Manitoba
Energy and Mines

MDS MAP NO. 20 (1996)

MINERAL DEPOSITS AND OCCURRENCES IN THE NAOSAP LAKE (63K/14) AREA, MANITOBA

To accompany Report No. 20 of the Mineral Deposit Series

MANITOBA MINERAL DEPOSIT SERIES

The Mineral Deposit Series is designed to provide the explorationist with an up-to-date reference with accurate geographic locations of known mineralization within the Province. A descriptive classification of the mineralization into *deposit types* will assist mineral explorationists in the formulation of exploration strategies.

Mineral occurrences with known tonnage and metal grades are designated as *deposits* and are highlighted with bold deposit type symbols. Where more than one deposit type is known to occur at a locality, the deposit type with the greatest economic potential is indicated. For example, a 30 cm thick solid sulphide layer of the massive sulphide deposit type is indicated instead of a 2 m thick graphitic sulphide layer of the chemical sediment deposit type at the same locality. Mineral occurrence data not displayed on the map are referenced in a companion report to enable the explorationist to modify the classifications in keeping with new developments or concepts.

The basic publication unit for the Mineral Deposit Series is the 1:50 000 NTS sheet, on which deposits and occurrences are indexed consecutively. Where the density of data warrants the publication of a 1:20 000 map sheet (e.g. 63K/13SE), location numbers may not be consecutive and intervening numbers will be found on the remaining portions of that NTS map sheet (e.g. 63K/13SW).

The accompanying report contains a synthesis of known information for each locality on: Exploration History, Geological Setting, Mineralization, Deposit Type and References. The reports contain detailed maps that include precise locations, drill hole and trench locations and wherever possible detailed geological maps of the property. The data base used to derive the reports resides in active mineral deposit files in the possession of the mineral deposit geologists at the Geological Services Branch.

This Mineral Deposit Series will be updated periodically as new information becomes available. Consequently, any errors, omissions or suggestions for improvement should be brought to the attention of the Director, Geological Services Branch.

GEOLOGICAL LEGEND

INTRUSIVE ROCKS

12 — Gabbroic to dioritic rocks

11 — Granodiorite
a) Gneissic biotite granodiorite; some gneissic hornblende granodiorite
b) Massive biotite granodiorite and granite
c) Porphyritic biotite granodiorite

10 — Intermediate intrusive rocks
a) Gneissic hornblende-biotite-quartz diorite to hornblende granodiorite, some biotite granodiorite
b) Gneissic hornblende diorite
c) Gneissic diorite to monzonite

9 — Quartzofeldspathic gneiss (orthogneiss)

MISSI METAMORPHIC SUITE

8 — Amphibolite

7 — Metasandstones (quartz rich gneiss, quartzofeldspathic gneiss, hornblende-biotite gneiss and metaconglomerate)
a) Metaconglomerate

6 — Felsic gneiss (metavolcanic)

BURNTWOOD RIVER METAMORPHIC SUITE

5 — Biotite-garnet gneiss

AMISK GROUP

4 — Metasedimentary rocks
a) Biotite-garnet schist
b) Greywacke, siltstone, mudstone

3 — Amphibolite, calc-silicate rocks and felsic volcanic rocks

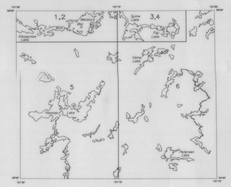
2 — Felsic volcanic rocks

Mafic to intermediate volcanic rocks
a) Amphibolite derived from (1a)

U.T.M. COORDINATES FOR MINERAL DEPOSITS/OCCURRENCES

MINERAL OCCURRENCE NUMBER	U.T.M. NORTHING (METRES)	U.T.M. EASTING (METRES)
1	6093394	348672
2	6093680	349013
3	6094010	353838
4	6092757	351252
5	6093735	352547
6	6092236	348840
7	6095839	343001
8	6097107	342115
9	6095918	345404
10	6076507	344483
11	6079456	347389
12	6084311	340427
13	6086177	344761
14	6085338	353353
15	6084128	352717
16	6082728	345150
17	6082647	346286
18	6089814	361070
19	6092596	364650
20	6093905	366309
21	6071604	363636
22	6069881	361320
23	6069223	360836
24	6070710	362120
25	6092543	342359
26	6075387	342646
27	6076686	371033
28	6069157	363374
29	6068999	361022
30	6075987	339457
31	6092298	365267
32	6083211	341858
33	6088117	359479

GEOLOGICAL MAP SOURCE



Geological base derived from:

1. Froese, E. and Gait, Q.
1981: Geology of the eastern vicinity of Kisseynew Lake, Manitoba; **in** Geological Survey of Canada, Current Research, Part A, Paper 81-1A, p. 311-313.
2. Zwanzig, H.V. and Seneshen, D.
1984: Lobstick Narrows-Cleunion Lake: Manitoba Energy and Mines, Mineral Resources, Preliminary Map 1984K-1, 1:20 000.
3. Schledewitz, D.C.P.
1990: Webb Lake - Fay Lake (NTS 63/15); **in** Manitoba Energy and Mines, Minerals Division, Report of Activities, 1990, p. 58-61.
4. Parbery, D.
1986: Mineral occurrence studies - Flin Flon area; **in** Manitoba Energy and Mines, Minerals Division, Report of Field Activities, 1986, p. 49-55.
5. Kallickoski, J.
1952: Weldon Bay map area, Manitoba; Geological Survey of Canada, Memoir 270, 80p.
6. McGlynn, J.C.
1959: Elbow-Herming lakes area, Manitoba, Geological Survey of Canada, Memoir 305, 72 p.

MINERAL DEPOSITS

Deposit #	Name	Tonnes/Grade	Status
18	Vamp Lake	5 739 560/ 1.36% Cu, 1.9% Zn, 3.98 g/t Au, 13.7 g/t Ag	Exploration

Mineral deposit interpretation and compilation by
G.H. Gale and L.I. Norquay

Cartography by C. Cuddy

Scale 1:50 000

KILOMETRES 1 0 1 2 3 4 5 KILOMETRES

MINERAL DEPOSIT TYPE

- STRATABOUND MASSIVE SULPHIDE TYPE DEPOSITS
  - a) Volcanic rock associated
  - b) Sedimentary rock associated
  - c) Alteration zone associated with a or b
- CHEMICAL-SEDIMENT TYPE DEPOSITS
  - a) Sulphide facies Iron Formation
  - b) Oxide facies Iron Formation
  - c) Carbonate facies Iron Formation
  - d) Silicate facies Iron Formation
  - e) Other chemical sediments
- VEIN TYPE DEPOSITS
  - a) Single vein
  - b) Multiple veins or lenses
  - c) Stockwork
- MAGMATOGENIC TYPE DEPOSITS ASSOCIATED WITH MAFIC/ULTRAMAFIC ROCKS
  - a) Disseminated
  - b) Layered
  - c) Net textured
  - d) Podiform
- DEPOSITS WITH PORPHYRY AFFINITIES
- PEGMATITE TYPE DEPOSITS
- CLASTIC SEDIMENT TYPE DEPOSITS
- REPLACEMENT TYPE DEPOSITS
- DISSEMINATED MINERALIZATION — NOT CLASSIFIED

IMMEDIATE HOST ROCK TO MINERALIZATION

(Appendage in the 9 o'clock position)

- Rhyolitic volcanic rocks
- Dacitic volcanic rocks
- Intermediate volcanic rocks
- Basaltic volcanic rocks
- Ultramafic volcanic rocks
- Chert, cherty rocks
- Sericitic schist
- Chloritic schist
- Shale, slate, phyllite
- Sandstone, arkose
- Greywacke
- Quartzite
- Calc-silicate-rich rocks (limestone, dolomite)
- Chemical sediments
- Breccia
- Conglomerate
- Felsic intrusive rocks
- Intermediate intrusive rocks
- Mafic intrusive rocks
- Ultramafic intrusive rocks

*or metamorphic equivalent

TYPE OF MINERALIZATION

(Appendage in the 6 o'clock position)

- Trace (<1%*)
- Minor (1-10%*)
- Moderate (10 - 50%*)
- Near solid (50-75%*) to solid (>75%*)
- Near solid to solid stratified
- Near solid to solid zoned

*by volume

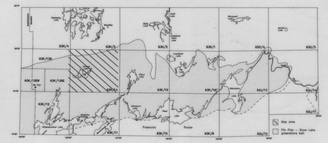
EXPLANATION OF MINERAL DEPOSIT AND OCCURRENCE SYMBOLS

AuCuZn ▲□·1 AuCuZn ▲□·1

- ·1 — Occurrence location* and reference number
- □ — Mineral deposit
- □ — Mineral occurrence
- ▲ — Immediate host rock to mineralization
- — Type of mineralization
- AuCuZn — Elements present (in order of increasing abundance)

*Exact locations indicated by a dot or outline of mineralization in solid black. Approximate locations indicated by an x.

MINERAL DEPOSIT MAP SERIES



SYMBOLS

GEOLOGICAL SYMBOLS

- Geological contact, known
- approximate, assumed
- Fault
- Geophysical conductor

TOPOGRAPHIC SYMBOLS

- Marsh, swamp
- Rock, island reef
- 1000 — Contour
- 614 — Road
- Railroad