

EXPLANATION

Rocks East of Stony Creek Fault Zone

Qal Qls

Alluvium and landslide debris

Qal, alluvium; unconsolidated clay, silt, sand, and gravel, poorly sorted and poorly stratified.
Qls, landslide debris.

Tt Tc

Tehama formation (east); Cache formation (west)

Tt, Tehama formation, consolidated blue-green claystone containing beds and lenses of poorly indurated conglomerate, sandstone, and siltstone. Exposed only along eastern part of map.
Tc, Cache formation, white to light gray, poorly bedded, poorly consolidated gravel, sandstone, and siltstone. Exposed only in SW corner of map.

3c 3b
3d
3c 3a

Unit 3

Sandstone beds of Unit 3 are characterized by about equal proportions of quartz and feldspar (20-25%), 30-40% rock fragments, and 1 to 5% mica; quartz to feldspar ratio 0.7-1.0; plagioclase to K-feldspar ratio about 2.0.

3a, sandstone, light- to coarse-grained; 3b, sandstone and siltstone, thinly interbedded in about equal amounts; 3c, mudstone and siltstone, medium- to dark gray, thinly bedded to laminated. 3d, conglomerate, chiefly pebbles and cobbles of dark aphanitic volcanic rocks with a few clasts of sedimentary rocks.

Unit contains megafossils of Turonian age near the base and Campanian age near the top. Includes Venado, Yolo, Sites, Funks and Guinda Formations of Kirby (1943).

2c 2b
2d
2c 2a

Unit 2

Sandstone beds in lower two-thirds of unit are characterized by: quartz, 45-64%; feldspar, 15-35%; rock fragments, 15-25%; quartz to feldspar ratio, 1.8 to 2.5. Sandstone beds in upper one-third of unit are characterized by: quartz, 30-50%; feldspar, 20-30%, rock fragments 20-45%; quartz to feldspar ratio, 1.0-1.5; plagioclase to K-feldspar ratio about 1.0.

2a, sandstone, light olive-gray, thin-bedded to massive, fine- to medium-grained; 2b, sandstone and siltstone, thinly interbedded in about equal amounts; 2c, mudstone and siltstone, thinly bedded to laminated; 2d, conglomerate, massive to thick bedded, poorly sorted; composed chiefly of pebbles of chert and andesitic rock with clasts of sedimentary rock.

Contains megafossils of Albian and Cenomanian age in upper one-third of unit.

1a
1b 1c 1d
1Ba 1E

Unit 1

Sandstone beds of Unit 1 are characterized by about equal amounts of quartz and feldspar (20% each) and 40-80% volcanic rock fragments; K-feldspar only in minor amounts. Contains megafossils of Late Jurassic and Early Cretaceous ages. *Buchia crassicolis* in zone 50 to 150 feet thick about 3,000 feet below top of formation and *Buchia piochii* (Late Jurassic) beneath *B. crassicolis* zone. *B. uncitoides* (Berriasian) from conglomerate unit underlying Gravelly Buttes.

1a, sandstone, pale olive-gray, thin- to medium-bedded, fine- to coarse-grained; 1b, sandstone and siltstone, thinly interbedded in about equal amounts; 1c, mudstone and siltstone, dark-gray to greenish gray, thinly bedded to laminated, tuffaceous near base of formation; 1d, conglomerate, massive to thick-bedded, composed chiefly of pebbles of chert and andesitic to basaltic rocks, in places contains pebbles and cobbles of diorite or quartz diorite; 1e, pillow basalt, flow breccia, and volcanic-rich sedimentary rock; 1Ba, basaltic sandstone, dark-gray to greenish-black, thin-bedded to massive, medium- to coarse-grained; composed chiefly of poorly sorted basaltic debris and chloritized(?) basaltic debris; most beds exhibit graded bedding.

Serp

Serpentinite

Intensely sheared and foliated serpentinite containing rounded blocks of serpentinitized peridotite and slivers of sedimentary rock. Includes "detrital" serpentine of previous workers.

Rocks West of Stony Creek Fault Zone

Sed.

Sedimentary Rocks

Sandstone and siltstone; sandstone, dark-gray to greenish-gray, medium- to coarse-grained with interbeds of thin-bedded to laminated siltstone and mudstone.

Meta.

Metasedimentary Rocks

Phyllonite and semischist that lithologically resembles rocks found east of Stony Creek Fault. Cataclastic texture most pronounced near thrust zone.

Vol

Volcanic Rocks

Finely crystalline volcanic rocks, chiefly pillow basalts and flow breccia, intensely altered to greenstone near Stony Creek Fault. In places exotic blocks of hypabyssal rocks, chiefly diabase, enclosed in serpentinite.

Serp

Serpentinite

Serpentinized peridotite and serpentinite, undifferentiated. In places pyroxene crystals as much as 1/2 inch in diameter partly altered to bastite and lattice structures. Contact with country rock commonly sheared. May include diapiric or "detrital"serpentine of previous workers.

GEOLOGIC SYMBOLS

Contact

Dashed where approximately located; length of dash indicates degree of accuracy of location.

U
D

Fault

Dashed where approximately located; U, relatively upthrown side.

▲

Thrust Fault

Dashed where approximately located; barb on upper plate.

Probable fault in serpentinite

Located from lineations on aerial photographs and alignment of springs and slivers of exotic rocks.

*

Syncline

Showing trace of axial plane.

↑

Anticline

Showing trace of axial plane.

34

Strike and dip of beds.

34

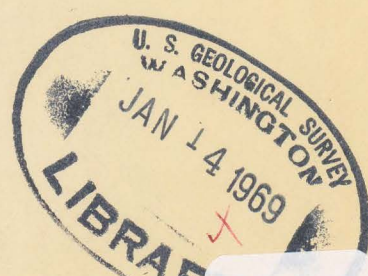
Strike and dip of beds.
Unknown whether right side up or overturned.

7 34

Strike and dip of overturned beds.

+

Strike of vertical beds.



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California (Wilbur Springs quad.) Geol. 1:48,000. 1969.
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