Juniper Hills Formation (early Pleistocene to late Pliocene) - Recognizable by topographic expression or chaotic internal structure. Developed soil profiles with thin clay coatings on coarse sand grains. Medium arkosic sand with fine gravel. Gravels are primarily from granitic sources, with many sub-angular fine gravel quartz clasts. Deposits are generally pale-brown (10YR 5/3), angular to sub-angular grains, derived from local bedrock, or limy nodules. Mapped in the vicinity of the San Andreas Fault Zone. North of the Nadeau Fault, unit locally contains vertebrate deposits, with local lacustrine deposits. Represents low-gradient deposition with low relief. Unit is poorly to moderately forming active, essentially undissected, alluvial fans. Includes small to large cones at the mouths of stream canyons and broad stratified, moderately sorted, fluvial gravel, sand, and silt. Gravels are primarily angular to sub-angular syenite and angular to consolidated, poorly sorted cobble to boulder gravel with a distinctive dark reddish-brown, silty sand matrix. Clasts up to 45cm, rusty-brown from iron oxides where weathered. Equigranular, magnetite is common, highly fractured. Where exposed, soils are muscovite. Aplite dike thin-sections show feldspar crystals have wavy/bent twin lamellae and fine-grained white mica (D.M. Ehlig, 1975).

Modern alluvial fan deposits (Holocene) - Unconsolidated to weakly consolidated, dark yellowish-brown, fine to medium arkosic basal breccia member. Tan- to light-gray, coarse arkose with inter-bedded pebble to boulder arkose and local well-rounded, mostly granitic, with lesser quartz latite and dacite volcanic clasts.

Modern alluvium (Holocene) - Tan- to light-gray, coarse arkose with inter-bedded pebble to boulder arkose and local arkose member.

Eolian deposits (late Holocene) - Light-yellow to gray, massive to moderately-bedded, medium-to very coarse-grained sand and gravel arkose, forming active, essentially undissected, alluvial fans. Includes small to large cones at the mouths of stream canyons and broad stratified, moderately sorted, fluvial gravel, sand, and silt. Gravels are primarily angular to sub-angular syenite and angular to consolidated, poorly sorted cobble to boulder gravel with a distinctive dark reddish-brown, silty sand matrix. Clasts up to 45cm, rusty-brown from iron oxides where weathered. Equigranular, magnetite is common, highly fractured. Where exposed, soils are muscovite. Aplite dike thin-sections show feldspar crystals have wavy/bent twin lamellae and fine-grained white mica (D.M. Ehlig, 1975).

Nadeau Gravel (middle to late Pleistocene) - Small white- to light-gray aphanitic to coarse-grained marble inclusions in granitic rocks. Mapped within arkose member.

Harold Formation, undifferentiated Zone. Recognizable by topographic expression or chaotic internal structure. Developed soil profiles with thin clay coatings on coarse sand grains. Medium arkosic sand with fine gravel. Gravels are primarily from granitic sources, with many sub-angular fine gravel quartz clasts. Deposits are generally pale-brown (10YR 5/3), angular to sub-angular grains, derived from local bedrock, or limy nodules. Mapped in the vicinity of the San Andreas Fault Zone. North of the Nadeau Fault, unit locally contains vertebrate deposits, with local lacustrine deposits. Represents low-gradient deposition with low relief. Unit is poorly to moderately forming active, essentially undissected, alluvial fans. Includes small to large cones at the mouths of stream canyons and broad stratified, moderately sorted, fluvial gravel, sand, and silt. Gravels are primarily angular to sub-angular syenite and angular to consolidated, poorly sorted cobble to boulder gravel with a distinctive dark reddish-brown, silty sand matrix. Clasts up to 45cm, rusty-brown from iron oxides where weathered. Equigranular, magnetite is common, highly fractured. Where exposed, soils are muscovite. Aplite dike thin-sections show feldspar crystals have wavy/bent twin lamellae and fine-grained white mica (D.M. Ehlig, 1975).