CENTENNIAL SECTION

Location: This section is exposed on the west flank of the Centennial syncline one mile west of Centennial, in Sec. 4, T. 15 N., R. 78 W.

Sundance:

Jelm:

Soft gray to drab and reddish shale

No. 38 Massive brown to buff sandstone, uniformly grained and eolian cross-bedded. The upper 30' are darker in color than the underlying. Only the central 15' of this member is exposed on the surface. The character of the rest of the member was determined by shallow pits..... 85'

No. 37 Soft green and red paper shale. The upper and lower portions of the member are of a deep green color while the central portion is a bright red..... 10' 6"

No. 36 Red to gray eolian, cross-bedded sandstone; clay-galls, dark brown and shaly in upper portion. Thin irregular beds of the characteristic red limestone breccia occupy positions near the base of this member..... 35'

No. 35 Fine red sandy shale, the upper 2 or 3 feet of which consist of the characteristic red limestone and gray shale..... 35'

No. 34 Soft gray sandstone..... 6'

No. 33 Red and gray sandy shale..... 50'

Chugwater:

No. 32 Red sandstone and shale. This member is too poorly exposed for detailed observation..... 616'

Forelle:

No. 31 Irregular band of white fossiliferous limestone. Myalina Zone..... 1' +

No. 30 Brick red to purplish red sandy shale..... 5' 3"

No. 29 Purplish gray paper shale. This bed grades into a limy sand in the upper portion..... 5'

No. 28 Gray to white wavy limestone..... 4'

Satanka:

No. 27 Soft red shale and shaly sand, 160 feet from the base is a 10' bed of cross-bedded reddish buff sandstone. The upper 100' of this member has a mottled appearance due to numerous small spherical green spots..... 250'

Camel Rock:

No. 26 Massive deep-red to buff sandstone. The lower 30' are brick-red in color. The red gradually gives way to buff which in turn gives way to gray and buff. The whole is irregularly cross-bedded with the eolian type. A net-work pattern of small ramifying quartz stringers is characteristic of some of the beds..... 208'

No. 25 Purplish red arkose conglomerate and soft sandy shale. This is an interbedded arkose shale series. Limestone lenses are characteristic of the conglomerate and nodules of the same material are not uncommon in the shale. Pebbles in the conglomerate attain a diameter of three inches..... 46' 6"

No. 24 Soft, massive, brick red sandstone, some development of white in large patches. Eolian cross-bedding thruout. This sandstone is of the monumental type..... 39' 6"

No. 23	Red and gray paper shale. This member thins to 0' in 10 feet.....	1'
No. 22	Massive, gray sandstone.....	1' 2"
No. 21	Soft variously colored sandy shale. The color varies from deep red to purple and gray. Some arkose sand at base.....	10'
No. 20	Soft, fine-grained pink sandy shale.....	8'
No. 19	Soft, massive, red sandstone irregularly cross-bedded thruout.....	21'
No. 18	Fine-grained red arkose conglomerate.....	20'
No. 17	Hard, irregular band of dark gray to reddish limestone	4'
No. 16	Soft variously colored sandstone. Color red (predominantly), purple, gray, and white. Eolian cross-bedding in part. Not well exposed.....	122'
No. 15	Very hard reddish gray sandstone.....	1' 6"
No. 14	Soft, fine-grained sandstone to sandy shale. Colors variable, deep-red, pink, grayish purple, green, gray, and white. Change very irregular.....	27' 6"
No. 13	Mottled red and green sandstone, The green spots average less than an inch in diameter.....	4' 6"
No. 12	Hard dark gray limestone, nodular in the lower two inches. An abundance of quartz grains are imbedded in the limestone.....	1' 6"
No. 11	Mottled red and greenish gray sandstone.....	10'
No. 10	Massive salmon-pink sandstone, appearing to contain considerable lime.....	15' 9"

No. 9	Arkose sand. Color change from purplish red to green and gray; irregularly cross-bedded. The material is that of a coarse sand or a fine-grained conglomerate	142'	
No. 8	Soft massive red and gray sandstone.....	7'	6"
No. 7	Red sandy shale. Limestone lenses and nodules are common.....	14'	8"
No. 6	Red shale with a minor amount of sand. Limestone nodules present in great abundance. Member not well exposed.....	73'	6"
No. 5	Soft red and gray sandstone.....	1'	
No. 4	Fine-grained red joint shale with numerous nodules of gray limestone.....	29'	5"
No. 3	Soft red and gray sandstone.....	2'	
No. 2	Mottled red and green shale.....	29'	6"
No. 1	Deep red and cream colored soft shale streaked and mottled.....	35'	4"
	Concealed.....	50'	

Pre-Cambrian:

Medium-grained hornblende schist and interbedded fine-grained biotite schist.