

# Orange County Geologic Labels

ptype	name	source_ptype	source_name	source_age
af	Artificial Fill	af	artificial fill	late Holocene
af	Artificial Fill	Qaf	Artificial fill	late Holocene
af	Artificial Fill	Qaf?	Artificial fill, uncertain	late Holocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qc	Very young colluvial deposits	late Holocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qsw	Very young slope-wash deposits	late Holocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qsw?	Very young slope-wash deposits, uncertain	late Holocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qyc	Young colluvial deposits	Holocene and late Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qyc?	Young colluvial deposits, uncertain	Holocene and late Pleistocene
Qsu	Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits of all ages	Qypt	Young peat deposits	Holocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qls	Landslide deposits	Holocene and Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qls?	Landslide deposits	Holocene and Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qols	Old landslide deposits	late to middle Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qyls	Young landslide deposits	Holocene and late Pleistocene
Qls	Landslide Deposits; may include debris flows and older landslides	Qyls?	Young landslide deposits, uncertain	Holocene and late Pleistocene
Qb	Beach Deposits	Qb	Beach deposits	late Holocene
Qb	Beach Deposits	Qm	Very young marine deposits, active sandy beach deposits	late Holocene
Qb	Beach Deposits	Qmb	Marine beach deposits	late Holocene
Qw	Alluvial Wash Deposits	Qw	Active channel and wash deposits	late Holocene
Qf	Alluvial Fan Deposits	Qf	Very young alluvial-fan deposits	late Holocene

<b>ptype</b>	<b>name</b>	<b>source_ptype</b>	<b>source_name</b>	<b>source_age</b>
Qa	Alluvial Valley Deposits	Qa	Alluvial flood-plain deposits	late Holocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qes	Very young estuarine deposits	late Holocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Ql	Very young lacustrine deposits	late Holocene
Ql	Lacustrine, Playa and Estuarine (Paralic) Deposits	Qpe	Paralic estuarine deposits	late Holocene
Qe	Eolian and Dune Deposits	Qe	Very young eolian deposits	late Holocene
Qyw	Young Alluvial Wash Deposits	Qyw	Young wash deposits	Holocene and late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyf	Young alluvial fan deposits	Holocene and late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyf1	Young alluvial-fan deposits, Unit 1	early Holocene and late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyf3	Young alluvial-fan deposits, Unit 3	middle Holocene
Qyf	Young Alluvial Fan Deposits	Qyf5	Young alluvial-fan deposits, Unit 5	late Holocene
Qyf	Young Alluvial Fan Deposits	Qyfa	Young alluvial fan and valley deposits, sand	Holocene and late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyfc	Young alluvial fan and valley deposits, clay	Holocene and late Pleistocene
Qyf	Young Alluvial Fan Deposits	Qyfs	Young alluvial fan and valley deposits, silt	Holocene and late Pleistocene
Qya	Young Alluvial Valley Deposits	Qya	Young alluvial flood-plain deposits	Holocene and late Pleistocene
Qya	Young Alluvial Valley Deposits	Qyv	Young alluvial-valley deposits	Holocene and late Pleistocene
Qyl	Young Lacustrine, Playa and Estuarine (Paralic) Deposits	Qype	Young paralic estuarine deposits	Holocene and late Pleistocene
Qye	Young Eolian and Dune Deposits	Qye	Young eolian deposits	Holocene and late Pleistocene
Qow	Old Alluvial Wash Deposits	Qow	Old wash deposits	late to middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qof	Old alluvial-fan deposits	late to middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qof1	Old alluvial-fan deposits, Unit 1	middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qof3	Old alluvial-fan deposits, Unit 3	late to middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qofa	Old alluvial fan and valley deposits, sand	late to middle Pleistocene

ptype	name	source_ptype	source_name	source_age
Qof	Old Alluvial Fan Deposits	Qofc	Old alluvial fan and valley deposits, clay	late to middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qofs	Old alluvial fan and valley deposits, silt	late to middle Pleistocene
Qof	Old Alluvial Fan Deposits	Qopf	Old paralic deposits overlain by alluvial-fan deposits	late to middle Pleistocene
Qoa	Old Alluvial Valley Deposits	Qoa	Old alluvial flood-plain deposits, undivided	late Pleistocene
Qoa	Old Alluvial Valley Deposits	Qoa1-2	Old alluvial flood-plain deposits, Units 1-2	late to middle Pleistocene
Qoa	Old Alluvial Valley Deposits	Qoa2-6	Old alluvial flood-plain deposits, Units 2-6	late to middle Pleistocene
Qoa	Old Alluvial Valley Deposits	Qoa6	Old alluvial flood-plain deposits, Unit 6	late to middle Pleistocene
Qoa	Old Alluvial Valley Deposits	Qoa7	Old alluvial flood-plain deposits, Unit 7	late Pleistocene
Qoa	Old Alluvial Valley Deposits	Qov	Old alluvial-valley deposits	late to middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qop	Old paralic deposits, undivided	late to middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qop1	Old paralic deposits, Unit 1	late to middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qop1-2	Old paralic deposits, Units 1-2	late to middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qop2	Old paralic deposits, Unit 2	late to middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qop2-6	Old paralic deposits, Units 2-6	late to middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qop3	Old paralic deposits, Unit 3	late to middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qop3-6	Old paralic deposits, Units 3-6, undivided	late to middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qop4	Old paralic deposits, Unit 4	late to middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qop4-6	Old paralic deposits, Units 4-6	late to middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qop6	Old paralic deposits, Unit 6	late to middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qop7	Old paralic deposits, Unit 7	late to 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	Qop7?	Old paralic deposits, Unit 7, uncertain	late to middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qopa	Old paralic deposits, sand	late to middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qopc	Old paralic deposits, clay	late to middle Pleistocene
Qol	Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qops	Old paralic deposits, silt	late to middle Pleistocene
Qvof	Very Old Alluvial Fan Deposits	Qvof	Very old alluvial-fan deposits	middle to early Pleistocene
Qvof	Very Old Alluvial Fan Deposits	Qvof1	Very old alluvial-fan deposits, Unit 1	early Pleistocene
Qvoa	Very Old Alluvial Valley Deposits	Qvoa	Very old alluvial flood-plain deposits, undivided	middle to early Pleistocene
Qvoa	Very Old Alluvial Valley Deposits	Qvoa1	Very old axial-channel deposits, Unit 1	early Pleistocene
Qvoa	Very Old Alluvial Valley Deposits	Qvoa1?	Very old axial-channel deposits, Unit 1, uncertain	early Pleistocene
Qvoa	Very Old Alluvial Valley Deposits	Qvoa11	Very old alluvial flood-plain deposits, Unit 11	middle to early Pleistocene
Qvoa	Very Old Alluvial Valley Deposits	Qvoa12	Very old alluvial flood-plain deposits, Unit 12	middle to early Pleistocene
Qvoa	Very Old Alluvial Valley Deposits	Qvoa13	Very old alluvial flood-plain deposits, Unit 13	middle to early Pleistocene
Qvoa	Very Old Alluvial Valley Deposits	Qvoa2	Very old axial-channel deposits, Unit 2	early Pleistocene
Qvoa	Very Old Alluvial Valley Deposits	Qvoa3	Very old axial-channel deposits, Unit 3	middle to early Pleistocene
Qvoa	Very Old Alluvial Valley Deposits	Qvoa4	Very old axial-channel deposits, Unit 4	middle to early Pleistocene
Qvoa	Very Old Alluvial Valley Deposits	Qvoa5	Very old axial-channel deposits, Unit 5	middle to early Pleistocene
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop	Very old paralic deposits	middle to early Pleistocene
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop?	Very old paralic deposits, uncertain	middle to early Pleistocene
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop1	Very old paralic deposits, Unit 1	middle to early Pleistocene
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop10-13	Very old paralic deposits, Units 10-13	middle to early Pleistocene
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop11	Very old paralic deposits, Unit 11	middle to early Pleistocene

<b>ptype</b>	<b>name</b>	<b>source_ptype</b>	<b>source_name</b>	<b>source_age</b>
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop12	Very old paralic deposits, Unit 12	middle to early Pleistocene
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop2	Very old paralic deposits, Unit 2	middle to early Pleistocene
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop3	Very old paralic deposits, Unit 3	middle to early Pleistocene
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop4	Very old paralic deposits, Unit 4	middle to early Pleistocene
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop5	Very old paralic deposits, Unit 5	middle to early Pleistocene
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop7	Very old paralic deposits, Unit 7	middle to early Pleistocene
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop7-8	Very old paralic deposits, Units 7-8	middle to early Pleistocene
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop8	Very old paralic deposits, Unit 8	middle to early Pleistocene
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop9	Very old paralic deposits, Unit 9	middle to early Pleistocene
Qvol	Very Old Lacustrine, Playa and Estuarine (Paralic) Deposits	Qvop9-10	Very old paralic deposits, Units 9-10	middle to early Pleistocene
Qss	Coarse-grained formations of Pleistocene age and younger	Qpf?	Pauba Formation, uncertain	Pleistocene
Qss	Coarse-grained formations of Pleistocene age and younger	Qsp	San Pedro Formation, marine sandstone	Pleistocene
Qss	Coarse-grained formations of Pleistocene age and younger	Qsp2	San Pedro Formation, sandstone and conglomerate	Pleistocene
Qss	Coarse-grained formations of Pleistocene age and younger	Qsp4	San Pedro Formation, sandstone and conglomerate	Pleistocene
Qss	Coarse-grained formations of Pleistocene age and younger	QTc	Conglomeratic sedimentary rocks of Riverside West 7.5' quadrangle	early Pleistocene and late Miocene
Qss	Coarse-grained formations of Pleistocene age and younger	QTn	Sedimentary rocks of Norco area	early Pleistocene and late Miocene
Qss	Coarse-grained formations of Pleistocene age and younger	QTs	Unnamed sedimentary rocks in Riverside and Corona areas	early Pleistocene and late Miocene
Qss	Coarse-grained formations of Pleistocene age and younger	QTt	Conglomerate of Temescal area	early Pleistocene and late Miocene
Qsh	Fine-grained formations of Pleistocene age and younger	Qlh	La Habra Formation, mudstone, sandstone, and conglomerate	late Pleistocene

ptype	name	source_ptype	source_name	source_age
Qsh	Fine-grained formations of Pleistocene age and younger	Qch	Coyote Hills Formation, 60% mudstone, 40% sandstone	Pleistocene
Qsh	Fine-grained formations of Pleistocene age and younger	Qsp1	San Pedro Formation, siltstone and clay	Pleistocene
Qsh	Fine-grained formations of Pleistocene age and younger	Qsp3	San Pedro Formation, siltstone and clay	Pleistocene
Tss	Coarse-grained Tertiary age formations	Tc	Capistrano Formation, marine sandstone and siltstone	early Pliocene and Miocene
Tss	Coarse-grained Tertiary age formations	Tcga	Conglomerate of Arlington Mountain	Paleogene
Tss	Coarse-grained Tertiary age formations	Tcgr	Rhyolite-clast conglomerate of Lake Mathews area	Miocene
Tss	Coarse-grained Tertiary age formations	Tch	Sandstone and conglomerate in southeastern Chino Hills	early Pliocene and Miocene
Tss	Coarse-grained Tertiary age formations	Tco	Capistrano Formation, Oso Member sandstone	early Pliocene and late Miocene
Tss	Coarse-grained Tertiary age formations	Tct	Capistrano Formation, turbidite facies	early Pliocene and late Miocene
Tss	Coarse-grained Tertiary age formations	Tflc	Fernando Formation, conglomerate	Pliocene
Tss	Coarse-grained Tertiary age formations	Tfu	Fernando Formation, upper member, silty and pebbly sandstone	Pliocene
Tss	Coarse-grained Tertiary age formations	Tfuc	Fernando Formation, conglomerate	Pliocene
Tss	Coarse-grained Tertiary age formations	Tn	Niguel Formation, marine sandstone interbedded with sandy siltstone	late Pliocene
Tss	Coarse-grained Tertiary age formations	Tn?	Niguel Formation, uncertain	Pliocene
Tss	Coarse-grained Tertiary age formations	Tns	Sandstone of Norco area	Pliocene
Tss	Coarse-grained Tertiary age formations	Tpsc	Puente Formation, Sycamore Canyon Member	early Pliocene and Miocene
Tss	Coarse-grained Tertiary age formations	Tpscc	Puente Formation, Sycamore Canyon Member, conglomerate	early Pliocene and Miocene
Tss	Coarse-grained Tertiary age formations	Tpsq	Puente Formation, Soquel Member, sandstone and silt	Miocene
Tss	Coarse-grained Tertiary age formations	Tpyc	Puente Formation, Yorba Member, conglomerate	Miocene
Tss	Coarse-grained Tertiary age formations	Ts	Sespe Formation, non-marine conglomerate, sandstone	early Miocene, Oligocene, and late Eocene
Tss	Coarse-grained Tertiary age formations	Ts?	Sespe Formation, uncertain	early Miocene, Oligocene, and late Eocene

<b>ptype</b>	<b>name</b>	<b>source_ptype</b>	<b>source_name</b>	<b>source_age</b>
Tss	Coarse-grained Tertiary age formations	Tsa	Santiago Formation, sandstone, conglomerate and claystone	middle Eocene
Tss	Coarse-grained Tertiary age formations	Tsi	Silverado Formation, sandstone, siltstone, shale and conglomerate	Paleocene
Tss	Coarse-grained Tertiary age formations	Tsicg	Silverado Formation, basal conglomerate	Paleocene
Tss	Coarse-grained Tertiary age formations	Tso	San Onofre Breccia, breccia facies	middle Miocene
Tss	Coarse-grained Tertiary age formations	Tsob	San Onofre Breccia, marine sedimentary breccia	middle Miocene
Tss	Coarse-grained Tertiary age formations	Tsoss	San Onofre Breccia, sandstone facies	middle Miocene
Tss	Coarse-grained Tertiary age formations	Tsv	Sespe and Vaqueros Formations, undivided	early Miocene, Oligocene, and late Eocene
Tss	Coarse-grained Tertiary age formations	Tt	Topanga Group, marine sandstone, siltstone, and shale	middle Miocene
Tss	Coarse-grained Tertiary age formations	Ttb	Topanga Group, Bommer Formation, sandstone	middle Miocene
Tss	Coarse-grained Tertiary age formations	Tto	Topanga Formation, tuffaceous sandstone and siltstone	middle Miocene
Tss	Coarse-grained Tertiary age formations	Tv?	Vaqueros Formation, sandstone, uncertain	early Miocene, Oligocene, and late Eocene
Tss	Coarse-grained Tertiary age formations	Tvs	Vaqueros and Sespe Formations, undifferentiated	early Miocene, Oligocene, and late Eocene
Tss	Coarse-grained Tertiary age formations	Tvss	Vaqueros, Sespe, Santiago, and Silverado Formations, undifferentiated	early Miocene and Paleocene
Tss	Coarse-grained Tertiary age formations	Tv	Vaqueros Formation, sandstone	early Miocene, Oligocene, and late Eocene
Tsh	Fine-grained Tertiary age formations	Tfl	Fernando Formation, lower member	Pliocene
Tsh	Fine-grained Tertiary age formations	Tcs	Capistrano Formation, siltstone facies	early Pliocene and late Miocene
Tsh	Fine-grained Tertiary age formations	Tcs?	Capistrano Formation, uncertain	early Pliocene and Miocene
Tsh	Fine-grained Tertiary age formations	Tf	Fernando Formation, siltstone and conglomerate	Pliocene
Tsh	Fine-grained Tertiary age formations	Tlm	Lake Mathews Formation, massive mudstone	Miocene

ptype	name	source_ptype	source_name	source_age
Tsh	Fine-grained Tertiary age formations	Tlm?	Lake Mathews Formation, massive mudstone, uncertain	Miocene
Tsh	Fine-grained Tertiary age formations	Tm	Monterey Formation, marine siltstone	middle and late Miocene
Tsh	Fine-grained Tertiary age formations	Tp	Puente Formation, marine siltstone, shale and sandstone	early Pliocene and Miocene
Tsh	Fine-grained Tertiary age formations	Tplv	Puente Formation, La Vida Member, siltstone	late Miocene
Tsh	Fine-grained Tertiary age formations	Tpy	Puente Formation, Yorba Member, siltstone	late Miocene
Tsh	Fine-grained Tertiary age formations	Tsis	Silverado Formation, Serrano clay unit	Paleocene
Tsh	Fine-grained Tertiary age formations	Tsm	San Mateo Formation, marine and paralic siltstone, sandstone and conglomerate	early Pliocene and late Miocene
Tsh	Fine-grained Tertiary age formations	Ttlt	Topanga Group, Los Trancas Formation, siltstone	middle Miocene
Tsh	Fine-grained Tertiary age formations	Ttlt?	Topanga Group, uncertain	middle Miocene
Tsh	Fine-grained Tertiary age formations	Ttp	Topanga Group, Paulerino Formation, siltstone and tuffaceous sandstone	middle Miocene
Tv	Tertiary age formations of volcanic origin	Tvem	El Modeno Volcanics, undifferentiated	middle Miocene
Tv	Tertiary age formations of volcanic origin	Tvema	El Modeno Volcanics, andesite	middle Miocene
Tv	Tertiary age formations of volcanic origin	Tvemb	El Modeno Volcanics, basalt	middle Miocene
Tv	Tertiary age formations of volcanic origin	Tvemt	El Modeno Volcanics, tuff and breccia	middle Miocene
Tv	Tertiary age formations of volcanic origin	Tvsr	Santa Rosa basalt of Mann (1955)	late Miocene
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Kl	Ladd Formation, undifferentiated	Late Cretaceous
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Klbc	Ladd Formation, Baker Canyon Conglomerate	Late Cretaceous
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Klhsc	Ladd Formation, Holz Sandstone and Conglomerate	Cretaceous
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Ktr	Trabuco Formation, nonmarine conglomerate with sandstone and siltstone interbeds	Upper Cretaceous
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Ktrl	Trabuco Formation, lower unit, fanglomerate	Upper Cretaceous
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Ktru	Trabuco Formation, upper unit, conglomerate	Late Cretaceous
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Kwl	Williams and Ladd Formations, undifferentiated	Late Cretaceous
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Kwp	Williams Formation, Pleasant Sandstone Member	Upper Cretaceous
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Kwps	Williams Formation, Pleasant Sandstone Member	Upper Cretaceous

ptype	name	source_ptype	source_name	source_age
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Kwps?	Williams Formation, conglomeratic sandstone, uncertain	Late Cretaceous
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Kwps1	Williams Formation, conglomeratic sandstone	Late Cretaceous
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Kwsr	Williams Formation, Schultz Ranch Sandstone Member	Late Cretaceous
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Kwsr?	Williams Formation, Shultz Ranch Member, sandstone and conglomerate, uncertain	Late Cretaceous
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Kwsru	Williams Formation, Shultz Ranch Upper Sandstone	Late Cretaceous
Kss	Coarse-grained Cretaceous age formations of sedimentary origin	Kwst	Williams Formation, Starr Member, fanglomerate	Late Cretaceous
Ksh	Fine-grained Cretaceous age formations of sedimentary origin	Kc	Carbonate-silicate rock	Cretaceous
Ksh	Fine-grained Cretaceous age formations of sedimentary origin	Klhs	Ladd Formation, Holz Shale	Cretaceous
Ksh	Fine-grained Cretaceous age formations of sedimentary origin	Kwsrl	Williams Formation, Shultz Ranch lower siltstone	Late Cretaceous
Kv	Cretaceous age formations of volcanic origin	Ksv	Intermixed Estelle Mountain volcanics of Herzig (1991) and Cretaceous (?) sedimentary rocks	Cretaceous
Kv	Cretaceous age formations of volcanic origin	Kvem	Estelle Mountain volcanics of Herzig (1991)	Cretaceous
Kv	Cretaceous age formations of volcanic origin	Kvr	Rhyolite of Estelle Mountain volcanics of Herzig (1991)	Cretaceous
Kv	Cretaceous age formations of volcanic origin	Kvs	Intermixed Estelle Mountain volcanics of Herzig (1991) and Mesozoic sedimentary rocks	Mesozoic
Kv	Cretaceous age formations of volcanic origin	Kvsp	Santiago Peak Volcanics	Cretaceous
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Jbc	Bedford Canyon Formation, undifferentiated	Jurassic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Jbc?	Bedford Canyon Formation, undifferentiated?	Jurassic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Jbc1	Bedford Canyon Formation, metasandstone	Jurassic

<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	Jbcm	Bedford Canyon Formation, marble and limestone	Jurassic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Mzu	Metasedimentary and metavolcanic rocks, undivided	Mesozoic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Pzc	Calc-silicate rocks	Paleozoic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Pzmp	Marble, Peninsular Ranges	Paleozoic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Pzq	Impure quartzite	Paleozoic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	Pzsgp	Biotite schist and gneiss	Paleozoic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	TRmp	Rocks of Menifee Valley, phyllite	Triassic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	TRms	Rocks of Menifee Valley, schist	Triassic
pKm	Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin	TRmu	Rocks of Menifee Valley, undifferentiated	Triassic
sp	Serpentinite of all ages	Ks	Serpentinite	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kcg	Cajalco Pluton, monzogranite	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kcgb	Cajalco Pluton, granodiorite and gabbro	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kcgd	Cajalco Pluton, granodiorite	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kcgq	Cajalco Pluton, granodiorite and quartz latite	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kct	Cajalco Pluton, tonalite	Cretaceous

<b>p_type</b>	<b>name</b>	<b>source_p_type</b>	<b>source_name</b>	<b>source_age</b>
gr	Granitic and other intrusive crystalline rocks of all ages	Kcto	Cajalco Pluton, tourmalinized monogranite and granodiorite	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kd	Diorite, undifferentiated	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kdqd	Diorite and quartz diorite, undifferentiated	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kg	Granite, undivided	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kgb	Gabbro, undifferentiated	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kgd	Granodiorite, undifferentiated	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kgdfg	Granodiorite, undivided	middle Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kgh	Gavilan Ring Complex, hypabyssal tonalite	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kgr	Granophyre	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kgt	Gavilan Ring Complex, massive textured tonalite	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kgtf	Gavilan Ring Complex, foliated tonalite	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kgti	Gavilan Ring Complex, tonalite with mesocratic inclusions	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kgu	Granite, undifferentiated	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Khg	Heterogeneous granitic rocks	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Klst	La Sierra Tonalite	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kmhg	Mount Hole Granodiorite	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kmp	Micropegmatite granite	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kmpc	Micropegmatite and granodiorite of Cajalco Pluton, undifferentiated	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kmrg	Granite of Mount Rubidoux, tonalite dikes	Cretaceous

<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	Kqd	Quartz diorite, undifferentiated	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Krg	Granite of Riverside area	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Ksmg	Monzogranite of Squaw Mountain	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kt	Tonalite, undifferentiated	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Ktd	Tonalite dikes of Mount Rubidoux	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kvspi	Intrusive rocks associated with Santiago Peak Volcanics	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Kvt	Val Verde Pluton, tonalite	Cretaceous
gr	Granitic and other intrusive crystalline rocks of all ages	Tiema	Volcanic intrusive rocks associated with El Modeno Volcanics, andesite	middle Miocene
gr	Granitic and other intrusive crystalline rocks of all ages	Tiema?	Volcanic intrusive rocks associated with El Modeno Volcanics, uncertain	middle Miocene
gr	Granitic and other intrusive crystalline rocks of all ages	Tiemd	Volcanic intrusive rocks associated with El Modeno Volcanics, diabase	middle Miocene
gr	Granitic and other intrusive crystalline rocks of all ages	Tiemd?	Volcanic intrusive rocks associated with El Modeno Volcanics, uncertain	middle Miocene