GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS

Figure 6

Iron deposits and their relationship to anorthosite masses of the Grenville Province

Scale 1:2,000,000
(1 inch = approximately 32 miles)

Miles 25 0 25 50 75 Miles
Kilometres 50 0 50 100 Kilometres

To accompany Economic Geology Report No. 22, Volume II, by G. A. Gross

LEGEND

MESOZOIC

14 — *Volcanic rocks, mainly massive andesite*

PALAEOZOIC

13 + 13 — *Sedimentary rocks, mainly early Palaeozoic limestone, dolomite, and sandstone*

PROTEROZOIC

12 — *Volcanic and metavolcanic rocks; may include some minor sediments*

11 — *Sedimentary and metasedimentary rocks; may include some minor volcanic rocks*

GRENVILLE SERIES (9, 10)

10 — *Metasedimentary rocks, mainly crystalline limestone, quartzite, schist, gneiss*

9 — *Mainly basic metavolcanic rocks, amphibolite*

ARCHAEAN

7 — *Volcanic and metavolcanic rocks; may include some minor sediments*

6 — *Sedimentary and metasedimentary rocks; may include some minor volcanic rocks*

8 — *Undifferentiated 6 and 7*

PLUTONIC ROCKS

PRECAMBRIAN

5 — *Mainly gabbro; minor diabase, diorite, and related intermediate to basic rocks; metamorphic equivalents*

4 — *Anorthosite*

3 + 3 — *Gabbroic anorthosite and anorthosite, mainly with related basic rocks*

2 — *Peridotite, dunite, serpentine; other ultrabasic and related rocks*

1 — *Alkaline ring complex*

Notes: Units 1 to 5 not necessarily in order of age or all of the same age. Blank areas undifferentiated granite, granodiorite- granitoid gneiss; hornblende, mica garnet schist; granulites; amphibolites; metasedimentary and metavolcanic rocks; largely unmapped.

Note: Off-shore islands lie within the Districts of Keewatin and Franklin

EXPLANATION OF SYMBOLS

Note: A red number beside a symbol indicates the number of occurrences of that type in a small area. Solid symbols indicate producing deposits or deposits worked in the past. Open symbols indicate undeveloped occurrences

IRON-FORMATIONS

Superior type iron-formation or metamorphic equivalent

Algoma type iron-formation or metamorphic equivalent; mostly associated with volcanic rocks

Quartz magnetite and hematite iron-formation in south part of Grenville Province

Location or extent of iron-formation uncertain, in part assumed from magnetic data

IRON DEPOSITS ASSOCIATED DIRECTLY WITH PLUTONIC ROCKS AND RELATED METASOMATIC DEPOSITS

Contact metasomatic, replacement, and skarn deposits, composed predominantly of magnetite and containing less than 1 per cent TiO_2

Titaniferous magnetite deposits in basic, ultrabasic and anorthositic rocks with minor ilmenite or chromite associated and containing more than 1 per cent TiO_2

Ilmenite deposits in anorthosite T

Veins, open space fillings and structurally controlled replacement occurrences of iron minerals

OTHER TYPES OF IRON DEPOSITS

Iron-bearing sand, gravel or placer deposits S

Bog iron B

Iron occurrences of unknown type ×

Location numbers on map are given in text and listed in Appendix III 98

Compiled by G. A. Gross, 1962

Mineral deposit information from published and unpublished maps and reports of federal and provincial government departments and private companies

Road, all weather — Route No. (7)
Railway
International boundary
Provincial boundary
County or district boundary

Cartography by the Geological Survey of Canada, 1966

Base-map from maps published by the Surveys and Mapping Branch

Approximate boundary of Grenville Province

HUDSON BAY · JAMES BAY · UNGAVA BAY · LABRADOR SEA · NEW QUEBEC · QUEBEC · LABRADOR · NEWFOUNDLAND · ONTARIO · NEW BRUNSWICK · NOVA SCOTIA · PRINCE EDWARD ISLAND · CAPE BRETON ISLAND · ISLAND OF NEWFOUNDLAND · ANTICOSTI ISLAND · GULF OF ST LAWRENCE · ST LAWRENCE RIVER · ATLANTIC OCEAN · UNITED STATES · LAKE HURON · LAKE ERIE · LAKE ONTARIO

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Figure 6