------------	0-4	Silt loam--------	ML, CL-ML	A-4	0	100	95-100	95-100	85-95	15-30	NP-10
Joevar	4-60	Silt loam--------	ML, CL-ML	A-4	0	100	95-100	95-100	85-95	15-30	NP-10
65, 66, 67, 68---	0-22	Silt loam--------	ML	A-4	0	100	100	95-100	90-100	20-25	NP-5
Lanoak	22-60	Silt loam--------	CL, CL-ML	A-6, A-4	0	100	100	95-100	90-100	25-35	5-15
69*:											
Lanoak----------	0-22	Silt loam--------	ML	A-4	0	100	100	95-100	90-100	20-25	NP-5
	22-60	Silt loam--------	CL, CL-ML	A-6, A-4	0	100	100	95-100	90-100	25-35	5-15
Camelback-------	0-21	Gravelly silt loam.	GM-GC, GM	A-4	0-5	55-70	50-65	45-60	35-50	20-30	NP-10
	21-42	Extremely gravelly silt loam, extremely cobbly silt loam.	GM-GC, GC	A-2, A-1	15-55	25-50	20-45	20-40	15-35	25-35	5-15
	42	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
70*, 71*:											
Lanoak----------	0-22	Silt loam--------	ML	A-4	0	100	100	95-100	90-100	20-25	NP-5
	22-60	Silt loam--------	CL, CL-ML	A-6, A-4	0	100	100	95-100	90-100	25-35	5-15

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 3 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
70*, 71*:											
Greys	0-19	Silt loam	ML, CL-ML	A-4	0	100	100	100	90-100	15-30	NP-10
	19-60	Silt loam, silty clay loam.	CL-ML, CL	A-4, A-6	0	100	100	100	90-100	25-35	5-15
72*:											
Lanoak	0-22	Silt loam	ML	A-4	0	100	100	95-100	90-100	20-25	NP-5
	22-60	Silt loam	CL, CL-ML	A-6, A-4	0	100	100	95-100	90-100	25-35	5-15
Hades	0-7	Gravelly silt loam.	CL-ML	A-4	0-5	65-80	60-75	55-75	50-60	20-30	5-10
	7-60	Gravelly silt loam, gravelly silty clay loam.	CL, GC	A-6	0-10	60-85	60-80	55-80	45-75	25-40	10-20
73*:											
Lanoak	0-22	Silt loam	ML	A-4	0	100	100	95-100	90-100	20-25	NP-5
	22-60	Silt loam	CL, CL-ML	A-6, A-4	0	100	100	95-100	90-100	25-35	5-15
Watercanyon	0-7	Silt loam	CL-ML, ML	A-4	0	100	100	95-100	90-100	15-30	NP-10
	7-16	Silt loam	CL-ML, ML	A-4	0	100	100	95-100	90-100	15-30	NP-10
	16-60	Silt loam, very fine sandy loam, silt.	ML	A-4	0	100	100	95-100	75-100	15-25	NP-5
Rexburg	0-10	Silt loam	ML, CL-ML	A-4	0	100	100	95-100	80-100	25-35	5-10
	10-26	Silt loam	ML, CL-ML	A-4	0	100	100	95-100	80-100	25-35	5-10
	26-60	Silt loam, silt	ML	A-4	0	100	100	95-100	80-100	25-35	NP-10
74*:											
Lava flows.											
McCarey	0-12	Silt loam	ML	A-4	0-5	95-100	90-100	85-100	60-90	20-35	NP-10
	12-17	Clay loam, silty clay loam, silt loam.	CL, CL-ML	A-6, A-4	0-5	85-100	85-100	80-100	65-85	25-40	5-15
	17-28	Silt loam, loam	ML	A-4	0-5	85-100	85-100	80-100	65-85	20-35	NP-10
	28	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
McCarey Variant-	0-8	Extremely stony silt loam.	ML	A-4	50-65	75-90	70-85	65-80	60-75	20-25	NP-5
	8-13	Very stony silt loam, very stony loam.	CL-ML, ML	A-4	50-65	75-90	70-85	65-80	60-75	20-30	NP-10
	13	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
75*:											
Manila	0-7	Silt loam	CL-ML, CL	A-4, A-6	0	95-100	90-100	85-95	70-90	25-35	5-15
	7-48	Clay, silty clay, silty clay loam.	CL, CH	A-7	0-5	100	95-100	85-100	75-90	40-60	20-35
	48-60	Silt loam, loam	ML, CL-ML	A-4	0-5	95-100	95-100	85-95	75-90	20-30	NP-10
Bancroft	0-7	Silt loam	ML, CL-ML	A-4	0	100	100	100	95-100	20-30	NP-10
	7-37	Silt loam, silty clay loam.	CL	A-6	0	100	100	100	95-100	30-40	10-20
	37-60	Silt loam	ML, CL-ML	A-4	0	100	100	100	95-100	20-30	NP-10
76*:											
Manila	0-7	Silt loam	CL-ML, CL	A-4, A-6	0	95-100	90-100	85-95	70-90	25-35	5-15
	7-48	Clay, silty clay, silty clay loam.	CL, CH	A-7	0-5	100	95-100	85-100	75-90	40-60	20-35
	48-60	Silt loam, loam	ML, CL-ML	A-4	0-5	95-100	95-100	85-95	75-90	20-30	NP-10

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 3 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
76*:											
Cedarhill-------	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	40-50	60-75	55-70	50-65	40-50	15-25	NP-10
	9-28	Very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4	40-65	55-75	50-70	45-65	35-50	20-30	NP-10
	28-60	Very cobbly loam, very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4, A-2	40-65	55-65	50-60	45-55	30-45	15-25	NP-10
77*:											
McDole----------	0-21	Silt loam--------	ML	A-4	0	100	100	95-100	80-95	25-35	NP-10
	21-60	Silt loam--------	ML, CL-ML	A-4	0	100	100	95-100	80-100	20-30	NP-10
McDole Variant--	0-34	Silt loam--------	ML, CL-ML	A-4	0	100	100	85-95	70-80	20-30	NP-10
	34-60	Fine sandy loam, loam.	ML, CL-ML	A-4	0	100	100	85-95	60-80	20-30	NP-10
78---------------	0-24	Silt loam--------	ML, CL-ML	A-4	0	80-95	75-90	70-85	65-80	20-30	NP-10
Moonlight	24-60	Silt loam--------	ML, CL-ML	A-4	0	80-95	75-90	70-85	65-80	20-30	NP-10
79*:											
Moonlight-------	0-24	Silt loam--------	ML, CL-ML	A-4	0	80-95	75-90	70-85	65-80	20-30	NP-10
	24-60	Silt loam--------	ML, CL-ML	A-4	0	80-95	75-90	70-85	65-80	20-30	NP-10
Camelback-------	0-21	Gravelly silt loam.	GM-GC, GM	A-4	0-5	55-70	50-65	45-60	35-50	20-30	NP-10
	21-42	Extremely gravelly silt loam, extremely cobbly silt loam.	GM-GC, GC	A-2, A-1	15-55	25-50	20-45	20-40	15-35	25-35	5-15
	42	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
80*:											
Moonlight-------	0-24	Silt loam--------	ML, CL-ML	A-4	0	80-95	75-90	70-85	65-80	20-30	NP-10
	24-60	Silt loam--------	ML, CL-ML	A-4	0	80-95	75-90	70-85	65-80	20-30	NP-10
Pavohroo--------	0-3	Silt loam--------	ML, CL-ML	A-4	0-5	90-95	85-90	80-85	70-75	15-25	NP-10
	3-26	Silt loam--------	CL, CL-ML	A-6, A-4	0-10	90-95	85-90	80-85	70-75	20-35	5-15
	26-60	Loam, gravelly loam, stony loam.	CL, CL-ML	A-6, A-4	10-25	75-95	70-90	65-85	50-60	20-35	5-15
81---------------	0-5	Silty clay loam	CL	A-6, A-7	0	100	95-100	95-100	85-95	35-45	15-25
Oxford	5-63	Silty clay, clay	CH, CL	A-7	0	100	100	95-100	90-95	40-60	20-40
82*:											
Oxford----------	0-5	Silty clay loam	CL	A-6, A-7	0	100	95-100	95-100	85-95	35-45	15-25
	5-63	Silty clay, clay	CH, CL	A-7	0	100	100	95-100	90-95	40-60	20-40
Banida----------	0-6	Silty clay loam	CL	A-6, A-7	0	100	95-100	90-100	80-95	30-45	10-20
	6-64	Silty clay, clay	CH, CL	A-7	0	100	100	95-100	90-100	40-60	20-40
83*:											
Pavohroo--------	0-3	Silt loam--------	ML, CL-ML	A-4	0-5	90-95	85-90	80-85	70-75	15-25	NP-10
	3-26	Silt loam--------	CL, CL-ML	A-6, A-4	0-10	90-95	85-90	80-85	70-75	20-35	5-15
	26-60	Loam, gravelly loam, stony loam.	CL, CL-ML	A-6, A-4	10-25	75-95	70-90	65-85	50-60	20-35	5-15

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 3 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
83*:											
Moonlight-------	0-24	Silt loam--------	ML, CL-ML	A-4	0	80-95	75-90	70-85	65-80	20-30	NP-10
	24-60	Silt loam--------	ML, CL-ML	A-4	0	80-95	75-90	70-85	65-80	20-30	NP-10
84*:											
Pavohroo--------	0-3	Silt loam--------	ML, CL-ML	A-4	0-5	90-95	85-90	80-85	70-75	15-25	NP-10
	3-26	Silt loam--------	CL, CL-ML	A-6, A-4	0-10	90-95	85-90	80-85	70-75	20-35	5-15
	26-60	Loam, gravelly loam, stony loam.	CL, CL-ML	A-6, A-4	10-25	75-95	70-90	65-85	50-60	20-35	5-15
Sedgway---------	0-5	Gravelly silt loam.	ML, CL-ML	A-4	0-5	75-80	70-75	65-75	60-70	25-35	5-10
	5-21	Very cobbly silt loam, very cobbly loam.	CL-ML, GM-GC, GM	A-4	40-55	65-85	60-80	55-75	45-65	25-35	5-10
	21-60	Very cobbly clay loam, very cobbly silty clay loam.	CL, GC	A-6	40-55	50-75	50-70	40-65	35-60	30-40	10-15
Toponce---------	0-3	Silt loam--------	CL-ML, CL	A-4, A-6	0-5	90-100	85-100	85-95	70-90	20-30	5-15
	3-14	Silt loam, silty clay loam.	CL-ML, CL	A-4, A-6	0-5	95-100	90-100	90-95	85-95	25-35	5-15
	14-60	Silty clay loam, silty clay, clay.	CL, CH	A-7	0-5	95-100	90-100	90-95	85-95	45-60	20-35
85*, 86*. Pits											
87, 88, 89, 90, 91---------- Pocatello	0-8	Silt loam--------	ML	A-4	0	100	100	95-100	80-95	25-35	NP-10
	8-40	Silt loam--------	ML	A-4	0	100	100	95-100	80-95	25-35	NP-10
	40-60	Silt loam, silt	ML	A-4	0	100	100	95-100	80-95	25-35	NP-10
92*:											
Portino---------	0-9	Silt loam--------	ML, CL-ML	A-4	0-10	95-100	95-100	90-100	75-90	20-30	NP-10
	9-29	Silt loam--------	ML, CL-ML	A-4	0-5	95-100	95-100	95-100	75-90	20-30	NP-10
	29	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Thornock--------	0-2	Stony silt loam	ML, CL-ML	A-4	15-30	85-95	80-90	75-85	70-80	15-30	NP-10
	2-14	Silt loam--------	ML, CL-ML	A-4	0-5	90-100	85-100	80-90	75-85	15-30	NP-10
	14	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
93, 94, 95, 96--- Rexburg	0-10	Silt loam--------	ML, CL-ML	A-4	0	100	100	95-100	80-100	25-35	5-10
	10-26	Silt loam--------	ML, CL-ML	A-4	0	100	100	95-100	80-100	25-35	5-10
	26-60	Silt loam, silt	ML	A-4	0	100	100	95-100	80-100	25-35	NP-10
97, 98, 99------- Ririe	0-12	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	75-90	20-30	NP-10
	12-60	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	75-90	20-30	NP-10
100*, 101*, 102*:											
Ririe-----------	0-12	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	75-90	20-30	NP-10
	12-60	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	75-90	20-30	NP-10
Watercanyon-----	0-7	Silt loam--------	CL-ML, ML	A-4	0	100	100	95-100	90-100	15-30	NP-10
	7-16	Silt loam--------	CL-ML, ML	A-4	0	100	100	95-100	90-100	15-30	NP-10
	16-60	Silt loam, very fine sandy loam, silt.	ML	A-4	0	100	100	95-100	75-100	15-25	NP-5

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 3 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
103*:											
Ririe----------	0-12	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	75-90	20-30	NP-10
	12-60	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	75-90	20-30	NP-10
Watercanyon-----	0-7	Silt loam--------	CL-ML, ML	A-4	0	100	100	95-100	90-100	15-30	NP-10
	7-16	Silt loam--------	CL-ML, ML	A-4	0	100	100	95-100	90-100	15-30	NP-10
	16-60	Silt loam, very fine sandy loam, silt.	ML	A-4	0	100	100	95-100	75-100	15-25	NP-5
Cedarhill-------	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	40-50	60-75	55-70	50-65	40-50	15-25	NP-10
	9-28	Very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4	40-65	55-75	50-70	45-65	35-50	20-30	NP-10
	28-60	Very cobbly loam, very cobbly silt loam, extremely cobbly silt loam.	GM, GM-GC	A-4, A-2	40-65	55-65	50-60	45-55	30-45	15-25	NP-10
104*. Rock outcrop											
105*: Rubble land.											
Haploxerolls.											
106*:											
Scout Variant---	0-3	Gravelly silt loam.	ML, CL-ML	A-4	0-10	70-85	65-80	60-75	55-70	20-30	NP-10
	3-16	Very cobbly silt loam, very cobbly loam.	GM, GM-GC, ML, CL-ML	A-4	45-55	55-75	50-70	45-65	35-55	20-30	NP-10
	16-60	Extremely stony silt loam, very cobbly silt loam, extremely cobbly loam.	GM, GM-GC	A-4, A-2	55-70	45-65	40-60	35-55	30-50	20-30	NP-10
Camelback Variant--------	0-10	Gravelly silt loam.	ML, CL-ML, GM, GM-GC	A-4	5-10	65-75	60-70	55-65	45-55	20-30	NP-10
	10-60	Very cobbly loam, extremely cobbly loam.	GM, GM-GC, GC	A-2	30-70	45-55	40-50	35-45	25-35	20-35	NP-15
107*:											
Sedgway---------	0-5	Gravelly silt loam.	ML, CL-ML	A-4	0-5	75-80	70-75	65-75	60-70	25-35	5-10
	5-21	Very cobbly silt loam, very cobbly loam.	CL-ML, GM-GC, GM	A-4	40-55	65-85	60-80	55-75	45-65	25-35	5-10
	21-60	Very cobbly clay loam, very cobbly silty clay loam.	CL, GC	A-6	40-55	50-75	50-70	40-65	35-60	30-40	10-15
Beaverdam-------	0-12	Silt loam--------	ML, CL-ML	A-4	0-10	95-100	90-100	85-95	85-90	25-35	5-10
	12-65	Silty clay loam, silty clay.	CL	A-7	0-10	95-100	90-100	90-100	80-90	40-50	15-25
108*. Slickens											

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 3 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
109*:											
Swanner----------	0-9	Extremely stony loam.	SM, SM-SC	A-4	25-75	75-90	65-80	60-70	35-50	15-30	NP-10
	9-17	Very stony loam, extremely stony loam.	SM, SM-SC, GM, GM-GC	A-4	50-75	60-80	60-80	55-70	35-50	15-20	NP-5
	17	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Hondoho----------	0-15	Cobbly silt loam	CL-ML, ML	A-4	25-40	70-90	70-85	55-80	50-70	25-35	5-10
	15-60	Very cobbly sandy clay loam, very cobbly loam, extremely cobbly loam.	GC, GM	A-2, A-1	45-60	20-50	15-45	15-35	5-20	30-40	5-15
110*:											
Swanner----------	0-9	Extremely stony loam.	SM, SM-SC	A-4	25-75	75-90	65-80	60-70	35-50	15-30	NP-10
	9-17	Very stony loam, extremely stony loam.	SM, SM-SC, GM, GM-GC	A-4	50-75	60-80	60-80	55-70	35-50	15-20	NP-5
	17	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Rock outcrop.											
111----------	0-2	Silt loam--------	ML, CL-ML	A-4	0	100	100	95-100	85-95	15-30	NP-10
Tendoy	2-10	Sapric material	PT	A-8	0	---	---	---	---	---	NP
	10-60	Sapric material	PT	A-8	0	---	---	---	---	---	NP
112*:											
Toponce----------	0-3	Silt loam--------	CL-ML, CL	A-4, A-6	0-5	90-100	85-100	85-95	70-90	20-30	5-15
	3-14	Silt loam, silty clay loam.	CL-ML, CL	A-4, A-6	0-5	95-100	90-100	90-95	85-95	25-35	5-15
	14-60	Silty clay loam, silty clay, clay.	CL, CH	A-7	0-5	95-100	90-100	90-95	85-95	45-60	20-35
Broadhead--------	0-2	Silt loam--------	ML, CL-ML	A-4	0-5	95-100	90-100	85-95	80-90	25-35	5-10
	2-9	Silty clay loam, silt loam.	CL	A-6	0-5	95-100	90-100	85-95	80-90	30-40	10-15
	9-60	Silty clay loam, silty clay.	CL, CH	A-7	0-5	95-100	85-95	80-90	75-85	40-55	15-30
113*, 114*: Urban land.											
Bahem----------	0-11	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	85-95	20-30	NP-10
	11-49	Silt loam, silt	ML, CL-ML	A-4	0	95-100	95-100	95-100	90-95	20-30	NP-10
	49-60	Extremely cobbly sand, extremely stony sand.	GP, GP-GM	A-1	50-60	40-60	20-40	5-10	0-5	---	NP
Broxon----------	0-8	Silt loam--------	ML, CL-ML	A-4	0	95-100	95-100	95-100	85-95	20-30	NP-10
	8-25	Silt loam, silt	ML, CL-ML	A-4	0	95-100	95-100	95-100	90-95	20-30	NP-10
	25-60	Extremely stony sand, extremely cobbly sand.	GP, SP	A-1	50-60	40-60	20-40	5-10	0-5	---	NP

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 3 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
115---------- Valmar	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	30-45	55-75	50-70	45-65	40-50	20-30	NP-10
	9-14	Very stony silt loam, very cobbly silt loam.	GM-GC, GC	A-4, A-6	30-45	55-75	50-70	50-65	40-50	25-35	5-15
	14-24	Extremely stony silt loam, extremely flaggy silt loam.	GM-GC, GC	A-4, A-6, A-2	70-85	35-70	30-65	30-55	25-50	25-35	5-15
	24	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
116*: Valmar----------	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	30-45	55-75	50-70	45-65	40-50	20-30	NP-10
	9-14	Very stony silt loam, very cobbly silt loam.	GM-GC, GC	A-4, A-6	30-45	55-75	50-70	50-65	40-50	25-35	5-15
	14-24	Extremely stony silt loam, extremely flaggy silt loam.	GM-GC, GC	A-4, A-6, A-2	70-85	35-70	30-65	30-55	25-50	25-35	5-15
	24	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Camelback-------	0-21	Gravelly silt loam.	GM-GC, GM	A-4	0-5	55-70	50-65	45-60	35-50	20-30	NP-10
	21-42	Extremely gravelly silt loam, extremely cobbly silt loam.	GM-GC, GC	A-2, A-1	15-55	25-50	20-45	20-40	15-35	25-35	5-15
	42	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Hades----------	0-7	Gravelly silt loam.	CL-ML	A-4	0-5	65-80	60-75	55-75	50-60	20-30	5-10
	7-60	Gravelly silt loam, gravelly silty clay loam.	CL, GC	A-6	0-10	60-85	60-80	55-80	45-75	25-40	10-20
117*: Valmar----------	0-9	Extremely stony silt loam.	ML, CL-ML	A-4	40-50	70-85	65-80	60-75	50-60	20-30	NP-10
	9-14	Very stony silt loam, very cobbly silt loam.	GM-GC, GC	A-4, A-6	30-45	55-75	50-70	50-65	40-50	25-35	5-15
	14-24	Extremely stony silt loam, extremely flaggy silt loam.	GM-GC, GC	A-4, A-6, A-2	70-85	35-70	30-65	30-55	25-50	25-35	5-15
	24	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Hades----------	0-7	Gravelly silt loam.	CL-ML	A-4	0-5	65-80	60-75	55-75	50-60	20-30	5-10
	7-60	Gravelly silt loam, gravelly silty clay loam.	CL, GC	A-6	0-10	60-85	60-80	55-80	45-75	25-40	10-20

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 3 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
118*:											
Valmar----------	0-9	Extremely stony silt loam.	ML, CL-ML	A-4	40-50	70-85	65-80	60-75	50-60	20-30	NP-10
	9-14	Very stony silt loam, very cobbly silt loam.	GM-GC, GC	A-4, A-6	30-45	55-75	50-70	50-65	40-50	25-35	5-15
	14-24	Extremely stony silt loam, extremely flaggy silt loam.	GM-GC, GC	A-4, A-6, A-2	70-85	35-70	30-65	30-55	25-50	25-35	5-15
	24	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Rock outcrop.											
119*:											
Valmar----------	0-9	Very cobbly silt loam.	GM, GM-GC	A-4	30-45	55-75	50-70	45-65	40-50	20-30	NP-10
	9-14	Very stony silt loam, very cobbly silt loam.	GM-GC, GC	A-4, A-6	30-45	55-75	50-70	50-65	40-50	25-35	5-15
	14-24	Extremely stony silt loam, extremely flaggy silt loam.	GM-GC, GC	A-4, A-6, A-2	70-85	35-70	30-65	30-55	25-50	25-35	5-15
	24	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Watercanyon-----	0-7	Silt loam--------	CL-ML, ML	A-4	0	100	100	95-100	90-100	15-30	NP-10
	7-16	Silt loam--------	CL-ML, ML	A-4	0	100	100	95-100	90-100	15-30	NP-10
	16-60	Silt loam, very fine sandy loam, silt.	ML	A-4	0	100	100	95-100	75-100	15-25	NP-5
Hondoho---------	0-15	Cobbly silt loam	CL-ML, ML	A-4	25-40	70-90	70-85	55-80	50-70	25-35	5-10
	15-60	Very cobbly sandy clay loam, very cobbly loam, extremely cobbly loam.	GC, GM	A-2, A-1	45-60	20-50	15-45	15-35	5-20	30-40	5-15
120----------	0-7	Silt loam--------	CL-ML, ML	A-4	0	100	100	95-100	90-100	15-30	NP-10
Watercanyon	7-16	Silt loam--------	CL-ML, ML	A-4	0	100	100	95-100	90-100	15-30	NP-10
	16-60	Silt loam, very fine sandy loam, silt.	ML	A-4	0	100	100	95-100	75-100	15-25	NP-5
121*:											
Watercanyon-----	0-7	Silt loam--------	CL-ML, ML	A-4	0	100	100	95-100	90-100	15-30	NP-10
	7-16	Silt loam--------	CL-ML, ML	A-4	0	100	100	95-100	90-100	15-30	NP-10
	16-60	Silt loam, very fine sandy loam, silt.	ML	A-4	0	100	100	95-100	75-100	15-25	NP-5
Swanner---------	0-9	Extremely stony loam.	SM, SM-SC	A-4	25-75	75-90	65-80	60-70	35-50	15-30	NP-10
	9-17	Very stony loam, extremely stony loam.	SM, SM-SC, GM, GM-GC	A-4	50-75	60-80	60-80	55-70	35-50	15-20	NP-5
	17	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Rock outcrop.											

See footnote at end of table.

TABLE 16.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 3 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
122---------- Wursten	0-9	Gravelly silt loam.	CL-ML, ML	A-4	0-10	65-80	60-75	55-75	50-65	20-30	NP-10
	9-60	Gravelly loam, gravelly silt loam.	ML, CL-ML, GM, GM-GC	A-4	5-10	60-80	55-75	55-75	45-60	20-30	NP-10
123*:											
Wursten---------	0-9	Gravelly silt loam.	CL-ML, ML	A-4	0-10	65-80	60-75	55-75	50-65	20-30	NP-10
	9-60	Gravelly loam, gravelly silt loam.	ML, CL-ML, GM, GM-GC	A-4	5-10	60-80	55-75	55-75	45-60	20-30	NP-10
Watercanyon Variant--------	0-4	Silt loam--------	CL-ML, ML	A-4	0	90-100	85-100	80-95	75-90	15-30	NP-10
	4-60	Silt loam--------	CL-ML, ML	A-4	0	95-100	90-100	90-100	85-95	15-30	NP-10
Hondoho---------	0-15	Cobbly silt loam	CL-ML, ML	A-4	25-40	70-90	70-85	55-80	50-70	25-35	5-10
	15-60	Very cobbly sandy clay loam, very cobbly loam, extremely cobbly loam.	GC, GM	A-2, A-1	45-60	20-50	15-45	15-35	5-20	30-40	5-15

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 17.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS

[The symbol < means less than; > means more than. Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Organic matter" apply only to the surface layer. Absence of an entry indicates that data were not available or were not estimated]

Soil name and map symbol	Depth	Clay	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors		Wind erodibility group	Organic matter
								K	T		
	In	Pct	In/hr	In/in	pH	mmhos/cm					Pct
1, 2----------	0-9	13-18	0.6-2.0	0.16-0.18	7.4-8.4	<2	Low-------	0.37	5	5	1-3
Arbone	9-60	13-18	0.6-2.0	0.16-0.18	7.4-8.4	<2	Low-------	0.43			
3*:											
Arbone----------	0-9	13-18	0.6-2.0	0.12-0.15	7.4-8.4	<2	Low-------	0.28	5	5	1-3
	9-60	13-18	0.6-2.0	0.12-0.15	7.4-8.4	<2	Low-------	0.32			
Hondoho---------	0-15	12-25	0.6-2.0	0.13-0.14	7.4-8.4	<2	Low-------	0.28	2	6	2-3
	15-60	18-27	0.6-2.0	0.08-0.11	7.9-8.4	<2	Low-------	0.17			
4*:											
Arbone----------	0-9	13-18	0.6-2.0	0.16-0.18	7.4-8.4	<2	Low-------	0.37	5	5	1-3
	9-60	13-18	0.6-2.0	0.16-0.18	7.4-8.4	<2	Low-------	0.43			
McCarey---------	0-12	10-20	0.6-2.0	0.16-0.21	6.1-7.8	<2	Low-------	0.43	2	5	1-3
	12-17	20-34	0.2-0.6	0.19-0.21	6.6-8.4	<2	Moderate	0.32			
	17-28	15-25	0.6-2.0	0.16-0.21	6.6-8.4	<2	Low-------	0.43			
	28	---	---	---	---	---	----------	----			
Lava flows.											
5*:											
Arbone----------	0-9	13-18	0.6-2.0	0.16-0.18	7.4-8.4	<2	Low-------	0.37	5	5	1-3
	9-60	13-18	0.6-2.0	0.16-0.18	7.4-8.4	<2	Low-------	0.43			
Rubble land.											
6----------	0-18	10-18	0.6-2.0	0.18-0.20	6.6-7.8	<2	Low-------	0.37	2	5	1-3
Arimo	18-33	10-18	0.6-2.0	0.18-0.20	7.4-8.4	<2	Low-------	0.43			
	33-60	0-5	>20	0.02-0.04	7.4-8.4	<2	Low-------	0.10			
7, 8----------	0-11	8-18	0.6-2.0	0.19-0.21	7.4-7.8	<2	Low-------	0.43	3	4L	.8-2
Bahem	11-49	8-18	0.6-2.0	0.19-0.21	7.4-8.4	<2	Low-------	0.55			
	49-60	<5	>20	0.03-0.05	---	<2	Low-------	0.10			
9, 10----------	0-7	15-20	0.6-2.0	0.19-0.21	6.1-7.3	<2	Low-------	0.43	5	5	2-3
Bancroft	7-37	18-32	0.6-2.0	0.19-0.21	6.1-7.8	<2	Low-------	0.43			
	37-60	10-20	0.6-2.0	0.19-0.21	7.4-9.0	<2	Low-------	0.55			
11*:											
Bancroft--------	0-7	15-20	0.6-2.0	0.19-0.21	6.1-7.3	<2	Low-------	0.43	5	5	2-3
	7-37	18-32	0.6-2.0	0.19-0.21	6.1-7.8	<2	Low-------	0.43			
	37-60	10-20	0.6-2.0	0.19-0.21	7.4-9.0	<2	Low-------	0.55			
Manila----------	0-7	18-27	0.6-2.0	0.16-0.18	6.1-7.3	<2	Moderate	0.43	5	6	2-4
	7-48	35-55	0.06-0.2	0.17-0.19	6.1-7.8	<2	High------	0.37			
	48-60	12-18	0.6-2.0	0.17-0.19	6.6-7.8	<2	Low-------	0.49			
12----------	0-6	32-39	0.06-0.2	0.14-0.18	7.4-8.4	<2	Moderate	0.32	5	4	1-2
Banida	6-64	40-55	<0.06	0.14-0.16	7.4-8.4	2-4	High------	0.37			
13*:											
Bear Lake-------	0-12	18-27	0.6-2.0	0.19-0.21	7.4-8.4	2-4	Low-------	0.37	5	8	3-6
	12-60	18-34	0.2-0.6	0.19-0.21	7.4-9.0	2-8	Moderate	0.43			
Bear Lake Variant--------	0-5	18-25	0.6-2.0	0.17-0.22	7.4-8.4	2-4	Low-------	0.32	3	8	3-6
	5-17	23-30	0.2-0.6	0.16-0.21	7.4-8.4	2-8	Moderate	0.43			
	17-36	18-26	0.6-2.0	0.16-0.21	7.9-8.4	2-8	Low-------	0.43			
	36	---	---	---	---	---	----------	----			

See footnote at end of table.

TABLE 17.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors		Wind erodibility group	Organic matter
								K	T		
	In	Pct	In/hr	In/in	pH	mmhos/cm					Pct
14*:											
Broadhead-------	0-2	15-25	0.6-2.0	0.18-0.20	5.6-6.5	<2	Low-------	0.28	2	6	2-4
	2-9	25-35	0.2-0.6	0.18-0.20	6.1-7.3	<2	Moderate	0.28			
	9-60	35-50	0.06-0.2	0.16-0.18	6.1-7.3	<2	High------	0.24			
Hades-----------	0-7	18-25	0.6-2.0	0.15-0.18	5.6-7.3	<2	Low-------	0.28	5	6	2-4
	7-60	24-35	0.2-0.6	0.15-0.18	5.6-8.4	<2	Moderate	0.32			
Yago------------	0-10	27-35	0.2-0.6	0.09-0.12	5.6-6.5	<2	Moderate	0.15	2	8	2-4
	10-45	35-50	0.06-0.2	0.08-0.11	6.1-7.3	<2	High------	0.17			
	45-60	23-35	0.2-0.6	0.09-0.12	6.6-7.8	<2	Moderate	0.17			
15*, 16*:											
Broadhead-------	0-2	15-25	0.6-2.0	0.18-0.20	5.6-6.5	<2	Low-------	0.28	2	6	2-4
	2-9	25-35	0.2-0.6	0.18-0.20	6.1-7.3	<2	Moderate	0.28			
	9-60	35-50	0.06-0.2	0.16-0.18	6.1-7.3	<2	High------	0.24			
Yago------------	0-10	27-35	0.2-0.6	0.09-0.12	5.6-6.5	<2	Moderate	0.15	2	8	2-4
	10-45	35-50	0.06-0.2	0.08-0.11	6.1-7.3	<2	High------	0.17			
	45-60	23-35	0.2-0.6	0.09-0.12	6.6-7.8	<2	Moderate	0.17			
17---------------	0-6	10-15	0.6-2.0	0.09-0.13	7.4-8.4	<2	Low-------	0.24	1	5	.5-1
Broncho	6-13	10-15	0.6-2.0	0.09-0.13	7.4-8.4	<2	Low-------	0.24			
	13-60	<5	>20	0.02-0.04	7.4-8.4	<2	Low-------	0.05			
18---------------	0-6	10-15	0.6-2.0	0.09-0.13	7.4-8.4	<2	Low-------	0.24	1	5	.5-1
Broncho	6-13	10-15	0.6-2.0	0.09-0.13	7.4-8.4	<2	Low-------	0.24			
	13-60	<5	>20	0.02-0.04	7.4-8.4	<2	Low-------	0.05			
19*:											
Broncho Variant-	0-4	10-20	0.6-2.0	0.09-0.11	6.6-7.8	<2	Low-------	0.17	5	8	.5-1
	4-28	20-30	0.6-2.0	0.08-0.11	6.6-8.4	2-4	Low-------	0.15			
	28-60	5-15	2.0-6.0	0.04-0.07	7.4-8.4	2-4	Low-------	0.10			
Pocatello-------	0-8	5-15	0.6-2.0	0.19-0.21	6.6-8.4	<2	Low-------	0.49	5	4L	.8-1
	8-40	5-15	0.6-2.0	0.19-0.21	7.9-9.0	2-4	Low-------	0.55			
	40-60	5-15	0.6-2.0	0.19-0.21	>7.8	8-16	Low-------	0.55			
20*:											
Broncho Variant-	0-4	10-20	0.6-2.0	0.09-0.11	6.6-7.8	<2	Low-------	0.17	5	8	.5-1
	4-28	20-30	0.6-2.0	0.08-0.11	6.6-8.4	2-4	Low-------	0.15			
	28-60	5-15	2.0-6.0	0.04-0.07	7.4-8.4	2-4	Low-------	0.10			
Ririe-----------	0-12	15-18	0.6-2.0	0.19-0.21	6.6-8.4	<2	Low-------	0.43	5	5	2-4
	12-60	12-18	0.6-2.0	0.19-0.21	7.4-9.0	<2	Low-------	0.55			
Pocatello-------	0-8	5-15	0.6-2.0	0.19-0.21	6.6-8.4	<2	Low-------	0.49	5	4L	.8-1
	8-40	5-15	0.6-2.0	0.19-0.21	7.9-9.0	2-4	Low-------	0.55			
	40-60	5-15	0.6-2.0	0.19-0.21	>7.8	8-16	Low-------	0.55			
21, 22----------	0-8	8-18	0.6-2.0	0.19-0.21	7.4-8.4	<2	Low-------	0.43	2	4L	.8-2
Broxon	8-25	8-18	0.6-2.0	0.19-0.21	7.4-8.4	<2	Low-------	0.55			
	25-60	0-5	>20	0.03-0.05	7.4-8.4	<2	Low-------	0.05			
23*:											
Camelback-------	0-21	12-18	0.6-2.0	0.11-0.15	6.1-7.3	<2	Low-------	0.24	3	8	2-4
	21-42	18-27	0.6-2.0	0.08-0.11	6.1-7.3	<2	Low-------	0.20			
	42	---	---	---	---	---	----------	----			
Cedarhill-------	0-9	10-16	0.6-2.0	0.09-0.12	7.4-8.4	<2	Low-------	0.17	5	8	1-3
	9-28	10-17	0.6-2.0	0.08-0.12	7.4-8.4	<2	Low-------	0.15			
	28-60	8-15	0.6-2.0	0.07-0.11	7.4-8.4	<4	Low-------	0.20			
Lanoak----------	0-22	10-20	0.6-2.0	0.19-0.21	6.1-7.8	<2	Low-------	0.37	5	5	3-5
	22-60	18-27	0.6-2.0	0.19-0.21	6.6-7.8	<2	Moderate	0.49			

See footnote at end of table.

TABLE 17.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors		Wind erodibility group	Organic matter
								K	T		
	In	Pct	In/hr	In/in	pH	mmhos/cm					Pct
24*:											
Camelback-------	0-21	12-18	0.6-2.0	0.11-0.15	6.1-7.3	<2	Low-------	0.32	5	5	2-4
	21-60	18-27	0.6-2.0	0.08-0.11	6.1-7.3	<2	Low-------	0.20			
Greys------------	0-19	12-15	0.6-2.0	0.19-0.21	5.6-7.3	<2	Low-------	0.43	5	5	2-4
	19-60	18-35	0.2-0.6	0.19-0.21	5.6-7.3	<2	Moderate	0.43			
25*:											
Camelback-------	0-21	12-18	0.6-2.0	0.11-0.15	6.1-7.3	<2	Low-------	0.24	5	8	2-4
	21-60	18-27	0.6-2.0	0.08-0.11	6.1-7.3	<2	Low-------	0.20			
Hades------------	0-7	18-25	0.6-2.0	0.15-0.18	5.6-7.3	<2	Low-------	0.28	5	6	2-4
	7-60	24-35	0.2-0.6	0.15-0.18	5.6-8.4	<2	Moderate	0.32			
26*:											
Camelback-------	0-21	12-18	0.6-2.0	0.11-0.15	6.1-7.3	<2	Low-------	0.32	3	5	2-4
	21-42	18-27	0.6-2.0	0.08-0.11	6.1-7.3	<2	Low-------	0.20			
	42	---	---	---	---	---	----------	----			
Valmar-----------	0-9	13-20	0.6-2.0	0.10-0.15	6.1-7.3	<2	Low-------	0.24	2	8	2-4
	9-14	20-27	0.6-2.0	0.10-0.15	6.6-7.8	<2	Moderate	0.20			
	14-24	20-27	0.6-2.0	0.07-0.12	6.6-7.8	<2	Moderate	0.17			
	24	---	---	---	---	---	----------	----			
Hades------------	0-7	18-25	0.6-2.0	0.15-0.18	5.6-7.3	<2	Low-------	0.28	5	6	2-4
	7-60	24-35	0.2-0.6	0.15-0.18	5.6-8.4	<2	Moderate	0.32			
27*:											
Camelback Variant--------	0-10	10-20	0.6-2.0	0.13-0.15	6.1-7.3	<2	Low-------	0.24	5	5	3-5
	10-60	10-25	0.6-2.0	0.08-0.11	6.1-7.3	<2	Low-------	0.15			
Valmar Variant--	0-9	10-15	0.6-2.0	0.10-0.13	6.1-6.5	<2	Low-------	0.17	2	8	3-5
	9-24	15-25	0.6-2.0	0.07-0.10	6.1-7.3	<2	Low-------	0.15			
	24	---	---	---	---	---	----------	----			
28---------------	0-9	10-16	0.6-2.0	0.09-0.12	7.4-8.4	<2	Low-------	0.17	5	8	1-3
Cedarhill	9-28	10-17	0.6-2.0	0.08-0.12	7.4-8.4	<2	Low-------	0.15			
	28-60	8-15	0.6-2.0	0.07-0.11	7.4-8.4	<4	Low-------	0.20			
29*:											
Cedarhill-------	0-9	10-16	0.6-2.0	0.09-0.12	7.4-8.4	<2	Low-------	0.17	5	8	1-3
	9-28	10-17	0.6-2.0	0.08-0.12	7.4-8.4	<2	Low-------	0.15			
	28-60	8-15	0.6-2.0	0.07-0.11	7.4-8.4	<4	Low-------	0.20			
Ireland----------	0-7	10-16	0.6-2.0	0.07-0.09	6.6-7.8	<2	Low-------	0.28	2	8	1-3
	7-30	16-22	0.6-2.0	0.05-0.07	7.4-8.4	<2	Low-------	0.20			
	30	---	---	---	---	---	----------	----			
Rock outcrop.											
30*:											
Cedarhill-------	0-9	10-16	0.6-2.0	0.09-0.12	7.4-8.4	<2	Low-------	0.17	5	8	1-3
	9-28	10-17	0.6-2.0	0.08-0.12	7.4-8.4	<2	Low-------	0.15			
	28-60	8-15	0.6-2.0	0.07-0.11	7.4-8.4	<4	Low-------	0.20			
Ririe------------	0-12	15-18	0.6-2.0	0.19-0.21	6.6-8.4	<2	Low-------	0.43	5	5	2-4
	12-60	12-18	0.6-2.0	0.19-0.21	7.4-9.0	<2	Low-------	0.55			
Watercanyon------	0-7	10-18	0.6-2.0	0.16-0.20	7.4-7.8	<2	Low-------	0.49	5	5	1-2
	7-16	10-18	0.6-2.0	0.16-0.20	7.4-8.4	<2	Low-------	0.55			
	16-60	5-16	0.6-2.0	0.14-0.18	7.9-9.0	2-4	Low-------	0.55			

See footnote at end of table.

TABLE 17.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors		Wind erodibility group	Organic matter
								K	T		
	In	Pct	In/hr	In/in	pH	mmhos/cm					Pct
31*:											
Cedarhill-------	0-9	10-16	0.6-2.0	0.09-0.12	7.4-8.4	<2	Low-------	0.17	5	8	1-3
	9-28	10-17	0.6-2.0	0.08-0.12	7.4-8.4	<2	Low-------	0.15			
	28-60	8-15	0.6-2.0	0.07-0.11	7.4-8.4	<4	Low-------	0.20			
Rock outcrop.											
32*:											
Cedarhill-------	0-9	10-16	0.6-2.0	0.09-0.12	6.6-8.4	<2	Low-------	0.17	5	8	1-3
	9-28	10-17	0.6-2.0	0.08-0.11	7.4-8.4	<2	Low-------	0.15			
	28-60	8-15	0.6-2.0	0.07-0.10	7.4-8.4	<4	Low-------	0.15			
Camelback-------	0-21	12-18	0.6-2.0	0.11-0.15	6.1-7.3	<2	Low-------	0.32	3	5	2-4
	21-42	18-27	0.6-2.0	0.08-0.11	6.1-7.3	<2	Low-------	0.20			
	42	---	---	---	---	---	----------	----			
Moonlight-------	0-24	12-18	0.6-2.0	0.19-0.21	5.6-7.3	<2	Low-------	0.32	5	5	4-6
	24-60	12-18	0.6-2.0	0.19-0.21	5.6-7.3	<2	Low-------	0.37			
33*:											
Cedarhill-------	0-9	10-16	0.6-2.0	0.09-0.12	6.6-8.4	<2	Low-------	0.17	5	8	1-3
	9-28	10-17	0.6-2.0	0.08-0.11	7.4-8.4	<2	Low-------	0.15			
	28-60	8-15	0.6-2.0	0.07-0.10	7.4-8.4	<4	Low-------	0.15			
Hades-----------	0-7	18-25	0.6-2.0	0.15-0.18	5.6-7.3	<2	Low-------	0.28	5	6	2-4
	7-60	24-35	0.2-0.6	0.15-0.18	5.6-8.4	<2	Moderate	0.32			
Ricrest---------	0-10	15-25	0.6-2.0	0.16-0.17	7.4-7.8	<2	Low-------	0.32	5	6	2-5
	10-24	24-32	0.6-2.0	0.17-0.18	7.4-7.8	<2	Moderate	0.24			
	24-60	20-30	0.6-2.0	0.15-0.17	7.4-8.4	<2	Moderate	0.24			
34*:											
Cedarhill-------	0-9	10-16	0.6-2.0	0.09-0.12	7.4-8.4	<2	Low-------	0.17	5	8	1-3
	9-28	10-17	0.6-2.0	0.08-0.12	7.4-8.4	<2	Low-------	0.15			
	28-60	8-15	0.6-2.0	0.07-0.11	7.4-8.4	<4	Low-------	0.20			
Hondoho---------	0-15	15-25	0.6-2.0	0.11-0.13	6.6-8.4	<2	Low-------	0.28	5	8	2-3
	15-60	18-30	0.6-2.0	0.08-0.10	7.9-8.4	<2	Low-------	0.10			
Arbone----------	0-9	13-18	0.6-2.0	0.12-0.15	7.4-8.4	<2	Low-------	0.28	5	5	1-3
	9-60	13-18	0.6-2.0	0.12-0.15	7.4-8.4	<2	Low-------	0.32			
35*:											
Cedarhill-------	0-9	10-16	0.6-2.0	0.09-0.12	7.4-8.4	<2	Low-------	0.17	5	8	1-3
	9-28	10-17	0.6-2.0	0.08-0.12	7.4-8.4	<2	Low-------	0.15			
	28-60	8-15	0.6-2.0	0.07-0.11	7.4-8.4	<4	Low-------	0.20			
Hondoho---------	0-15	15-25	0.6-2.0	0.11-0.13	6.6-8.4	<2	Low-------	0.28	5	8	2-3
	15-60	18-30	0.6-2.0	0.08-0.10	7.9-8.4	<2	Low-------	0.10			
Ridgecrest------	0-14	8-18	0.6-2.0	0.08-0.10	7.4-8.4	<2	Low-------	0.24	2	8	2-4
	14-27	8-18	0.6-2.0	0.05-0.08	7.4-8.4	<2	Low-------	0.20			
	27	---	---	---	---	---	----------	----			
36*:											
Cedarhill-------	0-9	10-16	0.6-2.0	0.09-0.12	7.4-8.4	<2	Low-------	0.17	5	8	1-3
	9-28	10-17	0.6-2.0	0.08-0.12	7.4-8.4	<2	Low-------	0.15			
	28-60	8-15	0.6-2.0	0.07-0.11	7.4-8.4	<4	Low-------	0.20			
Manila----------	0-7	18-27	0.6-2.0	0.16-0.18	6.1-7.3	<2	Moderate	0.43	5	6	2-4
	7-48	35-55	0.06-0.2	0.17-0.19	6.1-7.8	<2	High------	0.37			
	48-60	12-18	0.6-2.0	0.17-0.19	6.6-7.8	<2	Low-------	0.49			

See footnote at end of table.

TABLE 17.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors		Wind erodibility group	Organic matter
								K	T		
	In	Pct	In/hr	In/in	pH	mmhos/cm					Pct
37*:											
Cedarhill-------	0-9	10-16	0.6-2.0	0.09-0.12	7.4-8.4	<2	Low-------	0.17	5	8	1-3
	9-28	10-17	0.6-2.0	0.08-0.12	7.4-8.4	<2	Low-------	0.15			
	28-60	8-15	0.6-2.0	0.07-0.11	7.4-8.4	<4	Low-------	0.20			
Trailcreek------	0-4	---	2.0-6.0	0.09-0.15	6.6-7.8	<2	Low-------	0.37	2	3	1-4
	4-26	---	2.0-6.0	0.07-0.13	6.6-8.4	<2	Low-------	0.49			
	26	---	---	---	---	---	----------	----			
Coalbank--------	0-33	---	2.0-6.0	0.09-0.15	6.6-7.8	<2	Low-------	0.37	5	3	1-4
	33-60	---	2.0-6.0	0.07-0.13	6.6-8.4	<2	Low-------	0.49			
38----------	0-33	---	2.0-6.0	0.09-0.15	6.6-7.8	<2	Low-------	0.37	5	3	1-4
Coalbank	33-60	---	2.0-6.0	0.07-0.13	6.6-8.4	<2	Low-------	0.49			
39*, 40*:											
Coalbank--------	0-33	---	2.0-6.0	0.09-0.15	6.6-7.8	<2	Low-------	0.37	5	3	1-4
	33-60	---	2.0-6.0	0.07-0.13	6.6-8.4	<2	Low-------	0.49			
Trailcreek------	0-4	---	2.0-6.0	0.09-0.15	6.6-7.8	<2	Low-------	0.37	2	3	1-4
	4-26	---	2.0-6.0	0.07-0.13	6.6-8.4	<2	Low-------	0.49			
	26	---	---	---	---	---	----------	----			
Lonigan---------	0-7	---	0.6-2.0	0.12-0.16	6.6-7.8	<2	Low-------	0.24	2	5	1-3
	7-12	---	2.0-6.0	0.09-0.13	7.4-8.4	<2	Low-------	0.20			
	12-27	---	2.0-6.0	0.08-0.11	7.4-8.4	<2	Low-------	0.15			
	27	---	---	---	---	---	----------	----			
41*:											
Downata---------	0-14	12-24	0.6-2.0	0.18-0.21	7.4-8.4	<4	Low-------	0.32	5	8	3-6
	14-40	28-34	0.2-0.6	0.17-0.20	7.4-8.4	<4	Moderate	0.43			
	40-60	18-27	0.6-2.0	0.17-0.20	7.4-8.4	<2	Low-------	0.43			
Bear Lake-------	0-12	18-27	0.6-2.0	0.19-0.21	7.4-8.4	2-4	Low-------	0.37	5	8	3-6
	12-60	18-34	0.2-0.6	0.19-0.21	7.4-9.0	2-8	Moderate	0.43			
42*, 43*:											
Downey----------	0-17	10-18	0.6-2.0	0.18-0.20	6.6-8.4	<2	Low-------	0.37	1	5	1-3
	17-60	0-5	>20	0.02-0.04	7.4-8.4	<2	Low-------	0.10			
Arimo-----------	0-18	10-18	0.6-2.0	0.18-0.20	6.6-7.8	<2	Low-------	0.37	2	5	1-3
	18-33	10-18	0.6-2.0	0.18-0.20	7.4-8.4	<2	Low-------	0.43			
	33-60	0-5	>20	0.02-0.04	7.4-8.4	<2	Low-------	0.10			
44*:											
Enochville------	0-12	15-25	0.6-2.0	0.19-0.21	6.1-7.3	<2	Low-------	0.32	5	5	4-6
	12-43	20-35	0.2-0.6	0.14-0.20	6.6-7.8	<2	Moderate	0.37			
	43-60	13-18	2.0-6.0	0.03-0.07	6.6-8.4	<2	Low-------	0.15			
Enochville Variant--------	0-11	12-17	0.6-2.0	0.13-0.18	6.6-7.8	<2	Low-------	0.28	5	5	4-6
	11-24	17-25	0.6-2.0	0.12-0.16	6.6-7.8	<2	Low-------	0.28			
	24-60	14-19	0.6-2.0	0.05-0.07	6.1-7.3	<2	Low-------	0.15			
45*:											
Greys-----------	0-19	12-15	0.6-2.0	0.19-0.21	5.6-7.3	<2	Low-------	0.43	5	5	2-4
	19-60	18-35	0.2-0.6	0.19-0.21	5.6-7.3	<2	Moderate	0.43			
Pavohroo--------	0-3	8-17	0.6-2.0	0.16-0.19	6.1-7.3	<2	Low-------	0.32	5	5	4-8
	3-26	18-25	0.6-2.0	0.16-0.19	6.1-7.3	<2	Low-------	0.37			
	26-60	18-25	0.6-2.0	0.12-0.16	6.6-8.4	<2	Low-------	0.28			
Sedgway---------	0-5	15-25	0.6-2.0	0.14-0.16	5.6-6.5	<2	Low-------	0.37	5	5	2-4
	5-21	15-25	0.6-2.0	0.09-0.11	5.6-6.5	<2	Low-------	0.20			
	21-60	27-34	0.2-0.6	0.08-0.10	5.6-6.5	<2	Moderate	0.20			

See footnote at end of table.

TABLE 17.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors		Wind erodibility group	Organic matter
								K	T		
	In	Pct	In/hr	In/in	pH	mmhos/cm					Pct
46----------	0-7	18-25	0.6-2.0	0.15-0.18	5.6-7.3	<2	Low-------	0.28	5	6	2-4
Hades	7-60	24-35	0.2-0.6	0.15-0.18	5.6-8.4	<2	Moderate	0.32			
47*:											
Hades----------	0-7	18-25	0.6-2.0	0.15-0.18	5.6-7.3	<2	Low-------	0.28	5	6	2-4
	7-60	24-35	0.2-0.6	0.15-0.18	5.6-8.4	<2	Moderate	0.32			
Camelback-------	0-21	12-18	0.6-2.0	0.11-0.15	6.1-7.3	<2	Low-------	0.32	5	5	2-4
	21-60	18-27	0.6-2.0	0.08-0.11	6.1-7.3	<2	Low-------	0.20			
Hondoho---------	0-15	15-25	0.6-2.0	0.11-0.13	6.6-8.4	<2	Low-------	0.28	5	8	2-3
	15-60	18-30	0.6-2.0	0.08-0.10	7.9-8.4	<2	Low-------	0.10			
48*:											
Hades----------	0-7	18-25	0.6-2.0	0.15-0.18	5.6-7.3	<2	Low-------	0.28	5	6	2-4
	7-60	24-35	0.2-0.6	0.15-0.18	5.6-8.4	<2	Moderate	0.32			
Holmes----------	0-16	10-20	0.6-2.0	0.05-0.08	6.6-7.3	<2	Low-------	0.15	1	8	2-4
	16-28	15-30	0.6-2.0	0.06-0.09	6.6-7.3	<2	Low-------	0.10			
	28-60	2-5	6.0-20	0.02-0.04	6.1-6.5	<2	Low-------	0.05			
49*:											
Hades----------	0-7	18-25	0.6-2.0	0.15-0.18	5.6-7.3	<2	Low-------	0.28	5	6	2-4
	7-60	24-35	0.2-0.6	0.15-0.18	5.6-8.4	<2	Moderate	0.32			
Lanoak----------	0-22	10-20	0.6-2.0	0.19-0.21	6.1-7.8	<2	Low-------	0.37	5	5	3-5
	22-60	18-27	0.6-2.0	0.19-0.21	6.6-7.8	<2	Moderate	0.49			
50*:											
Hades----------	0-7	18-25	0.6-2.0	0.15-0.18	5.6-7.3	<2	Low-------	0.28	5	6	2-4
	7-60	24-35	0.2-0.6	0.15-0.18	5.6-8.4	<2	Moderate	0.32			
Lanoak----------	0-22	10-20	0.6-2.0	0.19-0.21	6.1-7.8	<2	Low-------	0.37	5	5	3-5
	22-60	18-27	0.6-2.0	0.19-0.21	6.6-7.8	<2	Moderate	0.49			
Camelback-------	0-21	12-18	0.6-2.0	0.11-0.15	6.1-7.3	<2	Low-------	0.32	3	5	2-4
	21-42	18-27	0.6-2.0	0.08-0.11	6.1-7.3	<2	Low-------	0.20			
	42	---	---	---	---	---	----------	----			
51*:											
Harkness--------	0-8	15-20	0.6-2.0	0.15-0.19	5.1-6.0	<2	Low-------	0.37	2	5	2-5
	8-14	15-25	0.6-2.0	0.11-0.17	5.1-6.0	<2	Low-------	0.24			
	14-60	35-55	0.06-0.2	0.13-0.18	4.5-6.5	<2	High------	0.28			
Sedgway---------	0-5	15-25	0.6-2.0	0.14-0.16	5.6-6.5	<2	Low-------	0.37	5	5	2-4
	5-21	15-25	0.6-2.0	0.09-0.11	5.6-6.5	<2	Low-------	0.20			
	21-60	27-34	0.2-0.6	0.08-0.10	5.6-6.5	<2	Moderate	0.20			
Mikesell--------	0-11	15-25	0.6-2.0	0.16-0.18	5.1-6.5	<2	Low-------	0.37	5	6	.5-1
	11-31	40-55	0.06-0.2	0.13-0.15	5.1-6.5	<2	High------	0.20			
	31-60	40-55	0.06-0.2	0.09-0.12	5.1-6.5	<2	High------	0.10			
52----------	0-16	15-25	0.6-2.0	0.10-0.13	6.6-7.3	<2	Low-------	0.15	1	8	2-4
Holmes	16-28	15-30	0.6-2.0	0.06-0.09	6.6-7.3	<2	Low-------	0.10			
	28-60	2-5	6.0-20	0.02-0.04	6.1-6.5	<2	Low-------	0.05			
53*:											
Hondoho---------	0-15	12-25	0.6-2.0	0.13-0.14	7.4-8.4	<2	Low-------	0.28	2	6	2-3
	15-60	18-27	0.6-2.0	0.08-0.11	7.9-8.4	<2	Low-------	0.17			
Arbone----------	0-9	13-18	0.6-2.0	0.12-0.15	7.4-8.4	<2	Low-------	0.28	5	5	1-3
	9-60	13-18	0.6-2.0	0.12-0.15	7.4-8.4	<2	Low-------	0.32			

See footnote at end of table.

TABLE 17.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors		Wind erodibility group	Organic matter
								K	T		
	In	Pct	In/hr	In/in	pH	mmhos/cm					Pct
54*:											
Hondoho	0-15	15-25	0.6-2.0	0.11-0.13	6.6-8.4	<2	Low	0.28	5	8	2-3
	15-60	18-30	0.6-2.0	0.08-0.10	7.9-8.4	<2	Low	0.10			
Arbone	0-9	13-18	0.6-2.0	0.12-0.15	7.4-8.4	<2	Low	0.28	5	5	1-3
	9-60	13-18	0.6-2.0	0.12-0.15	7.4-8.4	<2	Low	0.32			
Ririe	0-12	15-18	0.6-2.0	0.19-0.21	6.6-8.4	<2	Low	0.43	5	5	2-4
	12-60	12-18	0.6-2.0	0.19-0.21	7.4-9.0	<2	Low	0.55			
55*:											
Hondoho	0-15	15-25	0.6-2.0	0.11-0.13	6.6-8.4	<2	Low	0.28	5	8	2-3
	15-60	18-30	0.6-2.0	0.08-0.10	7.9-8.4	<2	Low	0.10			
Hades	0-7	18-25	0.6-2.0	0.15-0.18	5.6-7.3	<2	Low	0.28	5	6	2-4
	7-60	24-35	0.2-0.6	0.15-0.18	5.6-8.4	<2	Moderate	0.32			
56*:											
Hondoho	0-15	15-25	0.6-2.0	0.11-0.13	6.6-8.4	<2	Low	0.28	5	8	2-3
	15-60	18-30	0.6-2.0	0.08-0.10	7.9-8.4	<2	Low	0.10			
Lanoak	0-22	10-20	0.6-2.0	0.19-0.21	6.1-7.8	<2	Low	0.37	5	5	3-5
	22-60	18-27	0.6-2.0	0.19-0.21	6.6-7.8	<2	Moderate	0.49			
Camelback	0-21	12-18	0.6-2.0	0.11-0.15	6.1-7.3	<2	Low	0.32	5	5	2-4
	21-60	18-27	0.6-2.0	0.08-0.11	6.1-7.3	<2	Low	0.20			
57, 58	0-7	12-20	0.6-2.0	0.19-0.22	7.4-8.4	<4	Low	0.37	5	4L	3-6
Inkom	7-60	18-27	0.6-2.0	0.18-0.21	7.4-8.4	<4	Low	0.43			
59*:											
Ireland	0-7	10-16	0.6-2.0	0.07-0.09	6.6-7.8	<2	Low	0.28	2	8	1-3
	7-30	16-22	0.6-2.0	0.05-0.07	7.4-8.4	<2	Low	0.20			
	30	---	---	---	---	---	---	---			
Camelback	0-21	12-18	0.6-2.0	0.11-0.15	6.1-7.3	<2	Low	0.24	3	8	2-4
	21-42	18-27	0.6-2.0	0.08-0.11	6.1-7.3	<2	Low	0.20			
	42	---	---	---	---	---	---	---			
Rock outcrop.											
60*:											
Ireland	0-7	10-16	0.6-2.0	0.07-0.09	6.6-7.8	<2	Low	0.28	2	8	1-3
	7-30	16-22	0.6-2.0	0.05-0.07	7.4-8.4	<2	Low	0.20			
	30	---	---	---	---	---	---	---			
Dateman	0-9	15-25	0.6-2.0	0.12-0.16	6.1-7.3	<2	Low	0.20	2	5	3-5
	9-35	18-25	0.6-2.0	0.08-0.12	6.6-7.8	<2	Low	0.10			
	35	---	---	---	---	---	---	---			
Pavohroo	0-3	8-17	0.6-2.0	0.16-0.19	6.1-7.3	<2	Low	0.32	5	5	4-8
	3-26	18-25	0.6-2.0	0.16-0.19	6.1-7.3	<2	Low	0.37			
	26-60	18-25	0.6-2.0	0.12-0.16	6.6-8.4	<2	Low	0.28			
61*:											
Ireland	0-7	10-16	0.6-2.0	0.07-0.09	6.6-7.8	<2	Low	0.28	2	8	1-3
	7-30	16-22	0.6-2.0	0.05-0.07	7.4-8.4	<2	Low	0.20			
	30	---	---	---	---	---	---	---			
Hades	0-7	18-25	0.6-2.0	0.15-0.18	5.6-7.3	<2	Low	0.28	5	6	2-4
	7-60	24-35	0.2-0.6	0.15-0.18	5.6-8.4	<2	Moderate	0.32			

See footnote at end of table.

TABLE 17.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors		Wind erodibility group	Organic matter
								K	T		
	In	Pct	In/hr	In/in	pH	mmhos/cm					Pct
61*:											
Cedarhill-------	0-9	10-16	0.6-2.0	0.09-0.12	7.4-8.4	<2	Low-------	0.17	5	8	1-3
	9-28	10-17	0.6-2.0	0.08-0.12	7.4-8.4	<2	Low-------	0.15			
	28-60	8-15	0.6-2.0	0.07-0.11	7.4-8.4	<4	Low-------	0.20			
62, 63----------	0-13	12-18	0.6-2.0	0.19-0.21	6.6-7.8	<2	Low-------	0.43	5	4L	1-2
Joes	13-60	18-24	0.6-2.0	0.19-0.21	7.4-8.4	<2	Low-------	0.49			
64----------	0-4	15-18	0.6-2.0	0.19-0.21	6.6-7.8	<2	Low-------	0.37	5	5	2-4
Joevar	4-60	15-18	0.6-2.0	0.19-0.21	7.4-8.4	<2	Low-------	0.43			
65, 66, 67, 68---	0-22	10-20	0.6-2.0	0.19-0.21	6.1-7.8	<2	Low-------	0.37	5	5	3-5
Lanoak	22-60	18-27	0.6-2.0	0.19-0.21	6.6-7.8	<2	Moderate	0.49			
69*:											
Lanoak----------	0-22	10-20	0.6-2.0	0.19-0.21	6.1-7.8	<2	Low-------	0.37	5	5	3-5
	22-60	18-27	0.6-2.0	0.19-0.21	6.6-7.8	<2	Moderate	0.49			
Camelback-------	0-21	12-18	0.6-2.0	0.11-0.15	6.1-7.3	<2	Low-------	0.32	3	5	2-4
	21-42	18-27	0.6-2.0	0.08-0.11	6.1-7.3	<2	Low-------	0.20			
	42	---	---	---	---	---	----------	----			
70*, 71*:											
Lanoak----------	0-22	10-20	0.6-2.0	0.19-0.21	6.1-7.8	<2	Low-------	0.37	5	5	3-5
	22-60	18-27	0.6-2.0	0.19-0.21	6.6-7.8	<2	Moderate	0.49			
Greys-----------	0-19	12-15	0.6-2.0	0.19-0.21	5.6-7.3	<2	Low-------	0.43	5	5	2-4
	19-60	18-35	0.2-0.6	0.19-0.21	5.6-7.3	<2	Moderate	0.43			
72*:											
Lanoak----------	0-22	10-20	0.6-2.0	0.19-0.21	6.1-7.8	<2	Low-------	0.37	5	5	3-5
	22-60	18-27	0.6-2.0	0.19-0.21	6.6-7.8	<2	Moderate	0.49			
Hades-----------	0-7	18-25	0.6-2.0	0.15-0.18	5.6-7.3	<2	Low-------	0.28	5	6	2-4
	7-60	24-35	0.2-0.6	0.15-0.18	5.6-8.4	<2	Moderate	0.32			
73*:											
Lanoak----------	0-22	10-20	0.6-2.0	0.19-0.21	6.1-7.8	<2	Low-------	0.37	5	5	3-5
	22-60	18-27	0.6-2.0	0.19-0.21	6.6-7.8	<2	Moderate	0.49			
Watercanyon-----	0-7	10-18	0.6-2.0	0.16-0.20	7.4-7.8	<2	Low-------	0.49	5	5	1-2
	7-16	10-18	0.6-2.0	0.16-0.20	7.4-8.4	<2	Low-------	0.55			
	16-60	5-16	0.6-2.0	0.14-0.18	7.9-9.0	2-4	Low-------	0.55			
Rexburg---------	0-10	12-18	0.6-2.0	0.19-0.21	6.1-7.8	<2	Low-------	0.43	5	5	1-3
	10-26	14-18	0.6-2.0	0.19-0.21	6.6-7.8	<2	Low-------	0.49			
	26-60	10-16	0.6-2.0	0.19-0.21	7.4-8.4	<2	Low-------	0.55			
74*:											
Lava flows.											
McCarey---------	0-12	10-20	0.6-2.0	0.16-0.21	6.1-7.8	<2	Low-------	0.43	2	5	1-3
	12-17	20-34	0.2-0.6	0.19-0.21	6.6-8.4	<2	Moderate	0.32			
	17-28	15-25	0.6-2.0	0.16-0.21	6.6-8.4	<2	Low-------	0.43			
	28	---	---	---	---	---	----------	----			
McCarey Variant-	0-8	15-20	0.6-2.0	0.07-0.11	6.1-7.3	<2	Low-------	0.28	1	8	1-3
	8-13	20-27	0.6-2.0	0.07-0.11	6.1-7.3	<2	Low-------	0.28			
	13	---	---	---	---	---	----------	----			
75*:											
Manila----------	0-7	18-27	0.6-2.0	0.16-0.18	6.1-7.3	<2	Moderate	0.43	5	6	2-4
	7-48	35-55	0.06-0.2	0.17-0.19	6.1-7.8	<2	High------	0.37			
	48-60	12-18	0.6-2.0	0.17-0.19	6.6-7.8	<2	Low-------	0.49			

See footnote at end of table.

TABLE 17.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors		Wind erodibility group	Organic matter
								K	T		
	In	Pct	In/hr	In/in	pH	mmhos/cm					Pct
75*:											
Bancroft--------	0-7	15-20	0.6-2.0	0.19-0.21	6.1-7.3	<2	Low-------	0.43	5	5	2-3
	7-37	18-32	0.6-2.0	0.19-0.21	6.1-7.8	<2	Low-------	0.43			
	37-60	10-20	0.6-2.0	0.19-0.21	7.4-9.0	<2	Low-------	0.55			
76*:											
Manila----------	0-7	18-27	0.6-2.0	0.16-0.18	6.1-7.3	<2	Moderate	0.43	5	6	2-4
	7-48	35-55	0.06-0.2	0.17-0.19	6.1-7.8	<2	High------	0.37			
	48-60	12-18	0.6-2.0	0.17-0.19	6.6-7.8	<2	Low-------	0.49			
Cedarhill-------	0-9	10-16	0.6-2.0	0.09-0.12	7.4-8.4	<2	Low-------	0.17	5	8	1-3
	9-28	10-17	0.6-2.0	0.08-0.12	7.4-8.4	<2	Low-------	0.15			
	28-60	8-15	0.6-2.0	0.07-0.11	7.4-8.4	<4	Low-------	0.20			
77*:											
McDole----------	0-21	8-18	0.6-2.0	0.19-0.21	7.4-8.4	<2	Low-------	0.43	5	4L	1-3
	21-60	8-18	0.6-2.0	0.19-0.21	7.4-9.0	<2	Low-------	0.49			
McDole Variant--	0-34	10-18	0.6-2.0	0.19-0.21	7.4-8.4	<2	Low-------	0.43	5	4L	2-4
	34-60	10-18	0.6-2.0	0.14-0.17	7.4-8.4	<2	Low-------	0.49			
78---------------	0-24	12-18	0.6-2.0	0.19-0.21	5.6-7.3	<2	Low-------	0.32	5	5	4-6
Moonlight	24-60	12-18	0.6-2.0	0.19-0.21	5.6-7.3	<2	Low-------	0.37			
79*:											
Moonlight-------	0-24	12-18	0.6-2.0	0.19-0.21	5.6-7.3	<2	Low-------	0.32	5	5	4-6
	24-60	12-18	0.6-2.0	0.19-0.21	5.6-7.3	<2	Low-------	0.37			
Camelback-------	0-21	12-18	0.6-2.0	0.11-0.15	6.1-7.3	<2	Low-------	0.32	3	5	2-4
	21-42	18-27	0.6-2.0	0.08-0.11	6.1-7.3	<2	Low-------	0.20			
	42	---	---	---	---	---	----------	----			
80*:											
Moonlight-------	0-24	12-18	0.6-2.0	0.19-0.21	5.6-7.3	<2	Low-------	0.32	5	5	4-6
	24-60	12-18	0.6-2.0	0.19-0.21	5.6-7.3	<2	Low-------	0.37			
Pavohroo--------	0-3	8-17	0.6-2.0	0.16-0.19	6.1-7.3	<2	Low-------	0.32	5	5	4-8
	3-26	18-25	0.6-2.0	0.16-0.19	6.1-7.3	<2	Low-------	0.37			
	26-60	18-25	0.6-2.0	0.12-0.16	6.6-8.4	<2	Low-------	0.28			
81---------------	0-5	35-42	0.06-0.2	0.14-0.17	7.4-7.8	<2	High------	0.32	5	4	1-2
Oxford	5-63	40-58	<0.06	0.14-0.16	7.4-8.4	2-4	High------	0.37			
82*:											
Oxford----------	0-5	35-42	0.06-0.2	0.14-0.17	7.4-7.8	<2	High------	0.32	5	4	1-2
	5-63	40-58	<0.06	0.14-0.16	7.4-8.4	2-4	High------	0.37			
Banida----------	0-6	32-39	0.06-0.2	0.14-0.18	7.4-8.4	<2	Moderate	0.32	5	4	1-2
	6-64	40-55	<0.06	0.14-0.16	7.4-8.4	2-4	High------	0.37			
83*:											
Pavohroo--------	0-3	8-17	0.6-2.0	0.16-0.19	6.1-7.3	<2	Low-------	0.32	5	5	4-8
	3-26	18-25	0.6-2.0	0.16-0.19	6.1-7.3	<2	Low-------	0.37			
	26-60	18-25	0.6-2.0	0.12-0.16	6.6-8.4	<2	Low-------	0.28			
Moonlight-------	0-24	12-18	0.6-2.0	0.19-0.21	5.6-7.3	<2	Low-------	0.32	5	5	4-6
	24-60	12-18	0.6-2.0	0.19-0.21	5.6-7.3	<2	Low-------	0.37			
84*:											
Pavohroo--------	0-3	8-17	0.6-2.0	0.16-0.19	6.1-7.3	<2	Low-------	0.32	5	5	4-8
	3-26	18-25	0.6-2.0	0.16-0.19	6.1-7.3	<2	Low-------	0.37			
	26-60	18-25	0.6-2.0	0.12-0.16	6.6-8.4	<2	Low-------	0.28			

See footnote at end of table.

TABLE 17.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors		Wind erodibility group	Organic matter
								K	T		
	In	Pct	In/hr	In/in	pH	mmhos/cm					Pct
84*:											
Sedgway---------	0-5	15-25	0.6-2.0	0.14-0.16	5.6-6.5	<2	Low-------	0.37	5	5	2-4
	5-21	15-25	0.6-2.0	0.09-0.11	5.6-6.5	<2	Low-------	0.20			
	21-60	27-34	0.2-0.6	0.08-0.10	5.6-6.5	<2	Moderate	0.20			
Toponce---------	0-3	15-25	0.6-2.0	0.19-0.21	5.6-6.5	<2	Low-------	0.37	5	6	4-6
	3-14	20-30	0.2-0.6	0.18-0.21	5.6-6.5	<2	Low-------	0.37			
	14-60	35-55	0.06-0.2	0.16-0.18	5.6-6.5	<2	High------	0.32			
85*, 86*. Pits											
87, 88, 89, 90, 91----------	0-8	5-15	0.6-2.0	0.19-0.21	6.6-8.4	<2	Low-------	0.49	5	4L	.8-1
Pocatello	8-40	5-15	0.6-2.0	0.19-0.21	7.9-9.0	2-4	Low-------	0.55			
	40-60	5-15	0.6-2.0	0.19-0.21	>7.8	8-16	Low-------	0.55			
92*:											
Portino---------	0-9	8-18	0.6-2.0	0.17-0.21	7.4-9.0	<2	Low-------	0.49	2	5	.5-1
	9-29	8-18	0.6-2.0	0.17-0.21	7.4-9.0	<2	Low-------	0.49			
	29	---	---	---	---	---	----------	----			
Thornock--------	0-2	8-18	0.6-2.0	0.14-0.16	7.4-8.4	<2	Low-------	0.28	1	8	.5-1
	2-14	8-18	0.6-2.0	0.16-0.18	7.4-8.4	<2	Low-------	0.43			
	14	---	---	---	---	---	----------	----			
93, 94, 95, 96---	0-10	12-18	0.6-2.0	0.19-0.21	6.1-7.8	<2	Low-------	0.43	5	5	1-3
Rexburg	10-26	14-18	0.6-2.0	0.19-0.21	6.6-7.8	<2	Low-------	0.49			
	26-60	10-16	0.6-2.0	0.19-0.21	7.4-8.4	<2	Low-------	0.55			
97, 98, 99-------	0-12	15-18	0.6-2.0	0.19-0.21	6.6-8.4	<2	Low-------	0.43	5	5	2-4
Ririe	12-60	12-18	0.6-2.0	0.19-0.21	7.4-9.0	<2	Low-------	0.55			
100*, 101*, 102*:											
Ririe-----------	0-12	15-18	0.6-2.0	0.19-0.21	6.6-8.4	<2	Low-------	0.43	5	5	2-4
	12-60	12-18	0.6-2.0	0.19-0.21	7.4-9.0	<2	Low-------	0.55			
Watercanyon-----	0-7	10-18	0.6-2.0	0.16-0.20	7.4-7.8	<2	Low-------	0.49	5	5	1-2
	7-16	10-18	0.6-2.0	0.16-0.20	7.4-8.4	<2	Low-------	0.55			
	16-60	5-16	0.6-2.0	0.14-0.18	7.9-9.0	2-4	Low-------	0.55			
103*:											
Ririe-----------	0-12	15-18	0.6-2.0	0.19-0.21	6.6-8.4	<2	Low-------	0.43	5	5	2-4
	12-60	12-18	0.6-2.0	0.19-0.21	7.4-9.0	<2	Low-------	0.55			
Watercanyon-----	0-7	10-18	0.6-2.0	0.16-0.20	7.4-7.8	<2	Low-------	0.49	5	5	1-2
	7-16	10-18	0.6-2.0	0.16-0.20	7.4-8.4	<2	Low-------	0.55			
	16-60	5-16	0.6-2.0	0.14-0.18	7.9-9.0	2-4	Low-------	0.55			
Cedarhill-------	0-9	10-16	0.6-2.0	0.09-0.12	7.4-8.4	<2	Low-------	0.17	5	8	1-3
	9-28	10-17	0.6-2.0	0.08-0.12	7.4-8.4	<2	Low-------	0.15			
	28-60	8-15	0.6-2.0	0.07-0.11	7.4-8.4	<4	Low-------	0.20			
104*. Rock outcrop											
105*: Rubble land.											
Haploxerolls.											
106*:											
Scout Variant---	0-3	10-20	0.6-2.0	0.14-0.16	5.1-6.5	<2	Low-------	0.32	5	5	3-5
	3-16	10-20	0.6-2.0	0.09-0.11	5.1-6.5	<2	Low-------	0.17			
	16-60	10-20	0.6-2.0	0.07-0.09	5.1-6.5	<2	Low-------	0.17			

See footnote at end of table.

TABLE 17.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors		Wind erodibility group	Organic matter
								K	T		
	In	Pct	In/hr	In/in	pH	mmhos/cm					Pct
106*:											
Camelback											
Variant--------	0-10	10-20	0.6-2.0	0.13-0.15	6.1-7.3	<2	Low-------	0.24	5	5	3-5
	10-60	10-25	0.6-2.0	0.08-0.11	6.1-7.3	<2	Low-------	0.15			
107*:											
Sedgway---------	0-5	15-25	0.6-2.0	0.14-0.16	5.6-6.5	<2	Low-------	0.37	5	5	2-4
	5-21	15-25	0.6-2.0	0.09-0.11	5.6-6.5	<2	Low-------	0.20			
	21-60	27-34	0.2-0.6	0.08-0.10	5.6-6.5	<2	Moderate	0.20			
Beaverdam-------	0-12	15-25	0.6-2.0	0.17-0.20	5.6-7.3	<2	Low-------	0.37	2	5	1-3
	12-65	35-45	0.06-0.2	0.15-0.19	6.1-7.3	<2	Moderate	0.32			
108*.											
Slickens											
109*:											
Swanner---------	0-9	12-22	0.6-2.0	0.07-0.08	7.4-8.4	<2	Low-------	0.20	1	5	---
	9-17	12-22	0.6-2.0	0.05-0.06	7.4-8.4	<2	Low-------	0.05			
	17	---	---	---	---	---	----------	----			
Hondoho---------	0-15	15-25	0.6-2.0	0.11-0.13	6.6-8.4	<2	Low-------	0.28	5	8	2-3
	15-60	18-30	0.6-2.0	0.08-0.10	7.9-8.4	<2	Low-------	0.10			
110*:											
Swanner---------	0-9	12-22	0.6-2.0	0.07-0.08	7.4-8.4	<2	Low-------	0.20	1	5	---
	9-17	12-22	0.6-2.0	0.05-0.06	7.4-8.4	<2	Low-------	0.05			
	17	---	---	---	---	---	----------	----			
Rock outcrop.											
111---------------	0-2	8-18	0.6-2.0	0.17-0.20	6.6-7.8	<2	Low-------	0.37	5	8	2-4
Tendoy	2-10	---	0.6-2.0	0.22-0.30	6.1-7.8	<2	High------	----			
	10-60	---	0.6-2.0	0.22-0.30	5.6-6.5	<2	High------	----			
112*:											
Toponce---------	0-3	15-25	0.6-2.0	0.19-0.21	5.6-6.5	<2	Low-------	0.37	5	6	4-6
	3-14	20-30	0.2-0.6	0.18-0.21	5.6-6.5	<2	Low-------	0.37			
	14-60	35-55	0.06-0.2	0.16-0.18	5.6-6.5	<2	High------	0.32			
Broadhead-------	0-2	15-25	0.6-2.0	0.18-0.20	5.6-6.5	<2	Low-------	0.28	2	6	2-4
	2-9	25-35	0.2-0.6	0.18-0.20	6.1-7.3	<2	Moderate	0.28			
	9-60	35-50	0.06-0.2	0.16-0.18	6.1-7.3	<2	High------	0.24			
113*, 114*:											
Urban land.											
Bahem-----------	0-11	8-18	0.6-2.0	0.19-0.21	7.4-7.8	<2	Low-------	0.43	3	4L	.8-2
	11-49	8-18	0.6-2.0	0.19-0.21	7.4-8.4	<2	Low-------	0.55			
	49-60	<5	>20	0.03-0.05	---	<2	Low-------	0.10			
Broxon----------	0-8	8-18	0.6-2.0	0.19-0.21	7.4-8.4	<2	Low-------	0.43	2	4L	.8-2
	8-25	8-18	0.6-2.0	0.19-0.21	7.4-8.4	<2	Low-------	0.55			
	25-60	0-5	>20	0.03-0.05	7.4-8.4	<2	Low-------	0.05			
115---------------	0-9	13-20	0.6-2.0	0.10-0.15	6.1-7.3	<2	Low-------	0.24	2	8	2-4
Valmar	9-14	20-27	0.6-2.0	0.10-0.15	6.6-7.8	<2	Moderate	0.20			
	14-24	20-27	0.6-2.0	0.07-0.12	6.6-7.8	<2	Moderate	0.17			
	24	---	---	---	---	---	----------	----			
116*:											
Valmar----------	0-9	13-20	0.6-2.0	0.10-0.15	6.1-7.3	<2	Low-------	0.24	2	8	2-4
	9-14	20-27	0.6-2.0	0.10-0.15	6.6-7.8	<2	Moderate	0.20			
	14-24	20-27	0.6-2.0	0.07-0.12	6.6-7.8	<2	Moderate	0.17			
	24	---	---	---	---	---	----------	----			

See footnote at end of table.

TABLE 17.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors		Wind erodibility group	Organic matter
								K	T		
	In	Pct	In/hr	In/in	pH	mmhos/cm					Pct
116*:											
Camelback-------	0-21	12-18	0.6-2.0	0.11-0.15	6.1-7.3	<2	Low-------	0.32	3	5	2-4
	21-42	18-27	0.6-2.0	0.08-0.11	6.1-7.3	<2	Low-------	0.20			
	42	---	---	---	---	---	----------	----			
Hades-----------	0-7	18-25	0.6-2.0	0.15-0.18	5.6-7.3	<2	Low-------	0.28	5	6	2-4
	7-60	24-35	0.2-0.6	0.15-0.18	5.6-8.4	<2	Moderate	0.32			
117*:											
Valmar----------	0-9	13-20	0.6-2.0	0.09-0.14	6.1-7.3	<2	Low-------	0.24	2	8	2-4
	9-14	20-27	0.6-2.0	0.10-0.15	6.6-7.8	<2	Moderate	0.20			
	14-24	20-27	0.6-2.0	0.07-0.12	6.6-7.8	<2	Moderate	0.17			
	24	---	---	---	---	---	----------	----			
Hades-----------	0-7	18-25	0.6-2.0	0.15-0.18	5.6-7.3	<2	Low-------	0.28	5	6	2-4
	7-60	24-35	0.2-0.6	0.15-0.18	5.6-8.4	<2	Moderate	0.32			
118*:											
Valmar----------	0-9	13-20	0.6-2.0	0.09-0.14	6.1-7.3	<2	Low-------	0.24	2	8	2-4
	9-14	20-27	0.6-2.0	0.10-0.15	6.6-7.8	<2	Moderate	0.20			
	14-24	20-27	0.6-2.0	0.07-0.12	6.6-7.8	<2	Moderate	0.17			
	24	---	---	---	---	---	----------	----			
Rock outcrop.											
119*:											
Valmar----------	0-9	13-20	0.6-2.0	0.10-0.15	6.1-7.3	<2	Low-------	0.24	2	8	2-4
	9-14	20-27	0.6-2.0	0.10-0.15	6.6-7.8	<2	Moderate	0.20			
	14-24	20-27	0.6-2.0	0.07-0.12	6.6-7.8	<2	Moderate	0.17			
	24	---	---	---	---	---	----------	----			
Watercanyon-----	0-7	10-18	0.6-2.0	0.16-0.20	7.4-7.8	<2	Low-------	0.49	5	5	1-2
	7-16	10-18	0.6-2.0	0.16-0.20	7.4-8.4	<2	Low-------	0.55			
	16-60	5-16	0.6-2.0	0.14-0.18	7.9-9.0	2-4	Low-------	0.55			
Hondoho---------	0-15	15-25	0.6-2.0	0.11-0.13	6.6-8.4	<2	Low-------	0.28	5	8	2-3
	15-60	18-30	0.6-2.0	0.08-0.10	7.9-8.4	<2	Low-------	0.10			
120---------------	0-7	10-18	0.6-2.0	0.16-0.20	7.4-7.8	<2	Low-------	0.49	5	5	1-2
Watercanyon	7-16	10-18	0.6-2.0	0.16-0.20	7.4-8.4	<2	Low-------	0.55			
	16-60	5-16	0.6-2.0	0.14-0.18	7.9-9.0	2-4	Low-------	0.55			
121*:											
Watercanyon-----	0-7	10-18	0.6-2.0	0.16-0.20	7.4-7.8	<2	Low-------	0.49	5	5	1-2
	7-16	10-18	0.6-2.0	0.16-0.20	7.4-8.4	<2	Low-------	0.55			
	16-60	5-16	0.6-2.0	0.14-0.18	7.9-9.0	2-4	Low-------	0.55			
Swanner---------	0-9	12-22	0.6-2.0	0.07-0.08	7.4-8.4	<2	Low-------	0.20	1	5	---
	9-17	12-22	0.6-2.0	0.05-0.06	7.4-8.4	<2	Low-------	0.05			
	17	---	---	---	---	---	----------	----			
Rock outcrop.											
122---------------	0-9	13-18	0.6-2.0	0.13-0.17	7.4-8.4	<2	Low-------	0.32	5	4L	1-2
Wursten	9-60	13-18	0.6-2.0	0.11-0.16	7.9-9.0	2-4	Low-------	0.28			
123*:											
Wursten---------	0-9	13-18	0.6-2.0	0.13-0.17	7.4-8.4	<2	Low-------	0.32	5	4L	1-2
	9-60	13-18	0.6-2.0	0.11-0.16	7.9-9.0	2-4	Low-------	0.28			
Watercanyon Variant--------	0-4	12-18	0.6-2.0	0.15-0.18	7.4-8.4	4-8	Low-------	0.49	1	4L	1-2
	4-60	12-18	0.6-2.0	0.05-0.11	7.4-8.4	>16	Low-------	0.55			
Hondoho---------	0-15	15-25	0.6-2.0	0.11-0.13	6.6-8.4	<2	Low-------	0.28	5	8	2-3
	15-60	18-30	0.6-2.0	0.08-0.10	7.9-8.4	<2	Low-------	0.10			

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 18.--SOIL AND WATER FEATURES

["Flooding" and "water table" and terms such as "rare," "brief," and "apparent," are explained in the text. The symbol < means less than; > means more than. Absence of an entry indicates that the feature is not a concern or that data were not estimated]

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness		Uncoated steel	Concrete
					Ft			In				
1, 2---------- Arbone	B	None---------	---	---	>6.0	---	---	>60	---	Moderate	High-----	Low.
3*: Arbone----------	B	None---------	---	---	>6.0	---	---	>60	---	Moderate	High-----	Low.
Hondoho----------	B	None---------	---	---	>6.0	---	---	>60	---	Moderate	High-----	Low.
4*: Arbone----------	B	None---------	---	---	>6.0	---	---	>60	---	Moderate	High-----	Low.
McCarey----------	C	None---------	---	---	>6.0	---	---	20-40	Hard	Moderate	High-----	Low.
Lava flows.												
5*: Arbone----------	B	None---------	---	---	>6.0	---	---	>60	---	Moderate	High-----	Low.
Rubble land.												
6---------- Arimo	B	None---------	---	---	>6.0	---	---	>60	---	Moderate	High-----	Low.
7, 8---------- Bahem	B	None---------	---	---	>6.0	---	---	>60	---	Moderate	High-----	Low.
9, 10---------- Bancroft	B	None---------	---	---	>6.0	---	---	>60	---	High-----	High-----	Low.
11*: Bancroft---------	B	None---------	---	---	>6.0	---	---	>60	---	High-----	High-----	Low.
Manila----------	C	None---------	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Low.
12---------- Banida	D	None---------	---	---	>6.0	---	---	>60	---	Moderate	High-----	Low.
13*: Bear Lake--------	D	Frequent----	Brief-----	Jan-Jun	0-1.5	Apparent	Feb-Jun	>60	---	High-----	High-----	Low.
Bear Lake Variant	D	Frequent----	Brief-----	Jan-Jun	0-1.5	Apparent	Feb-Jun	20-40	Soft	High-----	High-----	Low.

See footnotes at end of table.

TABLE 18.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness		Uncoated steel	Concrete
					Ft			In				
14*:												
Broadhead	C	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
Hades	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
Yago	C	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
15*, 16*:												
Broadhead	C	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
Yago	C	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
17, 18 Broncho	B	None	---	---	>6.0	---	---	>60	---	Low	High	Low.
19*:												
Broncho Variant	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Pocatello	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
20*:												
Broncho Variant	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Ririe	B	None	---	---	>6.0	---	---	>60	---	High	High	Low.
Pocatello	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
21, 22 Broxon	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
23*:												
Camelback	B	None	---	---	>6.0	---	---	40-60	Hard	Moderate	Moderate	Low.
Cedarhill	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Lanoak	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Low.
24*:												
Camelback	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Low.
Greys	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Moderate.
25*:												
Camelback	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Low.
Hades	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.

See footnotes at end of table.

TABLE 18.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness		Uncoated steel	Concrete
					Ft			In				
26*:												
Camelback	B	None	---	---	>6.0	---	---	40-60	Hard	Moderate	Moderate	Low.
Valmar	C	None	---	---	>6.0	---	---	20-40	Hard	Moderate	Moderate	Low.
Hades	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
27*:												
Camelback Variant	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Low.
Valmar Variant	B	None	---	---	>6.0	---	---	20-40	Hard	Moderate	Moderate	Low.
28---------- Cedarhill	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
29*:												
Cedarhill	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Ireland	C	None	---	---	>6.0	---	---	20-40	Hard	Moderate	High	Low.
Rock outcrop.												
30*:												
Cedarhill	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Ririe	B	None	---	---	>6.0	---	---	>60	---	High	High	Low.
Watercanyon	B	None	---	---	>6.0	---	---	>60	---	High	High	Low.
31*:												
Cedarhill	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Rock outcrop.												
32*:												
Cedarhill	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Camelback	B	None	---	---	>6.0	---	---	40-60	Hard	Moderate	Moderate	Low.
Moonlight	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Moderate.
33*:												
Cedarhill	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Hades	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.

See footnotes at end of table.

TABLE 18.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness		Uncoated steel	Concrete
					Ft			In				
33*:												
Ricrest	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
34*:												
Cedarhill	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Hondoho	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Arbone	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
35*:												
Cedarhill	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Hondoho	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Ridgecrest	C	None	---	---	>6.0	---	---	20-40	Hard	Moderate	High	Low.
36*:												
Cedarhill	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Manila	C	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Low.
37*:												
Cedarhill	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Trailcreek	C	None	---	---	>6.0	---	---	20-40	Soft	High	High	Low.
Coalbank	B	None	---	---	>6.0	---	---	>60	---	High	High	Low.
38--Coalbank	B	None	---	---	>6.0	---	---	>60	---	High	High	Low.
39*, 40*:												
Coalbank	B	None	---	---	>6.0	---	---	>60	---	High	High	Low.
Trailcreek	C	None	---	---	>6.0	---	---	20-40	Soft	High	High	Low.
Lonigan	C	None	---	---	>6.0	---	---	20-40	Soft	Moderate	High	Low.
41*:												
Downata	D	Frequent	Brief	Jan-Jun	0-1.5	Apparent	Jan-Jun	>60	---	High	High	Low.
Bear Lake	D	Frequent	Brief	Jan-Jun	0-1.5	Apparent	Feb-Jun	>60	---	High	High	Low.
42*, 43*:												
Downey	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.

See footnotes at end of table.

TABLE 18.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness		Uncoated steel	Concrete
					Ft			In				
42*, 43*:												
Arimo	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
44*:												
Enochville	D	Frequent	Brief	Feb-Jun	1.0-2.0	Apparent	Apr-Jun	>60	---	High	High	Low.
Enochville Variant	D	Frequent	Brief	Feb-Jun	1.0-2.0	Apparent	Apr-Jun	>60	---	High	Moderate	Low.
45*:												
Greys	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Moderate.
Pavohroo	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Sedgway	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
46--Hades	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
47*:												
Hades	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
Camelback	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Low.
Hondoho	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
48*:												
Hades	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
Holmes	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Low.
49*:												
Hades	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
Lanoak	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Low.
50*:												
Hades	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
Lanoak	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Low.
Camelback	B	None	---	---	>6.0	---	---	40-60	Hard	Moderate	Moderate	Low.
51*:												
Harkness	C	None	---	---	>6.0	---	---	>60	---	High	High	High.
Sedgway	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.

See footnotes at end of table.

TABLE 18.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness		Uncoated steel	Concrete
					Ft			In				
51*:												
Mikesell	C	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
52---------- Holmes	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Low.
53*:												
Hondoho	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Arbone	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
54*:												
Hondoho	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Arbone	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Ririe	B	None	---	---	>6.0	---	---	>60	---	High	High	Low.
55*:												
Hondoho	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Hades	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
56*:												
Hondoho	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Lanoak	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Low.
Camelback	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Low.
57---------- Inkom	D	Frequent	Brief	Jan-Jun	0-2.0	Apparent	Feb-Jun	>60	---	High	High	Low.
58---------- Inkom	C	Occasional	Brief	Jan-Jun	2.0-4.0	Apparent	Feb-Jun	>60	---	High	High	Low.
59*:												
Ireland	C	None	---	---	>6.0	---	---	20-40	Hard	Moderate	High	Low.
Camelback	B	None	---	---	>6.0	---	---	40-60	Hard	Moderate	Moderate	Low.
Rock outcrop.												
60*:												
Ireland	C	None	---	---	>6.0	---	---	20-40	Hard	Moderate	High	Low.
Dateman	C	None	---	---	>6.0	---	---	20-40	Hard	Moderate	Moderate	Low.

See footnotes at end of table.

TABLE 18.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness		Uncoated steel	Concrete
					Ft			In				
60*:												
Pavohroo	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
61*:												
Ireland	C	None	---	---	>6.0	---	---	20-40	Hard	Moderate	High	Low.
Hades	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
Cedarhill	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
62, 63--Joes	B	None	---	---	>6.0	---	---	>60	---	High	High	Low.
64--Joevar	B	Rare	---	---	5.0-6.0	Apparent	Mar-May	>60	---	High	High	Low.
65, 66, 67, 68--Lanoak	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Low.
69*:												
Lanoak	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Low.
Camelback	B	None	---	---	>6.0	---	---	40-60	Hard	Moderate	Moderate	Low.
70*, 71*:												
Lanoak	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Low.
Greys	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Moderate.
72*:												
Lanoak	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Low.
Hades	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
73*:												
Lanoak	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Low.
Watercanyon	B	None	---	---	>6.0	---	---	>60	---	High	High	Low.
Rexburg	B	None	---	---	>6.0	---	---	>60	---	High	High	Low.
74*: Lava flows.												
McCarey	C	None	---	---	>6.0	---	---	20-40	Hard	Moderate	High	Low.
McCarey Variant	D	None	---	---	>6.0	---	---	10-20	Hard	Moderate	Moderate	Low.

See footnotes at end of table.

TABLE 18.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness		Uncoated steel	Concrete
					Ft			In				
75*:												
Manila	C	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Low.
Bancroft	B	None	---	---	>6.0	---	---	>60	---	High	High	Low.
76*:												
Manila	C	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Low.
Cedarhill	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
77*:												
McDole	B	Rare	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
McDole Variant	B	Occasional	Brief	Feb-Jun	>6.0	---	---	>60	---	Moderate	High	Low.
78--Moonlight	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Moderate.
79*:												
Moonlight	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Moderate.
Camelback	B	None	---	---	>6.0	---	---	40-60	Hard	Moderate	Moderate	Low.
80*:												
Moonlight	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Moderate.
Pavohroo	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
81--Oxford	D	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
82*:												
Oxford	D	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Banida	D	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
83*:												
Pavohroo	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Moonlight	B	None	---	---	>6.0	---	---	>60	---	High	Moderate	Moderate.
84*:												
Pavohroo	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Sedgway	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.

See footnotes at end of table.

TABLE 18.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness		Uncoated steel	Concrete
					Ft			In				
84*: Toponce	C	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
85*, 86*. Pits												
87, 88, 89, 90, 91---------- Pocatello	B	None	---	---	>6.0	---	---	>60	---	Moderate	High-----	Low.
92*: Portino	C	None	---	---	>6.0	---	---	20-40	Hard	Moderate	High-----	Low.
Thornock	D	None	---	---	>6.0	---	---	10-20	Hard	Moderate	High-----	Low.
93, 94, 95, 96---- Rexburg	B	None	---	---	>6.0	---	---	>60	---	High-----	High-----	Low.
97, 98, 99-------- Ririe	B	None	---	---	>6.0	---	---	>60	---	High-----	High-----	Low.
100*, 101*, 102*: Ririe	B	None	---	---	>6.0	---	---	>60	---	High-----	High-----	Low.
Watercanyon	B	None	---	---	>6.0	---	---	>60	---	High-----	High-----	Low.
103*: Ririe	B	None	---	---	>6.0	---	---	>60	---	High-----	High-----	Low.
Watercanyon	B	None	---	---	>6.0	---	---	>60	---	High-----	High-----	Low.
Cedarhill	B	None	---	---	>6.0	---	---	>60	---	Moderate	High-----	Low.
104*. Rock outcrop												
105*: Rubble land. Haploxerolls.												
106*: Scout Variant	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
Camelback Variant	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Low.

See footnotes at end of table.

TABLE 18.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness		Uncoated steel	Concrete
					Ft			In				
107*:												
Sedgway	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
Beaverdam	C	None	---	---	>6.0	---	---	>60	---	High	Moderate	Moderate.
108*. Slickens												
109*:												
Swanner	D	None	---	---	>6.0	---	---	10-20	Hard	Moderate	High	Low.
Hondoho	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
110*:												
Swanner	D	None	---	---	>6.0	---	---	10-20	Hard	Moderate	High	Low.
Rock outcrop.												
111--- Tendoy	D	Frequent	Brief	Jan-Jun	+.5-0.5	Apparent	Feb-Jun	>60	---	High	Moderate	Moderate.
112*:												
Toponce	C	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
Broadhead	C	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
113*, 114*: Urban land.												
Bahem	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Broxon	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
115--- Valmar	C	None	---	---	>6.0	---	---	20-40	Hard	Moderate	Moderate	Low.
116*:												
Valmar	C	None	---	---	>6.0	---	---	20-40	Hard	Moderate	Moderate	Low.
Camelback	B	None	---	---	>6.0	---	---	40-60	Hard	Moderate	Moderate	Low.
Hades	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
117*:												
Valmar	C	None	---	---	>6.0	---	---	20-40	Hard	Moderate	Moderate	Low.

See footnotes at end of table.

TABLE 18.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness		Uncoated steel	Concrete
					Ft			In				
117*:												
Hades	B	None	---	---	>6.0	---	---	>60	---	Moderate	Moderate	Moderate.
118*:												
Valmar	C	None	---	---	>6.0	---	---	20-40	Hard	Moderate	Moderate	Low.
Rock outcrop.												
119*:												
Valmar	C	None	---	---	>6.0	---	---	20-40	Hard	Moderate	Moderate	Low.
Watercanyon	B	None	---	---	>6.0	---	---	>60	---	High	High	Low.
Hondoho	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
120--- Watercanyon	B	None	---	---	>6.0	---	---	>60	---	High	High	Low.
121*:												
Watercanyon	B	None	---	---	>6.0	---	---	>60	---	High	High	Low.
Swanner	D	None	---	---	>6.0	---	---	10-20	Hard	Moderate	High	Low.
Rock outcrop.												
122--- Wursten	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
123*:												
Wursten	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.
Watercanyon Variant	B	None	---	---	>6.0	---	---	>60	---	High	High	High.
Hondoho	B	None	---	---	>6.0	---	---	>60	---	Moderate	High	Low.

* See description of the map unit for composition and behavior characteristics of the map unit.

** In the "High water table--Depth" column, a plus sign preceding the range in depth indicates that the water table is above the surface of the soil. The first numeral in the range indicates how high the water rises above the surface. The second numeral indicates the depth below the surface.

TABLE 19.--CLASSIFICATION OF THE SOILS

[An asterisk in the first column indicates that the soil is a taxadjunct to the series. See text for a description of those characteristics of the soil that are outside the range of the series]

Soil name	Family or higher taxonomic class
Arbone	Coarse-loamy, mixed, frigid Calcic Haploxerolls
Arimo	Coarse-loamy over sandy or sandy-skeletal, mixed, frigid Calcic Haploxerolls
Bahem	Coarse-silty, mixed, mesic Xerollic Calciorthids
Bancroft	Fine-silty, mixed, frigid Calcic Argixerolls
Banida	Fine, montmorillonitic, frigid Vertic Xerochrepts
Bear Lake	Fine-silty, frigid Typic Calciaquolls
Bear Lake Variant	Fine-silty, frigid Typic Calciaquolls
Beaverdam	Fine, montmorillonitic Argic Cryoborolls
Broadhead	Fine, montmorillonitic, frigid Pachic Argixerolls
Broncho	Sandy-skeletal, mixed, mesic Xerollic Camborthids
Broncho Variant	Loamy-skeletal, mixed mesic Xerollic Haplargids
Broxon	Coarse-silty over sandy or sandy-skeletal, mixed, mesic Xerollic Calciorthids
Camelback	Loamy-skeletal, mixed, frigid Pachic Argixerolls
Camelback Variant	Loamy-skeletal, mixed Typic Cryoborolls
Cedarhill	Loamy-skeletal, mixed, frigid Typic Calcixerolls
Coalbank	Ashy, frigid Mollic Vitrandepts
Dateman	Loamy-skeletal, mixed Pachic Cryoborolls
Downata	Fine-silty, mixed (calcareous), frigid Cumulic Haplaquolls
Downey	Coarse-loamy over sandy or sandy-skeletal, mixed, frigid Calcic Haploxerolls
Enochville	Fine-silty, mixed Cumulic Cryaquolls
Enochville Variant	Loamy-skeletal, mixed Cumulic Cryaquolls
Greys	Fine-silty, mixed Boralfic Cryoborolls
Hades	Fine-loamy, mixed, frigid Pachic Argixerolls
Haploxerolls	Haploxerolls
Harkness	Fine, montmorillonitic Mollic Cryoboralfs
Holmes	Loamy-skeletal, mixed, frigid Typic Argixerolls
Hondoho	Loamy-skeletal, mixed, frigid Calcic Haploxerolls
Inkom	Fine-silty, mixed (calcareous), frigid Cumulic Haplaquolls
Ireland	Loamy-skeletal, mixed, frigid Calcic Haploxerolls
Joes	Fine-silty, mixed, frigid Typic Calcixerolls
Joevar	Coarse-silty, mixed, frigid Cumulic Haploxerolls
Lanoak	Fine-silty, mixed, frigid Pachic Haploxerolls
Lonigan	Ashy-skeletal, frigid Mollic Vitrandepts
Manila	Fine, montmorillonitic, frigid Typic Argixerolls
McCarey	Fine-loamy, mixed, frigid Calcic Argixerolls
McCarey Variant	Loamy-skeletal, mixed frigid Lithic Argixerolls
* McDole	Coarse-silty, mixed, mesic Cumulic Haploxerolls
McDole Variant	Coarse-loamy, mixed, mesic Cumulic Haploxerolls
Mikesell	Fine, montmorillonitic Typic Cryoboralfs
Moonlight	Coarse-loamy, mixed Pachic Cryoborolls
Oxford	Fine, montmorillonitic, frigid Vertic Xerochrepts
Pavohroo	Fine-loamy, mixed Pachic Cryoborolls
Pocatello	Coarse-silty, mixed (calcareous), mesic Xeric Torriorthents
* Portino	Coarse-silty, mixed, mesic Xerollic Calciorthids
Rexburg	Coarse-silty, mixed, frigid Calcic Haploxerolls
Ricrest	Fine-loamy, mixed, frigid Calcic Pachic Haploxerolls
* Ridgecrest	Loamy-skeletal, carbonatic, frigid Typic Calcixerolls
Ririe	Coarse-silty, mixed, frigid Calcic Haploxerolls
Scout Variant	Loamy-skeletal, mixed Typic Cryochrepts
Sedgway	Loamy-skeletal, mixed Argic Cryoborolls
Swanner	Loamy-skeletal, mixed, frigid Lithic Haploxerolls
Tendoy	Euic Typic Borosaprists
* Thornock	Loamy, mixed (calcareous), mesic Lithic Xeric Torriorthents
Toponce	Fine, montmorillonitic Argic Pachic Cryoborolls
Trailcreek	Ashy, frigid Mollic Vitrandepts
Valmar	Loamy-skeletal, mixed, frigid Typic Argixerolls
Valmar Variant	Loamy-skeletal, mixed Typic Cryoborolls
Watercanyon	Coarse-silty, mixed, frigid Calcixerollic Xerochrepts
Watercanyon Variant	Coarse-silty, carbonatic, frigid Calcixerollic Xerochrepts
Wursten	Coarse-loamy, mixed, frigid Typic Calcixerolls
Yago	Clayey-skeletal, montmorillonitic, frigid Typic Argixerolls

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