SOIL LEGEND

Map symbols consist of a combination of letters. The first capital letter is the initial one of the map unit name. The letter or letters that follow separate map units having names that begin with the same letter but do not separate sloping phases. The last capital letter indicates the class of slope. Symbols without a slope letter are for nearly level soils or miscellaneous areas.

SYMBOL	NAME
Ab	Aberdeen-Nahon silty clay loams
Ac	Aberdeen-Nahon silty clay loams, sandy substratum
Ad	Aberdeen-Urban land complex
Ar	Arveson fine sandy loam
BaD	Barnes-Buse loams, 6 to 15 percent slopes
BbC	Barnes-Buse-Svea loams, 1 to 9 percent slopes
BcA	Barnes-Cavour loams, 0 to 3 percent slopes
BcB	Barnes-Cavour loams, 3 to 6 percent slopes
BdA	Barnes-Cresbard-Tonka complex, 0 to 3 percent slopes
BdB	Barnes-Cresbard-Tonka complex, 0 to 6 percent slopes
BeA	Barnes-Ferney-Tonka complex, 0 to 4 percent slopes
BfA	Barnes-Hamerly-Tonka complex
BgC	Barnes-Kranzburg-Buse complex, 5 to 9 percent slopes
BhA	Barnes-Svea loams, 0 to 3 percent slopes
BhB	Barnes-Svea loams, 1 to 6 percent slopes
BkA	Barnes-Svea-Tonka complex, 0 to 3 percent slopes
BkB	Barnes-Svea-Tonka complex, 0 to 6 percent slopes
BmB	Barnes-Tally complex, 2 to 6 percent slopes
BnA	Barnes-Urban land complex, 0 to 3 percent slopes
Bo	Bearden silt loam
Bp	Bearden silt loam, saline
BrB	Bearden-Huffton silt loams, 1 to 6 percent slopes
BsB	Bearden-Huffton-Putney silt loams, 1 to 4 percent slopes
Bt	Beotia silt loam, 0 to 2 percent slopes
Bv	Beotia-Rondell silt loams, 0 to 3 percent slopes
Bw	Beotia-Urban land complex, 0 to 2 percent slopes
Bx	Beotia-Winship silt loams
By	Borup silt loam
Bz	Borup silt loam, saline
BzGA	Brantford Variant loam, 0 to 2 percent slopes
BzHB	Brantford Variant-Vang loams, 2 to 6 percent slopes
BzVE	Buse-Barnes loams, 9 to 25 percent slopes
Ca	Camtown-Turton fine sandy loams, somewhat poorly drained
Cb	Camtown-Turton loams
Cd	Cavour-Cresbard loams
Cf	Cavour-Ferney complex
Cm	Colvin fine sandy loam, saline
Cn	Colvin silty clay loam
Cp	Colvin silty clay loam, ponded
Cs	Colvin silty clay loam, saline
Cv	Cresbard-Cavour loams
DaA	Daglum-Rhoades loams, 0 to 4 percent slopes
Do	Dovray silty clay
Dv	Dovray Variant silty clay
EcA	Eckman very fine sandy loam, 0 to 2 percent slopes
EdB	Eckman-Gardena very fine sandy loams, 2 to 6 percent slopes
EeB	Eckman-Zell very fine sandy loams, 1 to 6 percent slopes
EgB	Edgeley-Kloten complex, 1 to 6 percent slopes
EhA	Egeland fine sandy loam, 0 to 2 percent slopes
EkB	Egeland-Embden fine sandy loams, 2 to 6 percent slopes
Em	Embden fine sandy loam
Et	Embden-Tiffany fine sandy loams
Ex	Exline-Aberdeen-Nahon silt loams
EyA	Exline-Putney silt loams, 1 to 4 percent slopes
Fe	Ferney-Heil complex
Fo	Fordville loam
FsA	Forman-Aastad loams, 0 to 3 percent slopes
FsB	Forman-Aastad loams, 1 to 6 percent slopes
FtC	Forman-Buse-Aastad loams, 2 to 9 percent slopes
Fy	Fossum fine sandy loam
Ga	Gardena very fine sandy loam
Gc	Gardena-Glyndon silt loams
Gh	Gardena-Turton very fine sandy loams
Gm	Glyndon silt loam
Gn	Glyndon silt loam, saline
GrA	Great Bend silt loam, 0 to 2 percent slopes
GsB	Great Bend-Beotia silt loams, 2 to 6 percent slopes
GtA	Great Bend-Putney silt loams, 0 to 2 percent slopes
GyB	Great Bend-Zell silt loams, 2 to 6 percent slopes
GyC	Great Bend-Zell silt loams, 4 to 9 percent slopes
GzC	Great Bend-Zell-Huffton silt loams, 4 to 9 percent slopes
Ha	Hamar loamy fine sand
Hc	Hamerly loam
Hd	Hamerly loam, saline
Hf	Hamerly-Vallers loams
Hh	Hamerly-Vallers loams
Hm	Harmony Variant clay loam
Hn	Harmony-Aberdeen silty clay loams
Hp	Harmony-Beotia silt loams
Hr	Harriet loam
HtB	Hecla-Hamar loamy fine sands, 0 to 6 percent slopes
Hx	Heil silt loam
Ka	Koto loam
Kh	Koto-Harriet loams
KkA	Kranzburg-Brookings silt loams, 0 to 2 percent slopes
Krb	Kranzburg-Brookings-Buse complex, 1 to 6 percent slopes
Kt	Kratka loamy fine sand
La	LaDelle silt loam
Lc	LaDelle silt loam, channeled
Le	Lamoure silty clay loam
Lg	La Prairie loam
Lh	La Prairie-Harriet loams
Lm	Letcher-Embden-Miranda complex
Lu	Ludden silty clay
Lw	Ludden silty clay, ponded
Lx	Ludden-Ludden, saline, silty clays
Lz	Ludden silty clay, ponded-Water complex
MaB	Maddock-Hecla-Hamar loamy fine sands, 2 to 8 percent slopes
Na	Nahon-Aberdeen-Exline silt loams
Nc	Nahon-Aberdeen-Exline silty clay loams, sandy substratum
NeA	Niobell-Noonan-Williams loams, 1 to 4 percent slopes
Ng	Nishon silt loam
Nh	Nishon-Heil silt loams
No	Noonan-Niobell-Miranda loams
Og	Orthents, gravelly
Ot	Orthents, loamy
Pa	Parnell silty clay loam
Pc	Parnell silty clay loam, ponded
PeA	Peever clay loam, 0 to 2 percent slopes
PfB	Peever-Buse clay loams, 1 to 4 percent slopes
Pg	Pits, gravel
Pm	Playmoor silty clay loam
Pr	Playmoor-Lamoure silty clay loams, channeled
Ra	Ranslo silty clay loam
Rc	Ranslo-Harriet loams
RfA	Renshaw-Fordville loams, 0 to 2 percent slopes
RfB	Renshaw-Fordville loams, 2 to 6 percent slopes
Ry	Ryan-Ludden complex
SaD	Serden fine sand, 6 to 15 percent slopes
ScB	Sercen-Hamar-Venlo loamy fine sands, 0 to 6 percent slopes
Sd	Slickspots
Sf	Spottswood-Divide loams, 0 to 2 percent slopes
Sh	Stirum fine sandy loam
Sn	Stirum-Stirum Variant loams
SoA	Swenoda fine sandy loam, 0 to 2 percent slopes
StB	Swenoda-Embden fine sandy loams, 2 to 6 percent slopes
SvA	Swenoda-Tiffany Variant fine sandy loams, 0 to 3 percent slopes
SwA	Swenoda-Turton complex, 0 to 3 percent slopes
SxA	Swenoda-Turton Variant complex, 0 to 3 percent slopes
TaB	Tally fine sandy loam, 2 to 6 percent slopes
TeB	Tally-Letcher fine sandy loams, 1 to 6 percent slopes
Tk	Tonka silt loam
Tn	Tonka-Nishon silt loams
Tr	Towner-Hecla loamy fine sands
Tv	Turton-Turton Variant complex
Un	Ulen fine sandy loam
Us	Ulen-Stirum fine sandy loams
Va	Vallers clay loam
Vs	Vallers loam, saline
VzC	Vida-Zahl loams, 6 to 15 percent slopes
VzE	Vida-Zahl loams, 9 to 25 percent slopes
WaB	Williams loam, 2 to 6 percent slopes
WbA	Williams-Bowbells loams, 0 to 3 percent slopes
WbB	Williams-Bowbells loams, 1 to 6 percent slopes
WdA	Williams-Bowbells-Tonka complex, 0 to 3 percent slopes
WdB	Williams-Bowbells-Tonka complex, 0 to 6 percent slopes
WfA	Williams-Cavour loams, 0 to 3 percent slopes
WfB	Williams-Cavour loams, 3 to 6 percent slopes
WhA	Willifams-Cresbard-Tonka complex, 0 to 3 percent slopes
WhB	Williams-Cresbard-Tonka complex, 0 to 6 percent slopes
WnB	Williams-Niobell loams, 1 to 6 percent slopes
WrD	Williams-Vida loams, 6 to 15 percent slopes
WsC	Williams-Zahl-Bowbells loams, 1 to 9 percent slopes
Wt	Winship-Tonka silt loams
Wy	Wyndmere fine sandy loam
Wz	Wyndmere-Stirum fine sandy loams
ZaD	Zahl-Embden-Wabek Variant complex, 3 to 15 percent slopes
ZdE	Zahl-Kloten-Edgeley complex, 9 to 35 percent slopes
ZeA	Zell silt loam, 0 to 2 percent slopes
ZdG	Zell-Great Bend silt loams, 6 to 25 percent slopes

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

CULTURAL FEATURES

BOUNDARIES
- National, state, or province
- County or parish
- Minor civil division
- Reservation (national forest or park, state forest or park, and large airport)
- Land grant
- Limit of soil survey (label)
- Field sheet matchline and neatline

AD HOC BOUNDARY (lable)
- Cemetary (not named)
- Small airport, airfield, park, oilfield, cemetery, or flood pool (Davis Airstrip; FLOOD POOL LINE)

STATE COORDINATE TICK

LAND DIVISION CORNER (sections and land grants)

ROADS
- Divided (median shown if scale permits)
- As shown on general highway map
- Other roads
- Trail

ROAD EMBLEM & DESIGNATIONS
- Federal (173)
- State (28)
- Other (Named) (1283)
- County, farm or ranch

RAILROAD

POWER TRANSMISSION LINE (normally not shown)

PIPE LINE (normally not shown)

FENCE (normally not shown)

LEVEES
- Without road
- With road
- With railroad

DAMS
- Large (to scale) (named)
- Medium or Small (water)

PITS
- Gravel pit < 5 acres
- Mine or quarry

MISCELLANEOUS CULTURAL FEATURES
- Farmstead, house (omit in urban area)
- Church (Rural)
- School
- Indian mound (label) (Indian Mound)
- Located object (label) (Tower)
- Tank (label) (Gas)
- Wells, oil or gas
- Windmill
- Kitchen midden

WATER FEATURES

DRAINAGE JAMES RIVER
- Perennial, double line
- Perennial, single line CREEKS NAMED
- Intermittent
- Drainage end

Canals or ditches
- Double-line (label) (CANAL)
- Drainage and/or irrigation

LAKES, PONDS AND RESERVOIRS
- Perennial (water)
- Intermittent (int)

MISCELLANEOUS WATER FEATURES
- Marsh or swamp < 5 acres
- Spring
- Well, artesian
- Well, irrigation
- Wet spot < 5 acres

SPECIAL SYMBOLS FOR SOIL SURVEY

SOIL DELINEATIONS AND SYMBOLS (Na TaB)

ESCARPMENTS
- Bedrock (points down slope)
- Other than bedrock (points down slope)

SHORT STEEP SLOPE

GULLY

DEPRESSION OR SINK

SOIL SAMPLE (normally not shown)

MISCELLANEOUS
- Blowout
- Clay spot
- Gravelly spot < 5 acres
- Gumbo, slick or scabby spot (sodic) < 5 acres
- Dumps and other similar non soil areas
- Prominent hill or peak
- Rock outcrop (includes sandstone and shale)
- Saline spot < 5 acres
- Sandy spot < 5 acres
- Severely eroded spot
- Slide or slip (tips point upslope)
- Stony spot, very stony spot < 5 acres