Manitoba
Energy and Mines

MDS MAP NO. 12 (1991)

MINERAL DEPOSITS AND OCCURRENCES IN THE SAW LAKE (63J/14) AREA, MANITOBA

To accompany Report No. 12 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 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 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 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 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.

GEOLOGICAL LEGEND

INTRUSIONS

LATE TO POST-KINEMATIC INTRUSIVE ROCKS

- 13 — Pegmatite, pegmatitic granite, magnetite-biotite leucogranite

SYN-KINEMATIC INTRUSIVE ROCKS

- 12 — Gneissic leucomonzogranite, magnetite-microcline-biotite granite, monzonite, quartz monzonite
- 11 — Garnetiferous biotite-granite and granodiorite

EARLY KINEMATIC INTRUSIVE ROCKS

- 10 — Gabbro
- 9 — Pyroxenite

SUPRACRUSTAL ROCKS

MISSI GROUP

- 8 — Protoquartzite and siliceous paragneiss
- 7 — Basalt
  a) massive
  b) pillowed
  c) gneiss
  d) amphibolite
  e) felsic to intermediate heterolithic lapilli tuff and breccia
- 6 — Carbonate-rich sedimentary rocks and para-amphibolite
  a) massive calc-silicate gneiss and para-amphibolite
  b) garnet porphyroblastic para-amphibolite
  c) layered calc-silicate gneiss, garnetiferous para-amphibolite, siliceous paragneiss
  d) layered garnetiferous amphibolite and siliceous paragneiss
  e) garnet-diopside amphibolite and protoquartzite
- 5 — Sandstone, siltstone, mudstone and polymictic conglomerate

AMISK GROUP

- 4 — Greywacke, siltstone, mudstone
  a) garnet-biotite gneiss +/– staurolite +/– sillimanite
  b) garnet-biotite *ft par-it* gneiss — may contain 30% white anatectic monzogranite and granodiorite
- 3 — Heterolithic Volcaniclastic Breccia
- 2 — Rhyolite Tuff and Lapilli Tuff
  a) vesicular metadacite
- Basalt
  a) massive
  b) pillowed

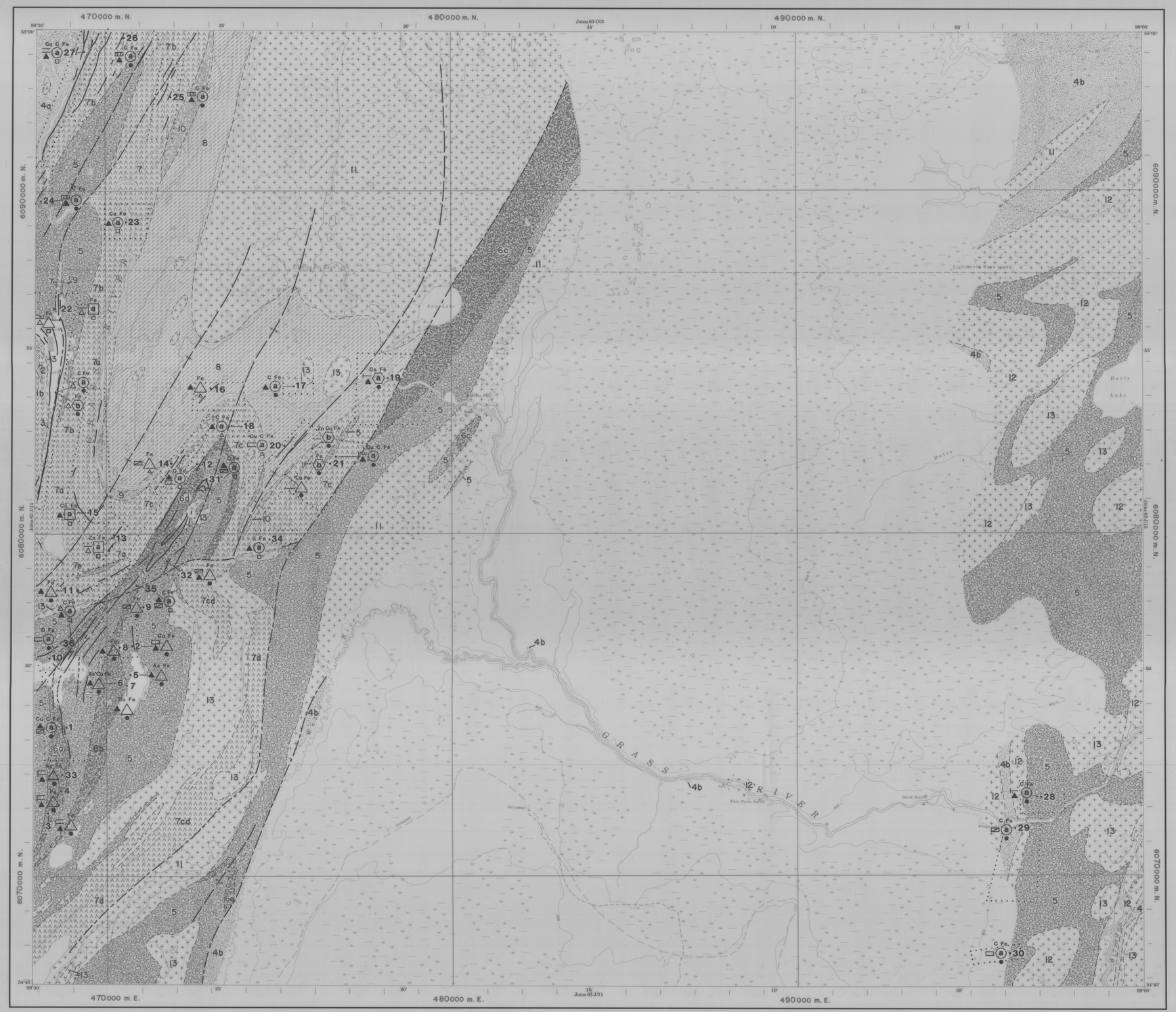
SYMBOLS

GEOLOGICAL SYMBOLS		TOPOGRAPHIC SYMBOLS	
	Geological boundary	–	Marsh, swamp
	Fault	+	Rock, island, reef
	Geophysical conductor	—100—	Contour
	Area encompassed by Mineral Deposit File		

Geological base derived from:
Bailes, A.H.
1985: Geology of the Saw Lake area: Manitoba Energy and Mines. Geological Report GR83-2, 47 p.

U.T.M. COORDINATES FOR MINERAL OCCURRENCES

MINERAL OCCURRENCE NUMBER	U.T.M. NORTHING (METRES)	U.T.M. EASTING (METRES)	MINERAL OCCURRENCE NUMBER	U.T.M. NORTHING (METRES)	U.T.M. EASTING (METRES)
1	6075534	469198	19	6084967	478325
2	6076712	470778	20	6082586	475131
3	6071825	468292	21	6082259	476616
4	6072465	468662	22	6086606	468515
5	6075847	470483	23	6089146	470523
6	6075586	470039	24	6089692	468012
7	6075541	470378	25	6092757	471862
8	6076659	470343	26	6094468	470531
9	6077795	471060	27	6094079	469369
10	6076361	468345	28	6072319	497072
11	6078329	469184	29	6071387	496330
12	6082036	472601	30	6067743	496157
13	6079997	470222	31	6081879	473348
14	6082052	471867	32	6079453	471706
15	6080614	469476	33	6072969	468722
16	6084243	473010	34	6079844	474720
17	6084322	475423	35	6078907	470653
18	6083134	473893	36	6076748	468970



The base for this map is taken from map sheet N.T.S. Map 63J/14- 1973. Her Majesty the Queen in Right of Canada with permission of Energy, Mines and Resources Canada

The magnetic declination at the centre of the map is approximately 8°38' East (1991) and is decreasing by 10.0' West annually.

Mineral Deposit interpretation and compilation by
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Cartography by E. Truman and L. Nguyen

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