## SUMMARY OF CONCLUSIONS.

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The Malagash salt is a deposit formed by the evaporation of sea water during a recession of the Mississippian sea in Windsor time.

Mining development has demonstrated the presence of a sufficient quantity of salt for the establishment of an important industry, and the market is now supplied by run of mine salt from a bed 4 feet thick, an average sample from which contained 98 per cent sodium chloride. A bed of clean crystalline salt 21 feet 6 inches thick has been encountered in a boring by a diamond drill at the face of the underground workings. Sixty feet thickness of salt strata measured at right angles to the dip has been eut by a shaft and level, all of which can be utilized for the manufacture of refined salt or other sodium compounds. As only about onetenth of the ground underlain by brine has been crossed in the Malagash mine workings, the outlook for a much thicker body of salt is good.

Potassium chloride occurs in a lenticular deposit in the form of crystalline masses of pink and yellowish green sylvite in a matrix of halite. A potash zone has been penetrated at two points 30 feet apart, varying in thickness from a few inches to 5 feet. The potash content is variable, dependent on the concentration of sylvite which is probably of secondary origin.

In the shaft near the top of the salt bed a 4-foot seam, with an analysis of  $1 \cdot 16$  potash was encountered, and in the face of the drift, about 30 feet lower stratigraphically, a much richer potash zone was exposed. In one place, a full shot from the face ran  $8 \cdot 73$  per cent potash.

The salt strata are probably offset by faults at certain localities, but the regularity of the structure along the coast to the north, for a distance of about three-quarters of a mile, suggests that the salt may extend without serious interruption for an equal distance along the strike, and the sedimentary character of the salt points to a continuation in depth, parallel to the dip of the enclosing rocks.

The occurrence at many localities in Nova Scotia and New Brunswick of salt springs issuing from rocks of the same geological age, suggests that other deposits of a similar nature occur in the vicinity of these springs. The salt strata are similar in origin to the extensive Stassfurt deposits in southern Saxony, in which large accumulations of potash-bearing sediments occur. The presence of small quantities of potash at Malagash and in the brines from springs elsewhere indicates that, possibly, potash in conmercial quantities may also occur in the Maritime Provinces.

The establishment of a salt and allied chemical industry should receive careful consideration as the favourable location of Malagash with respect to the supply of raw materials and fuel and its exceptional advantages for transportation either by rail or water offer an opportunity for successful competition in both domestic and foreign markets.

## PHYSIOGRAPHY.

The dominant feature controlling the scenery of the Malagash peninsula is a ridge rising to elevations between 100 and 200 feet above sealevel, and extending easterly from Wallace ridge north of Golden brook to Malagash point. A second parallel ridge lies to the south of Golden brook