

North Slope—North Seam :

Moisture	1.625
Volatile Combustible Matter, Fast Coking.	33.401
" " Slow "	28.672
Fixed Carbon	60.701
" " Slow "	65.431
Ash	4.272
Sulphur783
Theoretical Evaporative Power.....	8.99

The analysis of the Black seam made in the year 1878 has a complete sample column of coal representing the whole seam as then worked. A companion column was presented to the museum of the Geological Survey at Ottawa. The section of the seam was as follows :—

	Feet.	Inches.
Top coal, a little coarse.....	1	7
Coal, good	1	2½
Fire clay parting.....	—	0½
Coal, good	—	8
Coal, good	1	6
Fire clay parting.....	—	6
Coal, a little coarse.....	—	9
Coal, good	—	11
Fire clay parting.....	—	1
Coal, good	2	2
Coal, good, one inch soft	—	3
Coal, coarse.....	—	8½
Total	10	4½

I need not repeat here the minute description given then of the various layers. It may be stated that the coal of the sample was bright, with occasional calc-spar and pyrites films, with somewhat irregular fracture. In the vicinity of the point in the mine where the sample was taken a large amount of coal was beautifully iridescent, recalling that splendid mineral Chrysocolla. Samples of this when analysed with the means at my disposal did not give a reason for the coloring. It may have been due to some process of oxidation of iron pyrites.