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., 63K13SE), location numbers may not be consecutive and intervening numbers will be found on the remaining portions of that NTS map sheet (e.g., 63K13SW).
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, drillhole 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

Paleozoic

- Ordovician - Red River Formation

1.87-1.83 Ga Sedimentary, Volcanic and Hypabyssal Intrusive Rocks

Burntwood Group (1.85-1.83 Ga)

- B1a — Greywacke, siltstone, mudstone

Rocks of Uncertain Age

- W6c — Mafic phyllonite ± carbonate, cataclasite
- W6b — Mafic tectonite with mafic-felsic intrusive sheets
- W6a — Mafic tectonite, phyllonite, mylonite
- W6 — Tectonite, phyllonite, mylonite

Intrusive Rocks (1.88-1.83 Ga)

- P11a — Felsic tectonite, mylonite
- P9b — Granite to granodiorite
- P7e — Foliated and gneissic granodiorite to tonalite
- P7c — Xenolith-rich phase
- P7b — Granodiorite to tonalite
- P7a — Granodiorite
- P6f — Foliated to gneissic tonalite to quartz diorite
- P6e — Xenolith-rich phase
- P6d — Tonalite to quartz diorite
- P6a — Tonalite
- P5a — Quartz diorite to granodiorite
- P3c — Quartz ferrodiorite, ferrotonalite, leucotonalite
- P3b — Ferrogabbro
- P3a — Gabbronorite, gabbro
- P2f — Diabase, diabase dyke complex
- P2e — Diorite to quartz diorite
- P2d — Quartz diorite and gabbro
- P2b — Melagabbro
- P2a — Gabbro, diorite
- P2 — Gabbro, diorite, quartz diorite and derived amphibolite

1.92-1.82 Volcanic, Intrusive and Sedimentary Rocks

Juvenile Arc

- J15 — Undivided juvenile arc rocks
- J13c — Rhyolite, dacite; quartz porphyry, feldspar porphyry, quartz-feldspar porphyry
- J12 — Tonalite to granodiorite, granite
- J9b — Greywacke, siltstone, mudstone
- J7a — Felsic tuff, lapilli tuff, breccia, heterolithologic breccia
- J7 — Felsic volcaniclastic rocks
- J5 — Mafic volcaniclastic rocks
- J5c — Heterolithologic breccia, dominantly mafic fragments
- J4a — Rhyolite to dacite flows, flow breccia
- J3a — Andesite; derived fine-grained garnetiferous amphibolite
- J1a — Tholeiitic basalt, basaltic andesite; gabbro; derived amphibolite
- J1 — Basalt, basaltic andesite (pillowed and massive flows)

Ocean Floor

- F7 — Undivided ocean-floor rocks
- F6d — Layered pyroxenite, peridotite, subordinate gabbro
- F6c — Layered gabbro, leucogabbro, anorthosite
- F6b — Pyroxenite, peridotite, serpentinite
- F6a — Gabbro, gabbro pegmatite; leucogabbro; wispy-layered gabbro
- F4a — Hyaloclastite, reworked hyaloclastite, mafic wacke
- F2a — Athapapuskow massive and pillowed basalt/diabase
- F1b — Claw Bay pillowed and massive basalt, diabase, derived tectonite
- F1a — McDougalls Point pillowed and massive basalt/diabase

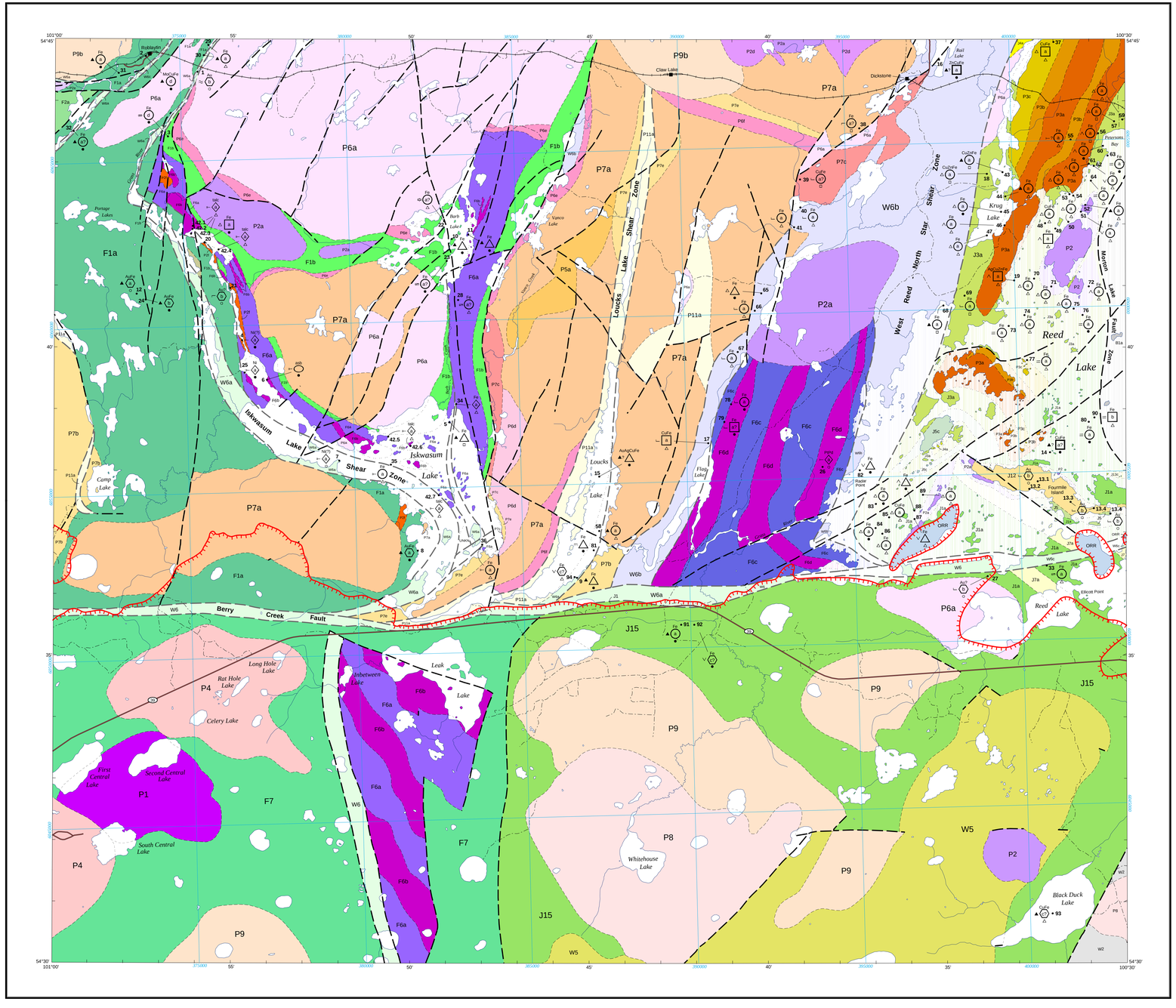
SYMBOLS

- Contact: approximate
- Contact: under water
- Fault: defined
- Fault: possible
- Shears
- Phanerozoic boundary
- Road
- Trail
- Railway right-of-way (abandoned)

UTM COORDINATES FOR MINERAL DEPOSITS AND OCCURRENCES

MINERAL OCCURRENCE NUMBER	UTM EASTING (METRES)	UTM NORTHING (METRES)
1	375520	6067485
2	373975	6067995
3	374585	6065555
4	376665	6059365
5	382845	6056740
6	377385	6058155
7	379500	6055665
8	381800	6052900
9	386570	6051965
10	383050	6062260
11	383550	6062380
12	373525	6060845
13.1	400510	6054535
13.2	400250	6054310
13.3	401485	6053890
13.4	402180	6053680
13.4	402675	6053510
14	400900	6055400
15	387315	6054995
16	397850	6067300
17	390620	6055920
18	399205	6063825
19	399950	6060600
20	375605	6062335
21	376345	6060950
22	382835	6062800
23	382880	6061600
24	373795	6060665
25	376720	6058390
26	394045	6055125
27	398935	6051715
28	383195	6060415
29	375865	6068280
30	375720	6067975
31	373150	6067505
32	371750	6065790
33	400720	6051990
34	383060	6057285
35	381050	6055510
36	383745	6053035
37	401305	6067750
38	395395	6065290
39	393575	6063795
40	393565	6062955
41	393365	6062360
42.1	375265	6062845
42.2	375255	6062750
42.3	375210	6062610
42.4	376025	6062115
42.5	380990	6056355
42.6	381655	6056055
42.7	382445	6054775

MINERAL OCCURRENCE NUMBER	UTM EASTING (METRES)	UTM NORTHING (METRES)
43	399675	6063865
44	399745	6063135
45	399605	6062675
46	399695	6062265
47	399160	6061970
48	400920	6062300
49	401225	6062130
50	401620	6062325
51	402005	6062620
52	402145	6062820
53	401675	6063155
54	401790	6063110
55	401750	6064800
56	402580	6064965
57	403070	6065315
58	387275	6053360
59	403320	6065365
60	402715	6064585
61	402280	6064055
62	402425	6063990
63	402850	6064290
64	402330	6063545
65	392325	6060395
66	392120	6059875
67	391665	6058625
68	397800	6059995
69	398445	6060175
70	400550	6060040
71	401960	6060390
72	402190	6060365
73	399750	6059230
74	400235	6059545
75	401720	6059705
76	401980	6059510
77	400275	6058190
78	391335	6057075
79	391120	6056550
80	402090	6056285
81	387095	6052780
82	395140	6055225
83	395620	6053970
84	395595	6053245
85	396010	6053355
86	395795	6053070
87	396775	6053485
88	396775	6053740
89	397045	6054210
90	402265	6056415
91	389670	6050475
92	390065	6050465
93	400640	6041510
94	386500	6051990



1:50 000

0 0.5 1 2 3 4 5 kilometres

MDS MAP No. 31

MINERAL DEPOSITS AND OCCURRENCES IN THE ISKWASUM LAKE AREA, MANITOBA (63K10)

To accompany Report No. 31 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
- 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

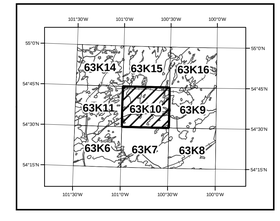
AuCuZn •1 AuCuZn •1

- •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.

INDEX MAP



The geology and unit numbers for this map are derived from:
NATMAP Shield Margin Project Working Group 1998: Geology: NATMAP Shield Margin Project Area (Fin Fion Belt), Manitoba - Saskatchewan; Geological Survey of Canada Map 1968A, Manitoba Energy and Mines Map A-98-2, sheets 1 to 7, Saskatchewan Energy and Mines Map 258A-2, scale 1:100 000.

Note: Only those units relevant to the Iskwasum Lake area appear in the legend.

Mineral deposit interpretation and compilation by: T.H. Heine
Cartography by M.E. McFarlane

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Suggested reference:
Heine, T.H. 2003: Mineral deposits and occurrences in the Iskwasum Lake area, Manitoba, NTS 63K10; Manitoba Industry, Trade and Mines, Manitoba Geological Survey, Mineral Deposit Series Report No. 31, 213 p. plus 1 map at 1:50 000.

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