appear less disturbed just above it, where the following section was measured:—

	Feet.	Inches
Dark brown shale		
Coal	1	0
Brown shale	1	6
Sandstone	12	0
Brown shale	7	3
Dark coarse sandstone	3	6
Sandstone and shale	32	0
Coal	15	6
Gray sandy shales	1	6
Coal	2	3
Dark gray shales	3	7
Coal	8	3
Dark brown sandstones and shales	1	10
Coal	21	0
Dark sandstones and shales	2	3
Coal	73	0
Brown coarse sandstones	8	2
Coal	21	0
Dark coarse shales	6	10
Dark blue shales	1	3
Shales and sandstones	0	0
Brown prominent sandstone bed	23	0
	63	0
Total thickness of Kootanie	314	8
Total thickness of coal	25	8
Dark Fernie shales	195	0

An average outcrop sample of the eighteen-inch seam in the above section, gives:—

Water.	Vol. comb. matter.	Fixed carbon.	Ash.
1.86%	19.23%	76.07%	2.84%

An average outcrop sample of the seven foot, six-inch seam, north of the creek, opposite the mine, gives:—

Water.	Vol. comb. matter.	Fixed carbon.	Ash.
1.17%	13.54%	69.77%	15.52%

An average outcrop sample of the six foot, ten-inch seam in the above section, gives:—

Water.	Vol. comb. matter.	Fixed carbon.	Ash.
2.74%	18.62%	75.52%	3.12%

These analyses were made by Dr. Hoffmann, of this department. Concerning the last sample, he also says:—

"Structure, somewhat coarse lamellar, made up of irregularly alternating layers of grayish-black, somewhat bright and dense, jet-black coal of brilliant lustre, with an occasional interposed film of mineral charcoal, contorted, shows slickensides in an eminent degree,—compact; firm; fracture, irregular; powder, brownish-black; it communicates a pale brownish-yellow colour to a boiling solution of caustic potash."

As the above measures cross the creek bottom the coal could be conveniently mined to advantage by tunnels run in on seams at convenient levels above the creek.