

**WESTERN SHORE, MACQUARIE HARBOUR  
BETWEEN DOUBLE COVE AND RUM POINT**

**LYELL E.Z. EXPLORATIONS**

**57 – 162**

18th March,

7

Report on Examination of Western Shore, Macquarie Harbour  
Between Double Cove and Rum Point

Dates of Examination: 18th February to 1st March, 1957.

Party Leader: D. Sampey

Personnel Employed: P. Goscombe (Student) and J. White (Bushman).

Man days in the field: 36

Location of Camp: Motor launch Yvonne docked at Double Cove and Sarah Island (i.e. Settlement Island).

Means of Transport and Supply: Motor launch Yvonne.

General Topography of Area: The shore consists of a series of rocky headlands with pebble and cobble beaches in between them. These coves run in along strike.

Geological Findings and Investigations:

The rock types along this shore are monotonous repetitions of interbedded tuffs and shales with occasional beds of breccia conglomerate and lava flows. Almost identical rock types are repeated so often that it is impossible to find marker beds.

The area consists of a series of asymmetric folds with axes striking  $350^{\circ} - 10^{\circ}$  and plunging from  $5^{\circ} - 90^{\circ}$  North or South. The variation in plunge is extremely rapid, it sometimes going from  $35^{\circ}$  North to  $60^{\circ}$  South within 150 yards.

At two localities there is evidence of strong E - W movement, namely on the eastern side of Double Cove and to the west of Little Gravelly Beach. At Double Cove the beds strike  $60^{\circ}$  and drag folds plunge  $30^{\circ} - 80^{\circ}$  in a direction

of 70°. West of Little Gravelly Beach there is a strong E.W. shearing causing the more competent tuffs to form laminae 2-4 m.m. thick and the shales to show joints spaced 1 - 4 inches apart. The strike of the bedding is N-S.

The serpentine mass at Asbestos Point has a strike of approximately 360° and appears to be a sill. Several other basic intrusions occur to the east of this point.

A very interesting occurrence of pyritic replacement of tuff was found at Pelias Cove (previously unnamed).

The replacement was complete but the tuffaceous texture was still very apparent. The occurrence as found was exposed just above high water line over an area of about 2 square feet. Several hours work later showed the mineralisation extends for 8 feet across supposed strike (360°) and 7 feet along strike.

A grab sample of fresh material was taken as there was insufficient time for a channel sample to be taken. The assay results are:

<u>Pb</u>	<u>Zn</u>	<u>Cu</u>	<u>Ag</u>	<u>Au</u>	<u>Fe</u>
Trace	1.1	0.41	0.389	0.010	45.4

Ag and Au figures are in oz. per ton, all others are percentages.

Recommendations:

Further work on Pelias Cove prospect be left until after the electromagnetic survey has been completed as this will then give some idea of size and shape of mineralised area.

*D. Sampey*  
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