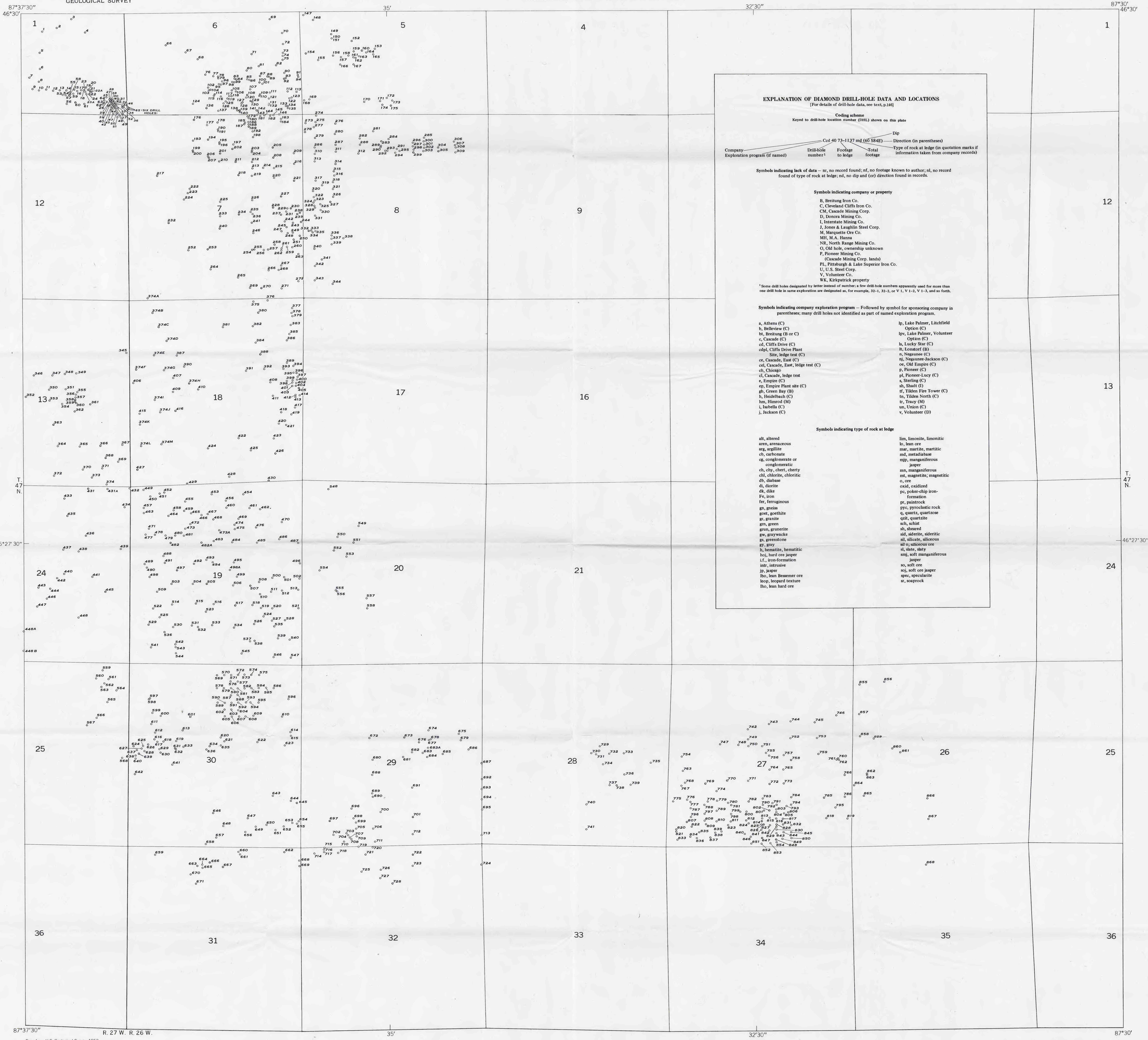
PREPARED IN COOPERATION WITH
THE GEOLOGICAL SURVEY DIVISION OF THE
MICHIGAN DEPARTMENT OF NATURAL RESOURCES



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

Ccd 40 73–1137 md (60 S84E)

- Company — Exploration program (if named)
- Drill-hole number[1]
- 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; nf, 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.
MH, 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

[1] Some drill holes designated by letter instead of number; a few drill-hole numbers apparently used for more than one drill hole in same exploration are designated as, for example, 32–1, 32–2, or V 1, V 1–2, V 1–3, and so forth.

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, Belleview (C)
bt, Breitung (B or C)
c, Cascade (C)
cd, Cliffs Drive (C)
cdpl, Cliffs Drive Plant Site, ledge test (C)
ce, Cascade, East (C)
cel, Cascade, East, ledge test (C)
ch, Chicago
cl, Cascade, ledge test
e, Empire (C)
ep, Empire Plant site (C)
gb, Green Bay (B)
h, Heidelbach (C)
hm, Himrod (M)
i, Isabella (C)
j, Jackson (C)
lp, Lake Palmer, Litchfield Option (C)
lpv, Lake Palmer, Volunteer Option (C)
ls, Lucky Star (C)
lt, Lonstorf (B)
n, Negaunee (C)
nj, Negaunee-Jackson (C)
oe, Old Empire (C)
p, Pioneer (C)
pl, Pioneer-Lucy (C)
s, Sterling (C)
sh, Shadt (I)
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 conglomeratic
ch, chy, 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, greenstone
gy, gray
h, hematite, hematitic
hoj, hard ore jasper
i.f., iron-formation
intr, intrusive
jp, jasper
lbo, lean Bessemer ore
leop, leopard texture
lho, lean hard ore
lim, limonite, limonitic
lo, lean ore
mar, martite, martitic
md, metadiabase
mjp, manganiferous jasper
mn, manganiferous
mt, magnetite, magnetitic
o, ore
oxid, oxidized
pc, poker-chip iron-formation
pr, paintrock
pyc, pyroclastic rock
q, quartz, quartzose
qzit, quartzite
sch, schist
sh, sheared
sid, siderite, sideritic
sil, silicate, siliceous
sil o, siliceous ore
sl, slate, slaty
smj, soft manganiferous jasper
so, soft ore
soj, soft ore jasper
spec, specularite
sr, soaprock

Base from U.S. Geological Survey, 1952

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

SCALE 1:12 000

1000 0 1000 2000 3000 4000 5000 FEET

500 0 500 1000 METRES