

Qau	<u>Undifferentiated alluvium (Qau)</u>
	<u>Active Wash (Qa1)</u>
Qa ₁	Active wash and drainage gullies. Contains a poorly sorted mixture of sand-sized particles with boulder- and cobble-sized clasts. These are unconsolidated sediments.
	<u>Young Alluvium (Qa2, Qa2L)</u>
Qa _{2L}	Qa ₂
	Previously active washes or dryland channels forming terraces above the active wash. These deposits contain a mixture of poorly sorted sand- to boulder-sized clasts. A lesser amount of sand-sized particles are present in this unit.
	<u>Old Alluvium (Qa3)</u>
Qa ₃	Light gray to brown continuous fluvial surfaces with well rounded pebble- to boulder-sized clasts. The clasts are dominantly biotite-tonalite, with minor amounts of meta-sedimentary clasts. Very little desert varnish and weathering of the surface exposure distinguishes this fluvial deposit from the alluvial pediment deposits.
	<u>Alluvial Pediment (Qa4ab, Qa5ab)</u>
Qa ₄	Qa ₅
	Gently sloping Northwest gradients to flat-lying, continuous surfaces comprised of locally derived clasts that are dominantly biotite-tonalite with minor amounts of meta-sedimentary clasts. Fluvial channel fills and finer sandstone lenses are present. Total thickness of this deposit varies from 2-20 meters thick. The surfaces of the pediments are generally dark brown in color due to desert varnish. Large boulder sized clasts near surface are weathering down into a desert pavement.
	<u>Ocotillo Formation (Qo)</u>
Qo	Pebble- to cobble-sized conglomerate alluvial fan deposits interbedded with distal overbank and fluvial sandstones and siltstones deposits. Conglomerate beds are primarily light gray to green. Clasts are sub angular, locally derived, and matrix supported. Clast composition are dominantly igneous with metamorphic and quartz grains. Bedding thickness varies from 20-50 cm thick. The distal deposits of sandstone and siltstones are brown-red to orange in color. Bedding thickness varies from 5-30 cm thick.
	<u>Canebrake Formation (Tc1, Tc2, Tc3, Tc4, Tc5)</u>
Tc ₅	Light gray to brown alluvial fan conglomerate deposits. Large cobble to mega-boulder conglomerate comprised of well rounded biotite-tonalite clasts with minor amounts of mafic and meta-sedimentary clasts make up the dark brown-chocolate brown weathering unit Tc1. Interbedded light gray, cobble to boulder conglomerates, with finer pebble to coarse sandstones ranging from 2-5 m thick distinguishes the Tc2 unit. Conformably to slightly unconformably above Tc2, Tc3 is distinguished in the east by a basal boulder conglomeratic layer with lesser amounts of the finer interbedding. These units grade laterally to the west and vertically into one indistinguishable coarse boulder conglomerate. Unconformably above lies Tc4, Tc5, light brown weathering boulder to cobble sized conglomerates
Tc ₄	
Tc ₃	
Tc ₂	
Tc ₁	
	<u>Mega Breccia (Mbx)</u>
Mbx	Dark gray-green to rust-brown brecciated meta-sedimentary and meta plutonic rocks. Blocks of basement rock vary in size from clasts size to blocks 20 m wide. Locally derived calcite veins.

Qac1	<u>Ocotillo Conglomerate (Qac1-5)</u> Gravel, gravelly sand, coarse sand, and sparse silt and clay. Poorly consolidated, locally strongly deformed
Qac2a	
Qac2b	
Qac3	
Qac4	
Qac5	
Qf	<u>Active Alluvial Fan (Qf)</u>
Kgt	<u>Garnet Hornblende Biotite Tonaitle Gneiss (Kgt)</u> White to gray, contains garnet, biotite, hornblende, plagioclase. Garnet porphoclasts range from 2 mm to 20 mm in a fine crystalline matrix of plagioclase and biotite. Garnet comprises 15-50% of rock. Contains more dark minerals than Ka. Unit is slightly sheared, but some areas look more massive. Apparent thickness: 71-380 m. Located in southern and eastern section of Coyote Mountain.
Ka	<u>Garnet Adamellite Gneiss (Ka)</u> White to light gray, contains quartz, potassium feldspar, biotite, muscovite, garnet porphoclasts; Garnet ranges from 1mm to 10mm; Garnet is imposed on fine to med crystalline matrix; mafic minerals make up <5% of most of the unit; distribution of crystal size is bimodal, with garnet coarser than everything; unit is foliated and well lineated; outcrops throughout the mylonite zone; the unit is present throughout Coyote Mountain. Apparent thickness: 10-900 m.
Kq	<u>Quartzofeldspathic Gneiss (Kq)</u> Gray, medium to coarse crystalline; contains biotite, quartz, muscovite, plagioclase; augen gneiss; foliation defined by parallelism of biotite; some areas are massive; coarser feldspar augens can be present; mylonitization or hearing is variable, ranging from incipient development of a cataclastic texture to a well developed blastomylonitic texture; shear dikes, small marbles, quartzites, and amphibolites are present. Apparent thickness: 70-400 m.
Kg	<u>Gneissic Gabbro and Amphibolite (Kg)</u> Gray, Fine crystalline; Contains biotite, hornblende, plagioclase; Hornblende is dimensionally oriented and is dominant mineral; a coarse, unshered crystalline gabbro outcrops in southwestern section of Coyote Mountain; western outcrop also contains a fine to medium amphibolite, a coarse crystalline leucocratic gabbro is sometimes present along contacts(Theodore 1967); some smaller metamorphosed marble lenses interfinger with other units. Apparent thickness: 47-83 m.
Kp	<u>Pegmatite (Kp)</u> White; quartz, potassium feldspar, small amounts of mica, and garnet?; coarse to medium crystalline, massive; located as pods or stingers throughout the mylonite and migmatite zone; few large outcrops are shown on the map, smaller outcrops are more prevalent in most areas

Kmb	<p><u>Marble (Kmb)</u> White to gray to blue; medium to coarse crystalline; can contain biotite, though less than 5% of total rock; recrystallized fossils (crinoids stems?) in lighter colored marbles; blue marbles have darker calcite preserved fossils; some areas are deformed looking with elongated calcite crystals, present throughout the entire mylonite zone in small lensoidal bodies ranging from 1-3m in length; marble is also on pluton borders and in migmatite. Apparent thickness: 0.5-140 m.</p>
Kw	<p><u>Marble that contains abundant in Wollastonite (Kw)</u> Gray to white to tan, some areas of unit contain abundance of wollastonite, calc-silicates, small amounts of garnet, diopside, pyroxene are seen in some areas of the unit (Theodore, 1967); resistant blocks of calc-silicates form erosional remnants among the easily eroded marble; pock mark surface in areas; strong foliation in some areas of the unit, some folds are present; located in SE Coyote Mountain. Apparent thickness: 45-238m</p>
Km	<p><u>Mylonite with plutonic protolith (Km)</u> Gray, contain bands of alternating colors of material; feldspar, mica; same composition as a pelitic gneiss; range from fine to coarse crystalline, depending on degree of mylonitization; lineations and foliation are almost always present in outcrops; weathers brown to rust color; weathers to more gentle slope than other mapped units; outcrop in northeastern part of Coyote Mountain; has small marbles, sheared igneous rocks and amphibolites throughout (Theodore, 1967). Apparent thickness: 45-600m</p>
Ku	<p><u>Undifferentiated metasedimentary and metaigneous (Ku)</u> Heterogenous combination of all other units; metasedimentary in nature; all degrees of mylonitic texture present, largest unit mapped in Coyote Mountain; (Theodore)</p>
pKm	<p><u>Biotite Rich Migmatite (pKm)</u> Gray to rust to brown; fine to medium crystalline; quartz, sillimanite, biotite, muscovite, potissuim feldspar, oligoclase; This is the thickest rock unit at Coyote Mountain has irregularly alternating lepidoblastic folia of mica and granoblastic domains of quartz and feldspar; small scale isoclinal folds have axial planes parallel to predominant local foliation; dikes throughout the unit cut across and are at a high angle to foliation; located in the southwest portion of Coyote Mountain; small marbles, pegmatite dikes, quartzite, and amphibolite are also present in the unit. This is the thickest unit in Coyote Mountain, ~2000m.</p>
Kt	<p><u>Biotite-Hornblende Bearing Tonalite (Kt)</u> Grey to white; contains biotite, horblende, quartz, plagioclase; med to coarse crystalline, average grain size 1.5-2.0mm. 20-35% is hornblende and biotite; ranges from massive to semi foliated; stronger foliation appears at contacts with overlying metasedimentarty rocks; these are mesozonal plutonic rocks; located in western Santa Rosa mountains, and northwestern area of Coyote Mountain, weathers to a brown color</p>