

one place here the coal was so much squeezed and the seams so irregular that they vary from a few inches to several feet, in almost the same distance. The coal of one seam has been so altered that in a tight part of a fold it has been altered to an impure graphite.

Farther up the river, about a quarter of a mile, where the coal again appears, one seam about three feet six inches wide was noticed, which, for some distance at least, is quite regular. An average outcrop sample was analysed by Dr. Hoffmann, giving:—

Water,	Vol. comb. matter,	Fixed carbon,	Ash,
0.53%	14.99%	61.55%	19.93%

"It yields by fast coking, a compact, firm, coherent coke."

Places could likely be found here where this coal could be profitably worked if there was a demand for it, especially as there is a good wagon road up this far.

Coxcomb Mountain.

Near the top of Coxcomb mountain the Kootanie coal measures outcrop for some distance, but a complete section was not seen. There appear to be, however, at least four or five seams, and some may be of workable width, but those seen were only thirty-six, twenty-three and nineteen inches, respectively.

An average outcrop sample of the thirty six inch seam, analysed by Dr. Hoffmann, shows it to be an anthracitic coal and gives:—

Water,	Vol. comb. matter,	Fixed carbon,	Ash,
1.64%	11.26%	82.01%	2.09%

But since the measures outcrop in so many places, at all elevations from the level of Jumpingpound creek, below, to the mountain summits on both sides of it, and along it for about four miles and south of Jumpingpound mountain, as shown on the map, there is a likely chance of finding quite accessible points at which the seams are of sufficient width and regular enough to be economically worked; since the quality of the coal itself is good. Where the measures outcrop along Jumpingpound creek to the north of Coxcomb mountain no seams were noticed over a few inches in width. Several feet of carbonaceous shale outcrop, however, in one place.

Where the Kootanie formation outcrops, on a branch of Lusk creek running into it from the east, only the upper part of the formation is exposed, and as the dips here are about flat whatever coal exists is below the surface.

There is no reason to suppose that the places where the coal was measured are better than others. They were simply convenient places where the seams could be measured with a little digging being necessary. There was no point along the outcrop where any considerable portion of the formation was exposed, that coal was not seen if search was made.