

GEOLOGIC LOG
CAPT ROSIER MINE
D. D. HOLE 2

Collar: N 4790, E 4778
Elevation: 10'

Course: N 55 W Mag.
Average Angle: 60°
Depth: 300'

<u>From</u>	<u>To</u>	
0'-0"	15'-0"	Unconsolidated.
15	20	Rhyolite agglomerate? silicified, leached to form cavities (broken core).
20	40	Diorite, (at 33' a white carbonate vein 1/2" thick bordered by dark green chlorite) massive medium grained.
40	84	Rhyolite Agglomerate. Sheared, altered 40-46 Silicified in large part with fractures filled by quartz-white carbonate and relic green chlorite with relic white feldspar crystals. 46-53 Talcose, schistose, light grey green, sheared agglomerate fragments with white feldspar crystals within the darker chlorite phases. Small concentration of pyrite crystals. Schistosity 75°-85° to core axis. 53-54 Silicified, light grey. 54-55.5 Ore, very heavy fine grained brown sphalerite, contains white carbonate. In part leached of carbonate having spongy sphalerite. (Est. 20-30 percent Zn). 2" of very dark grey chlorite on contact of ore at 55.5. 55.5-84 Grey sheared, chloritic (with white scattered feldspar crystals to 60') dark green grey and variegated, residual fragments up to 1/2" across, some carbonate veinlets. At 80' schistosity angle 40° to core axis.
84	120	Diorite, medium grained, (compared to diorite seen in outcrops south of Dyer Cove). Vein of carbonate-quartz at 88. Carbonate cream colored. Massive diorite. (117.5' a very thin sphalerite? veinlet). Pyrite crystals fairly coarse 117'-119'). The diorite is fine grained near 120'.

Cape Rosier Mine, D. D. Hole 2 (Cont'd)

<u>From</u>	<u>To</u>	
120	240	Rholite agglomerate? Much sheared, schisted, altered and mineralized. Occasional residual fragments.
	120-131.2	Dark grey-green (black) schistose chlorite-rich, with disseminated sphalerite and in streaks conforming with schistosity. Angle of schistosity 30°-50° to axis of core. (Est. Zn 1-2 percent W.H.N. and S.B.L.) Hales of selvage of white talc in radiating plates around individual sphalerite crystals or masses. (SAMPLE 15: 131.2'-136.2': Zn 5.3%, Cu 0.7%, Pb 0.6%, desc. as above).
	136.2-139.2	Note: Pyrite is very minor in 120-139.2. Minerals present in 120-139.2 are sphalerite, chalcopyrite, galena, pyrite and talc. (SAMPLE 16: Zn 6.6%, Cu 0.6%, Pb 0.0%, desc. like above.)
	139.2-154.2	Dark grey-green (black) schistose chlorite schist with disseminated and patchy sphalerite rimmed by talc. Angle of schistosity 30°-40° to axis of core. This section has 1-2 percent disseminated very small pyrite crystals. (locally up to several percent Zinc. W. H. N.)
	154.2-157.2	Sample 25 contains considerable disseminated pyrite crystals. (SAMPLE 25: Zn 0.6%, Cu 0.0%, Pb 0.0%)
	157.2-161	Description like 139.2-154.2. This ore replaces schistose rock. (SAMPLE 4: Zn 17.8%, Cu 1.5%, Pb 0.1%)
	161.0-164.8	Ore replaces schistose rock, (chlorite). (SAMPLE 5: Zn 29.0%, Cu 1.5%, Pb 0.4%)
	164.8-169.3	Description like above. (SAMPLE 6: Zn 5.1%, Cu 0.4%, Pb 0.0%)
	169.3-174	Description like above. (SAMPLE 7: Zn 10.9%, Cu 1.0%, Pb 0.0%)
	174-177	Silicified, some dark chlorite streaks, schisted where chloritic. Some residual fragments up to over half inch across. Sphalerite, minor disseminated.
	177-185	Dark grey-green chlorite schist with much white carbonate.
	185-187	Diorite, fine grained, fractured and veined by pyrite-talc? veins. No sphalerite in this rock.

Cape Rosier Mine, D. D. Hole 2 (Cont'd)

<u>From</u>	<u>To</u> +	
		187-192 Like 177-185 only more carbonate.
		192-197.8 Ore
		(SAMPLE 20: 192.8'-197.8' : Zn 11.8%, Cu 1.0%, Pb 0.9%)
		(SAMPLE 34: 197.8'-202.8' : Zn 3.7%, Cu 0.2%, Pb 0.1%)
		(SAMPLE 35: 202.8'-207.8' : Zn 2.7%, Cu 0.2%, Pb 0.0%)
		(SAMPLE 36: 207.8'+212.8' : Zn 5.5%, Cu 0.4%, Pb 0.0%)
		(SAMPLE 37: 212.8'-217.8' : Zn 3.9%, Cu 0.2%, Pb 0.0%)
		(SAMPLE 38: 217.8'-220.9' : Zn 6.4%, Cu 0.7%, Pb 0.2%)
		Note: 192-220.9' the sphalerite in part is disseminated, in part follows the schistosity of dark green chlorite and talc. Many 30°-40° angles of schistosity to axis of core. In places much fine veining and repl. of talcy rock by carbonate.
		220.9-240 Dark grey-green chloritic schist, local heavy white carbonate. Disseminated sphalerite and also parallel to schistosity. Talc rims around many dis- seminated sphalerite crystals or masses. Several places are several inches of sphalerite est. at several percent.
240	300	Rhyolite agglomerate, sheared but with many residual fragments near 240', then larger fragments near 265' and on to end of hole at 300'.

Angle of Hole:

At 0': 60°
At 300': 63°