

Table 4.--Section of Troy quartzite typical of the Sierra Ancha

Measured along east face of Center Mountain; lower member described largely from exposures in NE $\frac{1}{4}$  sec. 16; middle member measured in NW $\frac{1}{4}$  SW $\frac{1}{4}$  sec. 15 and NE $\frac{1}{4}$  SE $\frac{1}{4}$  sec. 16; upper member descriptions from SE $\frac{1}{4}$  sec. 16, NE $\frac{1}{4}$  sec. 21 and NW $\frac{1}{4}$  sec. 22, T. 6 N., R. 14 E.

Troy quartzite:

Quartzite member:

Top eroded. The sequence described is believed to be one of the thickest remnants of the quartzite member in the Sierra Ancha.

11. Quartzite, dominantly medium light gray but many beds pale red to grayish-red purple; mostly medium-grained with sparse content of coarse grains; a few beds coarse-grained; in tabular beds 3 to 12 in. thick (most 4 to 8 in.); some beds horizontally stratified, most cross-stratified on small to medium scales; flaggy to slabby parting everywhere conspicuous. Generally lower part crops as steep slope partly covered with talus; upward slope merges into slabby-parting cliffs as much as 150 ft high. Where deeply weathered, as on benches or mesa tops, detached slabs characteristically are stained moderate brown to very dusky red throughout and exhibit knobby or pock-marked surfaces - - - - -

Thickness  
(feet)

250

10. Quartzite, very light gray to pale red purple, medium-grained, in tabular beds 4 in. to 3 ft (mostly 1 to 2 ft) thick; more vitreous than unit 11, and internal stratification obscure; outcrops tend to stain slightly to pale to moderate reddish-brown; joints may be thinly coated by limonite, otherwise weathering colors as in fresh rock. Forms cliff with narrow to broad bench at top; upper 80 ft not as resistant as lower part - - - - -

185

9. Quartzite, pale red to grayish-red purple, coarse-grained; voids between rounded grains imperfectly filled by quartz overgrowths. Otherwise like unit 10, and crops as steep ledgy slope or cliff continuous with that of unit 10 - - - - -

50

Thickness of upper member (units 9-11) remnant - - - - -

495

Chediski sandstone member:

8. Sandstone, very light gray to pinkish-gray, mostly coarse-grained, some beds very coarse-grained; sand grain and matrix characteristics as in unit 6; tabular beds 3 to 8 ft thick cross-stratified on medium scale. Some beds include sparse well-rounded pebbles (up to 1 $\frac{1}{2}$  in., generally less than 1 in.) of white to pink quartz and rare pebbles of reddish-brown jasper. Like pebbles are concentrated in uppermost 1 to 2 in. of many individual beds. Pebbles most abundant in upper 30 ft, and topmost bed conspicuously conglomeratic. Lower 44 ft friable; upper 30 ft tends to be quartzitic, and a few of thinner very coarse-grained beds are quartzites. Crops as steep slope of massive rounded ledges, in which bedding structures are poorly displayed - - - - -

74

7. Sandstone, light gray to pinkish-gray, not pebbly; otherwise like unit 6 - - - - -

80

6. Sandstone, pinkish-gray to grayish red purple, progressively darker and more mottled by reduction spots upward, fine- to coarse-grained (mostly medium-grained), friable; of poorly sorted, well-rounded, minutely pitted quartz grains in matrix of sericite and clay. Slump structures prominent throughout, resulting in massive outcrops that display little continuity of bedding. Bedding units seen locally are mostly 10 to 30 ft thick. A few thin (2 ft maximum) tabular beds, with medium- to large-scale tangential cross-stratification, separate beds with slump structures. Includes pebbles like those in unit 5, but so sparsely distributed that only 1 or 2 pebbles are seen in each 100-300 sq ft of outcrop. Unit crops as gentle to steep slope, locally surmounted by hoodoos - - - - -

67

5. Conglomeratic sandstone, light brownish-gray, poorly to firmly cemented, bedding obscure but dominantly horizontal; mostly coarse-grained, but part very coarse-grained; includes lenses of granule size. Sand grains well-rounded, minutely pitted, mostly of quartz; rare granules of orange-pink feldspar conspicuous. Pebbles mostly of white to moderate red quartz, about 20 percent are of pale yellowish-brown to grayish-red, fine-grained vitreous quartzite; a few of feldspathic quartzite, reddish-brown jasper, or rhyolite. Most pebbles well-rounded and of diameters less than 3/4 in.; some up to 3 in. maximum diameter. Many pebbles, and possibly 5 percent of those exceeding 1 in. diameter, exhibit polished facets and forms characteristic of ventifacts. Unit crops as massive ledges or small cliff - - - - -

67

Thickness of middle member (units 5-8) - - - - -

260

Arkose member:

4. Arkose, light brown to pale brown or pale red (latter dominant), medium-grained, firmly cemented, mostly in thick tabular beds (2 to 8 ft) that exhibit large-scale cross-stratification; some beds wedge-form; forms cliffs. Cross-stratification truncated at sharp, slightly irregular contact with unit 5 - - - - -

110

3. Arkose, pale brown to grayish-red, fine-grained, firmly cemented, cross-stratified on very large scale; horizontal planes separating tabular bedding sets ordinarily tens of feet apart, so more than one such plane is rarely seen in a single outcrop; unit slabby parting; detached slabs as talus trains cover all outcrops except those on narrow hoodoo-studded precipitous ridges between principal ravines - - - - -

165

2. Arkose, like unit 1 except in tabular beds 4 in. to 3 ft thick. Some beds separated by silty seams that preserve mudcracks and, uncommonly, ripplemarks. Crops as receding