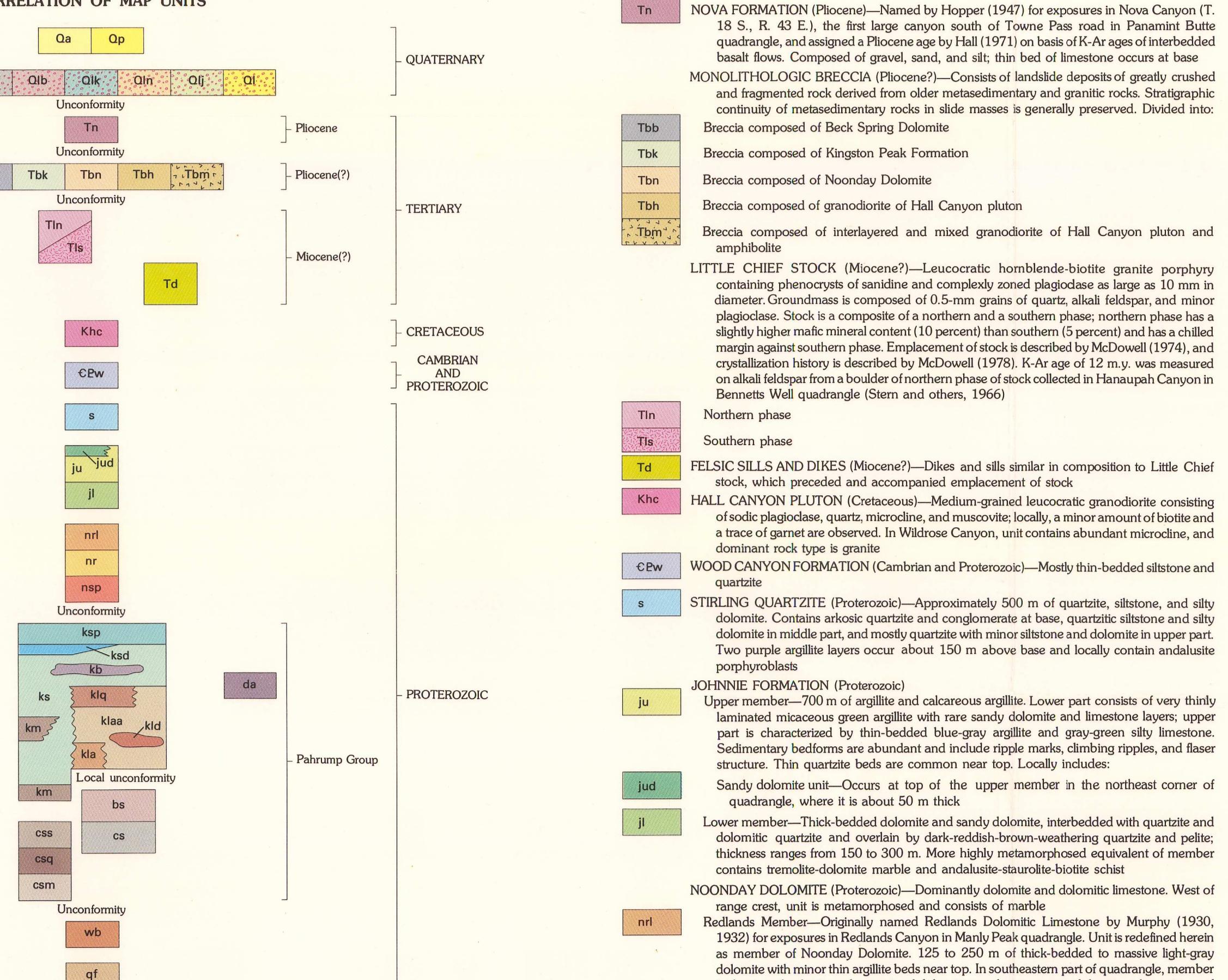
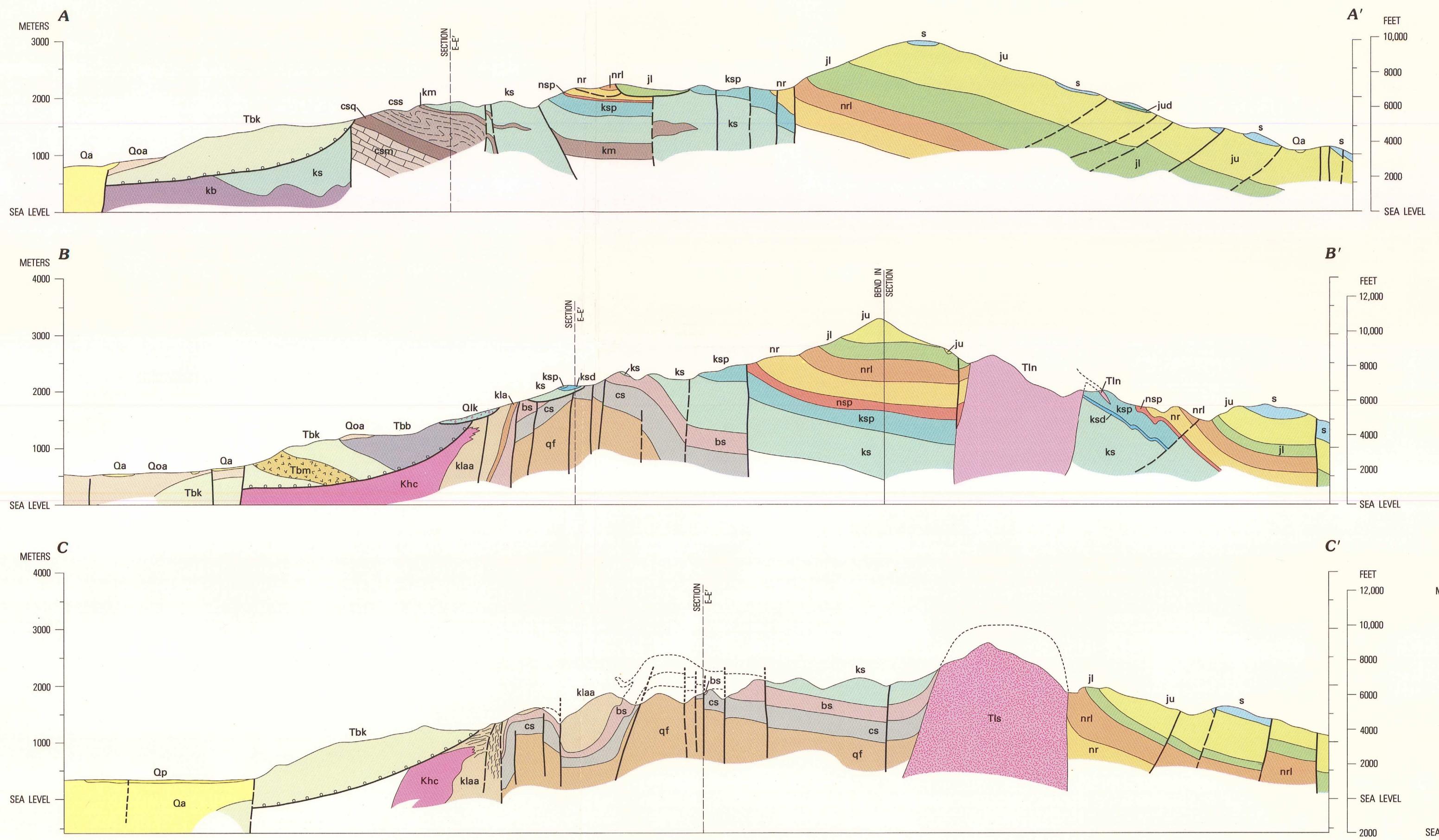


CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

Qa	ALLUVIUM AND TALUS (Quaternary)
Qp	PLAYA LAKE DEPOSITS (Quaternary)
Qo	OLDER ALLUVIUM (Quaternary)—Uplifted and dissected alluvial gravel and sand
Qlc	LANDSLIDE DEPOSITS (Quaternary)
Qlb	Debris composed of Crystal Spring Formation
Qlk	Debris composed of Beck Spring Dolomite
Qlk	Debris composed of Kingston Peak Formation
Qlk	Debris composed of Noonday Dolomite
Qlk	Debris composed of Johnnie Formation
Qlk	Deposits, undifferentiated—May be composed of debris of more than one source type



GEOLOGIC MAP OF THE TELESCOPE PEAK QUADRANGLE, CALIFORNIA

By
A.L. Albee, T.C. Labotka, M.A. Lanphere, and S.D. McDowell

1981

Scourough Limestone Member—Originally named by Murphy (1930, 1932) Sour Dough Limestone of Telescope Group; redefined by Johnson (1957) as member of Kingston Peak quadrangle. Spelling is changed to conform with that of Scourough Canyon (T. 21 S., R. 45 E.), a locality in Telescope Peak quadrangle after which Murphy named member. 5 to 10 m of thin bedded dolomite with interbeds of thin bedded limestone. In places, slumps occur at top of member and fold nappes of overlying Scourough Member into Scourough Limestone Member. In places, it is too thin to be mapped separately and is represented on map by contact between South Park Member and Surprise Member of Kingston Peak Formation.

Surprise Member—Originally defined by Surprise Formation by Murphy (1930, 1932) as type locality of member in upper part of Surprise Canyon (T. 21 S., R. 45 E.) in Telescope Peak quadrangle. Member contains 250 to 1,000 m of dolomite, dolomitic limestone, and dolomitic siltstone. Conglomeratic layers are common, particularly in lower part of member. Interbeds of thin bedded dolomite are common in upper part of member. Interbeds of dolomite lithologically similar to Beck Spring Dolomite are common in lower part, and in many places, member interingers with Beck Spring Dolomite. North of Surprise Canyon, lower part of member also contains numerous interbeds of medium-thick bedded arkose and arkosic conglomerate. Top of member is marked by 60 to 100 m of thin bedded dolomitic quartzite and quartzite. Surprise Member is divided into:

- Agelite, schist, amphibolite, and metamorphosed conglomerate**
- Quartzite and calcareous quartzite**
- Dolomite—Only thick units are mapped**
- Arkose and arkosic conglomerate—Also contains interbeds of dolomite, dolomite-clast conglomerate, and grus-clast conglomerate**
- DIABASE AND AMPHIBOLITE—Sills and dikes of metamorphosed mafic rock. May include rocks of different ages of intrusion**
- BECK SPRING DOLOMITE—Consists of 200 to 300 m of blue-gray to bluish massive dolomitic limestone, dolomitic dolomite, and dolomitic dolomitic dolomite. Originally named by Murphy (1930) and Lanphere (1962).**
- NOONDAY DOLOMITE (Proterozoic)—Dolomitic dolomite and dolomitic limestone. West of range limit, unit is dolomitic dolomite and dolomitic marble.**
- Redlands Member—Originally named Redlands Dolomite by Murphy (1930, 1932) but derivation of name was not stated. Unit is redefined herein as member of Noonday Dolomite. Range limit is 125 to 250 m of thick-bedded to massive light-gray dolomite with minor thin argillite layers near top. In southeastern part of quadrangle, member is dolomitic and consists of dolomitic sandstone, quartz-dolomitic dolomite, and quartzite.**
- Radcliff Member—Originally named Radcliff Dolomite by Murphy (1930, 1932), but derivation of name was not stated. Unit is redefined herein as member of Noonday Dolomite. Range limit is 100 to 250 m of thin bedded gray, pink, green, or brown limestone interbedded with thin bedded dolomitic dolomite and dolomitic marble.**
- Johnnie Formation (Proterozoic)—Upper part consists of very finely laminated interbedded green argillite with thin sandstone and dolomitic limestone; upper part is characterized by thin bedded blue-gray argillite and gray-green silty limestone. Sedimentary bedforms are abundant and include ripple marks, climbing ripples, and fissile structures. Thin quartzite beds are common near top. Locally bedrock.**
- Sandy dolomite unit—Occurs at the top of the member in the northeast corner of quadrangle, and it is about 50 m thick.**
- Limestone Member—Thick-bedded dolomitic dolomite, interbedded with quartzite and dolomitic quartzite, and overlain by dark reddish-brown dolomitic dolomite and pelite; thickness ranges from 150 to 300 m. More highly metamorphosed equivalent of member contains tremolite-dolomite marble and andalusite-staurolite-biotite schist.**
- NOONDAY DOLOMITE (Proterozoic)—Dolomitic dolomite and dolomitic limestone. West of range limit, unit is dolomitic dolomite and dolomitic marble.**
- Redlands Member—Originally named Redlands Dolomite by Murphy (1930) and Lanphere (1962). Unit is redefined herein as member of Noonday Dolomite. Range limit is 125 to 250 m of thick-bedded to massive light-gray dolomite with minor thin argillite layers near top. In southeastern part of quadrangle, member is dolomitic and consists of dolomitic sandstone, quartz-dolomitic dolomite, and quartzite.**
- Radcliff Member—Originally named Radcliff Dolomite by Murphy (1930, 1932), but derivation of name was not stated. Unit is redefined herein as member of Noonday Dolomite. Range limit is 100 to 250 m of thin bedded gray, pink, green, or brown limestone interbedded with thin bedded dolomitic dolomite and dolomitic marble.**
- Sentinel Peak Member—Originally named Sentinel Dolomite by Murphy (1930, 1932) and Remained Sentinel Peak Member to avoid confusion with Sentinel Member of Yerba Buena Peak. Type locality is west of Sentinel Peak (T. 21 S., R. 45 E.) in Telescope Peak quadrangle. 3 to 10 m of light-gray massive dolomite containing thin laminated siliceous limestone in lower part. Thin laminae and tabular structures are common in member. In many places, member is thin to be mapped separately.**
- Playa Lake Member—Originally named Playa Lake Member by Murphy (1930, 1932) and Remained Playa Lake Member to avoid confusion with Playa Lake Member of Yerba Buena Peak. Type locality is west of Playa Lake (T. 21 S., R. 45 E.) in Telescope Peak quadrangle. 3 to 10 m of light-gray massive dolomite containing thin laminated siliceous limestone in lower part. Thin laminae and tabular structures are common in member. In many places, member is thin to be mapped separately.**
- Kingston Peak Formation**
- South Park Member—Defined by Johnson (1957) for exposures near South Park basin in northern part of Manly Peak quadrangle. Lower part consists of as much as 130 m of thick-bedded argillite. Locally, argillite has spotted appearance due to presence of altered carbonaceous material. Middle part consists of 35 to 40 m of dolomitic dolomite and dolomite consisting of quartzite clasts in black argillitic matrix. Conglomerate is overlain by about 70 m of dolomitic quartzite and as much as 30 m of pebbly dolomite. These upper units are variably truncated by discontinuity at base of Noonday Dolomite.**

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