

012545

Property File  
924-152

Analysis, description of, and subsequent findings:  
relating to

HARBLE-ITE LIMESTONE DEPOSIT  
Harbledown Island, British Columbia Coast.

In a letter from the Department of Mines, Ottawa, under date of December 1st, 1930, to R.H. Chestnut, lessee of L 1594, Range One, Coast District; and signed, M.F. Gouge, Mining Engineer, Mineral Resources Division, in which he states:

"Last year I visited the deposit in question on Harbledown Island and can agree with you that it is a very large deposit. While at the deposit I obtained representative samples of the stone and these are being analysed chemically."

In his subsequent report on "Limestones in British Columbia" and in speaking of this deposit, Mr Gouge's description of the stone, reads:

"a blue sugary textured high calcium limestone forms a ridge along the south shore of Harbledown Island at its extreme easterly end. For three hundred yards it is exposed in cliffs 30 to 75 feet high, and then can be traced inland for some distance. The limestone band varies in width according to the dip, but in many places it is 300 feet wide. The country underlain by it is heavily wooded or forested. In addition to the igneous dykes the limestone contains inclusions of foreign rocks and some quartz. Small amounts of pyrite crystals are disseminated through some of the limestone. Sample (25) was taken across the north half of the band at its eastern end, and sample (25a) from the southern half. The low content of Magnesium Carbonate is notable.

Sample 25. light blue limestone forming the major part of the deposit. Sample 25a, dark colored stone from the south edge of the deposit.

	(25)	(25a)
Silica $SiO_2$	1.90	1.36
Iron $Fe_2O_3$	0.15	0.30
Alumina $Al_2O_3$	0.25	0.44
Calcium Phosphate	0.07	0.04
Calcium Carbonate	96.89	96.87
Magnesium Carbonate	0.29	0.27
	99.55	99.28
Sulphur	trace	0.10
Lime, oxide of calcium, $CaO$	54.30	54.27
MGO	0.14	0.13
Ratio $CaO$ to $MgO$	388.1	417.1

"The fetid smell given off the dark stone (25a) when struck with a hammer is attributed to the presence of hydrogen sulphide gas (h2s) accluded in the stone. Phosphorus is present in small quantities in all Canadian limestones, probably present as calcium phosphate."

A sample of the dark stone (25a) sent to the Department of Mines, Victoria, B.C. by, (the late) Mr. George Clothier, then District Mining Engineer, gave the following return analysis:

Calcium Carbomate 99%-- Carbon 0.05--Sulphur ,trace.

Three samples submitted to West Assay Works, G.G. West, proprioter, Provincial Assayer, Manufacturing and Research Chemist, 1346 Clark Drive, Vancouver, B.C.-- gave as follows:

Silica and insoluble Silicates	3.40	1.66	1.40
Iron Oxide	0.20	1.00	0.20
Alumina	0.80	0.88	0.24
Magnesia	0.05	0.06	0.16
Calcium Carbonate	<u>95.00</u>	<u>96.40</u>	<u>98.00</u>
	99.45	100.00	100.00
Lime ,oxide of calcium, CaO	53.20	53.99	54.88
Carbonic acid Co2 ,estimated,	41.80	42.40	43.12

An average of ten samples taken by Mr. R.W. Burton, Mining Engineer for the Privateer Mines Limited, Vancouver, B.C. on I 1594, west boundary to waterfront, gave the following analysis:-----

Silica and insoluble silicates	0.60
Iron Oxide	0.20
Alumina	1.00
Magnesia	0.11
Calcium Carbonate	<u>98.00</u>
	99.91
Lime, oxide of calcium CaO	54.70
Carbonic Acid	43.30

Subsequent explorations have greatly increased the extent of this deposit as reported by Mr. M.F. Gouge: as of course, he would not have the time at his disposal to do so. Instead of the width being 300 feet, which is quite true a short distance from the shore front as the shore runs diagonally to the line of the deposit, the main width is some 700 feet: or depth, as I find the deposit to be lying on its edge.

The distance inland has been traced for over one mile. The heavily wooded top cover has been logged. The inclusions of foreign rocks has been found to be of an end inclusion character rather than extending throughout the deposit.

Samples taken from the foreign blebs gave an assay:

Gold... trace, Silver 65 cts.... Copper \$1.80.. to the ton. this material could be salvaged as flux in opening a quarry face.

All elevations, measurements, and tie lines, shown on the accompanying sketch map, have been made by myself.

They represent the property as seen from surface indications. Seventy-five per cent of the surface shows up the stone, the overburden is forest and debris.

Tonnage shown is calculated at 150 lbs to the cub foot, and to the indications of the deposit extending to sea level.

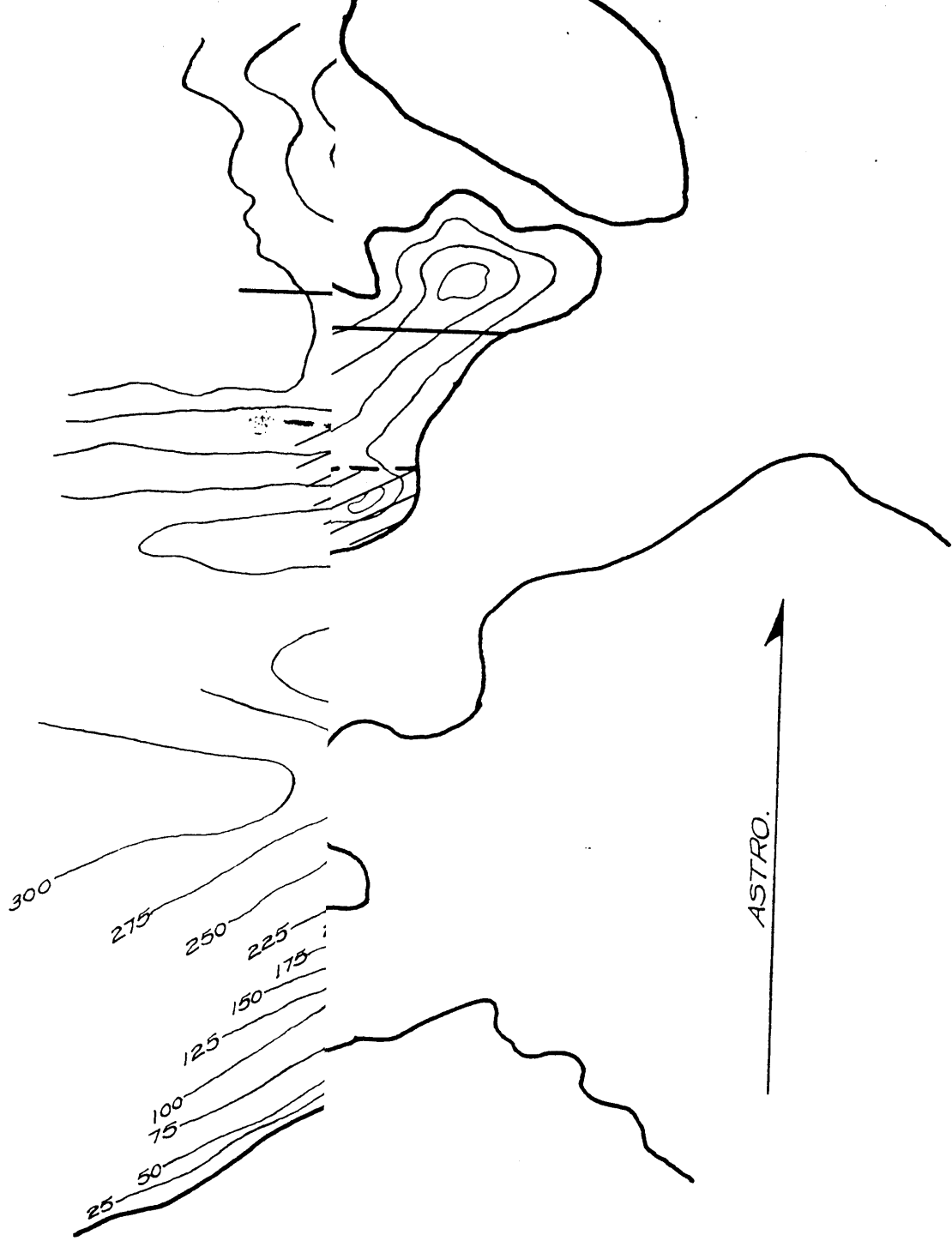
To prove this tonnage diamond drilling should be undertaken.

This property has not been developed. Dam and Quarry faces shown are proposed possibilities..

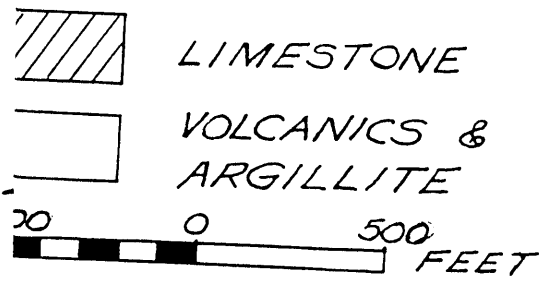
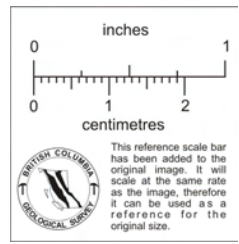
Baronett Passage is a navigable waterway.

R.H.Chestnut.

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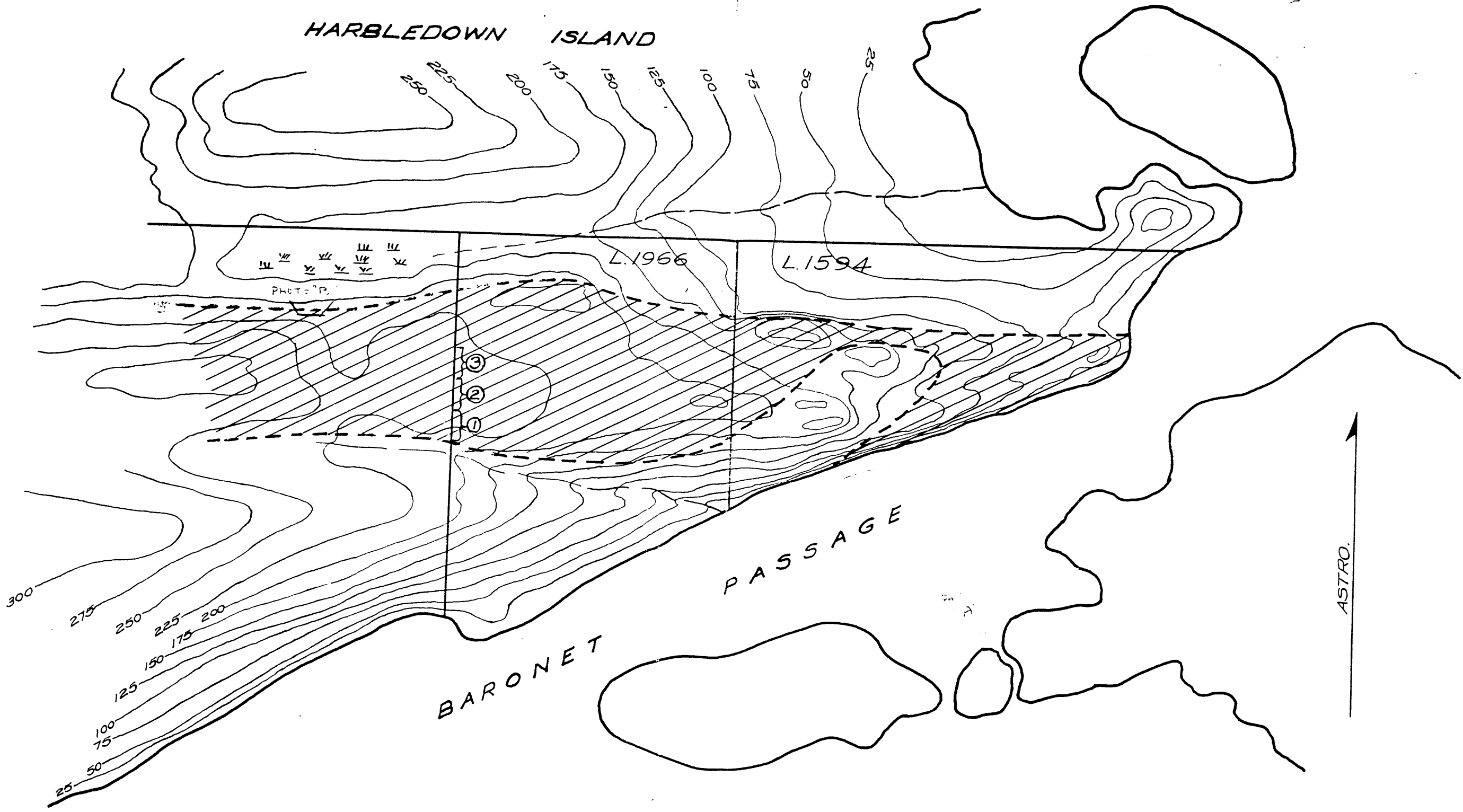
# BLEDOWN ISLAND ESTONE DEPOSIT



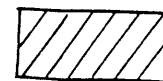
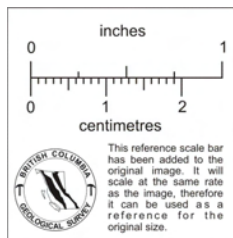
SEPT. 1954  
 J. W. McCAMMO



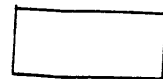
HARBLEDOWN ISLAND



HARBLEDOWN ISLAND  
LIMESTONE DEPOSIT



LIMESTONE



VOLCANICS &  
ARGILLITE

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CRACROFT ISLAND