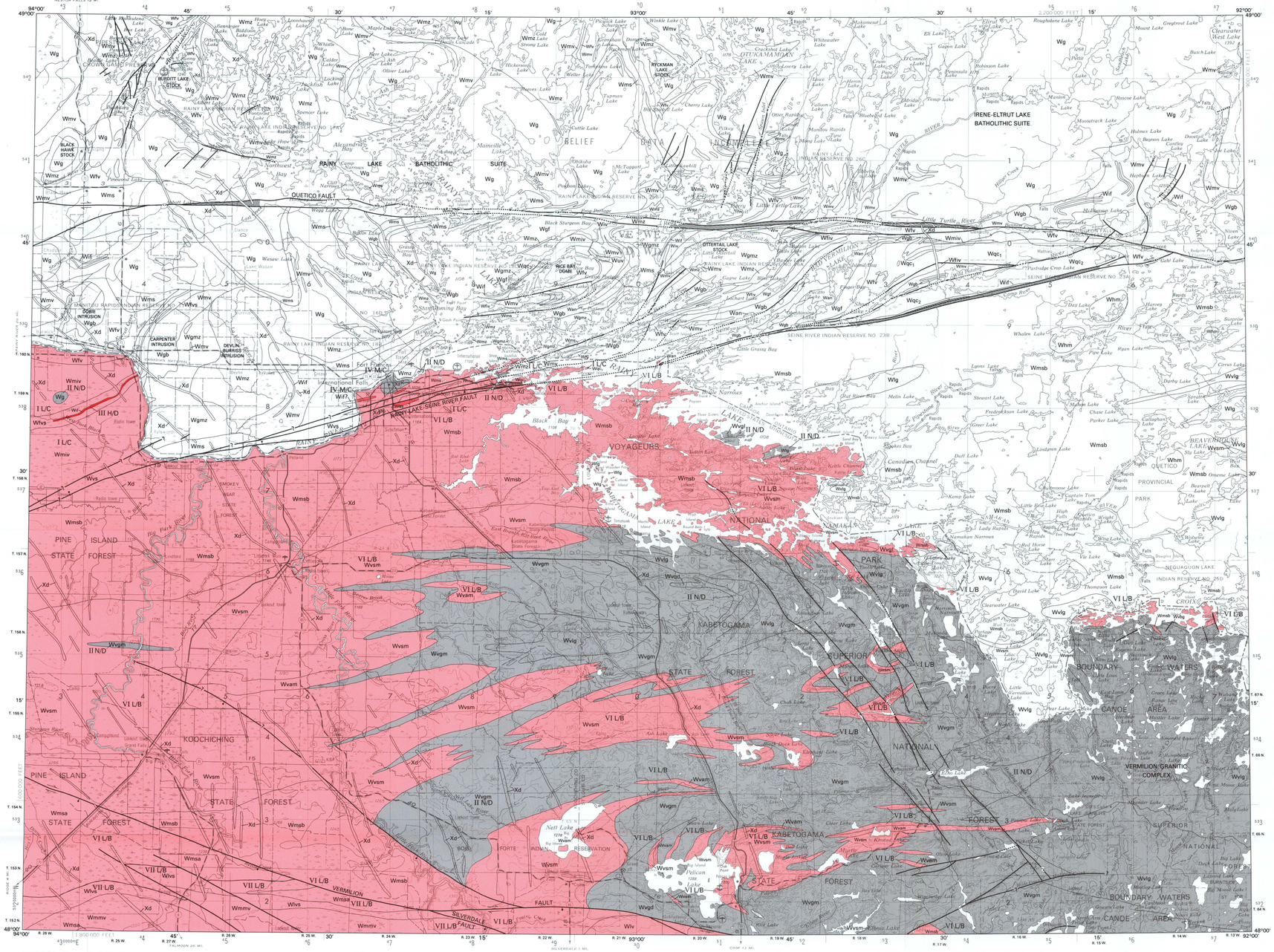
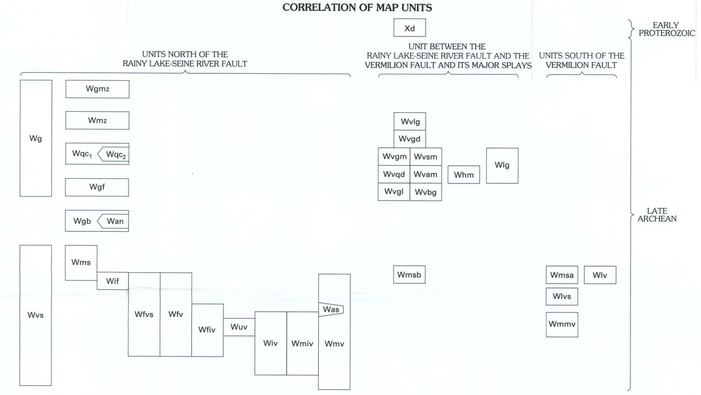


International Falls, Minn., U.S., Ont., Can. base map produced by the U.S. Geological Survey and prepared by the Defense Mapping Agency photogrammetric methods and from National Topographic Series, 1:253,440 scale Canada Department of Mines and Resources, Sheet 52–C.

Transverse Mercator Projection. 10,000-meter Universal Transverse Mercator grid, zone 15.

Geology from Day and others (1990b)

CORRELATION OF MAP UNITS



EXPLANATION OF MINERAL RESOURCE POTENTIAL

Area showing potential for algoma-type iron-formation—Diagnostic and permissive criteria outlined in table 9. Potential for numbered tracts shown in table 10. Definitions of levels of mineral resource potential and certainty of assessment defined in appendix 1

- **High potential**
- **Moderate potential**
- **Low potential**
- **No potential**

LIST OF MAP UNITS

EARLY PROTEROZOIC ROCKS

Xd	**Diabase, gabbro, and diorite**

LATE ARCHEAN ROCKS

Wgmz	**Granodiorite,quartz monzonite, and granite**
Wmz	**Hornblende monzonite**
	Quartzite and conglomerate
Wqc_1	**Quartzite**
Wqc_2	**Conglomerate**
Wgf	**Foliated granitoid rocks**
Wg	**Foliated and unfoliated granitoid rocks, undivided**
Wan	**Anorthosite**
Wgb	**Mafic intrusive rock**
Wms	**Metasedimentary rocks, undivided**
Wif	**Iron–formation**
Wfvs	**Felsic metavolcanic and volcaniclastic metasedimentary rocks**
Wfv	**Felsic metavolcanic rock**
Wfiv	**Felsic to intermediate metavolcanic rocks, undivided**
Wuv	**Ultramafic metavolcanic rocks**
Wiv	**Intermediate metavolcanic rocks**
Wmiv	**Mafic to intermediate metavolcanic rocks, undivided**
Was	**Amphibolitic schist**
Wmv	**Mafic metavolcanic rocks**
Wvs	**Metavolcanic and metasedimentary rocks, undivided**
Wvlg	**Lac La Croix Granite**
Wvgd	**Biotite–hornblende granodiorite and granite**
Wvgm	**Granite–rich migmatite**
Wvsm	**Schist–rich migmatite**
Wvqd	**Biotite–hornblende quartz diorite**
Wvam	**Ampibolitic migmatite**
Wvgl	**Granitic leucogneiss**
Wvbg	**Biotite–rich gneiss**
Whm	**Hornblende monzonite**
Wlg	**Leucogranite**
Wmsb	**Metasedimentary rocks, undivided**
Wlv	**Lake Vermilion Formation**
Wmsa	**Metasedimentary rocks, undivided**
Wlvs	**Layered volcanic–sedimentary rocks**
Wmmv	**Metavolcanic rocks, undivided**

Approximate contact

Fault

Fault rock

MAP SHOWING MINERAL RESOURCE POTENTIAL FOR ALGOMA–TYPE IRON–FORMATION IN THE U.S. PART OF THE INTERNATIONAL FALLS 1° × 2° QUADRANGLE, NORTHERN MINNESOTA

1997