

MANITOBA MINERAL DEPOSIT SERIES

The Mineral Deposit Series is designed to provide the explorationist with an up-to-date reference with accurate geographic locations for 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 graphic 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 will be 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/135E), location numbers may not be consecutive and intervening numbers will be found on the remaining portions of that NTS map sheet (e.g. 63K/135W).

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 will reside 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.

- SYMBOLS**
- GEOLOGICAL SYMBOLS**
- 5+ Felsic intrusions
    - a) Pegmatite
    - b) Granite, granodiorite, tonalite
  - 4 Mafic intrusions
    - a) Pyroxenite, gabbro
    - b) Diorite, diorite gneiss
  - 3 Quartzofeldspathic gneiss and migmatite
    - a) Quartz-feldspar-biotite hornblende + garnet + sillimanite paragneiss
    - b) Quartz-rich metasediments, metaconglomerate
    - c) Migmatitic quartzofeldspathic paragneiss
  - 2 Amphibolite
    - a) Amphibolite
    - b) Garnetiferous amphibolite
  - 1 Greywacke gneiss and migmatite
    - a) Quartz-feldspar-biotite + garnet + graphite paragneiss
    - b) Quartz-feldspar-biotite + staurolite + garnet paragneiss
    - c) Migmatitic greywacke gneiss
- TOPOGRAPHIC SYMBOLS**
- Marsh, swamp
  - Rock, island, reef
  - Contour
  - Road
- GEOLOGICAL MAP SOURCE**
- Geological base map derived or modified from:
- Pollock, G.D.  
1964: Geology of the Duval Lake area, Manitoba Mines and Natural Resources, Mines Branch, Publication 61-6, 59p.
  - Zwarg, H.V. and Semeshen, D.M.  
1984: Lobstick Narrows — Cleve Lake, Manitoba Energy and Mines, Preliminary Geological Map 1984 K-1, 1:20 000.

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

MINERAL OCCURRENCE NUMBER	UTM NORTHING (METRES)	UTM EASTING (METRES)	MINERAL OCCURRENCE NUMBER	UTM NORTHING (METRES)	UTM EASTING (METRES)
1	6113374	336491	14	6121776	316796
2	6115927	328855	15	6120758	315976
3	6117202	316909	16	6122673	316865
4	6114641	314558	17	6124065	317237
5	6114860	315032	18	6103703	320774
6	6114845	313865	19	6102660	324035
7	6125609	322406	20	6102660	324770
8	6129602	321805	21	6098133	326989
9	6106419	323324	22	6122617	339919
10	6107662	321652	23	6123467	327789
11	6108899	320552	24	6121763	322819
12	6109412	320248	25	6121385	322516
13	6109212	319464	26	6098855	334521

Mineral Deposit interpretation and compilation by G. Ostry

Cartography by E. Truman and L. Nguyen

Scale 1:50 000

KILOMETRES 1 2 3 4 5

The base for this map is taken from map sheet N.T.S. Map 63N/4-1980. Her Majesty the Queen in Right of Canada with permission of Energy, Mines and Resources Canada.

MDS MAP NO. 13

MINERAL DEPOSITS AND OCCURRENCES  
IN THE DUVAL LAKE (63 N/4) AREA,  
MANITOBA

To accompany Report No. 13 of the Mineral Deposit Series

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%)
- Near solid (50-75%) to solid (>75%)
- Minor (1-10%)
- Near solid to solid stratified
- Moderate (10 - 50%)
- 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

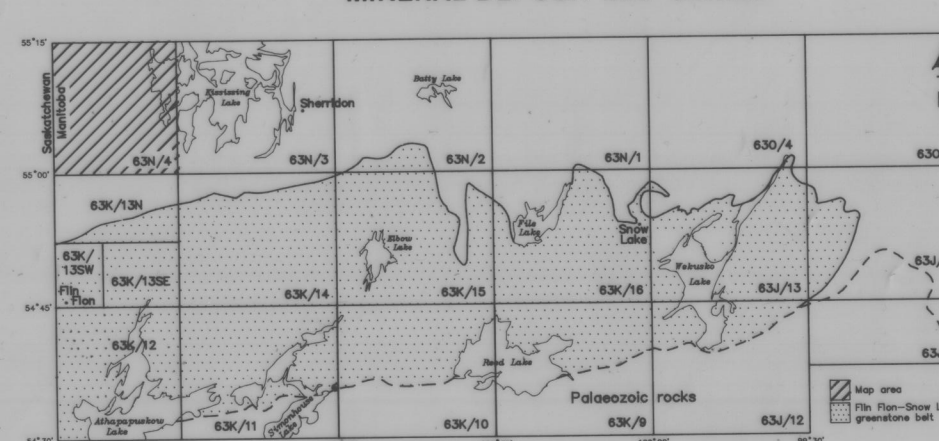
Immediate host rock to mineralization

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



The magnetic declination at the centre of the map is approximately 11° 53' West (1989) and is decreasing by 10.4' annually.