GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 22

Collar:	N 4825, E 4895	Course:	S 54E Mag.
Elevation:	-1	Average Angle:	86
		Depth:	504 Feet.

From	To	
0'-0"	8'-0"	Agglomerate, Dyers Point type; black, uniform, aphanitic rhyolite fragments over 3", in a light grey fine-grained, uniform matrix; some fragments bleached colorless.
8	15	Diorite; normal greenish grey; chilled margins top and bottom; coarse center.
15	30	Agglomerate, Dyer's Point; like above; matrix made of fragments of smaller magnitude, and definitely green.
30	72	Diorite; normal; extensive (4') chill margin at top; around 32-50 white calvite veins 4 mm to 2 cm thick at 0-25° angles; also quartz veins; lower margin chilled; central part coarser, 2 mm laths.
72	75	Agglomerate; recognizably Dyers Point, having large (3") bleached fragments.
75	153	Agglomerate: sheared; locally exhibiting foliation by chlorite streaks, alignment of white, rectangular, 2mm metacrysts of feldspar, or parallelism of elongate fragments; general color grey; fragments 2 mm to 2 cm, chiefly the smaller; few 3-4 cm bleached fragments suggest this is sheared Dyers Point. At 150-6 to 152 diorite (?) or fragments? Angles not distinct; shear angle 60° at 152.
153	164-6	Agglomerate; Dyers Point? Predominantly the uniform, almost vitreous, colorless or grey, bleached rhyolite (fragments?). Sharp contact against diorite.
164-6	247	Diorite; uniform grey, but texturally somewhat different from other diorite logged, in that long feldspar laths are not so prominent; top margin chilled; diorite traversed locally by thin seams.

From	To	
		(now chloritized) at angles 15, 30, 40, 60°. Lower margin chilled for 2'.
247	331	Mineralized altered agglomerate and ore. 247-259 Agglomerate? Sheared, silicified, and chloritized; angles 45°, range 40° to 50°. 259-260 Black chlorite with sphalerite spots. 260-263-10 Chiefly white calcite, minor pale green talc. (Note: 259 and 260 are estimates; core recovery 257-7 to 262-10 only 10" in small pieces. Recovery 262-10 to 267-10 is 100%.) 263-10-264 Ore; massive sphalerite minor chalcopyrite, contact about 45°. 264-265-6 White, coarse, crystalling calcite chiefly; minor talc 265-6 -268-2 Ore: massive sphalerite and chalcopyrite. Some white calcite gangue, but mostly solid sulfide. SAMPLE 50: 262'-10" - 267'-10" Zn 8.5% Cu 1.0% Pb 3.6%. 268-2-271-6 Calcite, white, with minor talc. 271-6-284 Sheared agglomerate; fragments 1 mm to 1 cm; silicified and chloritized, at 273' sphalerite and chalcopyrite spots several percent over 4". 284-289 Identity uncertain. May be sheared agglomerate or may be fine-grained diorite with sisps of included sheared agglomerate. Green-gray uniform, very fine grained, with occasional dark streaks at 45°. 289-301-6 Carbonate (white calcite) - talc zone; same as hole 19 around 152' except that talc is minor here. 301-6-331 Black chlorite; not well schisted; considerable disseminated pyrite; very minor chalcopyrite locally, angles uncertain-one direction of shear parallels core axis. Particular concentrations of spot sphalerite and chalcopyrite 303-5-305-5. SAMPLE 48: 303'-5" - 305'-5" Zn 1.0% Cu 3.0% Pb 0.0%. Also considerable spot chalcopyrite 314-315. At 324 few percent Cu (chalcopyrite and pyrite) for 6". One or two percent Cu 327-329-6 in disseminated chalcopyrite.
331	351-6	Agglomerate, sheared, chloritized, with whitish residual fragments 2 mm to 1 cm, and a grey-green

From	To	
		matrix streaked; angles variable 30-90o; chiefly 40°.
351-6	394-6	Silicified agglomerate; mottled grey, very dense, uniformly aphanitic; very hard, siliceous, with a ring. Contains some very fine grained pyrite, and traces chalcopyrite. 358-365 Much disseminated pyrite and chalcopyrite, traces sphalerite. Est. 1-2% Cu. Particular concentrations of sulfides locally at 370 chalcopyrite; 374 and 379 sphalerite; 384 chalcopyrite; 386 sphalerite *. Angles quite variable 80° to 20°. Some milky quartz. Small 2-5 mm. whitish residual fragments become increasingly visible around 387. (Note: the sphalerite is more markedly conformable to the shear than is the chalcopyrite.) 389-389-6 Massive sphalerite (Est. 25-1-0.) Core is broken here; core less uncertain since core-lifter failure left some core in hole at end of previous run and at end of this run. Ore length could be as much as 1 foot.
394-6	404	Agglomerate, highly chloritized matrix, locally wholly chlorite, with many 1 cm fragments. Clay gouge at 397.
404	504	Agglomerate; first 10 or 12 feet very light grey, fine-grained, dense, very hard, witha ring, probably silicified sheared-agglomerate. Below about 415 more normal grey, dense, fine-grained agglomerate, to 424. From 424 coarse grained; massive agglomerate, fragments of various color and texture, 1" to 8" in size, dominantly 1" to 2". Matrix grey to dark grey, locally sheared and considerably chloritized (as at 454) and bearing sphalerite spots. This is footwall agglomerate.

Collar angle		85°	
Surveys	200'	86°	
	300'	87°	(all corrected)
	400'	87°	
	500'	87°	

Note: Holes 14 to 22 inclusive logged by S. Benedict Levin, U.S.B.M.