U. S. GEOLOGICAL SURVEY Table 2 .- - Representative section of Dripping Spring quart

PEN FII F

/Measured on west wall of Deep Creek canyon, 3000 ft. north of junction of Deep Creek and Bull Canyon, in SW1, SW1, sec. 18 (unsurveyed), T. 5N., R. 15E./

Mescal limestone:

Thickness (feet)

11

99

117

14

50

334

20+ Dolomite breccia, in sandy dolomite matrix Arkose, pale yellowish-brown, mostly medium-grained but contains well-rounded quartz grains of very coarse-sand size; feldspar content about 40 percent, dolomitic, firmly cemented; generally cross-stratified on large scale in tabular beds 6 to 24 in. thick, but thinner beds cross-stratified on small scale; crops as massive ledge with ill-defined partings at 1/2 to 3-ft intervals; weathers moderate yellowish-brown

ft thick and forms ledge that is prominent below slope-forming dolomite breccia;

with lusterous black coating in recesses between grains. In adjacent areas is 4 to 9

locally outcrop is vuggy; contact with overlying unit everywhere sharp - - -

Unconformity.

Dripping Spring quartzite:

Upper member:

- 9. Arkose, pale yellowish-brown to grayish-orange pink, fine- to medium-grained, thinbedded (2-36 in.); includes some beds of feldspathic quartzite; medium-scale planar cross-stratification weathers out prominently; weathers pale to dark yellowish-brown, black surface coatings and grayish-red stains common; mudcracks and asymmetric ripplemarks common. Lower one-half thicker-bedded (1-3 ft), coarser-grained, less feldspathic than upper half and is cliff-former; upper one-half crops as ledges on slope; top 15 ft includes thin beds of siltstone like unit 8 - -
- 8. Siltstone, dusky yellow-green to very dark gray, highly feldspathic, laminated and thinly laminated and cross-laminated; stylolites abundant, mudcracks common; shaly to slabby undulant or irregular partings, 0.1 to 6 in. apart, characterize outcrops; weathers pale yellowish-brown to grayish-red; weathering obscures original texture; pyrite or minute yellow-green spots from which pyrite has deached abundant. Basal 33 ft includes interbeds of arkose like unit 7. Basal 20 to 30 ft crops as ledge or small cliff; siltstones above exposed in a slope, which steepens upward so that uppermost 40 ft crops as a cliff or steep ledge-studded slope - - -
- 7. Arkose, pale to dark yellowish-brown, weathering slightly darker and with black coating common; very fine-grained; low-angle, medium-scale, planar cross-lamination etches out poorly on weathering; outcrops part conspicuously at 2-in. to 6-ft intervals; "pockmarks", 1/2 to 3 in. in diameter, on weathered surfaces are accentuated by black coating. Crops out as vertical face in recess below protective
- 6. Siltstone with subordinate thin beds and scour fills of arkose, like units 8 and 7 respectively in texture, composition, and color; both rock types sparsely micaceous. thinly laminated to thin-bedded; many beds cross-stratified on small scale; channels, 3 to 24 in. wide, scoured into siltstone and filled with slightly coarser arkose are abundant; slabby partings at 2- to 10- in. intervals prominently defined by shaly seams; most partings are undulatory and reflect splitting along minor cross-laminae and along bedding planes folded by compaction adjacent to channel fills in preference to splitting along principal bedding planes; shaly parting common in siltstone beds: stylolites abundant; weathered arkoses and siltstones assume porcelaneous texture. Weathered slabs, stained grayish red, thickly cover moderate slope, which steepens
- 5. Arkose, like unit 7, with minor beds of siltstone like unit 8, except moderately micaceous. Basal 6 ft of dusky red weathering, especially micaceous thin-bedded arkose, which grades upward into shaly siltstone that dominates interval 6-14 fr above base. Interval 14-23 ft above base of abundantly hematite-flecked (in outcrop) arkose in beds 6 to 30 in. thick. Upper 27 ft of 2- to 8- in. beds of arkose, with subordinate thinner beds of siltstone; both exhibit abundant stylolites: this subunit forms prominent backy fractured ledge that caps slope-forming basal 23 ft - - - - -

Thickness of upper member (units 5-9) - - - - -

Lower member:

4. Quartzite, feldspathic, grayish-orange pink to pale yellowish-brown, medium-grained; weathers pale yellowish-brown; crops as massive rim-forming cliff the surface of which is slightly etched to suggest large-scale, low-angle thin cross-stratification; poorly defined partings at intervals 2 to 15 ft (average 6 ft) suggest tabular bedding units, otherwise bedding structure obscure. Outcrops of basal 10 ft and uppermost 20 ft tend to be "pockmarked". Bottom 8 ft and top 12 ft slightly less feldspathic than rest. White quartz pebbles, up to 1/2 in. diameter, and irregular disks of white-weathering chert, as much as 1 in. diameter, sparse in interval

20 to 30 ft above base; in adjacent areas like pebbles exist through thicker interval.