

## Cuddeback Lake Geologic Labels

ptype	name	source_ptype	source_name	source_age
af	Artificial Fill	ml	Made land or artificial fill; surficial material moved for mining, construction and agriculture that is extensively disturbed	latest Holocene
af	Artificial Fill	Qpf	Ponded fill; active sand and silt deposits resulting from the damming of drainages by man-made features	latest Holocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qmc	Colluvial deposits; hillslope materials thicker than 2 meters overlying wide areas; generally poorly vegetated	Holocene and Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qiad	Intermediate-age alluvial deposits; dominated by debris flows, hummocky topography	late and middle Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qiml	Intermediate-age mass movement deposits; landslide deposits thicker than 2 meters	Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	QTml	Extremely old landslide deposits; thicker than 2 meters; cemented with pedogenic carbonate	early Pleistocene and Pliocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qyml	Young mass-movement deposits; landslide deposits thicker than 2 meters	Holocene
Qw	Alluvial Wash Deposits	Qaw	Active wash deposits; characterized by surfaces and channels that are active and have received deposits with the last few decades	latest Holocene
Qw	Alluvial Wash Deposits	Qaw+Qaa	Active wash deposits and active alluvial fan deposits; intermixed	latest Holocene
Qw	Alluvial Wash Deposits	Qaw+Qya	Active wash deposits and young alluvial fan deposits; intermixed	latest Holocene to latest Pleistocene
Qw	Alluvial Wash Deposits	Qaw+Qyw	Active wash deposits and young wash deposits; intermixed	latest Holocene to latest Pleistocene
Qw	Alluvial Wash Deposits	Qya+Qaw	Young alluvial fan deposits and active wash deposits; intermixed	latest Holocene to latest Pleistocene
Qw	Alluvial Wash Deposits	Qyw+Qaw	Young wash deposits and active wash deposits; intermixed	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qaa	Active alluvial fan deposits; characterized by active surfaces that have received deposits within the last few decades	latest Holocene
Qf	Alluvial Fan Deposits	Qaa+Qaw	Active alluvial fan deposits and active alluvial wash deposits; intermixed	latest Holocene

<b>ptype</b>	<b>name</b>	<b>source_ptype</b>	<b>source_name</b>	<b>source_age</b>
Qf	Alluvial Fan Deposits	Qaa+Qaw+Qya	Active alluvial fan deposits, active alluvial wash deposits, and young alluvial fan deposits; intermixed	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qaa+Qya	Active alluvial fan deposits and young alluvial fan deposits; intermixed	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qaa+Qya+Qaw	Active alluvial fan deposits, young alluvial fan deposits, and active alluvial wash deposits; intermixed	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qaa+Qyae	Active alluvial fan deposits and young mixed alluvial and eolian deposits; intermixed	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qaa+Qyea	Active alluvial fan deposits and young mixed eolian and alluvial deposits; intermixed	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qaag	Active alluvial fan deposits composed of grus; predominantly clasts from granitic sources that weather to grus	latest Holocene
Qf	Alluvial Fan Deposits	Qaag+Qaw	Active alluvial fan deposits composed of grus and active wash deposits; intermixed	latest Holocene
Qf	Alluvial Fan Deposits	Qaag+Qyag	Active alluvial fan deposits composed of grus and young alluvial fan deposits composed of grus; intermixed	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qya+Qaa	Young alluvial fan deposits and active alluvial fan deposits; intermixed	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qya+Qaa+Qaw	Young alluvial fan deposits, active alluvial fan deposits, and active wash deposits; intermixed	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qyae+Qaa	Young mixed alluvial and eolian deposits and active alluvial fan deposits; intermixed	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qyag+Qaag	Young alluvial fan deposits composed of grus and active alluvial fan deposits composed of grus; intermixed	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qyag+Qaag+Qawg	Young alluvial fan deposits composed of grus; active alluvial fan deposits composed of grus, and active wash deposits; intermixed	latest Holocene to latest Pleistocene
Qa	Alluvial Valley Deposits	Qav	Active valley-axis deposits; loose, fine-grained deposits in valley axes characterized by anastomosing ephemeral washes, low relief interfluves and eolian deposits	latest Holocene
Qa	Alluvial Valley Deposits	Qav+Qyv	Active valley-axis deposits and young valley axis deposits; intermixed	latest Holocene to latest Pleistocene

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Qa	Alluvial Valley Deposits	Qyae+Qaae	Young mixed alluvial and eolian deposits and active mixed alluvial and eolian deposits; intermixed	latest Holocene to latest Pleistocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qap	Active playa deposits; playa deposits that are active and have received sediment in the last few decades; fine sand, silt and clay with some salts; flat and prone to flooding	latest Holocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qapf	Active playa fringe of mixed eolian, alluvial, groundwater discharge and playa deposits; have received sediment in the last few decades	latest Holocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qaps+Qaed	Active sandy facies of playa deposits and active eolian sand dune deposits	latest Holocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qaps+Qav	Active sandy facies of playa deposits and active valley-axis deposits	latest Holocene
Qe	Eolian and Dune Deposits	Qaea	Active mixed eolian and alluvial deposits; mixed eolian and alluvial materials that show evidence of migration	latest Holocene
Qe	Eolian and Dune Deposits	Qaea/ml	Active mixed eolian and alluvial deposits overlie made land or artificial fill	latest Holocene
Qe	Eolian and Dune Deposits	Qaed	Active eolian sand dune deposits; eolian sand deposits that are active and show evidence of migration	latest Holocene
Qe	Eolian and Dune Deposits	Qaes	Active eolian sand sheet deposits; eolian sand ramp deposits that are active and show evidence of migration	latest Holocene
Qe	Eolian and Dune Deposits	Qaes/ml	Active eolian sand sheet deposits overlie made land or artificial fill	latest Holocene
Qe	Eolian and Dune Deposits	Qye+Qae	Young eolian deposits and active eolian sand deposits; intermixed	latest Holocene to latest Pleistocene
Qe	Eolian and Dune Deposits	Qye+Qae/Qilg	Young eolian deposits and active eolian sand deposits overlie intermediate-age lacustrine sand	latest Holocene to latest Pleistocene/late and middle Pleistocene
Qe	Eolian and Dune Deposits	Qyer+Qaer	Young eolian sand ramp deposits and active eolian ramp deposits; intermixed	latest Holocene to latest Pleistocene
Qyw	Young Alluvial Wash Deposits	Qiw+Qyw	Intermediate-age wash deposits and young wash deposits; intermixed	late and middle Pleistocene/Holocene and latest Pleistocene

ptype	name	source_ptype	source_name	source_age
Qyw	Young Alluvial Wash Deposits	Qyw	Young wash deposits; moderately to poorly sorted sand and silt, sandy gravel; weak to no soil development; prone to channelized flow and flooding during and after heavy rains	Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qia+Qya	Intermediate-age alluvial fan deposits and young alluvial fan deposits; intermixed	late and middle Pleistocene/early Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qia+Qya/fpg	Intermediate-age alluvial fan deposits and young alluvial fan deposits overlie felsic plutonic rocks that weather to grus	late and middle Pleistocene/Pliocene to early Proterozoic
Qyf	Young Alluvial Fan Deposits	Qia+Qya/fv	Intermediate-age alluvial fan deposits and young alluvial fan deposits overlie felsic volcanic rocks	late and middle Pleistocene/Pliocene to early Proterozoic
Qyf	Young Alluvial Fan Deposits	Qia+Qyao	Intermediate-age alluvial fan deposits and older young alluvial fan deposits; intermixed	late and middle Pleistocene/early Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qia+Qyao/fpg	Intermediate-age alluvial fan deposits and older young alluvial fan deposits overlie felsic plutonic bedrock that weathers to grus	late and middle Pleistocene/early Holocene to early Proterozoic
Qyf	Young Alluvial Fan Deposits	Qia+Qyes	Intermediate-age alluvial fan deposits and young eolian sand sheet deposits; intermixed	late and middle Pleistocene/Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiag+Qyag	Intermediate-age alluvial fan deposits composed of grus and young alluvial fan deposits composed of grus; intermixed	late and middle Pleistocene/Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiag+Qyag/fpg	Intermediate-age alluvial fan deposits composed of grus and young alluvial fan deposits composed of grus overlie felsic plutonic bedrock that weathers to grus	late and middle Pleistocene/Pliocene to early Proterozoic
Qyf	Young Alluvial Fan Deposits	Qiag+Qyag/ QToa	Intermediate-age alluvial fan deposits composed of grus and young alluvial fan deposits composed of grus overlie extremely old alluvial fan deposits	late and middle Pleistocene/Holocene to Pliocene

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Qyf	Young Alluvial Fan Deposits	Qiag+Qyaog	Intermediate-age alluvial fan deposits composed of grus and older young alluvial fan deposits composed of grus; intermixed	late and middle Pleistocene/early Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiag+Qyaog/ fpg	Intermediate-age alluvial fan deposits composed of grus and older young alluvial fan deposits composed of grus overlie felsic plutonic bedrock that weathers to grus	late and middle Pleistocene/Pliocene to early Proterozoic
Qyf	Young Alluvial Fan Deposits	Qil+Qya	Intermediate-age lacustrine deposits and young alluvial fan deposits; intermixed	late and middle Pleistocene/Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qoa+Qya	Old alluvial fan deposits and young alluvial fan deposits; intermixed	middle and early Pleistocene/Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qoag+Qyag	Old alluvial fan deposits composed of grus and young alluvial fan deposits composed of grus; intermixed	middle and early Pleistocene/Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	QToa+Qya	Extremely old alluvial fan deposits and young alluvial fan deposits; intermixed	early Pleistocene and Pliocene/Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya	Young alluvial fan deposits; moderately to poorly sorted sand and silt, sandy gravel; abandoned surfaces receive material infrequently; little or no soil development	Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya/fpg	Young alluvial fan deposits overlie felsic plutonic rocks that weather to grus	Holocene and latest Pleistocene/Pliocene to early Proterozoic
Qyf	Young Alluvial Fan Deposits	Qya/fv	Young alluvial fan deposits overlie felsic volcanic rocks	Holocene and latest Pleistocene/Pliocene to early Proterozoic
Qyf	Young Alluvial Fan Deposits	Qya/pc	Young alluvial fan deposits overlie partially consolidated sedimentary deposits	Holocene and latest Pleistocene/Pliocene to early Proterozoic

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Qyf	Young Alluvial Fan Deposits	Qya/Qia	Young alluvial fan deposits overlie intermediate-age alluvial fan deposits	Holocene and latest Pleistocene/late to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya/Qil	Young alluvial fan deposits overlie intermediate-age lacustrine deposits	Holocene and latest Pleistocene/late to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya/Qoa	Young alluvial fan deposits overlie old alluvial fan deposits	Holocene and latest Pleistocene/middle to early Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya/Qygw	Young alluvial fan deposits overlie young groundwater wetland deposits	Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya/sl	Young alluvial fan deposits overlie siliciclastic rocks	Holocene and latest Pleistocene/Pliocene to early Proterozoic
Qyf	Young Alluvial Fan Deposits	Qya+Qia	Young alluvial fan deposits and intermediate-age alluvial fan deposits; intermixed	Holocene and latest Pleistocene/late to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya+Qia/fpg	Young alluvial fan deposits and intermediate-age alluvial fan deposits overlie felsic plutonic rocks that weather to grus	Holocene and latest Pleistocene/Pliocene to early Proterozoic
Qyf	Young Alluvial Fan Deposits	Qya+Qyw	Young alluvial fan deposits and young wash deposits; intermixed	Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyag	Young alluvial fan deposits composed of grus; moderately to poorly sorted sand and fine gravel derived from granitic sources; abandoned surfaces receive material infrequently; little or no soil development	Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyag/Qiag	Young alluvial fan deposits composed of grus overlie intermediate-age alluvial fan deposits composed of grus	Holocene and latest Pleistocene/late to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyag+Qiag	Young alluvial fan deposits composed of grus and intermediate-age alluvial fan deposits composed of grus; intermixed	Holocene and latest Pleistocene/late to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyag+Qiag/fpg	Young alluvial fan deposits composed of grus and intermediate-age alluvial fan deposits composed of grus overlie felsic plutonic rocks that weather to grus	Holocene and latest Pleistocene/Pliocene to early Proterozoic
Qyf	Young Alluvial Fan Deposits	Qyao	Young alluvial fan deposits; older young alluvial deposits with weakly to moderately developed pavements; weak varnish	Holocene and latest Pleistocene

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Qyf	Young Alluvial Fan Deposits	Qyao+Qia	Older young alluvial fan deposits and intermediate-age alluvial fan deposits; intermixed	Holocene and latest Pleistocene/late to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyao	Older young alluvial fan deposits composed of grus from granitic sources; abandoned surfaces receive material infrequently; little to moderate soil development	early Holocene and latest Pleistocene
Qya	Young Alluvial Valley Deposits	Qiae+Qyae	Intermediate-age mixed alluvial and eolian deposits and young mixed alluvial and eolian deposits; intermixed	late and middle Pleistocene/Holocene and latest Pleistocene
Qya	Young Alluvial Valley Deposits	Qyae	Young mixed alluvial and eolian deposit; mixed alluvial and eolian deposits generally inactive	Holocene and latest Pleistocene
Qya	Young Alluvial Valley Deposits	Qyae/Qia	Young mixed alluvial and eolian deposits overlie intermediate-age alluvial fan deposits	Holocene and latest Pleistocene/late to middle Pleistocene
Qya	Young Alluvial Valley Deposits	Qyae/Qiae	Young mixed alluvial and eolian deposits overlie intermediate-age mixed alluvial and eolian deposits	Holocene and latest Pleistocene/late to middle Pleistocene
Qya	Young Alluvial Valley Deposits	Qyae/Qil	Young mixed alluvial and eolian deposits overlie intermediate-age lacustrine deposits	Holocene and latest Pleistocene/late to middle Pleistocene
Qya	Young Alluvial Valley Deposits	Qyae?	Young mixed alluvial and eolian deposits; mixed alluvial and eolian deposits generally inactive	Holocene and latest Pleistocene
Qya	Young Alluvial Valley Deposits	Qyae+Qiae	Young mixed alluvial and eolian deposits and intermediate-age mixed alluvial and eolian deposits; intermixed	Holocene and latest Pleistocene/late to middle Pleistocene
Qya	Young Alluvial Valley Deposits	Qyaeo	Older young mixed alluvial and eolian deposits; mixed alluvial and eolian deposits generally inactive	Holocene and latest Pleistocene
Qya	Young Alluvial Valley Deposits	Qyv	Young valley-axis deposits; sand to small gravels in valley axis locations; prone to flooding in heavy rains	Holocene and latest Pleistocene
Qyl	Young Lacustrine, Playa and Estuarine (Paralic) Deposits	Qygw	Young groundwater wetland deposits; silt and fine sand; some groundwater carbonates, badlands	Holocene and latest Pleistocene
Qyl	Young Lacustrine, Playa and Estuarine (Paralic) Deposits	Qygw?	Young groundwater wetland deposits; silt and fine sand; some groundwater carbonates, badlands	Holocene and latest Pleistocene
Qyl	Young Lacustrine, Playa and Estuarine (Paralic) Deposits	Qyp	Young playa deposits; rarely flooded; fine sand, silt and clay with some salts; weak to moderate cement; prone to flooding during heavy rains	Holocene and latest Pleistocene

<b>ptype</b>	<b>name</b>	<b>source_ptype</b>	<b>source_name</b>	<b>source_age</b>
Qyl	Young Lacustrine, Playa and Estuarine (Paralic) Deposits	Qypf	Young playa fringe of mixed eolian, alluvial, lacustrine, groundwater discharge and playa deposits; flat, barren, poorly vegetated	Holocene and latest Pleistocene
Qyl	Young Lacustrine, Playa and Estuarine (Paralic) Deposits	Qyps	Young sandy facies of playa deposits; generally inactive	Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qye	Young eolian deposits; generally inactive, loose sediments; little or no soil development; may show carbonate accumulation downwind of playas and dry lakes	Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qye/fp	Young eolian deposits overlie felsic plutonic rocks	Holocene and latest Pleistocene/Pliocene to early Proterozoic
Qye	Young Eolian and Dune Deposits	Qye/fpg	Young eolian deposits overlie felsic plutonic rocks that weather to grus	Holocene and latest Pleistocene/Pliocene to early Proterozoic
Qye	Young Eolian and Dune Deposits	Qye/mv	Young eolian deposits overlie mafic volcanic rocks	Holocene and latest Pleistocene/Pliocene to early Proterozoic
Qye	Young Eolian and Dune Deposits	Qye/pc	Young eolian deposits overlie partially consolidated sedimentary deposits	Holocene and latest Pleistocene/Pliocene to early Proterozoic
Qye	Young Eolian and Dune Deposits	Qyea	Young mixed eolian and alluvial deposits; mixed eolian and alluvial deposits generally inactive	Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea/pc	Young mixed eolian and alluvial deposits overlie partially consolidated sedimentary deposits	Holocene and latest Pleistocene/Pliocene to early Proterozoic
Qye	Young Eolian and Dune Deposits	Qyea/Qia	Young mixed eolian and alluvial deposits overlie intermediate-age alluvial fan deposits	Holocene and latest Pleistocene/late and middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea/Qiag	Young mixed eolian and alluvial deposits and intermediate-age alluvial fan deposits composed of grus; intermixed	Holocene and latest Pleistocene/late and middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea/Qyag	Young mixed eolian and alluvial deposits overlie young alluvial fan deposits composed of grus; intermixed	Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyed	Young eolian sand dune deposits; generally inactive	Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyed/Qya	Young eolian sand dune deposits overlie young alluvial fan deposits	Holocene and latest Pleistocene



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Qye	Young Eolian and Dune Deposits	Qyed+Qyes	Young eolian sand dune deposits and young eolian sand sheet deposits; intermixed	Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyer	Young eolian sand ramp deposits; generally inactive	Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyes	Young eolian sand sheet deposits; generally inactive	Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyes/Qia	Young eolian sand sheet deposits overlie intermediate-age alluvial fan deposits	Holocene and latest Pleistocene/late and middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qyes/Qiag	Young eolian sand sheet deposits overlie intermediate-age alluvial fan deposits composed of grus	Holocene and latest Pleistocene/late and middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qyes+Qya	Young eolian sand sheet deposits and young alluvial fan deposits; intermixed	Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyes+Qyed	Young eolian sand sheet deposits and young eolian sand dune deposits; intermixed	Holocene and latest Pleistocene
Qow	Old Alluvial Wash Deposits	Qiw	Intermediate-age wash deposits; parent material moderately to poorly sorted sand and silt, sandy gravel; poorly to moderately consolidated and bedded	late and middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qia	Intermediate-age alluvial fan deposits; moderately to poorly sorted sand and silt, sandy gravel; moderate to strong soil development	late and middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qia/fp	Intermediate-age alluvial fan deposits overlie felsic plutonic bedrock	late and middle Pleistocene/Pliocene to early Proterozoic
Qof	Old Alluvial Fan Deposits	Qia/fpg	Intermediate-age alluvial fan deposits overlie felsic plutonic bedrock that weathers to grus	late and middle Pleistocene/Pliocene to early Proterozoic
Qof	Old Alluvial Fan Deposits	Qia/fv	Intermediate-age alluvial fan deposits overlie felsic volcanic bedrock	late and middle Pleistocene/Pliocene to early Proterozoic
Qof	Old Alluvial Fan Deposits	Qia/pc	Intermediate-age alluvial fan deposits overlie partly consolidated sedimentary deposits	late and middle Pleistocene/Pliocene to early Proterozoic
Qof	Old Alluvial Fan Deposits	Qia/Qigw	Intermediate-age alluvial fan deposits overlie intermediate-age groundwater wetland deposits	late and middle Pleistocene

ptype	name	source_ptype	source_name	source_age
Qof	Old Alluvial Fan Deposits	Qia/Qoa	Intermediate-age alluvial fan deposits overlies old alluvial fan deposits	late and middle Pleistocene/middle and early Pleistocene
Qof	Old Alluvial Fan Deposits	Qia/QToa	Intermediate-age alluvial fan deposits overlies extremely old alluvial fan deposits	late and middle Pleistocene/early Pleistocene and Pliocene
Qof	Old Alluvial Fan Deposits	Qia+Qigw	Intermediate-age alluvial fan deposits and intermediate-age groundwater wetland deposits; intermixed	late and middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qia+Qoa	Intermediate-age alluvial fan deposits and old alluvial fan deposits; intermixed	late and middle Pleistocene/middle and early Pleistocene
Qof	Old Alluvial Fan Deposits	Qiag	Intermediate-age alluvial fan deposits composed of grus; moderately to poorly sorted sand and silt derived from granitic sources; moderately consolidated; moderate to strong soil development	late and middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qiag/fpg	Intermediate-age alluvial fan deposits composed of grus overlies felsic plutonic bedrock that weathers to grus	late and middle Pleistocene/Pliocene to early Proterozoic
Qof	Old Alluvial Fan Deposits	Qiag/Qoag	Intermediate-age alluvial fan deposits composed of grus overlies old alluvial fan deposits composed of grus	late and middle Pleistocene/middle and early Pleistocene
Qof	Old Alluvial Fan Deposits	Qiag+Qoag	Intermediate-age alluvial fan deposits composed of grus and old alluvial fan deposits composed of grus; intermixed	late and middle Pleistocene/middle and early Pleistocene
Qof	Old Alluvial Fan Deposits	Qiag+Qoag/fpg	Intermediate-age alluvial fan deposits composed of grus and old alluvial fan deposits composed of grus overlies felsic plutonic bedrock that weathers to grus	late and middle Pleistocene/Pliocene to early Proterozoic
Qof	Old Alluvial Fan Deposits	Qoa+Qia	Old alluvial fan deposits and intermediate-age alluvial fan deposits; intermixed	middle and early Pleistocene/late and middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qoag+Qiag	Old alluvial fan deposits composed of grus and intermediate-age alluvial fan deposits composed of grus; intermixed	middle and early Pleistocene/late and middle Pleistocene

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Qof	Old Alluvial Fan Deposits	Qoag+Qiaq/fpg	Old alluvial fan deposits composed of grus and intermediate-age alluvial fan deposits composed of grus overlie felsic plutonic bedrock that weathers to grus	middle and early Pleistocene/late Pleistocene to early Proterozoic
Qof	Old Alluvial Fan Deposits	QToa+Qia	Extremely old alluvial fan deposits and intermediate-age alluvial fan deposits; intermixed	early Pleistocene and Pliocene/late and middle Pleistocene
Qoa	Old Alluvial Valley Deposits	Qiae	Intermediate-age mixed alluvial and eolian deposits; dominated by alluvial processes; well-defined thin bedding; soil development variable	late and middle Pleistocene
Qoa	Old Alluvial Valley Deposits	Qiae/QToa	Intermediate-age mixed alluvial and eolian deposits; dominated by alluvial processes; well-defined thin bedding; soil development variable	late and middle Pleistocene/early Pleistocene and Pliocene
Qoa	Old Alluvial Valley Deposits	Qiae?	Intermediate-age mixed alluvial and eolian deposits; dominated by alluvial processes; well-defined thin bedding; soil development variable	late and middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qigw	Intermediate-age groundwater wetland deposits; silt and fine sand; some carbonates; commonly forms badlands	late and middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qigw/Qoag	Intermediate-age groundwater wetland deposits overlie intermediate-age alluvial fan deposits composed of grus	late and middle Pleistocene/middle and early Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qigw?	Intermediate-age groundwater wetland deposits; silt and fine sand; some carbonates; commonly forms badlands	late and middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qil/Qiae	Intermediate-age lacustrine deposits overlie intermediate-age mixed eolian and alluvial deposits	late and middle Pleistocene/middle and early Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qil/QToa	Intermediate-age lacustrine deposits overlie extremely old alluvial fan deposits	late and middle Pleistocene/early Pleistocene and Pliocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qilg	Intermediate-age lacustrine gravel deposits; gravels associated with beaches and barrier bars	late and middle Pleistocene

<b>ptype</b>	<b>name</b>	<b>source_ptype</b>	<b>source_name</b>	<b>source_age</b>
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qils	Intermediate-age lacustrine sand; sandy lacustrine deposits are inactive; sparsely vegetated to barren	late and middle Pleistocene
Qoe	Old Eolian and Dune Deposits	Qiea	Intermediate-age mixed eolian and alluvial deposits; dominated by eolian processes; poor to moderate desert pavement; weak soil development	late and middle Pleistocene
Qvof	Very Old Alluvial Fan Deposits	Qoa	Old alluvial fan deposits; moderately to poorly sorted sand and sandy gravel; deeply incised fan remnants	middle and early Pleistocene
Qvof	Very Old Alluvial Fan Deposits	Qoa/fp	Old alluvial fan deposits overlie felsic plutonic bedrock	middle and early Pleistocene/Pliocene to early Proterozoic
Qvof	Very Old Alluvial Fan Deposits	Qoa/fv	Old alluvial fan deposits overlie felsic volcanic bedrock	middle and early Pleistocene/Pliocene to early Proterozoic
Qvof	Very Old Alluvial Fan Deposits	Qoa/sl	Old alluvial fan deposits overlie siliciclastic bedrock	middle and early Pleistocene/Pliocene to early Proterozoic
Qvof	Very Old Alluvial Fan Deposits	Qoa?	Old alluvial fan deposits; moderately to poorly sorted sand and sandy gravel; deeply incised fan remnants	middle and early Pleistocene
Qvof	Very Old Alluvial Fan Deposits	Qoa+QToa	Old alluvial fan deposits and extremely old alluvial fan deposits; intermixed	middle and early Pleistocene and Pliocene
Qvof	Very Old Alluvial Fan Deposits	Qoag	Old alluvial fan deposits composed of grus; moderately to poorly sorted sand and silt derived from granitic sources; deeply incised fan remnants	middle and early Pleistocene
Qvof	Very Old Alluvial Fan Deposits	QToa	Extremely old alluvial fan deposits; degraded remnants of abandoned surfaces	early Pleistocene and Pliocene
Qvof	Very Old Alluvial Fan Deposits	QToa?	Extremely old alluvial fan deposits; degraded remnants of abandoned surfaces	early Pleistocene and Pliocene
Qvof	Very Old Alluvial Fan Deposits	QToa+Qoa	Extremely old alluvial fan deposits and old alluvial fan deposits; intermixed	early Pleistocene and Pliocene/middle and early Pleistocene
Qvof	Very Old Alluvial Fan Deposits	QToa+Qoag	Extremely old alluvial fan deposits and old alluvial fan deposits that weather to grus; intermixed	early Pleistocene and Pliocene/middle and early Pleistocene

<b>ptype</b>	<b>name</b>	<b>source_ptype</b>	<b>source_name</b>	<b>source_age</b>
Tss	Coarse-grained Tertiary age formations	Qha/pc	Abundant hillslope deposits overlie partly consolidated sedimentary deposits	Holocene and Pleistocene/Pliocene to early Proterozoic
Tss	Coarse-grained Tertiary age formations	Qha/pc?	Abundant hillslope deposits overlie partly consolidated sedimentary deposits	Holocene and Pleistocene/Pliocene to early Proterozoic
Tss	Coarse-grained Tertiary age formations	Qha/sl	Abundant hillslope deposits overlie siliciclastic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
Tss	Coarse-grained Tertiary age formations	Qha/sl+mv	Abundant hillslope deposits overlie siliciclastic and mafic volcanic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
Tss	Coarse-grained Tertiary age formations	Qha/sl+pc	Abundant hillslope deposits overlie siliciclastic and partly consolidated sedimentary deposits	Holocene and Pleistocene/Pliocene to early Proterozoic
Tss	Coarse-grained Tertiary age formations	Qhs/sl	Sparse hillslope deposits overlie siliciclastic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
Tv	Tertiary age formations of volcanic origin	Qha/fv	Abundant hillslope deposits overlie felsic volcanic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
Tv	Tertiary age formations of volcanic origin	Qha/fv?	Abundant hillslope deposits overlie felsic volcanic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
Tv	Tertiary age formations of volcanic origin	Qha/mv	Abundant hillslope deposits overlie mafic volcanic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
Tv	Tertiary age formations of volcanic origin	Qha/mv+sl	Abundant hillslope deposits overlie mafic volcanic and siliciclastic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
Tv	Tertiary age formations of volcanic origin	Qhs/fv	Sparse hillslope deposits overlie felsic volcanic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
Tv	Tertiary age formations of volcanic origin	Qhs/mv	Sparse hillslope deposits overlie mafic volcanic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Qha/ca	Abundant hillslope deposits overlie carbonate bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic

<b>p</b> type	<b>name</b>	<b>source_p</b> type	<b>source_n</b> ame	<b>source_a</b> ge
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Qha/mr	Abundant hillslope deposits overlie metamorphic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Qha/mr+ca	Abundant hillslope deposits overlie metamorphic and carbonate bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Qha/mr+fp	Abundant hillslope deposits overlie metamorphic and felsic plutonic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Qha/sc	Abundant hillslope deposits overlie schistose bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Qha/sc+ca	Abundant hillslope deposits overlie schistose and carbonate bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Qhs/ca	Sparse hillslope deposits overlie carbonate bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Qhs/mr+ca	Sparse hillslope deposits overlie metamorphic and carbonate bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Qhs/sc	Sparse hillslope deposits overlie schistose bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qha/fp	Abundant hillslope deposits overlie felsic plutonic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qha/fp+sc	Abundant hillslope deposits overlie felsic plutonic and schistose bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qha/fpg	Abundant hillslope deposits overlie felsic plutonic bedrock that weathers to grus	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qha/mp	Abundant hillslope deposits overlie mafic plutonic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qha/mp+fp	Abundant hillslope deposits overlie mafic plutonic and felsic plutonic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic

<b>ptype</b>	<b>name</b>	<b>source_ptype</b>	<b>source_name</b>	<b>source_age</b>
gr	Granitic and other intrusive crystalline rocks of all ages	Qhs/fp	Sparse hillslope deposits overlie felsic plutonic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qhs/fpg	Sparse hillslope deposits overlie felsic plutonic bedrock that weather to grus	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qhs/mp	Sparse hillslope deposits overlie mafic plutonic bedrock	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qmc/fpg	Colluvial deposits overlie felsic plutonic bedrock that weathers to grus	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qpd-fp	Deeply dissected pediment in felsic plutonic rocks	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qpd-fpg	Deeply incised pediment in felsic plutonic rocks that weather to grus	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qpd-mp	Deeply incised pediment in mafic plutonic rocks	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qpi-fp	Incised pediment in felsic plutonic rocks	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qpi-fpg	Incised pediment in felsic plutonic rocks that weather to grus	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qpi-mp	Incised pediment in mafic plutonic rocks	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qpv-fpg	Pediment in felsic plutonic rocks with veneer of grus	Holocene and Pleistocene/Pliocene to early Proterozoic
gr	Granitic and other intrusive crystalline rocks of all ages	Qpv-mp	Pediment in mafic plutonic rocks with veneer of sediment	Holocene and Pleistocene/Pliocene to early Proterozoic