Manitoba
Energy and Mines

MDS MAP NO. 19 (1991)

MINERAL DEPOSITS AND OCCURRENCES IN THE BATTY LAKE AREA (63N/2) MANITOBA

To accompany Report No. 19 of the Mineral Deposit Series

MANITOBA MINERAL DEPOSIT SERIES

The Mineral Deposit Series is designed to provide the exploratorist 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 exploratorists 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 exploratorist 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

PHANEROZOIC
PALEOZOIC
ORDOVICIAN

- Dolomite

PRECAMBRIAN
PROTEROZOIC
INTRUSIVE ROCKS

- Pink granitic pegmatite
- Felsic intrusive rocks: monzogranite, granodiorite, tonalite
- Massive intermediate to ultramafic amphibolites
- Felsic to intermediate intrusive units
  a)Tonalite, granodiorite, granite
  b)Metadiorite, mesocratic hornblende-biotite gneiss

MISSI METAMORPHIC SUITE

- a)Intermediate feldspar-quartz gneiss +/- biotite +/- hornblende +/- magnetite +/- muscovite +/- epidote-quartz layers
  b)Pink felsic gneiss
- c)Metaconglomerate, banded gneiss, quartz-rich quartzofeldspathic gneiss +/- pebbles
- d)Amphibolite, intermediate gneiss

SHERRIDON METAMORPHIC SUITE

- a)Quartzofeldspathic gneiss, commonly quartz rich, +/- garnet +/- hornblende
  b)Layered or massive amphibolite, intermediate gneiss
  c)Calc-silicate, calcareous gneiss, marble
  d)Garnet +/- anthophyllite +/- cordierite porphyroblastic gneiss
  e)Mixed felsic gneisses with garnet +/- cordierite +/- anthophyllite gneiss

AMPHIBOLITES AND ASSOCIATED ROCKS

- a)Amphibolite +/- garnet +/- diopside +/- calcite, calc--silicate gneiss +/- carbonate layers, +/- hornblende-plagioclase rich gneiss
  b)Biotite gneiss +/- garnet +/- magnetite
  c)Garnet-hornblende-biotite-feldspar-quartz gneiss
  d)Rusty biotite-plagioclase-quartz gneiss +/- pyrrhotite +/- pyrite; layers or lenses of plagioclase-hornblende-pyrite +/- chlorite +/- calcite
  e)Quartz-plagioclase gneiss

BURNTWOOD RIVER METAMORPHIC SUITE
(PROBABLE AMISK GROUP EQUIVALENT)

- a)Biotite-feldspar-quartz paragneiss and/or metatexite +/- sillimanite +/- graphite garnet +/- pyrite +/- cordierite
  b)Quartz-feldspar-garnet-biotite migmatite +/- cordierite +/- sillimanite

AMISK GROUP

- a)Metabasalt, amphibolite, metagabbro
  b)Felsic gneiss, metadacite

GEOLOGICAL SYMBOLS

- Fault
- Geological boundary
- Geophysical conductor
- Area encompassed by Mineral Deposit File

U.T.M. COORDINATES FOR MINERAL DEPOSITS/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	6099969	373315	75	6115389	380566
2	6103842	380027	76	6114314	383340
3	6114855	374426	77	6112282	381976
4	6101407	387016	78	6117050	384382
5	6112542	373161	79	6118941	383469
6	6112539	374113	80	6119636	384751
7	6111911	373094	81	6120714	385635
8	6111007	372981	82	6120529	384477
9	6109255	374990	83	6121048	383922
10	6108912	375799	84	6116487	390223
11	6109847	375835	85	6115842	386657
12	6112115	376129	86	6116545	386967
13	6112552	376345	87	6118559	388785
14	6112570	375494	88	6114635	389470
15	6112597	375866	89	6119935	387326
16	6113261	374858	90	6119098	387410
17	6113929	372986	91	6119277	389533
18	6110107	374802	92	6119969	386942
19	6110309	374646	93	6120348	392915
20	6098610	373896	94	6120550	392040
21	6097194	374778	95	6117616	392668
22	6102661	378316	96	6117817	393051
23	6103716	378759	97	6118136	394281
24	6100320	377381	98	6119232	395369
25	6115602	373295	99	6117693	396442
26	6114503	376424	100	6115293	403255
27	6113943	376683	101	6117455	399298
28	6112894	379008	102	6116582	398111
29	6116347	377695	103	6112747	402751
30	6115889	378520	104	6105666	403829
31	6112963	378654	105	6107454	402739
32	6114101	374007	106	6107602	390393
33	6102224	375309	107	6106896	389573
34	6103510	373418	108	6111267	390041
35	6119095	376754	109	6108035	388971
36	6118873	375066	110	6109000	389352
37	6119534	374282	111	6111588	389407
38	6112001	378254	112	6111636	391869
39	6112243	378579	113	6111398	391624
40	6111820	377972	114	6114268	391899
41	6109766	377440	115	6113078	393314
42	6110090	376228	116	6112759	393737
43	6106983	383846	117	6114133	393989
44	6108244	382723	118	6113851	394059
45	6107876	383056	119	6114008	393133
46	6108016	383449	120	6111866	395930
47	6105972	387030	121	6112524	395269
48	6106111	385984	122	6111305	395003
49	6106551	385310	123	6108919	397019
50	6106176	383945	124	6111629	394662
51	6102403	383462	125	6111961	393566
52	6104260	382690	126	6111693	393490
53	6104372	384451	127	6111607	393231
54	6102417	392100	128	6110407	393347
55	6103810	391427	129	6107445	394489
56	6105221	388722	130	6104978	393022
57	6103645	390015	131	6106093	393397
58	6099597	393310	132	6107749	395989
59	6120895	381202	133	6109641	395186
60	6121148	380600	134	6110750	394118
61	6120514	380607	135	6100091	399940
62	6121348	379179	136	6102419	398823
63	6121823	379032	137	6104228	396045
64	6119678	379492	138	6111176	386124
65	6119196	379659	139	6098659	379996
66	6118663	381550	140	6113790	387823
67	6119490	379031	141	6096410	396614
68	6117236	379851	142	6097542	396830
69	6117125	381222	143	6095849	396726
70	6115916	382601	144	6097708	395373
71	6115722	381745	145	6097313	397762
72	6114978	382194	146	6098567	397168
73	6116456	381684	147	6095973	397105
74	6115963	380658			

MINERAL DEPOSITS

Deposit #	Name	Tonnes/Grade	Status
1	Puffy Lake	Produced: 291 800/2.61 g/t Au, 0.86 g/t Ag Reserves: 3.54 million/7.88 g/t Au	Past Producer (1987-1989)
2	Nokomis Lake	Reserves: 90 700/10.3 g/t Au	Exploration
3	Jungle Lake	Reserves: 1 960 383/1.26% Cu, 1.6% Zn, 3.7 g/t Ag and trace Au (to a vertical depth of 370 m)	Exploration
140	Ake Zone	Reserves: >400 000/1-2% Cu, <0.5% Zn	Exploration

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

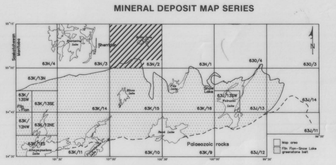
EXPLANATION OF MINERAL DEPOSIT AND OCCURRENCE SYMBOLS

AuCuZn AuCuZn
·1 ·1

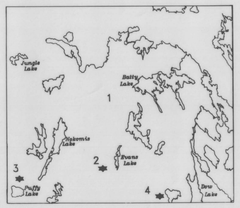
- ·1 Occurrence location* and reference number
- Mineral deposit
- Mineral occurrence
- Immediate host rock to mineralization
- Type of mineralization
- AuCuZn Elements present (in order of increasing abundance)

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

MINERAL DEPOSIT MAP SERIES



GEOLOGICAL MAP SOURCE



Geological base map derived from:

1. Zwanzig, H.V.,Elias, P. and Arkos, G. 1988: Batty Lake; Manitoba Energy and Mines, Preliminary map 1988K-2, 1:50 000. and modified at selected areas by:
2. Ostry, G. 1986: Mineral investigations in the Kisseynew gneiss terrain; in Manitoba Energy and Mines, Minerals Division, Report of Field Activities, 1986. p.100-106.
3. Ostry, G. 1988: Mineral investigations in the Kisseynew gneiss terrain; in Manitoba Energy and Mines, Minerals Division, Report of Field Activities. 1988. p.80-83.
4. Peloquin, S., Ostry, G. and Gale, G.H. 1985: Investigations of mineral occurrences in the Kisseynew metasedimentary terrain; in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p.64-70.

Mineral Deposit interpretation and compilation by

G. Ostry and G.D. Trembath

Cartography by CAN-TEC

Scale 1:50 000

KILOMETRES 0 1 2 3 4 5 KILOMETRES

The magnetic declination at the centre of the map is approximately 10°04' East(1992) and is decreasing by 10.0' West annually.