

Table 2.--Structural properties of units A through F and (A' through F') USBM/AEC Colorado Core Hole No. 3 (Bronco BR-1), Rio Blanco County, Colorado (see fig. 2)

Unit	Core interval (feet)	Thickness (feet)	Average joint frequency (joints/foot)	Average broken core (percent)	Average core loss (percent)	Average index number ^{1/}	Comments
A	964 - 1,153	189	2.5	34	4	6.3	Units A through F include bedding plane fractures in the joint frequency count. Average index numbers for Units A through F are taken from the lower curve in figure 2.
B	1,153 - 1,352	199	2.5	14	4	4.3	
C	1,352 - 1,646	294	1.6	33	16	6.5	
D	1,646 - 1,899	253	3.2	43	30	10.5	
E	1,899 - 2,749	850	1.4	2	5	2.1	
F	2,749 - 3,302	553	1.8	8	5	3.1	
A'	964 - 1,153	189	0.80	34	4	4.6	Units A' through F' do not include bedding plane fractures in the joint frequency count. Comparison of the index number from the equivalent core intervals given above may indicate what influence, if any, bedding planes will have on rock competency. The further the index numbers from comparable units diverge from each other might signify an increasing role that bedding planes will have on rock fracturability. Average index numbers for units A' through F' are taken from the upper curve in figure 2.
B'	1,153 - 1,352	199	0.50	14	4	2.3	
C'	1,352 - 1,646	294	0.40	33	16	5.3	
D'	1,646 - 1,899	253	0.20	43	30	7.5	
E'	1,899 - 2,749	850	0.08	2	5	0.8	
F'	2,749 - 3,302	553	0.10	8	5	1.4	

^{1/} Index number = joint frequency + 0.1 X percent of broken core + 0.1 X percent of lost core. Example: Unit A index number = 2.5 + 3.4 + 0.4 = 6.3.

An increase in number is indicative of an increase in the number of fractures in the rock and, therefore, a decrease in the competency of the rock.

In calculating the index number the values for percent of broken core and lost core (range 0-100) were reduced to 0.1 of their original values. This was done for two reasons: (1) to keep all values (joint frequency, broken core and lost core) within the range of 0-10 and (2) to avoid unrealistically weighting the broken core and lost core number values at the expense of the joint frequency number value. Joint frequency values normally range between 0-10.