Newberry Springs Geologic Labels

ptype	name	source_ptype	source_name	source_age
af	Artificial Fill	ml	Modified land or artificial fill; material moved for construction, agriculture, flood control, or mining.	latest Holocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qia+Qyg	Intermediate alluvial fan deposits and young groundwater discharge deposits; intermixed.	Holocene to middle Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qiag+Qyg	Intermediate alluvial fan grus deposits and young groundwater discharge deposits; intermixed.	Holocene to middle Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qig	Intermediate groundwater discharge deposits; silt and fine sand in former zones of groundwater discharge.	late and middle Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qig+Qag	Intermediate groundwater discharge deposits and active groundwater discharge deposits; intermixed.	latest Holocene to middle Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qig+Qyg	Intermediate groundwater discharge deposits and young groundwater discharge deposits; intermixed.	Holocene to middle Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qigs	Intermediate groundwater discharge spring mound deposits; silt and fine sand in former zones of groundwater discharge; commonly forms light colored raised features above surrounding landscape.	late and middle Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qigs+Qygs	Intermediate groundwater discharge spring mound deposits and young groundwater discharge spring mound deposits; intermixed.	Holocene to middle Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qigw	Intermediate groundwater discharge wetland deposits; remnant calcareous silt and fine sand formed by paleo-springs and wetlands.	Pleistocene

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Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qimc	Intermediate colluvial deposits; thicker than 2 meters; rocky and poorly sorted detritus; some areas varnished.	late and middle Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qpi?	Incised pediments; moderately incised surfaces; sparse, patchy alluvial veneers; alluvial deposits mainly in incised channels.	Quaternary and older
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qpv	Veneered pediments; minimally incised surfaces having extensive alluvial veneers.	Quaternary and older
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qyg	Young groundwater discharge deposits; silt and fine sand in zones of former groundwater discharge; generally calcareous.	Holocene and latest Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qygs	Young groundwater discharge spring mound deposits; distinct mound landforms above adjacent deposits; occurs in association with eolian and playa fringe deposits.	Holocene and latest Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qygw	Young groundwater discharge wetland deposits; similar to Qyg, but forms low broad relief.	Holocene and latest Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qygw?	Young groundwater discharge wetland deposits; similar to Qyg, but forms low broad relief.	Holocene and latest Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qymc	Young colluvial deposits; poorly sorted muddy sand and gravel containing clasts as large as boulders; loose to moderately compacted.	Holocene and latest Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qymc?	Young colluvial deposits; poorly sorted muddy sand and gravel containing clasts as large as boulders; loose to moderately compacted.	Holocene and latest Pleistocene

ptype	name	source_ptype	source_name	source_age
Qls	Landslide Deposits; may include debris flows and older landslides	Qiad	Intermediate alluvial fan debris flow deposits; alluvial deposits dominated by debris flows; poorly sorted bouldery deposits encased in sand and silt matrix.	late and middle Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qiad?	Intermediate alluvial fan debris flow deposits; alluvial deposits dominated by debris flows; poorly sorted bouldery deposits encased in sand and silt matrix.	late and middle Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qiad+Qyad	Intermediate alluvial fan debris flow deposits and young alluvial fan debris flow deposits; intermixed.	Holocene to middle Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qiayd	Younger intermediate alluvial fan debris flow deposits; debris flow deposits with moderately to strongly developed desert pavement with dark varnish on clasts.	late Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qiayd?	Younger intermediate alluvial fan debris flow deposits; debris flow deposits with moderately to strongly developed desert pavement with dark varnish on clasts.	late Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qiayd+Qyayd	Younger intermediate alluvial fan debris flow deposits and younger young alluvial fan debris flow deposits; intermixed.	Holocene to late Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qyad	Young alluvial fan debris flow deposits; muddy sand containing scattered pebbles, cobbles, and boulders; mainly deposited by debris flows; poorly sorted and stratified.	Holocene and latest Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qyad/Qyaod	Young alluvial fan debris flow deposits overlie older young alluvial fan debris flow deposits; intermixed.	Holocene and latest Pleistocene/early Holocene and latest Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qyad?	Young alluvial fan debris flow deposits; muddy sand containing scattered pebbles, cobbles, and boulders; mainly deposited by debris flows; poorly sorted and stratified.	Holocene and latest Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qyad+Qiad	Young alluvial fan debris flow deposits and intermediate alluvial fan debris flow deposits; intermixed.	Holocene to middle Pleistocene

ptype	name	source_ptype	source_name	source_age
Qls	Landslide Deposits; may include debris flows and older landslides	Qyad+Qyaod	Young alluvial fan debris flow deposits and older young alluvial fan debris flow deposits; intermixed.	Holocene to latest Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qyaod	Older young alluvial fan debris flow deposits.	early Holocene and latest Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qyaod/Qiad?	Older young alluvial fan debris flow deposits overlie intermediate alluvial fan debris flow deposits.	early Holocene and latest Pleistocene/late and middle Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qyaod+Qiad	Older young alluvial fan debris flow deposits and intermediate alluvial fan debris flow deposits; intermixed.	early Holocene to middle Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qyayd	Younger young alluvial fan debris flow deposits; rough deposit surfaces; coarse, boulder size deposits near surge front.	Holocene
Qw	Alluvial Wash Deposits	Qaw	Active wash deposits; loose, fine sand to boulder gravel deposited by ephemeral streams actively receiving sediments; generally wider, longer, more gentle and flow more frequently than alluvial fan channels.	latest Holocene
Qw	Alluvial Wash Deposits	Qaw+Qyw	Active wash deposits and young wash deposits; intermixed.	latest Holocene to latest Pleistocene
Qw	Alluvial Wash Deposits	Qaw+Qywy	Active wash deposits and younger young wash deposits; intermixed.	latest Holocene to Holocene
Qw	Alluvial Wash Deposits	QawMR	Active wash deposits of Mojave River.	latest Holocene
Qw	Alluvial Wash Deposits	QawMR+QywyMR	Active wash deposits of Mojave River and younger young wash deposits of the Mojave River; intermixed.	latest Holocene to Holocene
Qw	Alluvial Wash Deposits	Qyw+Qaw	Young wash deposits and active wash deposits; intermixed.	latest Holocene to latest Pleistocene
Qw	Alluvial Wash Deposits	Qywey+Qawe	Younger mixed wash and eolian sand deposits and active mixed wash and eolian sand deposits; intermixed.	latest Holocene to Holocene
Qw	Alluvial Wash Deposits	QywMR+QawMR	Younger wash deposits of the Mojave River and active wash deposits of the Mojave River; intermixed.	latest Holocene to Holocene
Qw	Alluvial Wash Deposits	Qywy+Qaw	Younger young wash deposits and active wash deposits; intermixed.	latest Holocene to Holocene

ptype	name	source_ptype	source_name	source_age
Qf	Alluvial Fan Deposits	ml+Qaae	Modified land or artificial fill and active mixed alluvial and eolian sand deposits; intermixed.	latest Holocene
Qf	Alluvial Fan Deposits	pc+Qaa	Partly consolidated sediments and active alluvial fan deposits; intermixed.	latest Holocene to Tertiary and older
Qf	Alluvial Fan Deposits	Qaa	Active alluvial fan deposits; poorly to moderately sorted fine sand to boulders deposited by ephemeral streams that have actively received sediments within the last few decades.	latest Holocene
Qf	Alluvial Fan Deposits	Qaa/fv	Active alluvial fan deposits overlie felsic volcanic rocks (rhyolite, rhyodacite, dacite, felsite).	latest Holocene/Tertiary and older
Qf	Alluvial Fan Deposits	Qaa/pc	Active alluvial fan deposits overlie partly consolidated sediments.	latest Holocene/Tertiary and older
Qf	Alluvial Fan Deposits	Qaa/Qia	Active alluvial fan deposits overlie intermediate alluvial fan deposits.	latest Holocene/late and middle Pleistocene
Qf	Alluvial Fan Deposits	Qaa/Qiaeo	Active alluvial fan deposits overlie older intermediate mixed alluvial and eolian sand deposits.	latest Holocene/late and middle Pleistocene
Qf	Alluvial Fan Deposits	Qaa+fv?	Active alluvial fan deposits and felsic volcanic rocks (rhyolite, rhyodacite, dacite, felsite); intermixed.	latest Holocene to Tertiary and older
Qf	Alluvial Fan Deposits	Qaa+Qia	Active alluvial fan deposits and intermediate alluvial fan deposits; intermixed.	latest Holocene to middle 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+Qyae	Active alluvial fan deposits and young mixed alluvial and eolian sand deposits; intermixed.	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qaa+Qyaey	Active alluvial fan deposits and younger young mixed alluvial and eolian sand deposits; intermixed.	latest Holocene to Holocene
Qf	Alluvial Fan Deposits	Qaa+Qyay	Active alluvial fan deposits and younger young alluvial fan deposits; intermixed.	latest Holocene to Holocene
Qf	Alluvial Fan Deposits	Qaae	Active mixed alluvial and eolian sand deposits; active alluvial fan deposits interstratified with lesser amounts of eolian sand.	latest Holocene

ptype	name	source_ptype	source_name	source_age
Qf	Alluvial Fan Deposits	Qaae/mv	Active mixed alluvial and eolian sand deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	latest Holocene/Tertiary and older
Qf	Alluvial Fan Deposits	Qaae/Qiv	Active mixed alluvial and eolian sand deposits overlie intermediate axial valley deposits.	latest Holocene/late and middle Pleistocene
Qf	Alluvial Fan Deposits	Qaae/Qoa	Active mixed alluvial and eolian sand deposits overlie old alluvial fan deposits.	latest Holocene/middle and early Pleistocene
Qf	Alluvial Fan Deposits	Qaae+Qyae	Active mixed alluvial and eolian sand deposits and young mixed alluvial and eolian sand deposits; intermixed.	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qaae+Qyaey	Active mixed alluvial and eolian sand deposits and younger young mixed alluvial and eolian sand deposits; intermixed.	latest Holocene to Holocene
Qf	Alluvial Fan Deposits	Qaag	Active alluvial fan grus deposits; moderately to well-sorted coarse sand to fine gravel derived from granitic sources that weather to grus.	latest Holocene
Qf	Alluvial Fan Deposits	Qia+Qaa	Intermediate alluvial fan deposits and active alluvial fan deposits; intermixed.	latest Holocene to middle Pleistocene
Qf	Alluvial Fan Deposits	Qiay+Qaa	Younger intermediate alluvial fan deposits and active alluvial fan deposits; intermixed.	latest Holocene to late 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+Qaae	Young alluvial fan deposits and active mixed alluvial and eolian sand deposits; intermixed.	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qyae+Qaa	Young mixed alluvial and eolian sand deposits and active alluvial fan deposits; intermixed.	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qyae+Qaae	Young mixed alluvial and eolian sand deposits and active mixed alluvial and eolian sand deposits; intermixed.	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qyaeg+Qaag	Young mixed alluvial fan grus and eolian sand deposits and active alluvial fan grus deposits; intermixed.	latest Holocene to Holocene
Qf	Alluvial Fan Deposits	Qyaey+Qaa	Younger young mixed alluvial and eolian sand deposits and active alluvial fan deposits; intermixed.	latest Holocene to Holocene

ptype	name	source_ptype	source_name	source_age
Qf	Alluvial Fan Deposits	Qyaey+Qaae	Younger young mixed alluvial and eolian sand deposits and active mixed alluvial and eolian sand deposits; intermixed.	latest Holocene to Holocene
Qf	Alluvial Fan Deposits	Qyag+Qaag	Young alluvial fan grus deposits and active alluvial fan grus deposits; intermixed.	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qyao+Qaa	Older young alluvial fan deposits and active alluvial fan deposits; intermixed.	latest Holocene to latest Pleistocene
Qf	Alluvial Fan Deposits	Qyay+Qaa	Younger young alluvial fan deposits and active alluvial fan deposits; intermixed.	latest Holocene to Holocene
Qf	Alluvial Fan Deposits	Qyeay+Qaa	Younger young mixed eolian sand and alluvial deposits and active alluvial fan deposits; intermixed.	latest Holocene to Holocene
Qf	Alluvial Fan Deposits	Qyeay+Qaae	Younger young mixed eolian sand and alluvial deposits and active mixed alluvial and eolian sand deposits; intermixed.	latest Holocene to Holocene
Qf	Alluvial Fan Deposits	Qywey+Qaae	Younger mixed wash and eolian sand deposits and active mixed alluvial and eolian sand deposits; intermixed	latest Holocene to Holocene
Qa	Alluvial Valley Deposits	Qav+Qyv	Active axial valley deposits and young axial valley deposits; intermixed.	latest Holocene to latest Pleistocene
Qa	Alluvial Valley Deposits	Qyv+Qav	Young axial valley deposits and active axial valley deposits; intermixed.	latest Holocene to latest Pleistocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qap	Active playa deposits; weekly bedded, poorly sorted silt, clay and sand; salt in places; prone to flooding.	latest Holocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qap/Qvp3	Active playa deposits overlie Pisgah crater volcanic flows and cinder cones of olivine basalt.	latest Holocene/latest Pleistocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qap+Qagw	Active playa deposits and active groundwater discharge wetland deposits; intermixed.	latest Holocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qap+Qapf	Active playa deposits and active playa fringe deposits; intermixed.	latest Holocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qap+Qyp	Active playa deposits and young playa deposits; intermixed.	latest Holocene to latest Pleistocene

ptype	name	source_ptype	source_name	source_age
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qapf	Active playa fringe deposits; poorly to moderately sorted sand and silt, with minor cobbles, gravel and clay; may have groundwater discharge or salt deposits.	latest Holocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qapf+Qae	Active playa fringe deposits and active eolian sand deposits; intermixed.	latest Holocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qapf+Qygs	Active playa fringe deposits and young groundwater discharge spring mound deposits; intermixed.	latest Holocene to latest Pleistocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qaps	Playa sand; sandy facies of playa generally near margins where alluvial sediments interfinger with playa sediments.	latest Holocene
Qe	Eolian and Dune Deposits	Qae	Active eolian sand deposits; fine to medium sand; loose and subject to migration; no soil development.	latest Holocene
Qe	Eolian and Dune Deposits	Qae/fv	Active eolian sand deposits overlie felsic volcanic rocks (rhyolite, rhyodacite, dacite, felsite).	latest Holocene/Tertiary and older
Qe	Eolian and Dune Deposits	Qae/mv	Active eolian sand deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	latest Holocene/Tertiary and older
Qe	Eolian and Dune Deposits	Qae/pc	Active eolian sand deposits overlie partly consolidated sediments.	latest Holocene/Tertiary and older
Qe	Eolian and Dune Deposits	Qae/Qia	Active eolian sand deposits overlie intermediate alluvial fan deposits.	latest Holocene/late and middle Pleistocene
Qe	Eolian and Dune Deposits	Qae/Qiaeo	Active eolian sand deposits overlie older intermediate mixed alluvial and eolian sand deposits.	latest Holocene/late and middle Pleistocene
Qe	Eolian and Dune Deposits	Qae/Qiaey	Active eolian sand deposits overlie younger intermediate mixed alluvial and eolian deposits.	latest Holocene/late Pleistocene
Qe	Eolian and Dune Deposits	Qae/Qiao	Active eolian sand deposits overlie older intermediate alluvial fan deposits.	latest Holocene/late to middle Pleistocene
Qe	Eolian and Dune Deposits	Qae/Qiay	Active eolian sand deposits overlie younger intermediate alluvial fan deposits.	latest Holocene/late Pleistocene
Qe	Eolian and Dune Deposits	Qae/Qilc	Active eolian sand deposits overlie coarse lacustrine-alluvial sediments.	latest Holocene/late and middle Pleistocene

ptype	name	source_ptype	source_name	source_age
Qe	Eolian and Dune Deposits	Qae/Qya	Active eolian sand deposits overlie young alluvial fan deposits.	latest Holocene/Holocene and latest Pleistocene
Qe	Eolian and Dune Deposits	Qae/Qyao	Active eolian sand deposits overlie older young alluvial fan deposits.	latest Holocene/early Holocene and latest Pleistocene
Qe	Eolian and Dune Deposits	Qae/Qyea	Active eolian sand deposits overlie young mixed eolian and alluvial deposits.	latest Holocene/Holocene and latest Pleistocene
Qe	Eolian and Dune Deposits	Qae/QywoMR	Active eolian sand deposits overlie older young wash deposits of the Mojave River.	latest Holocene/Early Holocene and latest Pleistocene
Qe	Eolian and Dune Deposits	Qae/QywyMR	Active eolian sand deposits overlie younger young wash deposits of the Mojave River.	latest Holocene/Holocene
Qe	Eolian and Dune Deposits	Qae+Qiaeo	Active eolian sand deposits and older intermediate mixed alluvial and eolian sand deposits; intermixed.	latest Holocene to middle Pleistocene
Qe	Eolian and Dune Deposits	Qae+Qyeay	Active eolian sand deposits and younger young mixed eolian sand and alluvial deposits; intermixed.	latest Holocene to Holocene
Qe	Eolian and Dune Deposits	Qaea	Active mixed eolian and alluvial deposits; active eolian sand deposits interstratified with lenses of alluvial fan deposits.	latest Holocene
Qe	Eolian and Dune Deposits	Qaea+Qyae	Active mixed eolian and alluvial deposits and young mixed alluvial and eolian sand deposits; intermixed.	latest Holocene to latest Pleistocene
Qe	Eolian and Dune Deposits	Qaed	Active eolian sand dune deposits; fine to medium sand with pronounced dune morphology.	latest Holocene
Qe	Eolian and Dune Deposits	Qaed+Qyed	Active eolian sand dune deposits and young eolian sand dune deposits; intermixed.	latest Holocene to latest Pleistocene
Qe	Eolian and Dune Deposits	Qaer	Active eolian sand ramp deposits; ramp of inclined sand sheets or wedge shaped sand deposits on hillsides; represent climbing and falling dunes.	latest Holocene
Qe	Eolian and Dune Deposits	Qaer/fv	Active eolian sand ramp deposits overlie felsic volcanic rocks (rhyolite, rhyodacite, dacite, felsite).	latest Holocene/Tertiary and older

ptype	name	source_ptype	source_name	source_age
Qe	Eolian and Dune Deposits	Qaer/mv	Active eolian sand ramp deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	latest Holocene/Tertiary and older
Qe	Eolian and Dune Deposits	Qaer/pc	Active eolian sand ramp deposits overlie partly consolidated sediments.	latest Holocene/Tertiary and older
Qe	Eolian and Dune Deposits	Qaes/Qvp1	Active eolian sand sheet deposits overlie Pisgah crater volcanic flows and cinder cones of olivine basalt.	latest Holocene/latest Pleistocene
Qe	Eolian and Dune Deposits	Qaes/Qvp2	Active eolian sand sheet deposits overlie Pisgah crater volcanic flows and cinder cones of olivine basalt.	latest Holocene/latest Pleistocene
Qe	Eolian and Dune Deposits	Qaes/Qvp3	Active eolian sand sheet deposits overlie Pisgah crater volcanic flows and cinder cones of olivine basalt.	latest Holocene/latest Pleistocene
Qe	Eolian and Dune Deposits	Qia+Qae	Intermediate alluvial fan deposits and active eolian sand deposits; intermixed.	latest Holocene to middle Pleistocene
Qe	Eolian and Dune Deposits	Qye+Qae	Young eolian sand deposits and active eolian sand deposits; intermixed.	latest Holocene to latest Pleistocene
Qe	Eolian and Dune Deposits	Qyea+Qaea	Young mixed eolian and alluvial deposits and active mixed eolian and alluvial deposits; intermixed.	latest Holocene to latest Pleistocene
Qe	Eolian and Dune Deposits	Qyeay+Qaea	Younger young mixed eolian sand and alluvial deposits and active mixed eolian sand and alluvial deposits; intermixed.	latest Holocene to Holocene
Qe	Eolian and Dune Deposits	Qyed+Qaed	Young eolian sand dune deposits and active eolian sand dune deposits; intermixed.	latest Holocene to Holocene
Qe	Eolian and Dune Deposits	QywyMR+Qae	Younger young locally designated grussy Mojave River deposits and active eolian sand deposits; intermixed.	latest Holocene to Holocene
Qyw	Young Alluvial Wash Deposits	Qiwey	Younger intermediate mixed wash and eolian sand deposits; poorly to moderately sorted silt, gravel, cobbles, and bounders interstratified with lenses of fine to medium, thinly bedded eolian sand deposits.	late Pleistocene
Qyw	Young Alluvial Wash Deposits	Qiwy+Qyw	Intermediate young wash deposits and young wash deposits; intermixed.	Holocene to late Pleistocene

ptype	name	source_ptype	source_name	source_age
Qyw	Young Alluvial Wash Deposits	Qiwy+Qywo	Intermediate young wash deposits and older young wash deposits; intermixed.	early Holocene to late Pleistocene
Qyw	Young Alluvial Wash Deposits	Qyw	Young wash deposits; mixed clastic sediment ranging from fine sand to boulders; abandoned surfaces; poorly cemented and consolidated.	Holocene and latest Pleistocene
Qyw	Young Alluvial Wash Deposits	Qywey	Younger young mixed wash and eolian sand deposits; clastic sediment ranging from fine sand to boulders interstratified with lesser amounts of thinly bedded eolian sand.	Holocene
Qyw	Young Alluvial Wash Deposits	Qywo	Older young wash deposits; characterized by small patches of desert pavement with slightly dark varnish.	Early Holocene and latest Pleistocene
Qyw	Young Alluvial Wash Deposits	Qywo/Qiwy	Older young wash deposits overlie younger intermediate wash deposits.	Early Holocene and latest Pleistocene/late Pleistocene
Qyw	Young Alluvial Wash Deposits	Qywo+Qywy	Older young wash deposits and younger young wash deposits; intermixed.	Holocene to latest Pleistocene
Qyw	Young Alluvial Wash Deposits	QywoMR	Older young wash deposits of the Mojave River; forms wide plain east of Daggett.	Early Holocene and latest Pleistocene
Qyw	Young Alluvial Wash Deposits	QywoMR?	Older young wash deposits of the Mojave River; forms wide plain east of Daggett.	Early Holocene and latest Pleistocene
Qyw	Young Alluvial Wash Deposits	Qywy	Younger young wash deposits; wash deposits characterized by abandoned surfaces; no desert pavement; varnish on some clasts; poorly developed soil.	Holocene
Qyw	Young Alluvial Wash Deposits	Qywy+Qyay	Younger young wash deposits and younger young alluvial fan deposits; intermixed.	Holocene
Qyw	Young Alluvial Wash Deposits	Qywy+Qywyg	Younger young wash deposits and younger young wash deposits that weather to grus; intermixed.	Holocene
Qyw	Young Alluvial Wash Deposits	QywyMR	Younger young locally designated grussy Mojave River deposits; typically form terraces along river channel.	Holocene
Qyf	Young Alluvial Fan Deposits	Qia+Qya	Intermediate alluvial fan deposits and young alluvial fan deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qia+Qya?	Intermediate alluvial fan deposits and young alluvial fan deposits; intermixed.	Holocene to middle Pleistocene

ptype	name	source_ptype	source_name	source_age
Qyf	Young Alluvial Fan Deposits	Qia+Qyag	Intermediate alluvial fan deposits and young alluvial fan grus deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qia+Qyao	Intermediate alluvial fan deposits and older young alluvial fan deposits; intermixed.	early Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qia+Qyay	Intermediate alluvial fan deposits and younger young alluvial fan deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiae+Qyae	Intermediate mixed alluvial and eolian sand deposits and young mixed alluvial and eolian sand deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiae+Qyaeo	Intermediate mixed alluvial and eolian sand deposits and older young mixed alluvial and eolian sand deposits; intermixed.	early Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiaeg+Qyaog	Intermediate mixed alluvial grus and eolian deposits and older young alluvial fan grus deposits.	early Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiaeo+Qyae	Older intermediate mixed alluvial and eolian sand deposits and young mixed alluvial and eolian sand deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiaey	Younger intermediate mixed alluvial and eolian deposits; characterized by abandoned surfaces, weakly developed desert pavement and moderately dark varnish on clasts.	late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiaey/fv	Younger intermediate mixed alluvial and eolian deposits overlie felsic volcanic rocks (rhyolite, rhyodacite, dacite, felsite).	late Pleistocene/Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qiaey+Qyae	Younger intermediate mixed alluvial and eolian deposits and young mixed alluvial and eolian sand deposits; intermixed.	Holocene to late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiag+Qyag	Intermediate alluvial fan grus deposits and young alluvial fan grus deposits; intermixed.	Holocene to late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiag+Qyag?	Intermediate alluvial fan grus deposits and young alluvial fan grus deposits; intermixed.	Holocene to late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiag+Qyaog	Intermediate alluvial fan grus deposits and older young alluvial fan grus deposits; intermixed.	early Holocene to middle Pleistocene

ptype	name	source_ptype	source_name	source_age
Qyf	Young Alluvial Fan Deposits	Qiao+Qya	Older intermediate alluvial fan deposits and young alluvial fan deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiao+Qyao	Older intermediate alluvial fan deposits and older young alluvial fan deposits; intermixed.	early Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiay	Younger intermediate alluvial fan deposits; characterized by abandoned surfaces, moderately to strongly developed desert pavement with dark varnish on clasts.	late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiay/fpg	Younger intermediate alluvial fan deposits overlie felsic plutonic rocks that weather to grus.	late Pleistocene/Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qiay/fv	Younger intermediate alluvial fan deposits overlie felsic volcanic rock (rhyolite, rhyodacite, dacite, felsite).	late Pleistocene/Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qiay/mv	Younger intermediate alluvial fan deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	late Pleistocene/Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qiay/pc	Younger intermediate alluvial fan deposits overlie partly consolidated sediments.	late Pleistocene/Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qiay?	Younger intermediate alluvial fan deposits; characterized by abandoned surfaces, moderately to strongly developed desert pavement with dark varnish on clasts.	late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiay?+Qyay	Younger intermediate alluvial fan deposits and younger young alluvial fan deposits; intermixed.	Holocene to late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiay+Qiayg	Younger intermediate alluvial fan deposits and younger intermediate alluvial fan grus deposits; intermixed.	late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiay+Qya	Younger intermediate alluvial fan deposits and young alluvial fan deposits; intermixed.	Holocene to late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiay+Qyao	Younger intermediate alluvial fan deposits and older young alluvial fan deposits; intermixed.	early Holocene to late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qiay+Qyay	Younger intermediate alluvial fan deposits and younger young alluvial fan deposits; intermixed.	Holocene to late Pleistocene

ptype	name	source_ptype	source_name	source_age
Qyf	Young Alluvial Fan Deposits	Qiayg	Younger intermediate alluvial fan grus deposits; coarse sandy to gravelly derived from granitic sources that weather to grus.	late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya	Young alluvial fan deposits; poorly to moderately sorted fine sand to boulders deposited by ephemeral streams; poorly cemented; loose to slightly compacted.	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/Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qya/mp	Young alluvial fan deposits overlie intermediate to mafic plutonic rocks (gabbro, diorite, monzodiorite, syenite, alkalic rocks) .	Holocene and latest Pleistocene/Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qya/mv	Young alluvial fan deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	Holocene and latest Pleistocene/Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qya/pc	Young alluvial fan deposits overlie partly consolidated sediments.	Holocene and latest Pleistocene/Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qya/Qia	Young alluvial fan deposits overlie intermediate alluvial fan deposits.	Holocene and latest Pleistocene/late and middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya/Qia?	Young alluvial fan deposits overlie intermediate alluvial fan deposits.	Holocene and latest Pleistocene/late and middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya/Qoa	Young alluvial fan deposits overlie old alluvial fan deposits.	Holocene and latest Pleistocene/middle and early Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya/Qoa?	Young alluvial fan deposits overlie old alluvial fan deposits.	Holocene and latest Pleistocene/middle and early Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya/Qv	Young alluvial fan deposits overlie Quaternary age volcanic rocks.	Holocene and latest Pleistocene/ Quaternary
Qyf	Young Alluvial Fan Deposits	Qya/Qyp?	Young alluvial fan deposits overlie young playa deposits.	Holocene and latest Pleistocene

ptype	name	source_ptype	source_name	source_age
Qyf	Young Alluvial Fan Deposits	Qya+mr	Young alluvial fan deposits and metamorphic rock (gneiss, migmatite, structurally mixed rocks); intermixed.	Holocene to Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qya+Qia	Young alluvial fan deposits and intermediate alluvial fan deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya+Qia?	Young alluvial fan deposits and intermediate alluvial fan deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya+Qiao	Young alluvial fan deposits and older intermediate alluvial fan deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya+Qiay	Young alluvial fan deposits and younger intermediate alluvial fan deposits; intermixed.	Holocene to late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya+Qyae	Young alluvial fan deposits and young mixed alluvial and eolian sand deposits; intermixed.	Holocene to latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qya+Qyao	Young alluvial fan deposits and older young alluvial fan deposits; intermixed.	Holocene to latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae	Young mixed alluvial and eolian sand deposits; young alluvial fan deposits interstratified with lesser amounts of eolian sand; loose to moderately compacted gravelly sand with thin bedding.	Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae/mv	Young mixed alluvial and eolian sand deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	Holocene and latest Pleistocene/Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qyae/Qia	Young mixed alluvial and eolian sand deposits overlie intermediate alluvial fan deposits.	Holocene and latest Pleistocene/late and middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae/Qiae	Young mixed alluvial and eolian sand deposits overlie intermediate mixed alluvial and eolian sand deposits.	Holocene and latest Pleistocene/late to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae/Qiag	Young mixed alluvial and eolian sand deposits overlie intermediate alluvial fan grus deposits.	Holocene and latest Pleistocene/late and middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae/Qiao	Young mixed alluvial and eolian sand deposits overlie older intermediate alluvial fan deposits.	Holocene and latest Pleistocene/late to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae/Qilc	Young mixed alluvial and eolian sand deposits overlie coarse lacustrine-alluvial sediments.	Holocene and latest Pleistocene/late and middle Pleistocene

ptype	name	source_ptype	source_name	source_age
Qyf	Young Alluvial Fan Deposits	Qyae/Qoa	Young mixed alluvial and eolian sand deposits overlie old alluvial fan deposits.	Holocene and latest Pleistocene/middle and early Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae/Qyao	Young mixed alluvial and eolian sand deposits overlie older young alluvial fan deposits.	Holocene and latest Pleistocene/early Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae/Qyaod	Young mixed alluvial and eolian sand deposits overlie older young alluvial fan debris flow deposits.	Holocene and latest Pleistocene/early Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae/QywoMR	Young mixed alluvial and eolian sand deposits overlie older young wash deposits of the Mojave River.	Holocene and latest Pleistocene/Early Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae+Qia	Young mixed alluvial and eolian sand deposits and intermediate alluvial fan deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae+Qiae	Young mixed alluvial and eolian sand deposits and intermediate mixed alluvial and eolian sand deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae+Qiaey	Young mixed alluvial and eolian sand deposits and younger intermediate mixed alluvial and eolian sand deposits; intermixed.	Holocene to late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae+Qiea	Young mixed alluvial and eolian sand deposits and intermediate mixed eolian sand and alluvial deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae+Qig	Young mixed alluvial and eolian sand deposits and intermediate groundwater discharge deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae+Qoae	Young mixed alluvial and eolian sand deposits and old mixed alluvial and eolian sand deposits; intermixed.	Holocene to early Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae+Qya	Young mixed alluvial and eolian sand deposits and young alluvial fan deposits; intermixed.	Holocene to latest Pleistocene

ptype	name	source_ptype	source_name	source_age
Qyf	Young Alluvial Fan Deposits	Qyae+Qyaeo	Young mixed alluvial and eolian sand deposits and older young mixed alluvial and eolian sand deposits, intermixed.	Holocene to latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae+Qyao	Young mixed alluvial and eolian sand deposits and older young alluvial fan deposits; intermixed.	Holocene to latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyae+Qyea	Young mixed alluvial and eolian sand deposits and young mixed eolian sand and alluvial deposits; intermixed.	Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyaeg/Qiag	Young mixed alluvial grus and eolian sand deposits overlie intermediate alluvial fan grus deposits; intermixed.	Holocene/late and middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyaeo	Older young mixed alluvial and eolian sand deposits; moderately compacted sand and gravelly sand; patches of pavement with stone.	early Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyaey	Younger young mixed alluvial and eolian sand deposits; loose sand and gravelly sand; soil development absent or incipient.	Holocene
Qyf	Young Alluvial Fan Deposits	Qyaey/Qyao	Younger young mixed alluvial and eolian sand deposits overlie older young alluvial fan deposits.	Holocene/early Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyag	Young alluvial fan grus deposits; moderately to well sorted coarse sand to fine gravel derived from granitic sources that weather to grus.	Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyag/Qia	Young alluvial fan grus deposits overlie intermediate alluvial fan deposits.	Holocene and latest Pleistocene/late and middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyag/Qiag	Young alluvial fan grus deposits overlie intermediate alluvial fan grus deposits.	Holocene and latest Pleistocene/late and middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyag/Qiag?	Young alluvial fan grus deposits overlie intermediate alluvial fan grus deposits.	Holocene and latest Pleistocene/late and middle Pleistocene

ptype	name	source_ptype	source_name	source_age
Qyf	Young Alluvial Fan Deposits	Qyag/Qyaod	Young alluvial fan grus deposits overlie older young alluvial fan debris flow deposits.	Holocene and latest Pleistocene/early Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyag+Qia	Young alluvial fan grus deposits and intermediate alluvial fan deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyag+Qiag	Young alluvial fan grus deposits and intermediate alluvial fan grus deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyag+Qyaeg	Young alluvial fan grus deposits and young mixed alluvial grus and eolian sand deposits; intermixed.	Holocene to latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyag+Qyaog	Young alluvial fan grus deposits and older young alluvial fan grus deposits; intermixed.	Holocene to latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyag+Qyg	Young alluvial fan grus deposits and young groundwater discharge deposits; intermixed.	Holocene to latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyao	Older young alluvial fan deposits; abandoned surfaces characterized by small patches of weakly to moderately developed pavement.	early Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyao/fv	Older young alluvial fan deposits overlie felsic volcanic rocks (rhyolite, rhyodactite, dacite, felsite).	early Holocene and latest Pleistocene/Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qyao/mv	Older young alluvial fan deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	early Holocene and latest Pleistocene/Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qyao/Qia	Older young alluvial fan deposits overlie intermediate alluvial fan deposits.	early Holocene and latest Pleistocene/late and middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyao/Qil	Older young alluvial fan deposits overlie intermediate lacustrine deposits.	early Holocene and latest Pleistocene/late and middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyao/Qilf	Older young alluvial fan deposits overlie fine lacustrine sediments.	early Holocene and latest Pleistocene/late and middle Pleistocene

ptype	name	source_ptype	source_name	source_age
Qyf	Young Alluvial Fan Deposits	Qyao/Qoa	Older young alluvial fan deposits overlie old alluvial fan deposits.	early Holocene and latest Pleistocene/middle and early Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyao/QToa	Older young alluvial fan deposits overlie extremely old Quaternary-Tertiary alluvial fan deposits.	early Holocene and latest Pleistocene/early Pleistocene and Pliocene
Qyf	Young Alluvial Fan Deposits	Qyao?	Older young alluvial fan deposits; abandoned surfaces characterized by small patches of weakly to moderately developed pavement.	early Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyao?/QTop	Older young alluvial fan deposits overlie extremely old playa-lacustrine and alluvial deposits.	early Holocene and latest Pleistocene/early Pleistocene and Pliocene
Qyf	Young Alluvial Fan Deposits	Qyao+Qia	Older young alluvial fan deposits and intermediate alluvial fan deposits; intermixed.	early Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyao+Qiay	Older young alluvial fan deposits and younger intermediate alluvial fan deposits; intermixed.	early Holocene to late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyao+Qiv	Older young alluvial fan deposits and intermediate axial valley deposits; intermixed.	early Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyao+Qya	Older young alluvial fan deposits and young alluvial fan deposits; intermixed.	Holocene to latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyao+Qyae	Older young alluvial fan deposits and young mixed alluvial and eolian sand deposits; intermixed.	Holocene to latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyao+Qyag	Older young alluvial fan deposits and young alluvial fan grus deposits; intermixed.	Holocene to latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyao+Qyay	Older young alluvial fan deposits and younger young alluvial fan deposits; intermixed.	early Holocene to latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyaog	Older young alluvial fan grus deposits; characterized by weakly developed pavements that generally lack varnish.	early Holocene and latest Pleistocene

ptype	name	source_ptype	source_name	source_age
Qyf	Young Alluvial Fan Deposits	Qyaog+Qiag	Older young alluvial fan grus deposits and intermediate alluvial fan grus deposits; intermixed.	early Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyaog+Qyayg	Older young alluvial fan grus deposits and younger young alluvial fan grus deposits; intermixed.	Holocene to latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyay	Younger young alluvial fan deposits; poorly developed soil; no desert pavement.	Holocene
Qyf	Young Alluvial Fan Deposits	Qyay/mv	Younger young alluvial fan deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	Holocene/Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qyay/Qiag	Younger young alluvial fan deposits overlie intermediate alluvial fan grus deposits.	Holocene/late and middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyay/Qiay	Younger young alluvial fan deposits overlie younger intermediate alluvial fan deposits.	Holocene/late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyay/Qvss	Younger young alluvial fan deposits overlie Sunshine Cone flows.	Holocene/Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyay/Qyao	Younger young alluvial fan deposits overlie older young alluvial fan deposits.	Holocene/early Holocene and latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyay+mp	Younger young alluvial fan deposits and intermediate to mafic plutonic rocks (gabbro, diorite, monzodiorite, syenite, alkalic rocks); intermixed.	Holocene to Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qyay+mv	Younger young alluvial fan deposits and intermediate to mafic volcanic rocks (andesite, basalt); intermixed.	Holocene to Tertiary and older
Qyf	Young Alluvial Fan Deposits	Qyay+Qia	Younger young alluvial fan deposits and intermediate alluvial fan deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyay+Qiao	Younger young alluvial fan deposits and older intermediate alluvial fan deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyay+Qiay	Younger young alluvial fan deposits and younger intermediate alluvial fan deposits; intermixed.	Holocene to late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyay+Qiay?	Younger young alluvial fan deposits and younger intermediate alluvial fan deposits; intermixed.	Holocene to late Pleistocene

ptype	name	source_ptype	source_name	source_age
Qyf	Young Alluvial Fan Deposits	Qyay+Qyao	Younger young alluvial fan deposits and older young alluvial fan deposits; intermixed.	Holocene to latest Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyayg	Younger young alluvial fan grus deposits; sandy	Holocene
Qya	Young Alluvial Valley Deposits	Qiv+Qyv	Intermediate axial valley deposits and young axial valley deposits; intermixed.	Holocene to middle Pleistocene
Qyf	Young Alluvial Valley Deposits	Qyaeo/Qia	Older young mixed alluvial and eolian sand deposits overlie intermediate alluvial fan deposits.	early Holocene and latest Pleistocene/late and middle Pleistocene
Qyf	Young Alluvial Valley Deposits	Qyaeo/Qiayg	Older young mixed alluvial and eolian sand deposits overlie intermediate alluvial fan grus deposits.	early Holocene and latest Pleistocene/late Pleistocene
Qyf	Young Alluvial Valley Deposits	Qyaeo+Qiae	Older young mixed alluvial and eolian sand deposits and intermediate mixed alluvial and eolian sand deposits; intermixed.	early Holocene to middle Pleistocene
Qya	Young Alluvial Valley Deposits	Qyv	Young axial valley deposits; moderately to poorly sorted sand, silt, and clay; occasionally flooded.	Holocene and latest Pleistocene
Qya	Young Alluvial Valley Deposits	Qyvo	Older young axial valley deposits; poorly to moderately developed sandy soil.	early Holocene and latest Pleistocene
Qyl	Young Lacustrine, Playa and Estuarine (Paralic) Deposits	Qyp	Young playa deposits; fine sand and silt to sandy clay; typically capped by sand crust.	Holocene and latest Pleistocene
Qyl	Young Lacustrine, Playa and Estuarine (Paralic) Deposits	Qypf	Young playa fringe deposits; poorly to moderately sorted sand and silt with minor amounts of cobbles, gravel and clay; loose and unconsolidated.	Holocene and latest Pleistocene
Qyl	Young Lacustrine, Playa and Estuarine (Paralic) Deposits	Qypf+Qypof	Young playa fringe deposits and older young playa fringe deposits; intermixed.	Holocene to latest Pleistocene
Qyl	Young Lacustrine, Playa and Estuarine (Paralic) Deposits	Qypof?	Older young playa fringe deposits; clay, silt, sand, and tufa deposits; material of complexly mixed eolian, lacustrine, playa, alluvial and groundwater discharge origin.	Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qia+Qyea	Intermediate alluvial fan deposits and young mixed eolian sand and alluvial deposits; intermixed.	Holocene to middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qieay	Younger intermediate mixed eolian sand and alluvial deposits; abandoned surfaces typically incised by channels.	latest Pleistocene

ptype	name	source_ptype	source_name	source_age
Qye	Young Eolian and Dune Deposits	QiwMR+Qye	Intermediate wash deposits of the Mojave River and young eolian sand deposits; intermixed.	Holocene to middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qye	Young eolian sand deposits; moderately to well sorted, fine to medium sand; moderately cross-laminated; loose to slightly compacted.	Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qye/fp	Young eolian sand deposits overlie felsic plutonic rocks (granite, granodiorite).	Holocene and latest Pleistocene/Tertiary and older
Qye	Young Eolian and Dune Deposits	Qye/fpg	Young eolian sand deposits overlie felsic plutonic rocks that weather to grus.	Holocene and latest Pleistocene/Tertiary and older
Qye	Young Eolian and Dune Deposits	Qye/fv	Young eolian sand deposits overlie felsic volcanic rocks (rhyolite, rhyodacite, dacite, felsite).	Holocene and latest Pleistocene/Tertiary and older
Qye	Young Eolian and Dune Deposits	Qye/mp	Young eolian sand deposits overlie intermediate to mafic plutonic rocks (gabbro, diorite, monzodiorite, syenite, alkalic rocks).	Holocene and latest Pleistocene/Tertiary and older
Qye	Young Eolian and Dune Deposits	Qye/mv	Young eolian sand deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	Holocene and latest Pleistocene/Tertiary and older
Qye	Young Eolian and Dune Deposits	Qye/mv?	Young eolian sand deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	Holocene and latest Pleistocene/Tertiary and older
Qye	Young Eolian and Dune Deposits	Qye/pc	Young eolian sand deposits overlie partly consolidated sediments.	Holocene and latest Pleistocene/Tertiary and older
Qye	Young Eolian and Dune Deposits	Qye/pc?	Young eolian sand deposits overlie partly consolidated sediments.	Holocene and latest Pleistocene/Tertiary and older
Qye	Young Eolian and Dune Deposits	Qye/Qia	Young eolian sand deposits overlie intermediate alluvial fan deposits.	Holocene and latest Pleistocene/late and middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qye/Qiae	Young eolian sand deposits overlie intermediate mixed alluvial and eolian sand deposits.	Holocene and latest Pleistocene/late to middle Pleistocene

ptype	name	source_ptype	source_name	source_age
Qye	Young Eolian and Dune Deposits	Qye/Qilc	Young eolian sand deposits overlie coarse lacustrine-alluvial sediments.	Holocene and latest Pleistocene/late and middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qye/Qoa	Young eolian sand deposits overlie old alluvial fan deposits.	Holocene and latest Pleistocene/middle and early Pleistocene
Qye	Young Eolian and Dune Deposits	Qye/Qoae	Young eolian sand deposits overlie old mixed alluvial and eolian sand deposits.	Holocene and latest Pleistocene/middle and early Pleistocene
Qye	Young Eolian and Dune Deposits	Qye/QTop	Young eolian sand deposits overlie extremely old playa-lacustrine and alluvial deposits.	Holocene and latest Pleistocene/early Pleistocene and Pliocene
Qye	Young Eolian and Dune Deposits	Qye/Qvp1	Young eolian sand deposits overlie Pisgah crater flows and cinder cones.	Holocene and latest Pleistocene/latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qye/Qvp2	Young eolian sand deposits overlie Pisgah crater flows and cinder cones.	Holocene and latest Pleistocene/latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qye/Qvp3	Young eolian sand deposits overlie Pisgah crater flows and cinder cones.	Holocene and latest Pleistocene/latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qye/QywoMR	Young eolian sand deposits overlie older young wash deposits of the Mojave River.	Holocene and latest Pleistocene/Early Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qye/QywyMR	Young eolian sand deposits overlie younger young wash deposits of the Mojave River.	Holocene and latest Pleistocene/ Holocene
Qye	Young Eolian and Dune Deposits	Qye/sl	Young eolian sand deposits overlie siliciclastic rocks (silicic sedimentary and metamorphic rocks, such as quartz-rich sandstone, shale, siltstone; quartzite).	Holocene and latest Pleistocene/Tertiary and older
Qye	Young Eolian and Dune Deposits	Qye+Qyed	Young eolian sand deposits and young eolian sand dune deposits; intermixed.	Holocene to latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea	Young mixed eolian and alluvial deposits; young deposits of eolian sand interstratified with lenses of alluvial fan deposits; loose, fine to medium sand with thin cross-bedding.	Holocene and latest Pleistocene

ptype	name	source_ptype	source_name	source_age
Qye	Young Eolian and Dune Deposits	Qyea/fp	Young mixed eolian and alluvial deposits overlie felsic plutonic rocks (granite, granodiorite).	Holocene and latest Pleistocene/Tertiary and older
Qye	Young Eolian and Dune Deposits	Qyea/mv	Young mixed eolian and alluvial deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	Holocene and latest Pleistocene/Tertiary and older
Qye	Young Eolian and Dune Deposits	Qyea/Qia	Young mixed eolian and alluvial deposits overlie intermediate alluvial fan deposits.	Holocene and latest Pleistocene/late and middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea/Qiae	Young mixed eolian and alluvial deposits overlie intermediate mixed alluvial and eolian sand deposits.	Holocene and latest Pleistocene/late to middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea/Qiag	Young mixed eolian and alluvial deposits overlie intermediate alluvial fan grus deposits.	Holocene and latest Pleistocene/late and middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea/Qiao	Young mixed eolian and alluvial deposits overlie older intermediate alluvial fan deposits.	Holocene and latest Pleistocene/late to middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea/Qiay	Young mixed eolian and alluvial deposits overlie younger intermediate alluvial fan deposits.	Holocene and latest Pleistocene/late Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea/Qoa	Young mixed eolian and alluvial deposits overlie old alluvial fan deposits.	Holocene and latest Pleistocene/middle and early Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea/QToa	Young mixed eolian and alluvial deposits overlie extremely old Quaternary-Tertiary alluvial fan deposits.	Holocene and latest Pleistocene/early Pleistocene and Pliocene
Qye	Young Eolian and Dune Deposits	Qyea/QTop	Young mixed eolian and alluvial deposits overlie extremely old playa-lacustrine and alluvial deposits.	Holocene and latest Pleistocene/early Pleistocene and Pliocene
Qye	Young Eolian and Dune Deposits	Qyea/Qya	Young mixed eolian and alluvial deposits overlie young alluvial fan deposits.	Holocene and latest Pleistocene/Holocene and latest Pleistocene

ptype	name	source_ptype	source_name	source_age
Qye	Young Eolian and Dune Deposits	Qyea/Qyaeo	Young mixed eolian and alluvial deposits overlie older young mixed alluvial and eolian sand deposits.	Holocene and latest Pleistocene/early Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea/Qyao	Young mixed eolian and alluvial deposits overlie older young alluvial fan deposits.	Holocene and latest Pleistocene/early Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea/Qyaog	Young mixed eolian and alluvial deposits overlie older young alluvial fan grus deposits.	Holocene and latest Pleistocene/early Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea/QywoMR	Young mixed eolian and alluvial deposits overlie older young wash deposits of the Mojave River.	Holocene and latest Pleistocene/Early Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea/QywyMR	Young mixed eolian and alluvial deposits overlie younger young wash deposits of the Mojave River.	Holocene and latest Pleistocene/Holocene
Qye	Young Eolian and Dune Deposits	Qyea+Qia	Young mixed eolian and alluvial deposits and intermediate alluvial fan deposits; intermixed.	Holocene to middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea+Qiae	Young mixed eolian and alluvial deposits and intermediate mixed alluvial and eolian sand deposits; intermixed.	Holocene to middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea+Qya	Young mixed eolian and alluvial deposits and young alluvial fan deposits; intermixed.	Holocene to latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea+Qyae	Young mixed eolian and alluvial deposits and young mixed alluvial and eolian sand deposits; intermixed.	Holocene to latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyea+Qyeao	Young mixed eolian and alluvial deposits and older young mixed eolian sand and alluvial deposits; intermixed.	Holocene to latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyeag	Young mixed eolian sand and alluvial grus deposits; fine to medium sand; also contains coarse sand and pebbles derived from granitic rocks weathered to grus.	Holocene

ptype	name	source_ptype	source_name	source_age
Qye	Young Eolian and Dune Deposits	Qyeao	Older young mixed eolian sand and alluvial deposits; east of Mojave River in Cady Mountains.	early Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyeao/mv	Older young mixed eolian sand and alluvial deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	early Holocene and latest Pleistocene/Tertiary and older
Qye	Young Eolian and Dune Deposits	Qyeao/Qia	Older young mixed eolian sand and alluvial deposits overlie intermediate alluvial fan deposits.	early Holocene and latest Pleistocene/late and middle middle Pleistocene
Qye	Young Eolian and Dune Deposits	Qyeao+Qyaeo	Older young mixed eolian sand and alluvial deposits and older young mixed alluvial and eolian sand deposits; intermixed.	early Holocene to latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyeay	Younger young mixed eolian sand and alluvial deposits; surfaces abandoned or receive materials infrequently; secondary alluvial deposits present; little or no soil development.	Holocene
Qye	Young Eolian and Dune Deposits	Qyed	Young eolian sand dune deposits; moderately to well sorted, fine to medium sand; strongly cross-laminated; surfaces typically inactive.	Holocene and latest Pleistocene
Qye	Young Eolian and Dune Deposits	Qyed/QywyMR	Young eolian sand dune deposits overlie younger young wash deposits of the Mojave River.	Holocene and latest Pleistocene/Holocene
Qye	Young Eolian and Dune Deposits	Qyewy	Younger young mixed eolian sand and wash deposits; fine to medium sand with faint to well defined thin bedding interstratified with lenses of coarse sand to cobbles.	Holocene
Qow	Old Alluvial Wash Deposits	Qiw	Intermediate wash deposits; poorly to moderately sorted fine sand to boulder gravel; form abandoned surfaces along active washes; moderately to strongly developed desert pavement.	late and middle Pleistocene
Qow	Old Alluvial Wash Deposits	QiwMR	Intermediate wash deposits of the Mojave River.	late and middle Pleistocene

ptype	name	source_ptype	source_name	source_age
Qow	Old Alluvial Wash Deposits	QiwMR?	Intermediate wash deposits of the Mojave River.	late and middle Pleistocene
Qof	Old Alluvial Fan Deposits	ml/Qiay	Modified land or artificial fill overlies younger intermediate alluvial fan deposits.	latest Holocene/late Pleistocene
Qof	Old Alluvial Fan Deposits	pc+Qia	Partly consolidated sediments and intermediate alluvial fan deposits; intermixed.	late Pleistocene to Tertiary and older
Qof	Old Alluvial Fan Deposits	Qia	Intermediate alluvial fan deposits; typically compact, but can be loose; moderately to well developed desert pavement.	late and middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qia/fp	Intermediate alluvial fan deposits overlie felsic plutonic rocks (granite, granodiorite).	late and middle Pleistocene/Tertiary and older
Qof	Old Alluvial Fan Deposits	Qia/fv	Intermediate alluvial fan deposits overlie felsic volcanic rocks (rhyolite, rhyodacite, dacite, felsite).	late and middle Pleistocene/Tertiary and older
Qof	Old Alluvial Fan Deposits	Qia/mp	Intermediate alluvial fan deposits overlie intermediate to mafic plutonic rocks (gabbro, diorite, monzodiorite, syenite, alkalic rocks).	late and middle Pleistocene/Tertiary and older
Qof	Old Alluvial Fan Deposits	Qia/mv	Intermediate alluvial fan deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	late and middle Pleistocene/Tertiary and older
Qof	Old Alluvial Fan Deposits	Qia/pc	Intermediate alluvial fan deposits overlie partly consolidated sediments.	late and middle Pleistocene/Tertiary and older
Qof	Old Alluvial Fan Deposits	Qia/pc?	Intermediate alluvial fan deposits overlie partly consolidated sediments.	late and middle Pleistocene/Tertiary and older
Qof	Old Alluvial Fan Deposits	Qia/Qilc	Intermediate alluvial fan deposits overlie coarse lacustrine-alluvial sediments.	late and middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qia/Qoa	Intermediate alluvial fan deposits overlie old alluvial fan deposits.	late and middle Pleistocene/middle and early Pleistocene
Qof	Old Alluvial Fan Deposits	Qia/Qoa?	Intermediate alluvial fan deposits overlie old alluvial fan deposits.	late and middle Pleistocene/middle and early Pleistocene
Qof	Old Alluvial Fan Deposits	Qia/Qpi	Intermediate alluvial fan deposits overlie incised pediments.	late and middle Pleistocene/Tertiary and older

ptype	name	source_ptype	source_name	source_age
Qof	Old Alluvial Fan Deposits	Qia/QToa	Intermediate alluvial fan deposits overlie extremely old Quaternary-Tertiary alluvial fan deposits.	late and middle Pleistocene/early Pleistocene and Pliocene
Qof	Old Alluvial Fan Deposits	Qia/QToa?	Intermediate alluvial fan deposits overlie extremely old Quaternary-Tertiary alluvial fan deposits.	late and middle Pleistocene/early Pleistocene and Pliocene
Qof	Old Alluvial Fan Deposits	Qia?	Intermediate alluvial fan deposits; typically compact, but can be loose; moderately to well developed desert pavement.	late and middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qia+fp	Intermediate alluvial fan deposits and felsic plutonic rocks (granite, granodiorite); intermixed.	late Pleistocene to Tertiary and older
Qof	Old Alluvial Fan Deposits	Qia+Qiae	Intermediate alluvial fan deposits and intermediate mixed alluvial and eolian sand deposits; intermixed.	late to middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qia+QToa	Intermediate alluvial fan deposits and extremely old Quaternary-Tertiary alluvial fan deposits; intermixed.	late Pleistocene to Pliocene
Qof	Old Alluvial Fan Deposits	Qia+QToa?	Intermediate alluvial fan deposits and extremely old Quaternary-Tertiary alluvial fan deposits; intermixed.	late Pleistocene to Pliocene
Qof	Old Alluvial Fan Deposits	Qiae	Intermediate mixed alluvial and eolian sand deposits; intermediate alluvial fan deposits interstratified with lesser amounts of eolian sand; typically compact, varnished.	late to middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qiae/mv	Intermediate mixed alluvial and eolian sand deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	late to middle Pleistocene/Tertiary and older
Qof	Old Alluvial Fan Deposits	Qiae/pc	Intermediate mixed alluvial and eolian sand deposits overlie partly consolidated sediments.	late to middle Pleistocene/Tertiary and older
Qof	Old Alluvial Fan Deposits	Qiae/pc?	Intermediate mixed alluvial and eolian sand deposits overlie partly consolidated sediments.	late to middle Pleistocene/Tertiary and older

ptype	name	source_ptype	source_name	source_age
Qof	Old Alluvial Fan Deposits	Qiae/QToa	Intermediate mixed alluvial and eolian sand deposits overlie extremely old Quaternary-Tertiary alluvial fan deposits.	late and middle Pleistocene/early Pleistocene and Pliocene
Qof	Old Alluvial Fan Deposits	Qiae+Qiv	Intermediate mixed alluvial and eolian sand deposits and intermediate axial valley deposits; intermixed.	late and middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qiaeg	Intermediate mixed alluvial grus and eolian deposits; intermediate alluvial fan deposits interstratified with lesser amounts of eolian sand; contains coarse sand and pebbles derived from granitic rocks that wether to grus.	late and middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qiaeg/QToa	Intermediate mixed alluvial grus and eolian deposits overlie extremely old Quaternary-Tertiary alluvial fan deposits.	late and middle Pleistocene/early Pleistocene and Pliocene
Qof	Old Alluvial Fan Deposits	Qiaeo	Older intermediate mixed alluvial and eolian sand deposits; characterized by abandoned surfaces and degraded pavement with dark varnish.	late and middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qiaeo+Qiao	Older intermediate mixed alluvial and eolian sand deposits and older intermediate alluvial fan deposits; intermixed.	late to middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qiag	Intermediate alluvial fan grus deposits; coarse sandy to gravelly deposits derived from granitic sources that weather to grus.	late and middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qiag/fpg	Intermediate alluvial fan grus deposits overlie felsic plutonic rocks that weather to grus (granite, granodiorite).	late and middle Pleistocene/Tertiary and older
Qof	Old Alluvial Fan Deposits	Qiag/Qoag	Intermediate alluvial fan grus deposits overlie old alluvial fan grus deposits.	late and middle Pleistocene/middle and early Pleistocene
Qof	Old Alluvial Fan Deposits	Qiag?	Intermediate alluvial fan grus deposits; coarse sandy to gravelly deposits derived from granitic sources that weather to grus.	late and middle Pleistocene

ptype	name	source_ptype	source_name	source_age
Qof	Old Alluvial Fan Deposits	Qiao	Older intermediate alluvial fan deposits; strongly developed interlocking pavement; locally degraded; dark varnish on clasts.	late to middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qiao/fp	Older intermediate alluvial fan deposits overlie felsic plutonic rocks (granite, granodiorite).	late and middle Pleistocene/Tertiary and older
Qof	Old Alluvial Fan Deposits	Qiao/mv	Older intermediate alluvial fan deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	late and middle Pleistocene/Tertiary and older
Qof	Old Alluvial Fan Deposits	Qiao/pc	Older intermediate alluvial fan deposits overlie partly consolidated sediments.	late and middle Pleistocene/Tertiary and older
Qof	Old Alluvial Fan Deposits	Qiao/QToa	Older intermediate alluvial fan deposits overlie extremely old Quaternary-Tertiary alluvial fan deposits.	late and middle Pleistocene/early Pleistocene and Pliocene
Qof	Old Alluvial Fan Deposits	Qiao?	Older intermediate alluvial fan deposits; strongly developed interlocking pavement; locally degraded; dark varnish on clasts.	late to middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qiao+mv	Older intermediate alluvial fan deposits and intermediate to mafic volcanic rocks (andesite, basalt); intermixed.	late Pleistocene to Teriary and older
Qof	Old Alluvial Fan Deposits	Qiao+Qiay	Older intermediate alluvial fan deposits and younger intermediate alluvial fan deposits; intermixed.	late to middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qiaog	Older intermediate alluvial fan grus deposits; consist of clasts from granitic sources that weather to grus.	late and middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qiay+Qiao	Younger intermediate alluvial fan deposits and older intermediate alluvial fan deposits; intermixed.	late Pleistocene to middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qiay+Qig	Younger intermediate alluvial fan deposits and intermediate groundwater discharge deposits; intermixed.	late Pleistocene to middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qoa+Qia	Old alluvial fan deposits and intermediate alluvial fan deposits; intermixed.	late Pleistocene to early Pleistocene
Qof	Old Alluvial Fan Deposits	Qoa+Qiao	Old alluvial fan deposits and older intermediate alluvial fan deposits; intermixed.	late Pleistocene to early Pleistocene

ptype	name	source_ptype	source_name	source_age
Qof	Old Alluvial Fan Deposits	Qoae+Qiaeo	Old mixed alluvial and eolian sand deposits and older intermediate mixed alluvial and eolian sand deposits; intermixed.	late to early Pleistocene
Qoa	Old Alluvial Valley Deposits	Qiv	Intermediate axial valley deposits; medium to fine grained sand to silt and clay with interbedded coarse sand to gravel.	late and middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qil	Intermediate lacustrine deposits; pluvial lake deposits; include clay, silt, sandy silt, fine to coarse sand, rounded beach gravel, and pebbly to cobbly fan and/or deltaic deposits.	late and middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qilf	Fine lacustrine sediment; clay to sandy silt.	late and middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qilf/Qilc	Fine lacustrine sediment overlies coarse lacustrine-alluvial sediment (fine sand to pebbly or cobbly coarse sand).	late and middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qilg	Lacustrine beach gravel; rounded gravel and gravelly sand.	late and middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qils	Lacustrine sand; well sorted.	late and middle Pleistocene
Qoe	Old Eolian and Dune Deposits	Qiea	Intermediate mixed eolian sand and alluvial deposits; moderately to well sorted sand with minor lenses of poorly to moderately sorted silt, gravel and cobbles; eolian processes dominate; patches of sandy desert pavement.	late and middle Pleistocene
Qoe	Old Eolian and Dune Deposits	Qieao	Older intermediate mixed eolian sand and alluvial deposits; abandoned surfaces typically incised by channels; generally proximal to mountain fronts.	late and middle Pleistocene
Qvof	Very Old Alluvial Fan Deposits	Qoa	Old alluvial fan deposits; poorly to moderately sorted fine sand to boulders; degraded remnants of abandoned surfaces commonly form deeply dissected ridges.	middle and early Pleistocene
Qvof	Very Old Alluvial Fan Deposits	Qoa/fv	Old alluvial fan deposits overlie felsic volcanic rocks (rhyolite, rhyodacite, dacite, felsite).	middle and early Pleistocene/Tertiary and older

ptype	name	source_ptype	source_name	source_age
Qvof	Very Old Alluvial Fan Deposits	Qoa/pc	Old alluvial fan deposits overlie partly consolidated sediments.	middle and early Pleistocene/Tertiary and older
Qvof	Very Old Alluvial Fan Deposits	Qoa?	Old alluvial fan deposits; poorly to moderately sorted fine sand to boulders; degraded remnants of abandoned surfaces commonly form deeply dissected ridges.	middle and early Pleistocene
Qvof	Very Old Alluvial Fan Deposits	Qoa?/mv	Old alluvial fan deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	middle and early Pleistocene/Tertiary and older
Qvof	Very Old Alluvial Fan Deposits	Qoae	Old mixed alluvial and eolian sand deposits; old alluvial fan deposits interstratified with lesser amounts of eolian sand.	middle and early Pleistocene
Qvof	Very Old Alluvial Fan Deposits	Qoae/mv	Old mixed alluvial and eolian sand deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	middle and early Pleistocene/Tertiary and older
Qvof	Very Old Alluvial Fan Deposits	Qoag	Old alluvial fan grus deposits; coarse sandy deposits derived from granitic sources that weather to grus.	middle and early Pleistocene
Qvof	Very Old Alluvial Fan Deposits	Qoag?	Old alluvial fan grus deposits; coarse sandy deposits derived from granitic sources that weather to grus.	middle and early Pleistocene
Qvof	Very Old Alluvial Fan Deposits	QToa	Extremely old Quaternary-Tertiary alluvial fan deposits; locally cemented and compact boulder bearing deposits forming deeply dissected, rugged terrain with little or no depositional remnants.	early Pleistocene and Pliocene
Qvof	Very Old Alluvial Fan Deposits	QToa/fv	Extremely old Quaternary-Tertiary alluvial fan deposits overlie felsic volcanic rocks (rhyolite, rhyodacite, dacite, felsite).	early Pleistocene and Pliocene/Tertiary and older
Qvof	Very Old Alluvial Fan Deposits	QToa/pc	Extremely old Quaternary-Tertiary alluvial fan deposits overlie partly consolidated sediments.	early Pleistocene and Pliocene/Tertiary and older
Qvof	Very Old Alluvial Fan Deposits	QToa?	Extremely old Quaternary-Tertiary alluvial fan deposits; locally cemented and compact boulder bearing deposits forming deeply dissected, rugged terrain with little or no depositional remnants.	early Pleistocene and Pliocene

ptype	name	source_ptype	source_name	source_age
Qvof	Very Old Alluvial Fan Deposits	QToa+fp	Extremely old Quaternary-Tertiary alluvial fan deposits and felsic plutonic rocks (granite, granodiorite); intermixed.	early Pleistocene to Tertiary and older
Qvof	Very Old Alluvial Fan Deposits	QToag	Extremely old alluvial fan grus deposits; coarse sandy deposits derived from granitic sources that weather to grus.	early Pleistocene to Tertiary
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	QTop	Extremely old playa-lacustrine and alluvial deposits; clayey silt to fine to medium sand; contains interbeds of volcanic ash; locally gypsiferous; forms badland topography.	early Pleistocene and Pliocene
Qv	Pleistocene age and younger formations of volcanic origin	ml/Qvp1	Modified land or artificial fill overlies Pisgah crater volcanic flows and cinder cones of olivine basalt.	latest Holocene/latest Pleistocene
Qv	Pleistocene age and younger formations of volcanic origin	ml/Qvp2	Modified land or artificial fill overlies Pisgah crater volcanic flows and cinder cones of olivine basalt.	latest Holocene/latest Pleistocene
Qv	Pleistocene age and younger formations of volcanic origin	ml/Qvp3	Modified land or artificial fill overlies Pisgah crater volcanic flows and cinder cones of olivine basalt.	latest Holocene/latest Pleistocene
Qv	Pleistocene age and younger formations of volcanic origin	Qhs/Qvss	Sparse hillslope deposits overlie Sunshine Cone flows.	Holocene and Pleistocene/latest Pleistocene
Qv	Pleistocene age and younger formations of volcanic origin	QTv	Lava flows; age based on degree of surface weathering.	early Pleistocene to late Pliocene
Qv	Pleistocene age and younger formations of volcanic origin	Qv	Volcanic rocks; lava flows and cinder cones of basaltic composition.	Quaternary
Qv	Pleistocene age and younger formations of volcanic origin	Qvp1	Pisgah crater flows and cinder cones of olivine basalt; first eruptive phase; alkali-olivine basalt with rare olivine phenocrysts.	latest Pleistocene
Qv	Pleistocene age and younger formations of volcanic origin	Qvp2	Pisgah crater flows and cinder cones of olivine basalt; second eruptive phase; porphrytic basalt with olivine and plagioclase phenocrysts; mostly aa flows.	latest Pleistocene
Qv	Pleistocene age and younger formations of volcanic origin	Qvp3	Pisgah crater flows and cinder cones of olivine basalt; final eruptive phase; porphrytic basalt with plagioclase phenocrysts larger than 10 mm and clustered olivine phenocrysts 5-6 mm; pahoehoe flows.	latest Pleistocene

ptype	name	source_ptype	source_name	source_age
Qv	Pleistocene age and younger formations of volcanic origin	Qvpc	Cinders; form rim and slopes of Pisgah crater.	latest Pleistocene
Qv	Pleistocene age and younger formations of volcanic origin	Qvsl	Sunshine crater lavic flows; porphrytic alkali-olivine basalt with phenocrysts of olivine and plagioclase; sparse titanaugite phenocrysts.	Pleistocene
Qv	Pleistocene age and younger formations of volcanic origin	Qvss	Sunshine crater Sunshine Cone flows; alkali-olivine basalt with olivine phenocrysts and occasional plagioclase phenocrysts.	Pleistocene
Tss	Coarse-grained Tertiary age formations of sedimentary origin	pc+mv	Partly consolidated sediments and intermediate to mafic volcanic rocks (andesite, basalt); intermixed.	Tertiary and older
Tss	Coarse-grained Tertiary age formations of sedimentary origin	Qha/pc	Abundant hillslope deposits overlie partly consolidated sediments.	Holocene and Pleistocene/Tertiary and older
Tss	Coarse-grained Tertiary age formations of sedimentary origin	Qha/pc?	Abundant hillslope deposits overlie partly consolidated sediments.	Holocene and Pleistocene/Tertiary and older
Tss	Coarse-grained Tertiary age formations of sedimentary origin	Qha/sl	Abundant hillslope deposits overlie siliciclastic rocks (silicic sedimentary and metamorphic rocks; quartz-rich sandstone, shale, siltstone, quartzite).	Holocene and Pleistocene/Tertiary and older
Tss	Coarse-grained Tertiary age formations of sedimentary origin	Qigs/pc	Intermediate groundwater discharge spring mound deposits overlie partly consolidated sediments.	late and middle Pleistocene/Tertiary and older
Tss	Coarse-grained Tertiary age formations of sedimentary origin	Qigw/pc	Intermediate groundwater discharge wetland deposits overlie partly consolidated sediments.	late and middle Pleistocene/Tertiary and older
Tss	Coarse-grained Tertiary age formations of sedimentary origin	Qpi-pc	Incised pediment within partly consolidated sediments.	Tertiary and older
Tv	Tertiary age formations of volcanic origin	Qha/fv	Abundant hillslope deposits overlie felsic volcanic rocks (rhyolite, rhyodacite, dacite, felsite).	Holocene and Pleistocene/Tertiary and older
Tv	Tertiary age formations of volcanic origin	Qha/mv	Abundant hillslope deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	Holocene and Pleistocene/Tertiary and older
Tv	Tertiary age formations of volcanic origin	Qha/mv?	Abundant hillslope deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	Holocene and Pleistocene/Tertiary and older

ptype	name	source_ptype	source_name	source_age
Tv	Tertiary age formations of volcanic origin	Qhs/mv	Sparse hillslope deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	Holocene and Pleistocene/Tertiary and older
Tv	Tertiary age formations of volcanic origin	Qig/mv	Intermediate groundwater discharge deposits overlie intermediate to mafic volcanic rocks (andesite, basalt).	late and middle Pleistocene/Tertiary and older
Tv	Tertiary age formations of volcanic origin	Qpd-fv	Deeply incised pediment within felsic volcanic rocks (rhyolite, rhyodacite, dacite, felsite).	Tertiary and older
Tv	Tertiary age formations of volcanic origin	Qpi-fv	Incised pediment within felsic volcanic rocks (rhyolite, rhyodacite, dacite, felsite).	Tertiary and older
Tv	Tertiary age formations of volcanic origin	Qpv-fv	Veneered pediments within felsic volcanic rocks (rhyolite, rhyodacite, dacite, felsite).	Tertiary and older
pKm	Cretaceous and Pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Qha/ca	Abundant hillslope deposits overlie carbonate rocks (marble, dolomite, limestone).	Holocene and Pleistocene/Tertiary and older
pKm	Cretaceous and Pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Qha/mr	Abundant hillslope deposits overlie metamorphic rocks (gneiss, migmatite, structurally mixed rocks).	Holocene and Pleistocene/Tertiary and older
pKm	Cretaceous and Pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Qha/mr?	Abundant hillslope deposits overlie metamorphic rocks (gneiss, migmatite, structurally mixed rocks).	Holocene and Pleistocene/Tertiary and older
pKm	Cretaceous and Pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Qpd-mr	Deeply incised pediment within metamorphic rocks (gneiss, migmatite, structurally mixed rocks).	Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qha/fp	Abundant hillslope deposits overlie felsic plutonic rocks (granite, granodiorite).	Holocene and Pleistocene/Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	'Qha/fp'	Abundant hillslope deposits overlie felsic plutonic rocks (granite, granodiorite).	Holocene and Pleistocene/Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qha/fp?	Abundant hillslope deposits overlie felsic plutonic rocks (granite, granodiorite).	Holocene and Pleistocene/Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qha/fpg	Abundant hillslope deposits overlie felsic plutonic rocks that weather to grus (granite, granodiorite).	Holocene and Pleistocene/Tertiary and older

ptype	name	source_ptype	source_name	source_age
gr	Granitic and other intrusive crystalline rocks of all ages	Qha/fpg?	Abundant hillslope deposits overlie felsic plutonic rocks that weather to grus (granite, granodiorite).	Holocene and Pleistocene/Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qha/mp	Abundant hillslope deposits overlie intermediate to mafic plutonic rocks (gabbro, diorite, monzodiorite, syenite, alkalic rocks).	Holocene and Pleistocene/Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qha/mp?	Abundant hillslope deposits overlie intermediate to mafic plutonic rocks (gabbro, diorite, monzodiorite, syenite, alkalic rocks).	Holocene and Pleistocene/Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qpd-fpg	Deeply incised pediment within felsic plutonic rocks that weather to grus.	Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qpd-fpg?	Deeply incised pediment within felsic plutonic rocks that weather to grus.	Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qpi-fp	Incised pediment within felsic plutonic rocks (granite, granodiorite).	Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qpi-fpg	Incised pediment within felsic plutonic rocks that weather to grus.	Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qpi-fpg?	Incised pediment within felsic plutonic rocks that weather to grus.	Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qpv-fp	Veneered pediments within felsic plutonic rocks (granite, granodiorite).	Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qpv-fp+mr	Veneered pediments within intermixed felsic plutonic and metamorphic rocks.	Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qpv-fpg	Veneered pediments within felsic plutonic rocks that weather to grus.	Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qpv-fpg?	Veneered pediments within felsic plutonic rocks that weather to grus.	Tertiary and older
gr	Granitic and other intrusive crystalline rocks of all ages	Qpv-mp	Veneered pediments within intermediate to mafic plutonic rocks (gabbro, diorite, monzodiorite, syenite, alkalic rocks).	Tertiary and older