



EXPLANATION OF DIAMOND DRILL-HOLE DATA AND LOCATIONS
[For details of drill-hole data, see text, p. 146]

Coding scheme
Keyed to drill-hole location number (DHL) shown on this plate

Company Exploration program (if named) Drill-hole number Footage to ledge Total footage Dip Direction (in parentheses) Type of rock at ledge (in quotation marks if information taken from company records)

Symbols indicating lack of data — nr, no record found; nt, no footage known to author; nl, no record found of type of rock at ledge; nd, no dip and (or) direction found in records.

Symbols indicating company or property

- B, Breitung Iron Co.
- C, Cleveland Cliffs Iron Co.
- CM, Cascade Mining Corp.
- D, Donora Mining Co.
- I, Interstate Mining Co.
- J, Jones & Laughlin Steel Corp.
- M, Marquette Ore Co.
- ML, M.A. Hanna
- NR, North Range Mining Co.
- O, Old hole, ownership unknown
- P, Pioneer Mining Co.
- (Cascade Mining Corp. lands)
- PL, Pittsburgh & Lake Superior Iron Co.
- U, U.S. Steel Corp.
- V, Volunteer Co.
- WK, Kirkpatrick property

Symbols indicating company exploration program — Followed by symbol for sponsoring company in parentheses; many drill holes not identified as part of named exploration program.

- a, Athens (C)
- b, Bellevue (C)
- bt, Breitung (B or C)
- c, Cascade (C)
- cd, Cliffs Drive (C)
- cdpl, Cliffs Drive Plant
- ce, Cascade, East (C)
- cel, Cascade, East, ledge test (C)
- ch, Chicago (C)
- cl, Cascade, ledge test
- e, Empire (C)
- ep, Empire Plant site (C)
- gb, Green Bay (B)
- h, Heidelberg (C)
- hm, Hamond (M)
- i, Isabella (C)
- j, Jackson (C)
- lp, Lake Palmer, Litchfield Option (C)
- lpv, Lake Palmer, Volunteer Option (C)
- l, Lucky Star (C)
- li, Lonsdorf (B)
- n, Negaunee (C)
- nj, Negaunee-Jackson (C)
- oe, Old Empire (C)
- p, Pioneer (C)
- pl, Pioneer-Lucy (C)
- s, Sterling (C)
- sh, Shatt (D)
- tf, Tilden Fire Tower (C)
- tn, Tilden North (C)
- tr, Tracy (M)
- un, Union (C)
- v, Volunteer (D)

Symbols indicating type of rock at ledge

- alt, altered
- aren, arenaceous
- arg, argillite
- cb, carbonate
- cg, conglomerate or conglomeritic
- ch, chert, cherty
- chl, chlorite, chloritic
- db, diabase
- di, diorite
- dk, dike
- Fe, iron
- fer, ferruginous
- gn, gneiss
- goet, goethite
- gr, granite
- grn, green
- grun, grunerite
- gw, graywacke
- gs, gneissoid
- gy, gray
- h, hematite, hematitic
- hoj, hard ore jasper
- i.f., iron-formation
- intr, intrusive
- lp, Jasper
- lho, lean Bessemer ore
- leop, leopard texture
- lho, lean hard ore
- lim, limonite, limonitic
- lo, lean ore
- mar, martite, martitic
- mt, metabasite
- mjp, manganiferous jasper
- mn, manganiferous
- mt, magnetite, magnetitic
- o, ore
- oxid, oxidized
- pc, poker-chip iron-formation
- pyc, pyroclastic rock
- q, quartz, quartzose
- qtz, quartzite
- sch, schist
- sh, sheared
- sld, siderite, sideritic
- sil, siliceous, siliceous
- sl o, siliceous ore
- sl, slate, slaty
- smj, soft manganiferous jasper
- so, soft ore
- soj, soft ore jasper
- spec, specularite
- sr, soaprock

INDEX MAP OF DIAMOND-DRILL HOLES IN THE NORTHERN PART OF THE PALMER QUADRANGLE, MARQUETTE COUNTY, MICHIGAN

