



GEOLOGICAL SURVEY OF CANADA

(Museum and Office, 76, S^t. Gabriel Street, MONTREAL.)

May 13th 1875

Dear Sir,

Mr. Hoffmann of the Survey Laboratory has just finished the analysis of the "saline" water from "Eastman's Springs," and thinking that you may be anxious to obtain the results, I forward you his analysis & notes on the subject.

"The quantity forwarded for examination was far too small to admit of a complete analysis: the principal constituents, however, have been estimated, leaving the Lithia, Baryta, Strontia, Bromine, Iodine, & Phosphoric Acid undetermined.

"The first sample of this water received had a specific gravity of 1020. A subsequent collection, and that of which the following is an analysis had a specific gravity of 1019.44. When received it was turbid and had a brownish-yellow colour; but after standing for some time it became perfectly clear and colourless. The deposited matter consisted mainly of Ferric Hydrate, which had no doubt previously existed in the water as Ferrous Carbonate.

2 "The whole of the sodium has been calculated as chloride, although a portion of it exists as Bromide & Iodide. It is also inferred that a portion of the Carbonic Acid represented as in combination with lime is really present in combination with a small portion of the magnesia & some of the undetermined bases.

"This water would appear to belong to the same class as those of Ancaster, Whitby & Hallowell which were analysed by Dr J. S. Hunt (Vide geology of Canada, 1863, p. 547.)

"The water contains in 1000 parts

Potassa	.0996	
Soda	10.0654	
Lithia	—	undetermined
Baryta	—	"
Strontia	—	"
Lime	2.1744	
Magnesia	.8020	
Alumina	.0022	
Ferrous Oxide	.0049	
Ferrie Oxide	.0311	
Copper	—	minute traces
Chlorine	15.6938	
Bromine	—	undetermined
Iodine	—	"
Sulphuric Acid	.0117	
Phosphoric Acid	—	"
Carbonic Acid	.1023	
Silica	.0090	