

Analyses of the Ore.—The ore is in 25 separate deposits, which vary somewhat in physical nature and will yield shipments with a considerable variety of chemical composition. Reports for 1948 give the following information:—

TONNAGE OF PROVEN ORE AT THE END OF 1948 AND DRY ANALYSES

<u>Class</u>	<u>Proven Ore</u>	<u>Dry Analyses</u>			
		<u>Fe</u>	<u>Mn</u>	<u>P</u>	<u>SiO₂</u>
	Long tons	p.c.	p.c.	p.c.	p.c.
LABRADOR MINING AND EXPLORATION Co.—					
Bessemer.....	53,572,000	60.84	0.21	0.029	10.08
Non-bessemer.....	36,884,000	58.88	0.52	0.119	7.40
Manganiferous.....	10,598,000	49.85	7.53	0.129	8.38
TOTAL.....	101,054,000				
HOLLINGER NORTH SHORE EXPLORATION Co.—					
Bessemer.....	132,955,000	60.63	0.33	0.028	7.98
Non-bessemer.....	62,023,000	57.13	0.58	0.108	7.80
Manganiferous.....	27,796,000	50.38	7.74	0.092	7.51
TOTAL.....	222,774,000				

As the intensive exploration has hardly begun, it is not yet possible to envisage the future of the field in any but a general way. After 50 years of mining on the Mesabi Range of Minnesota, new deposits are still being discovered beneath the deep cover glacial drift. After only three years of superficial prospecting of outcrops the Labrador field has yielded 25 mineable deposits. Plans were made to dig through the thin cover of glacial drift in favourable spots in search of additional deposits during the 1949 field season.

Besides the iron ore, outcrops of manganese ore and of lead, zinc and copper minerals have been found on the concessions. Such ores are, of course, worth a good deal more by the ton than iron ore and, if proven in mineable tonnages, they would be a very valuable addition to the new mineral region. Manganese ore, particularly, is much in demand in Canada and the United States as no appreciable quantity has been found so far on this Continent.

Of the three classes of iron ore, manganiferous iron ore is probably in greatest demand. It provides in convenient and economical form the manganese required in the resultant pig-iron. Bessemer ore, low in phosphorus, fetches a higher price than non-bessemer.

Operating Conditions.—In general operating conditions are good. As noted previously, by driving tunnels into the central parts of two of the orebodies the ore can be handled readily by shovels after being loosened by means of wide-spaced blast holes. The initial pits will be above valley level, thus permitting access to the pits on level tracks, avoiding pumping, and ensuring minimum cost in the ore-cars for some years to come.

The climatic conditions of this region during the shipping season are much the same as those of northern Minnesota, though its latitude is about 500 miles farther north, or about the same as Edmonton, Alta. Shipments from the mines will be confined to six months of the year on account of early and late frosts that would freeze the ore in the cars. Shipments by water from Seven Islands will be possible for a longer period as the climate at the coast is much less severe. The winter conditions are probably more severe than those in Minnesota, and constant winds cause large accumulations of drifted snow in some of the valleys but there is no