

stone, in beds of six to fifty feet thickness. Above this, although partial sections were obtained here and there, the continuity is broken. There appears to be altogether a development of 4,000 to 5,000 feet of measures above the top of the section just given. In contrast to the lower part of the series, black shales are rarely found here. Brown colours prevail throughout. The principal rocks are: soft brown friable shale decomposing easily into brown sand, brown shale weathering into angular blocks, soft grey, greenish, and yellowish sandstone weathering brown and reddish, frequently unequally and nodularly hardened. There are some beds of harder grey sandstone and conglomerate. Dark grey friable shale forms an appreciable part of the series, and an occasional band of black shale is to be seen. Toward the top of the series there is a notable bed of conglomerate, composed of well-rounded dark, cherty quartzite pebbles up to six inches in diameter, loosely held together by a matrix of soft grey sandstone. It decomposes readily, the pebbles being found in abundance in stream-beds and strewn along the hill-sides, while the rock in place, like the outcrop of coal-seams, is only to be found in certain favourable locations.

The total thickness of Cretaceous rocks deposited in the area, according to the above estimates, is from 12,000 to 13,000 feet.

It is not at all probable that a section could be found in any other part of the area that would exactly, or even closely, correspond to the one just given. A comparison of a part of this section with the beds at the mines on Coal creek, shows that there is a great difference in thickness between the measures at the two places. The coal seams numbered 61, 63, and 71, in the section, correspond to the three seams which up to the present have been chiefly worked at the mines as shown in the following table. The distance between the two places is about seven miles.

	Near Morrissey.	On Coal creek.
<i>Coal</i>	10 feet.	10 feet.
<i>Intervening beds</i>	140 "	60 "
<i>Coal</i>	36 "	30 "
<i>Intervening beds</i>	197 "	42 "
<i>Coal</i>	6 "	6 "