

332001

LYELL E.Z. EXPLORATIONS
Queenstown

INVESTIGATION OF
PELIAS COVE PROSPECT

19th May 1960

60_313

LYELL - E.Z. - EXPLORATIONS

G113

332002

19th May, 1956

To: Mr. G.F. Hudspeth

Investigation of Pelias Cove Prospect

1. Dates of Investigation: 5th to 8th April, 1960.

2. Man days in the Field: 13

Personnel:
B. Scott
J. Lang
D. Russell
H. Hooper

3. Location and Access

Pelias Cove is situated on the west shore of Macquarie Harbour immediately below Double Cove which provides a good anchorage and camping site. A short track has been prepared from the south-east corner of this location to Pelias Cove.

The area is covered by photograph 9/889/36.

4. Previous Work

Hematite mineralisation was first discovered by D. Sampey in the 1956-1957 season (G21). The location was later investigated in greater detail (G25) and a 39 ft. width of hematite with sulphides (50%) and country rock (50%) was exposed on the beach. An attempt was made to trace this mineralisation southwards with the small E100 drill and six short holes were completed; two were inclined holes (L2 and L3) and their position is shown on the accompanying plan Q50/10. The remaining four holes (L4, L5A, L5B and L6) were vertical and drilled on the hematite outcrop at the beach. The results of these holes are summarised in the monthly report for the period ending 23rd August, 1957; they are reproduced in this report as an appendix.

The holes drilled on the sulphide outcrop showed that the hematite on the beach was a capping some 6 to 10 ft. thick below which loose sandy ground (greywacke?) extended to at least 46 ft. This hematite zone was not found in holes L2 and L3 which were drilled to intersect a projected strike extension 100 ft. and 35 ft. respectively from the outcrop position, at a vertical depth of 65 ft.

The average of two assays of the hematite mineralisation is reproduced here.

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TABLE I

Assays of Hematite on beach at Pelias Cove

<u>Copper</u>	<u>Lead</u>	<u>Zinc</u>	<u>Silver*</u>	<u>Gold*</u>	<u>Iron</u>
0.12 %	0.75%	1.0%	0.14	0.008	40.2%

* ounces/ton

5. Present Work

The present work consisted of a ~~ground~~^{ground} electromagnetic survey across the projected strike extension of the mineralisation. Using the set-up technique, the R.E.M. transmitter was placed at the outcrop of the hematite and traverses were run at 200 and 400 ft. separations; no cross-over was obtained in the dip angles as shown on plate Q50/10.

6. Conclusions

The results of the drilling and electromagnetic survey demonstrate that the mineralisation does not persist along its strike and no further work is warranted on this prospect.

Chief Geologist, L.E.E.

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APPENDIX (cont.)

(b) Assay Data

	<u>Lead</u>	<u>Copper</u>	<u>Sulphur</u>	<u>Iron</u>
0' - 6' (10" core)	Tr.	0.07%	0.30%	38.6%

Diamond Drill Hole L5 (L5b) Vertical

(a) Drill Core Core recovery was 85%

0' - 3'4" Hard fine-grained pyrite with subordinate hematite

(b) Assay Data

	<u>Lead</u>	<u>Copper</u>	<u>Sulphur</u>	<u>Iron</u>
0' - 3'4"	0.15%	0.40%	13.16%	44.8%

5. Diamond Drill Hole L6 Vertical

(a) Core/Sludge The core recovery was 1%

0' - 10' Tough hematite/silicified rock
 10' - 34' Green sludge, as in L3
 34' - 44' Red sludge, as in L3

(b) Assay Data

	<u>Lead</u>	<u>Copper</u>	<u>Sulphur</u>	<u>Iron</u>
0' - 10'	Not sufficient representative sample for assay			
10' - 44'	0.03%	0.03%	0.18%	4.0%

6 Summary

(a) L2 and L3 should have intersected the ore-zone at approximately 30 to 70 feet vertically below the ground level.

(b) L2 did not intersect this zone and the rock type met does not resemble that found as the ore-host on the beach.

(c) L3 showed the rock type known to be the ore-host.

Sulphides were not intersected but the change in sludge at 42 ft. and the increase in lead values from 42 to 92 ft. (drill hole depth) is at the anticipated position of the ore-zone and may, in fact, outline this zone.

(d) The holes drilled on the sulphide outcrop, in conjunction with the costeaming to 3-4 ft., show that the ore-zone on the beach is a capping 6-10 ft. thick which contains copper values up to 2.5% over a vertical depth of at least 4-5 ft. The material below the sulphide/hematite is loose sandy ground with the typical green greywacke ore-host rock, to a known vertical depth of 46 ft.

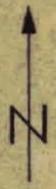
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AMG 348600mE
5326620mN

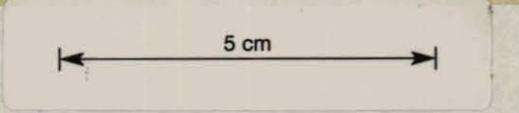
AMG 417600mE
5226650mN

Area referred to in report

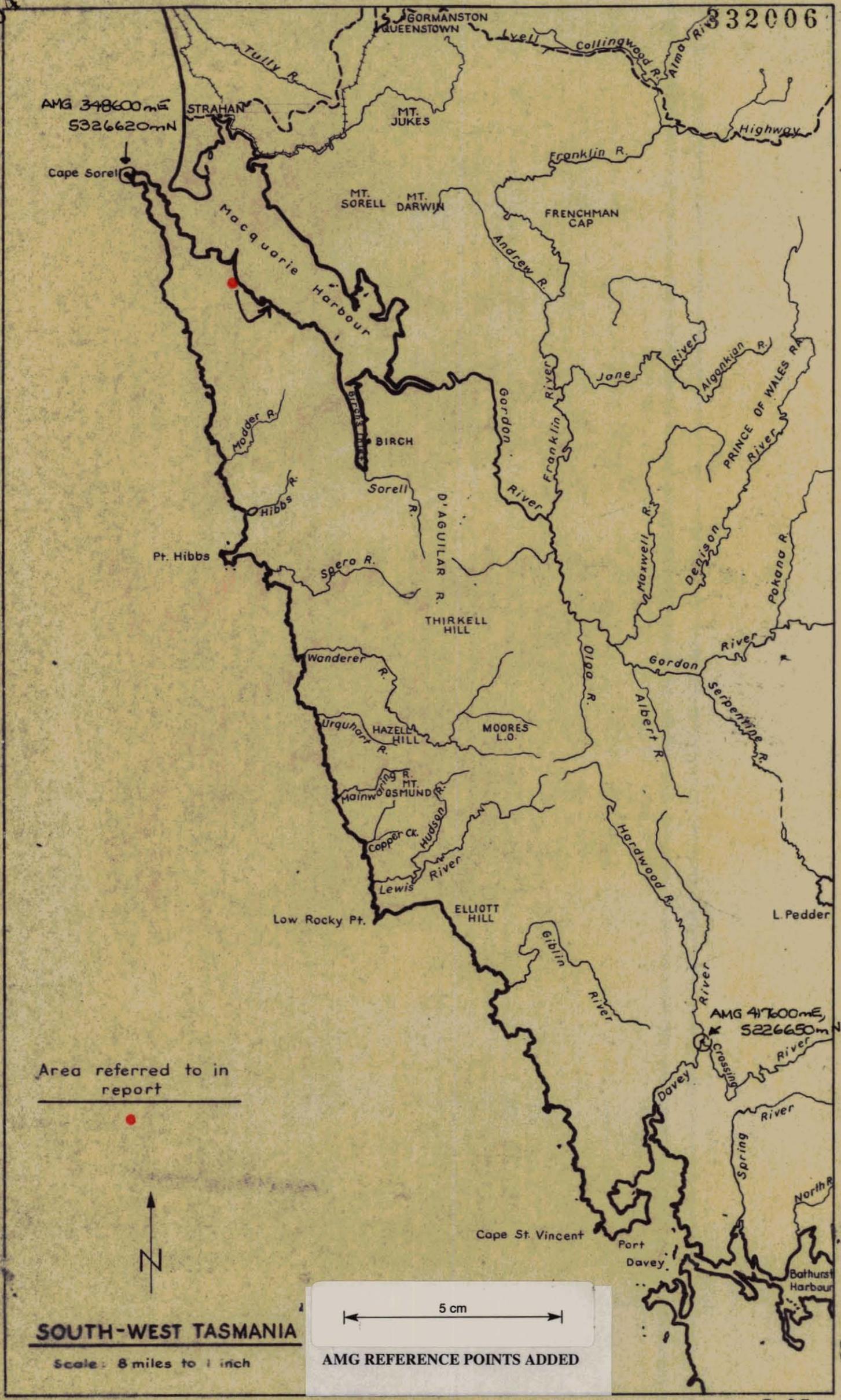


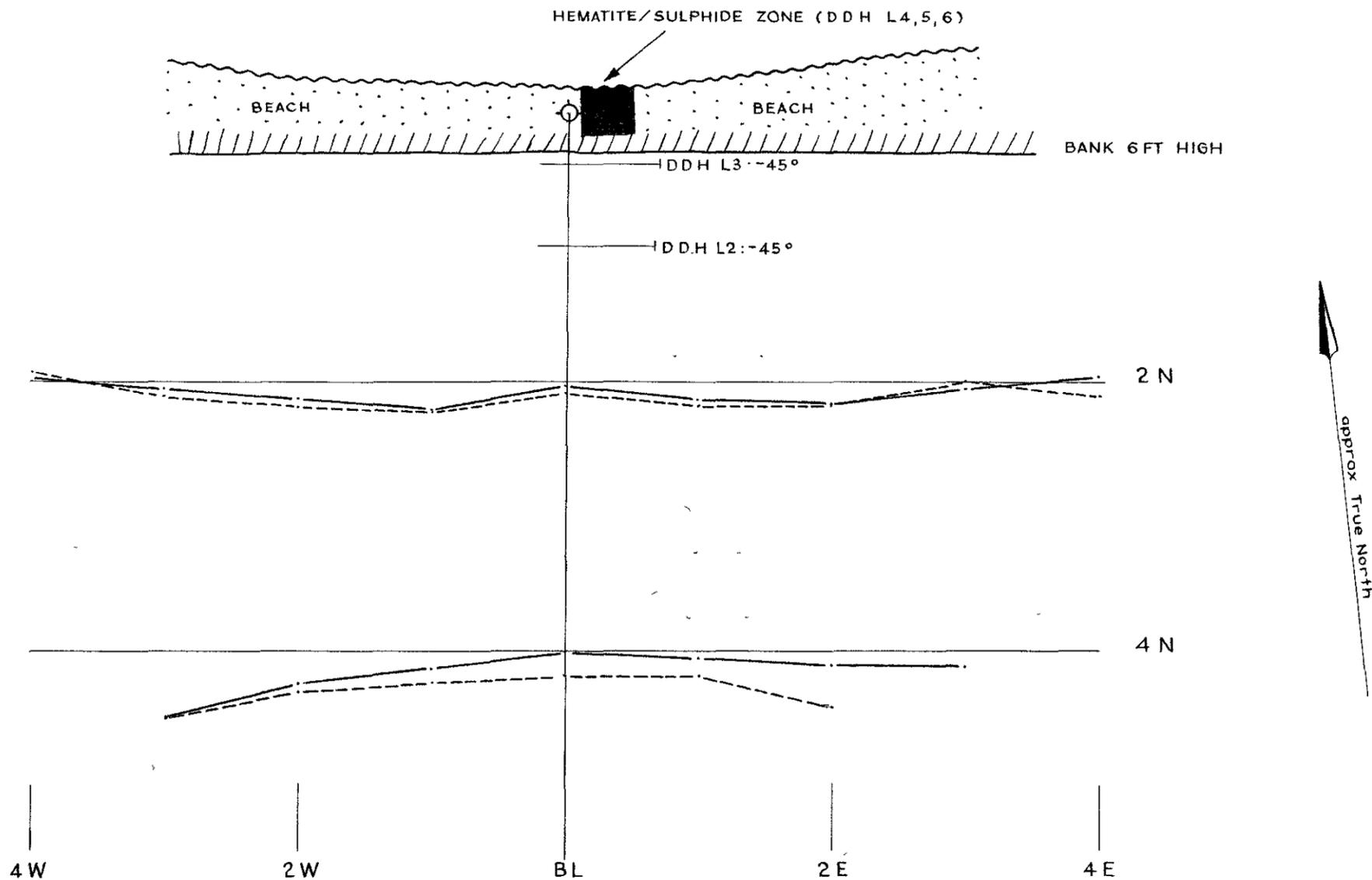
SOUTH-WEST TASMANIA

Scale: 8 miles to 1 inch



AMG REFERENCE POINTS ADDED





References	LYELL E.Z. EXPLORATIONS QUEENSTOWN		
1000 cps ———	PELIAS COVE		
5000 cps - - - -			
Survey			
Geology	B.S.	1957	Hor. 1" = 100'
Geophysics	B.S.	1960	
Geochemistry			Vert 1" = 20'
Drawn	B.S.	1960	
Traced	D.S.	1960	
	Q 50		Sheet No 10
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