BULL MOUNTAIN SECTION

Location: Southwest face of Bull Mountain, Sec. 26, T. 12 N., R. 76W.

No. 26 Base of Morrison. Drab Joint Shale

Sundance: (?)

No. 55 Soft, fine grained, variously colored sandstone. The lower 10' to 15' are prevailingly pink. Small gray and brown spots are visible on fresh surfaces. The pink is gradually replaced by buff which holds persistent throughout the rest of the member. Cross-bedding of the eolian type extends through the entire thickness. The upper 25' are less massive giving a flaggy appearance on weathered surfaces..... 127'

Jelm:

No. 54 Red limestone breccia. This bed is the characteristic bone bearing horizon throughout southern Wyoming. Its thickness thins from 3' to 6"..... 29"

No. 53 Red shale. Contains a number of irregular gray streaks and patches the maximum of which measures 4" in thickness..... 10' 6"

No. 52 Massive gray to brick red sandstone. The change of color is effective both vertically and horizontally. Both extremes may be noted in a distance of three feet either across the face of the member or along the strike. A characteristic feature of this member which serves to distinguish it from the preceding is that it breaks up into slabs from 2" to 4" thick, many of which have an area of from 15 to 20 square feet. 28' 6"

No. 51 Red shaly sandstone. Several mottled streaks of gray and pink in upper three feet..... 7' 6"

No. 50 Very massive, soft, brick red sandstone. This member is very uniform in grain throughout its entire thickness and is cross-bedded on a large scale (eolian type). This bed does not have the tendency to weather shaly. It is of the monumental type..... 108'

Chugwater:

No. 49 Soft red shale..... 6"-8"

No. 48 Red and gray sandstone. The contact between this sandstone and the underlying shale member is irregular. Upon weathering the bed breaks into slabs 6" to 8" thick. The surfaces of which are marked by large ripples. These ripples have the appearance of smalldomes and basins. The basins have an average depression of 1" and a diameter ranging from 6" to 12". This is the first gray sandstone to be noted in several hundred feet..... 5' 6"

No. 47 Red shale. A six inch sandstone layer occurs 3' from the base. Thin irregular gray streaks and patches also present..... 7' 2"

No. 46 Red shaly sandstone..... 18"

No. 45 Red joint shale. Contains a one inch gray streak two inches above base..... 9'

No. 44 Red shaly sandstone. Torrentially cross-bedded on a very small scale..... 9'

No. 43 Hard flaggy, red sandstone. The surface of the flags are marked with the following features: Claygalls, sun-cracks and ripple-marks..... 6'

No. 42 Red shaly sandstone. This member presents massive surfaces upon fresh exposures. It weathers rapidly into thin flakes which give rise to shaly slopes. Ripple-marked surfaces common 67'

No. 41 Hard red ripple-marked sandstone. Upper and lower surfaces covered with clay-galls..... 1' 2"

No. 40 Massive red sandstone. Weathers into thin shaly flakes..... 12' 6"

No. 39 Red shale and thin red sandstone. Two thin (1" to 2" thick) streaks of gray separated by 1" of red and present in the upper portion..... 12'

No. 38 Red sandstone. Weathers shaly..... 9'10"

No. 37 Red sandy shale..... 11' 6"

No. 36 Red sandstone presenting the same features as Bed No.34 6"

No. 35 Soft red shale..... 1'10"

No. 34 Hard red sandstone. Torrential cross-bedding on a very minute scale. In the upper two inches the bedding planes are thrown into series of small wrinkles or folds

No. 33 Red sandy shale..... 14"

No. 32 Red sandstone. This member appears massive upon fresh surfaces but upon weathering it breaks down into small roughly eliptical flakes. It displays on various surfaces the evidence of shallow water deposition. Ripple-marking resembling trails are common..... 52'

No. 31 Soft red shale and sandstone. The lower part of this member is covered with a drift of fine red sand. Shale predominates over the sandstone in the lower portion. Some thin gypsum seams may be present in the drift covered portion..... 423'

No. 30 White gypsum..... 1' 9"

No. 29 Soft red shale..... 9' 6"

No. 28 White gypsum..... 2' 6"-3"

No. 27 Bright red shale and shaly sandstone..... 52'

Forelle:

No. 26 Gray fragmental limestone..... 1' 6"

No. 25 Deep red sandy shale..... 8'

No. 24 Wavy crystalline limestone. Weathers to yellowish gray on fresh fracture. Evidence of sun-cracking on upper surface..... 2'

No. 23 Gray, red and purple ribbon limestone. This rock is very dense and resistant. It consists of thin (1/4 to 1/16" thick) alternating plates of red, gray and purple limestone. These layers are best exhibited on erosion surfaces accentuated by differential weathering. It is significant to note that the red and purple bands are more resistant than the gray..... 18'

No. 22 Irregular wavy gray limestone. Dirty brown on weathered surfaces..... 2' 6"

No. 21 Gray, red and purple, ribbon limestone..... 6"

Satanka:

No. 20 Deep red sandstone and shale. Sandstone predominates in the upper portion while shale is characteristic of the lower. The upper 25' to 30' ate mottled with an abundance of small white spots averaging less than 1/8" in diameter. This sandstone has a roughly concretionary habit scaling off in successive layers of varying thickness..... 98'

No. 19 Variously colored very soft sandstone. Color chiefly buff to brown with minor amounts of pink and red. Four feet from the base of this member is a thin irregular bed of gypsum and aragonites..... 10' 6"

No. 18 Dark crystalline limestone. This member has a marked fetid ordor on fresh fracture..... 4"-6"

No. 17 Soft cream colored shaly limestone. No fossils.... 1' 2"

Casper:

No. 16 Massive buff to salmon pink uniform grained eolian cross-bedded. The pink color is characteristic of the lower 1/3 of the member where it occurs in association with buff. The upper two-thirds is predominantly buff with thin irregular streaks of brown..... 164'

No. 15 Red sandstone and sandy shale. Five feet from the top of this bed is an irregular band (maximum thickness 1') of buff sandstone. This member passes gradually into the sandstone above..... 31' 6"

No. 14 Massive gray sandstone..... 2'

No. 13 Red shale changing upwards into pink sandstone..... 10'

No. 12 Red shale with some green spots present..... 2' 9"

No. 11 Gray sandstone with some thin red streaks..... 8'

No. 10 Deep red joint shale..... 3' 6"

No. 9 Gray sandstone..... 1' 3"

No. 8 Red shale..... 6"

No. 7 Massive fine grained gray sandstone..... 5' 6"

No. 6 Red and gray sandstones changing locally into red sandy shale. The gray color covers from 4 to 5 per cent of the exposed surface. The change from red to gray is gradual

and is not restricted to bedding planes. The change may be complete in 10' or less..... 22' 3"

No. 5 Red Joint shale. An irregular band of gray two to six inches thick occurs one inch from the top..... 3'

No. 4 Red, sandy shale. This member contains six gray streaks ranging from $\frac{1}{2}$ to 4" in thickness..... 18'

No. 3 Massive fine grained red sandstone..... 3'

Fountain:

No. 2 Arkose conglomerate and thin interbedded sandstone. This member is not exposed sufficiently for detailed subdivisions. It consists of medium fine red to gray arkose containing pebbles to three and four inches in diameter. Cut-and-fill structure is a promounced feature. Limestone lenses varying greatly in both vertical and horizontal distribution are characteristic. One of these lenses has a maximum thickness of 3'. Thin red and gray sandstones are interbedded with the conglomerate. Approximately 70% of the whole is arkose grits..... 458'

Pre-Cambrian:

No. 1 Coarse grained pink to red granite. Contact with the overlying sediments poorly exposed.....