

D.D.H. #1

Report - Electromagnetic Survey

June, 1951

Harryth Zone: 25° north Station CF
 Bearing . 258° Mag.
 Dip. -55°
 Depth. 250°

July 16th - 23rd, 1951

0 - 9 Medium grained dark grey gabbro, disseminated magnetite replacement.
 0 - 72 Dark grey to black fine to medium grained slightly hornblendized gabbro; disseminated magnetite with pyrrhotite and chalcopyrite sparsely present along small slips and fractures and disseminated grains.
 72 - 92 Mottled replacement of gabbro by hornblende and magnetite low disseminated sulphides in fractures.
 92 - 120 Hornblendite, a few gabbro remnants, patchy sulphides.
 120 - 200 Hornblendite, fractured and replaced by sulphides. Minor amounts of magnetite. Pyrrhotite, pyrite, and chalcopyrite.

Sample 1:	92 - 97	rare sulphides		
2:	92 - 102	rare sulphides		
3:	102 - 107	3% sulphides,	½° lost	
4:	107 - 114	1% sulphides,	5½° lost	
5:	114 - 120	1% sulphides,	2° lost	
6:	120 - 125	4% sulphides,		
7:	125 - 130	6% sulphides,	1° lost	
8:	130 - 135	10% sulphides		
9:	135 - 139	20% sulphides,	heavy pyrrhotite	
10:	139 - 144	25% sulphides,	heavy pyrrhotite	1° lost
11:	144 - 148	15	" "	½° lost
12:	148 - 153	15%	" "	½° lost
13:	153 - 158	5%	"	1° lost
14:	158 - 163	2%	"	3° lost
15:	163 - 170	10%	"	1½° lost
16:	170 - 175	15%	"	½° lost
17:	175 - 180	50%	"	heavy pyrrhotite
18:	180 - 185	50%	"	" "
19:	185 - 190	25%	"	" "
20:	190 - 195	5%	"	1° lost
21:	195 - 200	5%	"	1½° lost

200 - 250 Hornblendite, fine-grained, rare disseminated sulphides with scattered magnetite replacement, chloritized with calcite stringers 235 - 240.
 158 - 163 possible gouge zone

" P. A. Chubb "

120 - 175 -- 55° -- 0.20%

"W.W.S."

DIAMOND DRILL HOLE # 2

Location: Merryth Zone 40° North of Station C. F.
 Bearing: 212°
 Dip: 45°
 Depth: 268'

0 - 4 Casing, overburden
 4 - 156 Coarse to fine-grained gabbro, fractured irregularly magnetite replacement as grains and fracture fillings with minor associated chalcopyrite and pyrrhotite sulphides
 156 - 191 Fractured and broken dark grey to black gabbro, slightly altered to hornblende, disseminated and veinlets of magnetite with associated rare sulphides.
 191 - 220 Hornblendite, well broken and fractured, rare sulphides.
 209 - 211 2° lost
 211 - 213 1° lost
 213 - 216 2½° lost / Shear Zone Gouge
 216 - 217 Core lost/
 217 - 220 well fractured hornblendite, low sulphides
 220 - 268 Mineralized zone. Pyrrhotite, chalcopyrite and pyrite
 Cemented cave at 216°. Drill rods jammed by cave at 268° Unable to recover, attempted casing over rods but unsuccessful. Abandoned hole for the present.

<u>Samples No.</u>	<u>Footage</u>	<u>Remarks</u>
22	220 - 225	Patchy sulphides 1 - 40%
23	225 - 230	Sulphides 25%
24	230 - 235	" 30%
25	235 - 240	" 2%
26	240 - 245	" 3% 1 foot lost
27	245 - 250	" 10% ½ foot lost
28	250 - 255	" 5% ½ foot lost
29	255 - 260	" 1% 4° lost, shear zone
30	260 - 265	" 5% 4° lost shear zone gouge and chlorite breccia
31	265 - 268	" 10% 2½° lost chlorite breccia and gouge.

DIAMOND DRILL HOLE #3

Location: Merryth zone, 240° @ 160° from Station C. F.
 Bearing: 250°
 Dip: 45°

0 - 5 casing
 5 - 56 Light gray fine grained gabbro, massive
 56 - 73 Dark gray fine grained augite gabbro, massive
 73 - 75 Aplite stringer, intrusive contact
 75 - 111 Dark gray fine grained augite gabbro, massive
 111 - 113 Hornblendite
 113 - 150 Medium dark gray fine grained augite gabbro, flocks of native copper at 123
 150 - 168 Olivine gabbro fine grained medium dark gray
 168 - 199 Augite gabbro medium fine grained, massive
 199 - 270 Olivine gabbro, medium grained, 2° disseminated sulphides at 184, some aplitic phases, well fractured.
 270 - 417 Hornblendite, mineralized

Sample #

32	270 - 275	½° lost, 2% sulphides
33	275 - 280	30% sulphides, pyrrhotite
34	280 - 285	low sulphides
35	285 - 290	low sulphides, ½° lost
36	290 - 295	low sulphides
37	295 - 300	" "
38	300 - 305	" " , native copper @ 304°
39	305 - 310	" "
40	310 - 315	5% "
41	315 - 320	3% "
42	320 - 325	low sulphides, ½° lost
43	325 - 330	" " , ¾° lost
44	330 - 335	3% sulphides
45	335 - 340	low sulphides, ½° lost
46	340 - 345	10% " , ¾° lost
47	345 - 350	5% " , flecks of native copper, ¾° lost
48	350 - 355	5% "
49	355 - 360	low sulphides, ½° lost
50	360 - 365	" "
51	365 - 370	10% "
52	370 - 375	8% "
53	375 - 380	5% "
54	380 - 385	4% "
55	385 - 390	8% "
56	390 - 395	low "
57	395 - 400	low sulphides, ½° lost
58	400 - 405	2% " , ½° lost
59	405 - 410	low sulphides
60	410 - 415	low sulphides

P. A. Chubb
 "P.A.C."

270° - 410° - 140° - 0.46% Cu
 "J.S."

DIAMOND DRILL HOLE #4

Location: Cross Fault, Iron Mountain Zone
40° @ 290° from Station C. K.

Bearing: 290°

Dip: -35°

0 - 37½ Casing through, overburden, Sooke Formation, Sandstone and conglomerate

37½ - 80 Coarse grained dark grey augite gabbro, fractured with hornblende veinlets.

80 - 116 Coarse grained augite gabbro, slightly hornblendized, slightly sheared, rare scattered specks of native copper, disseminated grains of iron oxide

116 - 133 Coarse grained augite gabbro

133 - 150 Black fine grained hornblendized gabbro, disseminated iron oxides

150 - 174½ Crushed augite gabbro, chloritized. (shear)

174½ - 200 Aplite. Intrusive contact at 174½

200 - 231 Gradational contact between augite gabbro and splite

231 - 302 Massive, coarse grained augite gabbro, streaks and stringers of hornblende, disseminated iron oxides.

302 - 342 Crushed, chloritized hornblendite, calcite stringers rare sulphides (shear zones)

342 - 356 Augite gabbro, slightly hornblendized

356 - 365 Aplite

365 - 420 Coarse grained augite gabbro

420 - 449 Coarse grained augite gabbro, slightly sheared and hornblendized well fractured, medium iron oxides. Very rare sulphides

449 - 460 Aplite

"P. A. Chubb"

No mineralization worth sampling.

"W.S."

DIAMOND DRILL HOLE #5

Location: Main valley zone, 145° @ 45° from Station B. T.
Bearing: 270°
Dip: 45°
Depth: 346°

0 - 2 Casing
2 - 14 Olivine gabbro, medium grained, dark grey
14 - 212 Coarse grained augite gabbro, low disseminated magnetite replacement, very rare sulphides in crystal slip planes and minor fractures. Flakes of native copper between 185 - 191. Some minor granulation and alteration.
212 - 242 Granulated, chloritized, carbonated augite gabbro, 20' lost.
242 - 266 Carbonatedplitic shear zone, 19' lost
266 - 278 Granulated chloritized augite gabbro, 2' lost
278 - 301 Fractured slightly granulated augite gabbro, hornblendized and chloritized, diss. iron oxides and very rare sulphides.
301 - 346 Augite gabbro, slightly hornblendized and chloritized, minor fracturing with very rare sulphides.

"P. A. Chubb"

Note:- No mineralization worth sampling.

"W. S."

DIAMOND DRILL HOLE #6

Location: Hill zone, 100° @ 270° from Station D. H.
 Bearing: 90°
 Dip: -45°
 Depth: 154°

0 - 10 Casing
 10 - 17 Hornblendized augite gabbro, abundant diss. iron oxide
 Rare sulphides
 17 - 25 Hornblendite, very low sulphides
 25 - 139½ Mineralized hornblendite.
 37 - 42 shear zone
 139½ - 154 Slightly hornblendized olivine gabbro, medium-grained,
 rare sulphides

<u>Samples #</u>	<u>Footage</u>	<u>Remarks</u>
61	25 - 30	5% sulphides
62	30 - 35	10% sulphides
63	35 - 40	3' lost 5% "
64	40 - 45	2' lost 5% "
65	45 - 50	10% "
66	50 - 55	20%
67	55 - 60	30%
68	60 - 65	40%
69	65 - 70	60%
70	70 - 75	50%
71	75 - 80	50%
72	80 - 85	70%
73	85 - 90	60%
74	90 - 95	40%
75	95 - 100	60%
76	100 - 105	60%
77	105 - 110	60%
78	110 - 115	60%
79	115 - 120	80%
80	120 - 125	60%
81	125 - 130	30%
82	130 - 135	Hornblendite 2% sulphides

Sulphides consist of pyrrhotite with low chalcopyrite and pyrite as disseminations and fracture filling in pyrrhotite, possibly some cubanite.

25° - 130° - 105° - 0.40%
 "P. A. Chubb"
 "J.S."

DIAMOND DRILL HOLE #7

Location: Hill zone, Station D. I.
Bearing: N 70° E
Dip: 45°
Depth: 175°

0 - 15 Casing
15 - 29 Hornblendized augite gabbro, disseminated flecks of native copper
29 - 53 Augite gabbro, medium grained, rare specks native copper
53 - 66 Augite gabbro, crushed altered splitized in part, rare specks native copper, 6 feet lost.
66 - 132 Augite gabbro, in part chloritized, patchy disseminated magnetite, disseminated native copper
132 - 173 Hornblendite, slightly mineralized, chiefly pyrite lesser pyrrhotite, rare chalcopyrite.
173 - 175 Augite gabbro

<u>Samples #</u>	<u>Footage</u>	<u>Remarks</u>
83	138 - 143	2% sulphides
84	143 - 148	1%
85	148 - 153	2%
86	153 - 158	1%

"P. A. Chubb"

138' - 153' = 15° = 0.366% Cu

"W. S."

DIAMOND DRILL HOLE #3

Location: Hill zone; 60° @ N 85 E from Station D. L.
Bearing: N 85 E
Dip: -45°
Depth: 176'

0 - 5	Casing
5 - 32½	Black felsitic hornblendite, slightly fractured with low disseminated sulphides, some patchy 5% sulphides
32½ - 47	Olivine gabbro, medium grained low disseminated sulphides and magnetite.
47 - 60	Olivine gabbro, patchy aplitic alteration
60 - 123	Black felsitic hornblendite, patchy aplitic alteration rare sulphides, some patchy low chalcopyrite mineralization.
123 - 169	Same as above; 0 - 5% sulphides, percentage of chalcopyrite greater than normal, low native copper
169 - 176	Augite gabbro, coarse grained

<u>Sample #</u>	<u>Footage</u>
87	123 - 128
88	128 - 133
89	133 - 138
90	138 - 143
91	143 - 148
92	148 - 153
93	153 - 158
94	158 - 163

"P. A. Chubb"

DIAMOND DRILL HOLE #9

Location: Willow-Course Zone, 80° @ 155° from Station D

Bearing: 315°

Dip: -55°

Depth: 197'

0 - 9

Casing

9 - 23

Olivine anorthosite, white, coarse grained

23 - 197

Impure olivine anorthosite (Replacement of olivine gabbro?) Serpentine slip planes, olivine replaced in part by iron oxides. Faultzone 118 - 119½

"P. A. Chubb"

No mineralization worth sampling.

"W. S."

DIAMOND DRILL HOLE #30

Location: Willow-Grouse Zone, 100° @ 168° from Station E

Bearing: 150°

Dip: -45°

Depth: 101°

0 - 11 Casing

11 - 81 Impure olivine anorthosite, small patches of hornblende and olivine gabbro. Well broken and shattered. 47 - 50 fault gouge. Olivine partially altered to serpentine and iron oxides. Small patches porphyritic.

81 - 101 Impure olivine gabbro, partial anorthosite replacement

"P. A. Chubb"

No mineralization worth sampling.

"W. S."

DIAMOND DRILL HOLE #11

Location: Merryth zone; 520' @ 152° from Station C. F.
Bearing: 280°
Dip: -40°
Depth: 580'

0 - 171 Fine grained augite gabbro, a few aplite stringers, rare native copper on chloritic slips. Show partial segregation of acid and basic phases. Well fractured 79 - 98 iron sulphides 96 - 98, gauge seam 136

171 - 309 As above, medium grained, 208 - 215 chloritic hornblendite stringers; 6 inch anorthosite stringer at 265 containing 10% chalcopyrite

309 - 311½ Aplite stringer

311½ - 392 As 171 - 309

392 - 403 Fine grained black slightly hornblendized augite gabbro.

403 - 409 Gouge zone, core lost

409 - 455 Fine grained, slightly hornblendized augite gabbro containing 2 * 3 inch patches of good chalcopyrite fine disseminated native copper 442 - 498 poor core recovery 30 feet lost

455 - 501 Hornblendite, augite gabbro remnants, highly shattered 20 feet lost, mud @ 461, gouge @ 490, rare sulphides

501 - 532 Fine grained augite gabbro, slightly hornblendized well fractured,

532 - 538 As above with aplite stringers.

538 - 580 Fine grained augite gabbro, fractured, aplite stringers.

"P. A. Chubb"

No mineralization worth sampling.

"W. S."

DIAMOND DRILL HOLE #12

Location: Merryth zone, 520° @ 152° from Station C. F.
Bearing: 250°
Dip: -30°
Depth: 420°

0 - 9 Casing
9 - 201 Fine grained dark grey augite gabbro, well fractured
hornblendite slips, a few narrow aplite stringers.
201 - 240 Slightly hornblendized and chloritized augite gabbro
well fractured, 2 - 3 inch patches of mixed sulphides
separated by wide barren augite gabbro
240 - 325 Fine grained dark grey augite gabbro, very rare patches
of sulphides
325 - 342 Hornblendized augite gabbro, very scattered narrow
patches of sulphides of typical nature.
328 - 331, heavy pyrrhotite rare chalcopyrite.
Fault breccia 338°
342 - 368 Fine grained slightly hornblendized gabbro
368 - 371 Fault breccia and gouge
371 - 420 Medium grained augite gabbro, aplite stringers.
Fairly well fractured.

"D. A. Chubb"

No mineralization worth sampling.

"W. S."