

Pyrrhotite from Nictaux, Annapolis Co., N. S. The mineral occurs here also massive, with quartz; it attracts both ends of the magnetic needle. Analysis gave:—

Nickel with a little cobalt 0.10 per cent.

Pyrrhotite from Geysers Hill, Halifax Co., N. S. In this case no note is on record as regards magnetic intensity, but the mineral gave a distinct reaction for nickel.

Pyrrhotite from Latete, New Brunswick. Several specimens from this locality, where, I understand, on good authority, the mineral occurs in considerable quantity, examined at different times, have given results showing that the quantity of nickel and cobalt is far from uniform. The mineral is massive, finely granular, and attracts both ends of the needle readily. No attempt was made to separate the nickel and cobalt found, the metals were thrown down as oxides, and calculated as from protoxide of nickel.

No. 1	afforded, per cent.	0.09	"nickel."
" 2	" " "	0.36	"
" 3	" " "	0.80	"
" 4	" " "	0.40	"

the "nickel" was proved to contain a considerable proportion of cobalt in the last three cases, no note was preserved as regards the first; in the last, No. 4, manganese was detected before the blow-pipe by the soda test. This sample was averaged on the spot by an experienced person interested in obtaining a correct representation of the deposit, and the "nickel" obtained above is just the average of that got in the three preceding experiments; a circumstance I did not observe till these notes were put together.

Pyrrhotite from Lowell, Massachusetts, U. S. Specimens of this were placed in my hands, last autumn, as of a mineral containing 25 to 30 per cent. of nickel. It is found over a considerable area, and is, I believe, being worked. The mineral is coarsely granular, no crystals were seen on the specimens given to me; it occurs with a highly silicious rock containing a little mica, which runs in veins sometimes half an inch thick through the ore in hand-specimens. The magnetism is so feeble that it is only perceived by actual contact of the finely powdered mineral with a magnet, when an exceedingly small quantity is retained. This property and the similarity in some characters, and in qualitative composition to Pentlandite, together with the statement as to the amount of nickel present, made a quantitative analysis desirable. The results of one on a piece of pure looking ore were these:—

Sulphur	33.91
Iron	53.75
Nickel	2.41
Gangue	8.30
Magnesia and Loss . . .	1.63