

Younger Precambrian

Apache group

Erosional unconformity

Basalt flows

0-375

One to four flows of very hematitic, amygdaloidal basalt; conspicuously porphyritic in many localities. Rests on middle member of Mescal south of latitude of Chrysotile.

Erosional unconformity

Upper member

0-100

Flaggy to massive-cropping, reddish-orange to black siliceous argillite and subordinate mudstone; locally includes thin lenses of silicated limestone; typically a thin unit of chert conglomerate or breccia is at base. Member is best developed in McFadden Peak quadrangle, and is absent south of Matanes Plateau.

Erosional
unconformity

Basalt
(local)

0-110

Basalt flow like those above Mescal. Present only locally, in two small areas in McFadden Peak quadrangle and at Roosevelt Dam.

Mescal limestone

Middle (algal)
member

40-130

Comprised of two units, of about equal thickness: a lower massive-bedded stromatolite unit, and an upper slope-forming flat-bedded unit devoid of algal structures. Upper unit commonly thinned, owing to pre-Troy erosion. Both units are of dolomite or silicated limestone. Only upper unit toward top ordinarily includes abundant chert.

Lower
member

150-270

Thin- to thick-bedded, cherty dolomite original; in some areas thoroughly silicified during formation of karst breccia; in most areas has been metamorphosed to calcite limestone with abundant silicate minerals. In most of region basal 15 to 100 feet is a coarse breccia of carbonate rock.

Unconformity

Dripping Spring quartzite

Upper
member

200-370

Thin-parted feldspathic siltstone and subordinate quartzitic arkose. Siltstone is thinly laminated and cross-laminated; mudcracks, scour-and-fill features, and stylolites are abundant. Is uraniferous and generally pyritic.

Lower
member

200-350

Massive-cropping feldspathic quartzite and firmly-cemented orangish arkose. Cross-bedding characteristic but inconspicuous. Basal Barnes conglomerate bed, mainly of quartzite pebbles in an arkosic matrix, ranges from 0 to 40 feet in thickness in most areas.

Unconformity

Pioneer
formation

150-500

Predominantly grayish-red tuffaceous siltstone or silty mudstone. Lower half includes units of arkose; arkose content greatest in thick sections. Basal Scanlan conglomerate bed, 0 to 20 feet thick, is mostly of quartzite pebbles in a matrix that reflects composition of underlying rocks. Conglomerate is absent or is a thin arkose with sparse pebbles through large areas. Formation and basal part of Dripping Spring lap out against topographic high in northwest Gila County.

Nonconformity

Granitoid rocks

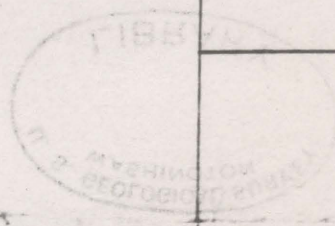
Mostly coarse, porphyritic quartz monzonite and granodiorite. Is principal basement rock of region.

Intrusive contact

Pinal schist and
equivalent metasedimentary
and metavolcanic rocks

Relatively small pendants of foliated Pinal schist in granite in southern part of region. Poorly foliated metasedimentary and metavolcanic rocks, which include prominent quartzite units increase in abundance in north part of Apache outcrop area.

Older Precambrian



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