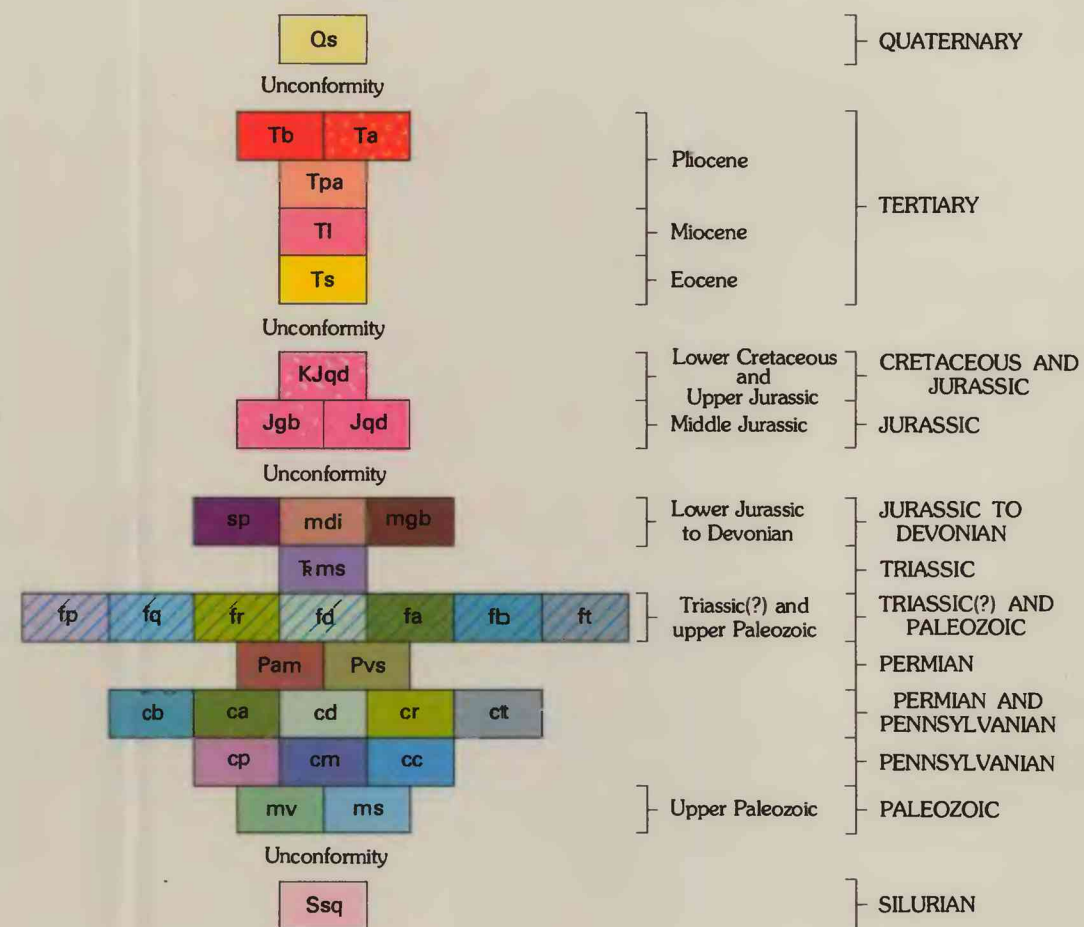


CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- Qs** SURFICIAL DEPOSITS
SAND (Quaternary)
- Tb** EXTRUSIVE ROCKS (Tertiary)
OLIVINE BASALT (Pliocene)—Medium-gray porphyritic rock with phenocrysts of olivine. Groundmass consists of augite, plagioclase, and glass.
- Ta** PLATY ANDESITE (Pliocene)—Fine-grained light to medium-gray two-pyroxene andesite with closely spaced fracturing. The mass on Table Rock contains phenocrysts of augite and olivine.
- Tpa** PYROCLASTIC ANDESITE (Pliocene)—Mudflow breccia and pyroclastic material containing rounded fragments of light to medium-gray porphyritic andesite in light-gray fine-grained debris. Phenocrysts are augite and plagioclase.
- Tl** LOVEJOY BASALT (Miocene)—Black to dark-gray fine-grained rock containing scattered phenocrysts of olivine and in places phenocrysts of plagioclase.
- Ts** PREVOLCANIC SEDIMENTARY ROCKS (Eocene)
ALUIFEROUS STREAM DEPOSITS—Sand and gravel
- KJqd** PLUTONIC ROCKS
HORNBLENDE-BIOTITE QUARTZ DIORITE (Upper Jurassic and Lower Cretaceous)—Coarse to medium-grained plagioclase-quartz-hornblende-biotite rock. Grades to lighter colored tonalite in Indian Valley and to hornblende gabbro north of Otis Bar.
- Jgb** HORNBLENDE GABBRO (Middle Jurassic)—Coarse-grained hornblende-plagioclase rock. Includes gabbro pegmatite.
- Jqd** HORNBLENDE QUARTZ DIORITE (Middle Jurassic)—Medium-grained plagioclase-hornblende rock with some quartz.
- sp** METAMORPHOSED INTRUSIVE ROCKS (Devonian to Lower Jurassic)
SERPENTINE AND PERIDOTITE—Serpentine and talc schist with remnants of olivine and peridotite.
- mdi** METADIORITE AND TONALITE, UNDIFFERENTIATED—Medium-gray medium-grained massive to foliated plagioclase-hornblende rock with some epidote and chlorite.
- mg** METAGABBRO—Black to dark-gray coarse- to medium-grained massive to foliated hornblende-plagioclase rock.
- Tms** METAMORPHIC ROCKS
METASANDSTONE (Triassic)
PHYLLITE AND METACHERT—Black and gray fine-grained quartz-rich and micaceous layers interbedded. Includes some calcareous phyllite.
- fp** FRANKLIN CANYON FORMATION (upper Paleozoic and Triassic?)
PHYLLITE—Fine-grained light-gray well-foliated muscovite-quartz rock with some dark chlorite-bearing layers.
- fq** QUARTZITE—Gray medium-grained biotite-quartz rock.
- fr** METASODARHYOLITE—Light-gray foliated albite-quartz-muscovite-biotite-epidote rock with some chlorite and actinolite. Includes sulfaceous layers.
- fd** METADACITE—Light-greenish-gray foliated albite-epidote-quartz-actinolite-chlorite rock.
- fs** META-ANDESITE—Greenish-gray amphibole-chlorite-albite-epidote rock with relict phenocrysts of amphibole and chlorite. Includes pyroclastic material and tuff layers.
- ft** METABASALT—Dark-gray to black hornblende-plagioclase rock.
- Pam** METATUFF—Greenish-gray foliated amphibole-chlorite-albite-epidote rock with distinct layering and pyroclastic structures. Biotite, chlorite, and actinolite are common in some layers.
- Pvs** AMPHIBOLITE AND HORNBLENDE GNEISS (Permian)—Black to dark-gray, fine- to medium-grained strongly banded hornblende-plagioclase rock with epidote and sphene. Includes some metagabbro.
- cb** BORDER ZONE OF AMPHIBOLITE (Permian)—Basaltic meta-andesite and meta-tuff with layers of metasedimentary material. Metavolcanic layers are greenish-gray hornblende-chlorite-albite-epidote rock with relict pyroclastic structures. Layers of metatuff are thin bedded and include sedimentary material rich in quartz, muscovite, and chlorite.
- ca** METAVOLCANIC ROCKS WITHIN AND OVERLYING(?) CALAVERAS FORMATION (Pennsylvanian and Permian)
METABASALT—Dark-gray foliated hornblende-chlorite-epidote-albite rock. West of Poker Flat, black brecciated augite-chlorite-epidote-albite rock.
- cd** META-ANDESITE—Dark-greenish-gray to black foliated amphibole-chlorite-epidote-albite rock with or without augite phenocrysts. Includes agglomeratic and tuffaceous layers. On Reese Ravine, purplish-gray hornblende-plagioclase-magnetite rock.
- cr** METADACITE—Light-greenish-gray foliated albite-epidote-quartz-amphibole-chlorite rock.
- ct** METASODARHYOLITE—Light-gray foliated quartz-albite-muscovite-chlorite-biotite rock.
- cp** METATUFF—Thin-bedded or fragmental fine-grained well-foliated rocks that consist of amphibole, chlorite, biotite, muscovite, epidote, albite, and quartz in varying proportions. Includes layers of lapilli tuff.
- cm** CALAVERAS FORMATION (Pennsylvanian)
PHYLLITE WITH LAYERS OF QUARTZITE AND METACHERT—Phyllite is light-brownish-gray well-foliated muscovite-quartz rock with greenish-brown to black layers that contain chlorite and disseminated carbonaceous material. Interbedded with phyllite are layers of micaceous quartzite and thin-bedded metachert.
- cc** MARBLE—Light-gray coarse- to medium-grained calcium carbonate rock with distinct bedding.
- mv** METACHERT WITH LAYERS OF PHYLLITE—Light- to medium-gray thin-bedded quartz-rich layers are separated by micaceous laminae. Layers of muscovite-chlorite phyllite are interbedded.
- ms** METAMORPHIC ROCKS WITHIN THE MELONES FAULT ZONE (upper Paleozoic)
METAVOLCANIC ROCKS—Bluish or greenish-gray brecciated or schistose actinolite-chlorite-epidote-albite rocks that in places contain crossite, lawsonite, pumpellyite, and stibiconite.
- Seq** SCHIST AND QUARTZITE, UNDIFFERENTIATED—Thin-laminated intricately folded quartz-rich rocks with muscovite, chlorite, and sporadic stibiconite.
- Sch** SHOO FLY FORMATION (Silurian)
QUARTZITE AND MICA SCHIST, UNDIFFERENTIATED—Medium-grained, light- to medium-brownish-gray quartz-muscovite-biotite-chlorite schist containing rare garnet interbedded with light-gray medium-grained blastolite quartzite. Discontinuous thin layers of gray metachert and limestone occur sporadically.

- Contact—Dashed where approximately located
--- Fault—Dashed where approximately located; dotted where concealed
--- Minor fold axis, showing plunge
--- Strike and dip of beds
--- Inclined
--- Vertical
--- Strike and dip of foliation
--- Inclined
--- Vertical
--- Bearing and plunge of lineation
--- Strike and dip of joints
--- Inclined
--- Vertical
--- Sample locality
--- Dike, undifferentiated

LOCALITIES OF SPECIMENS

No.	Section	Township north	Range east	No.	Section	Township north	Range east
2033	16	21	9	2349	10	19	9
2043	11	21	9	2358	28	21	10
2067	20	21	9	2359	21	21	10
2068	2	21	9	2361	4	19	9
2074	30	22	10	2364	35	20	9
2091	25	21	9	2365	21	19	9
2093	17	21	9	2366	21	20	10
2095	4	21	9	2371	9	20	10
2099	34	22	9	2380	10	19	9
2101	34	22	9	2383	33	20	9
2104	15	21	9	2392	4	19	9
2106	14	21	9	2393	9	21	10
2118	20	22	10	2406	16	21	10
2132	33	21	9	2407	16	21	10
2149	3	20	9	2421	10	19	9
2155	20	21	9	2438	25	23	9
2193	5	21	9	2440	2	22	9
2213	20	21	10	2444	32	21	9
2215	17	21	10	2447	32	21	9
2217	35	21	9	2448	28	21	9
2218	35	21	9	2458	20	20	9
2229	31	21	10	2496	1	22	9
2232	30	21	10	2498	33	20	10
2237	20	21	10	2504	8	22	9
2238	20	21	10	2533	35	20	10
2240	20	21	10	2534	1	19	9
2242	17	21	10	2539	1	19	9
2261	19	21	10	2546	19	19	10
2282	27	22	9	2549	34	20	10
2285	29	19	9	2550	34	20	10
2291	5	19	9	2554	33	20	10
2303	34	20	10	2560	35	20	9
2304	34	20	10	2561	35	20	9
2305	34	20	10	2562	35	20	9
2306	33	20	10	2572	33	20	9
2313	6	19	10	2578	5	22	10
2314	1	19	9	2592	35	24	9
2319	11	19	9	2601	19	23	10
2331	15	19	9	2619	4	22	9
2337	5	19	9	2647	33	20	10

