

The Mineral Deposit Series is designed to provide the explorationist with an up-to-date reference and 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 chromite 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/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 database used to derive the reports will reside in active mineral deposit files in the possession of the mineral deposit geologists at the Manitoba Geological Survey.

The 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, Manitoba Geological Survey.

GEOLOGICAL LEGEND

- 12

Tonalite, quartz diorite, granodiorite, granite, feldspar-quartz porphyry, related orthogneiss (intruded by Molson diabase dykes and late diorite-syenite plugs)
- 11

Greywacke, siltstone, argillite
- 10

Polymictic conglomerate; arkosic and feldspathic wackes, siltstone
- 9

Felsic volcanic and related sedimentary rocks
- 8

Quartz-feldspar porphyry
- 7

Mafic intrusive rocks
- 6

Ultramafic intrusive rocks; related subvolcanic or extrusive rocks
- 5

Tonalite, granodiorite, minor diorite and felsic porphyry; related migmatite
- 4

Polymictic conglomerate
- 3

Greywacke, siltstone, argillite; minor conglomerate, carbonate, chert, iron formation; related schist
- 2

Felsic to intermediate volcanic flows and fragmental rocks; related intrusive rocks
- 1

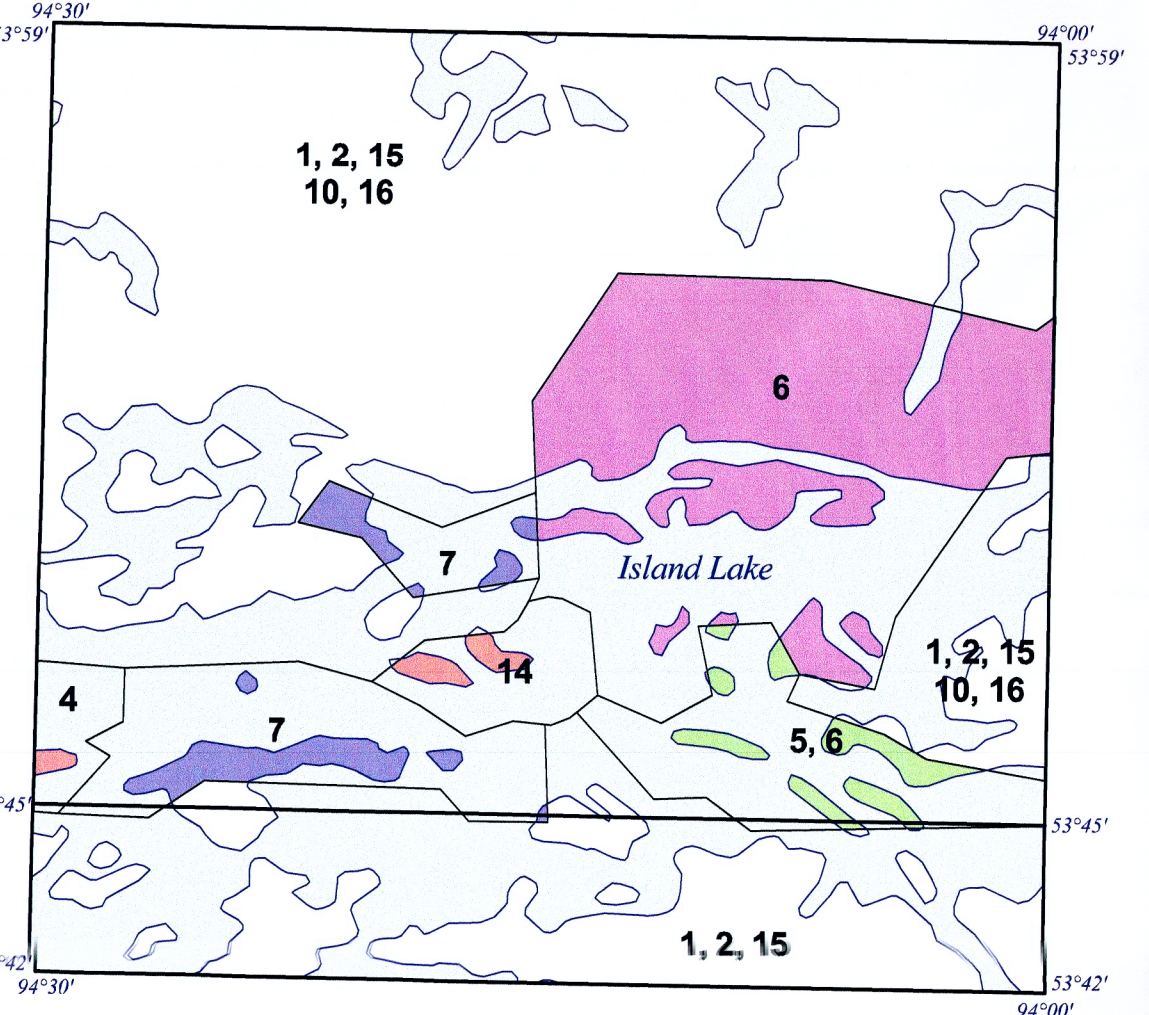
Mafic volcanic flows and fragmental rocks; related intrusive rocks

Symbols

- Defined contact
- - -

Shear, fault
- EM conductors
- NTS sheet boundary
- Fold Axes
- Anticline
- Overturned anticline
- Syncline
- Overturned syncline

GEOLOGICAL MAP SOURCE



- 1

Curtis, K.L. 1984. Island Lake Manitoba-Ontario; Geological Survey of Canada, Geological Compilation Map, Open File 1120, 1:250 000.
- 2

Ernst, L.F., Hart, R.K. and Curtis, K.L. 1987. Geology, Island Lake, Manitoba-Ontario (SSE). Geological Survey of Canada, Map 1664, 1:250 000.
- 3

Gilbert, H.P., Neale, K.L., Weber, W., Corkery, M.T. and McGregor, C.R. 1985. Island Lake, Manitoba Energy and Mines, Preliminary Map 1985-1, 1:20 000.
- 4

Gilbert, H.P., Persch, H.P. and Power, B.A. 1984. Loonfoot Island, Manitoba Energy and Mines, Preliminary Map 1984-1, 1:20 000.
- 5

Gilbert, H.P. 1985. Loonfoot Island, Manitoba Energy and Mines, Preliminary Map 1985-2, 1:20 000.
- 6

Gilbert, H.P. 1985. Loonfoot Island, Manitoba Energy and Mines, Preliminary Map 1985-3, 1:20 000.
- 7

Gilbert, H.P. 1985. Megess-sawasson Island, Manitoba Energy and Mines, Preliminary Map 1985-4, 1:20 000.
- 8

Goslin, J.D. 1983. York Lake, Manitoba Mines and Natural Resources, Mines Branch, Map 59-38, 1:63 360.
- 9

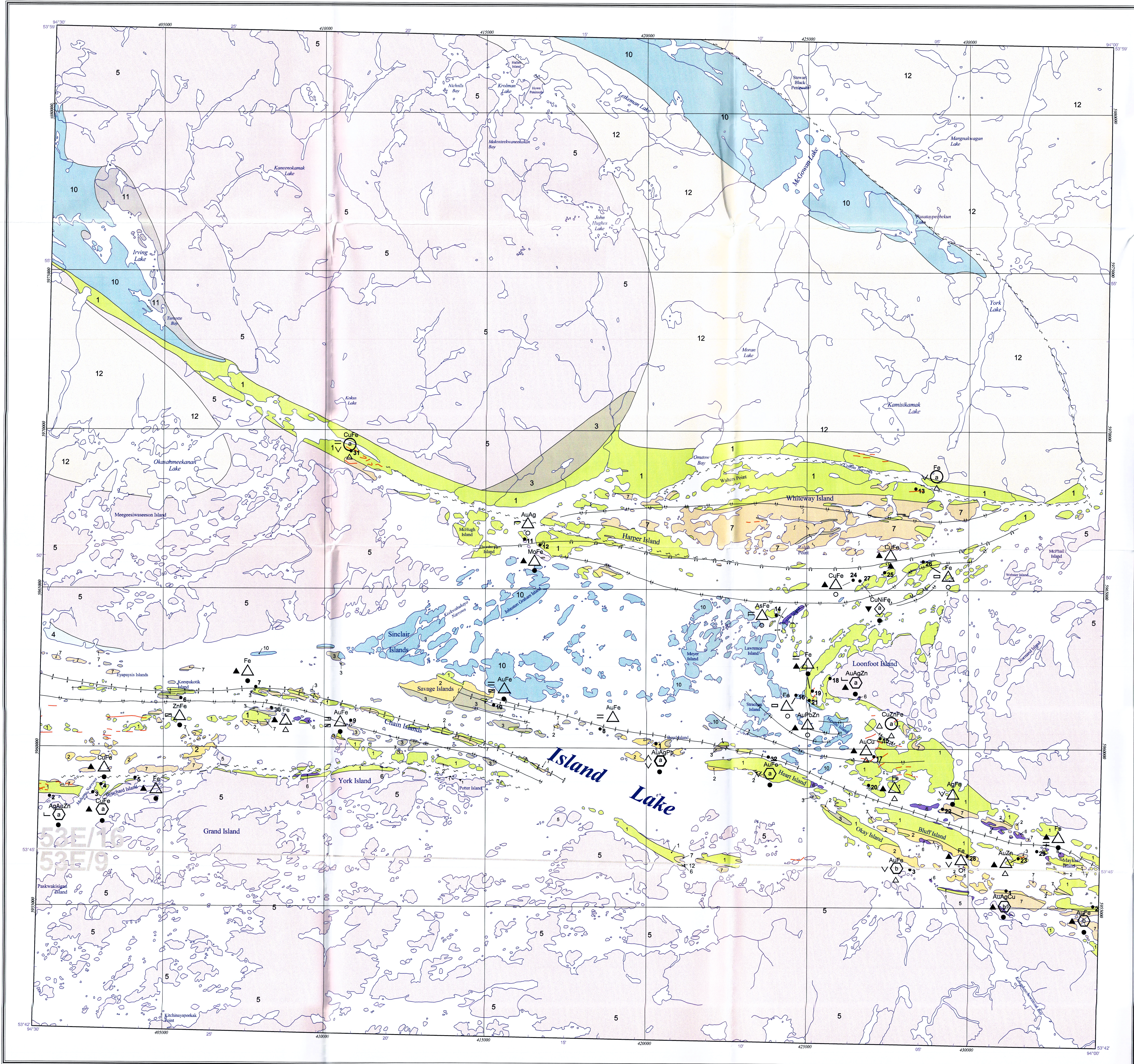
Neale, K.L. 1981. Island Lake Sinclair-Savage Islands, Manitoba Energy and Mines, Preliminary Map 1981-12, 1:20 000.
- 10

Quinn, H.A. 1960. Geology, Island Lake, Manitoba and Ontario; Geological Survey of Canada, Preliminary Series Map 26-1960, 1:253 440.
- 11

Thayer, P. 1980. Compilation of the geology and exploration work in the Island Lake area; Manitoba Energy and Mines, Map ER79-2-5, 1:25 000.

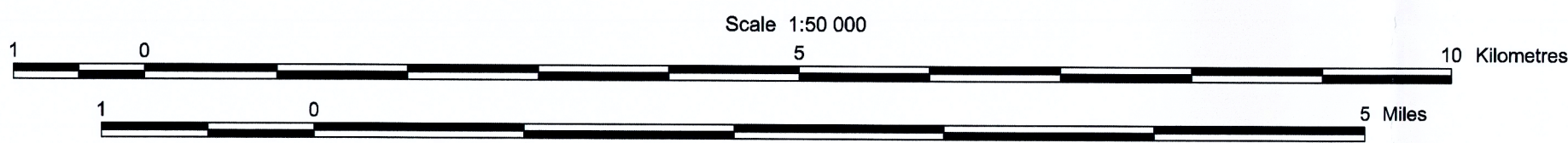
UTM COORDINATES FOR MINERAL DEPOSITS/OCCURRENCES

MINERAL OCCURRENCE NUMBER	UTM NORTHING (METRES)	UTM EASTING (METRES)	MINERAL OCCURRENCE NUMBER	UTM NORTHING (METRES)	UTM EASTING (METRES)
NTS 53E/16			NTS 53E/16		
1	5960138	420287	21	5961526	425088
2	5958439	401464	22	5958115	428194
3	5958557	402810	23	5956577	431553
4	5958812	403064	24	5965314	426420
5	5959017	404125	25	5965553	427392
6	5961532	405565	26	5965598	428586
7	5961892	407889	27	5965288	426629
8	5960597	418561	28	5956639	429969
9	5960842	410835	29	5956798	432126
10	5961338	415265	30	5961232	408372
11	5960581	416204	31	5965329	410828
12	5960398	416688	32	5959739	423802
13	5968203	428353			
14	5964201	424055	NTS 53E/9		
15	5960327	427248	1	5955555	431181
16	5961686	424677	2	5955062	433861
17	5959760	427055	3	5956210	428192
18	5962219	425726			
19	5961819	425184			
20	5958859	426895			



Information on this map is portrayed in Universal Transverse Mercator projection, Zone 15, North American Datum 1983.

The magnetic declination in the centre of the map in year 2000 is 1°34' west decreasing by 5.4" annually.



MINERAL DEPOSITS

Deposit #	Name	Tonnes/Grade	Status
1 (53E/16)	Island Lake Gold Mine	7819/25.4 g/t	Closed

MINERAL DEPOSITS AND OCCURRENCES IN THE ISLAND LAKE AREA (parts of NTS 53E/9,16)

To accompany Report No. 32 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 DEPOSIT
- △

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
- △

Schist
- △

Chert, cherty rocks
- △

Silicic schist
- △

Chertic schist
- △

Shale, slate, phyllite
- △

Sandstone, arkose
- △

Greywacke
- △

Quartzite
- △

Calc-alkaline-rich rocks (metasand, dolomite)
- △

Chemical sediments
- △

Breccia
- △

Conglomerate
- △

Felsic intrusive rocks
- △

Intermediate intrusive rocks
- △

Mafic intrusive rocks
- △

Ultramafic intrusive rocks
- \*

or metamorphic equivalent

TYPE OF MINERALIZATION

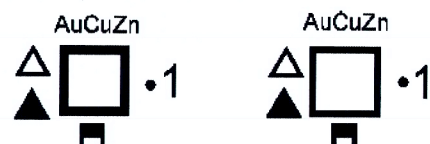
(Appendage in the 6 o'clock position)

- 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



\*1 Occurrence location\* and reference number

Mineral deposit

Mineral occurrence

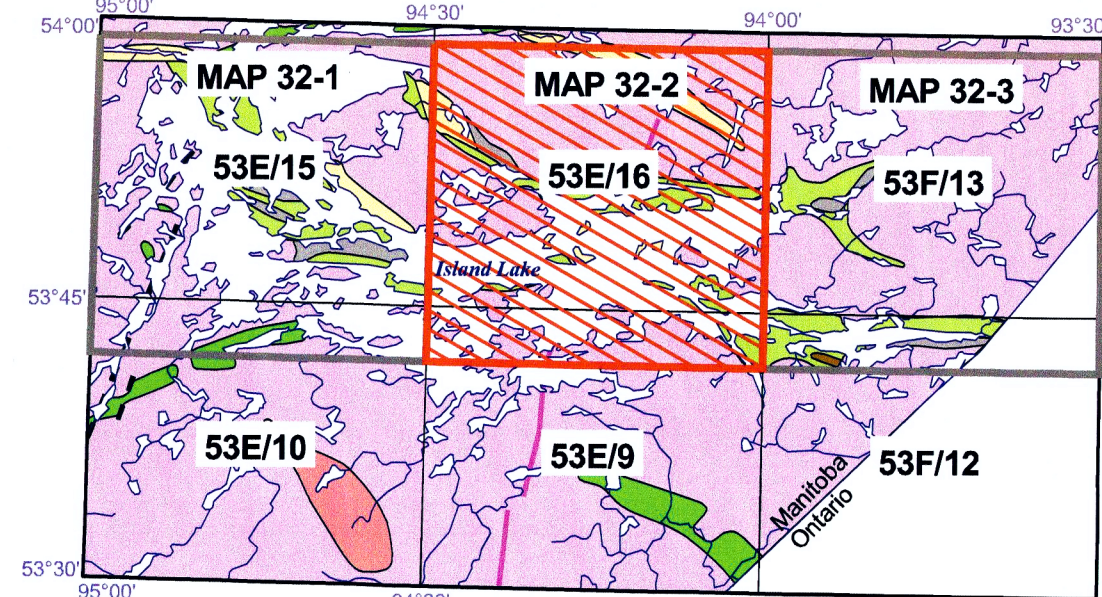
Immediate host rock to mineralization

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.

INDEX TO MAP SHEETS



Mineral deposit interpretation and compilation by P. Thayer

Geological compilation by H.P. Gilbert and P. Thayer

Digital cartography by B. Lenton and P. Lenton

Published 2000

Suggested reference: Thayer, P. 2000. Mineral deposits and occurrences in the Island Lake area, NTS 53E/15, 16, 53E/13 and parts of 53E/9, 10 and 53E/12. Manitoba Industry, Trade and Mines, Geological Survey, Mineral Deposit Series Report No. 32, 169 p.