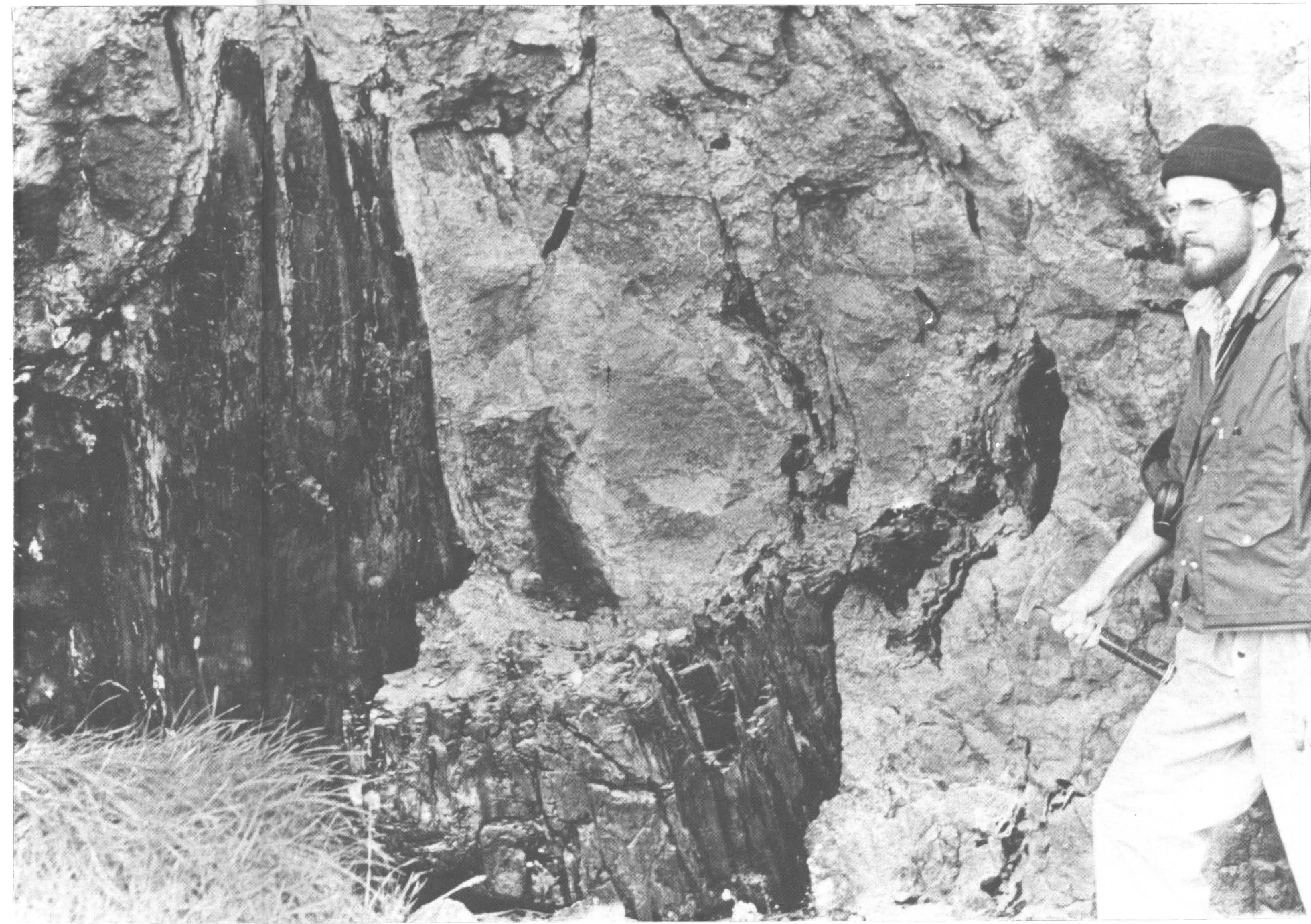




1



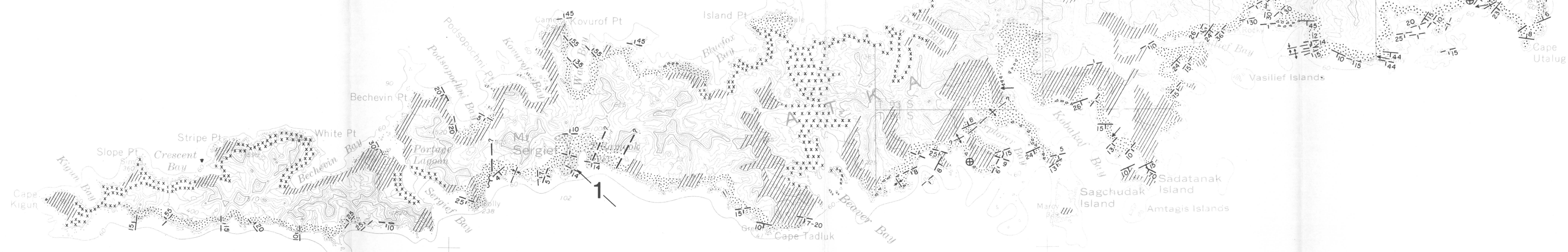
2



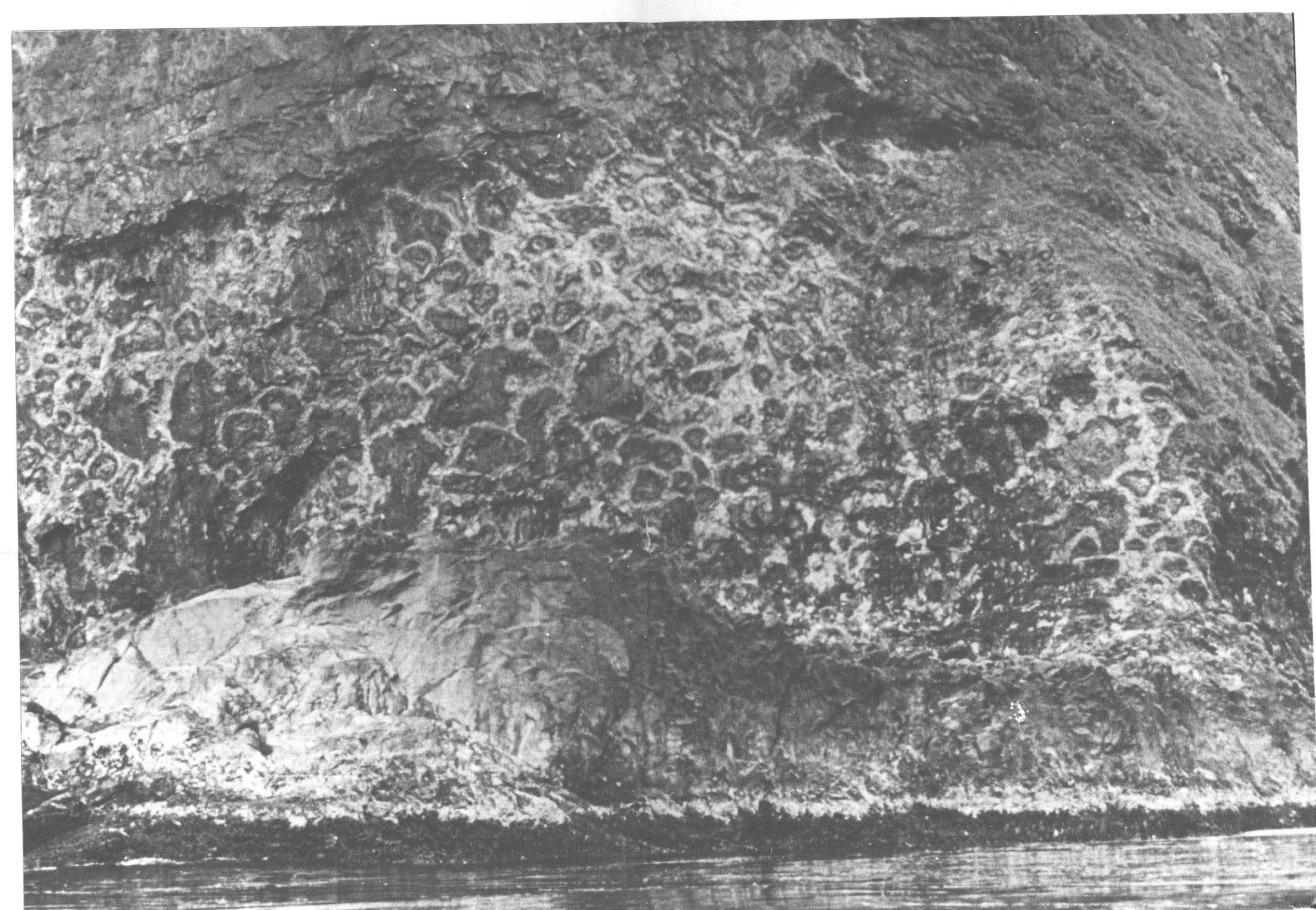
3



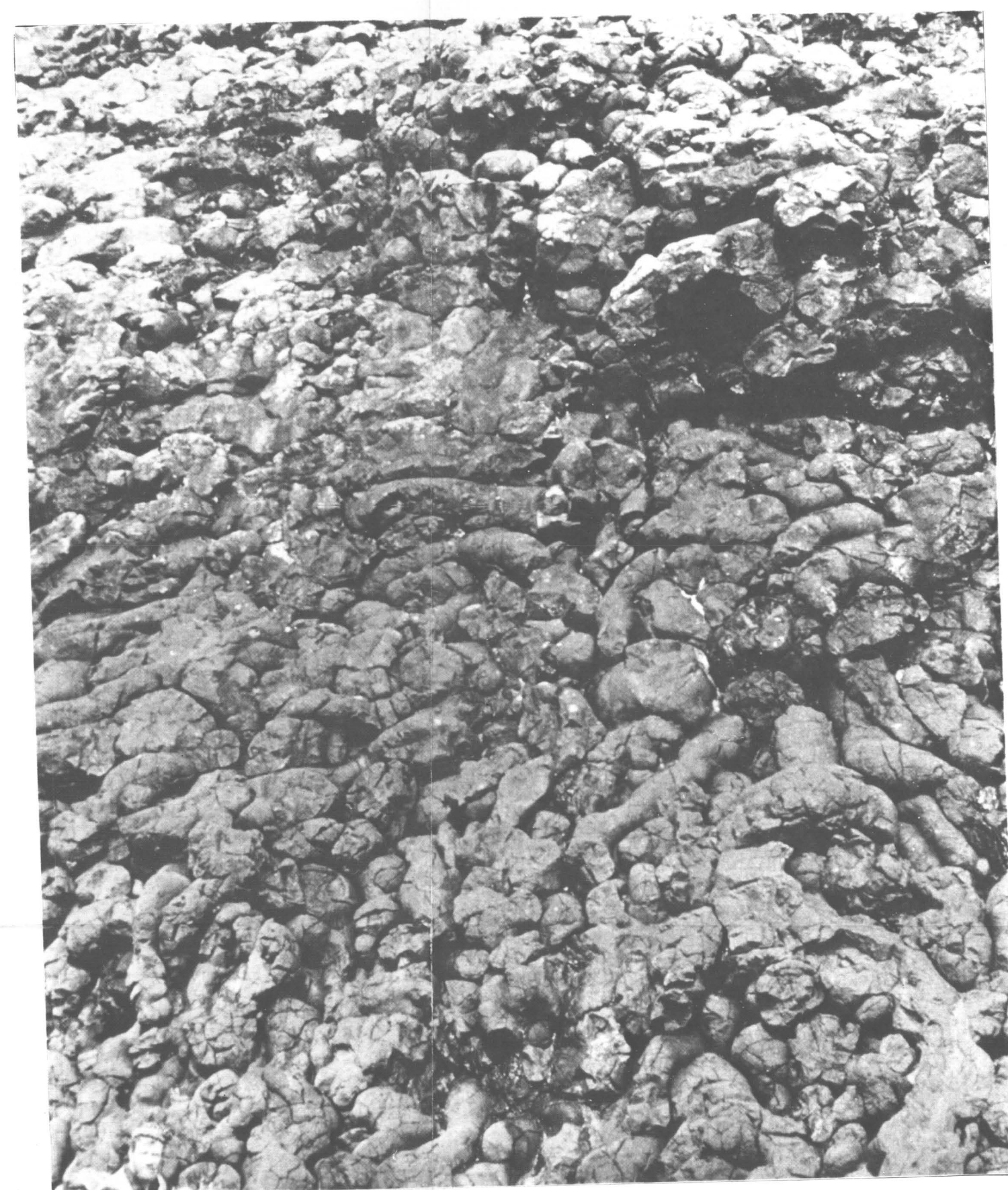
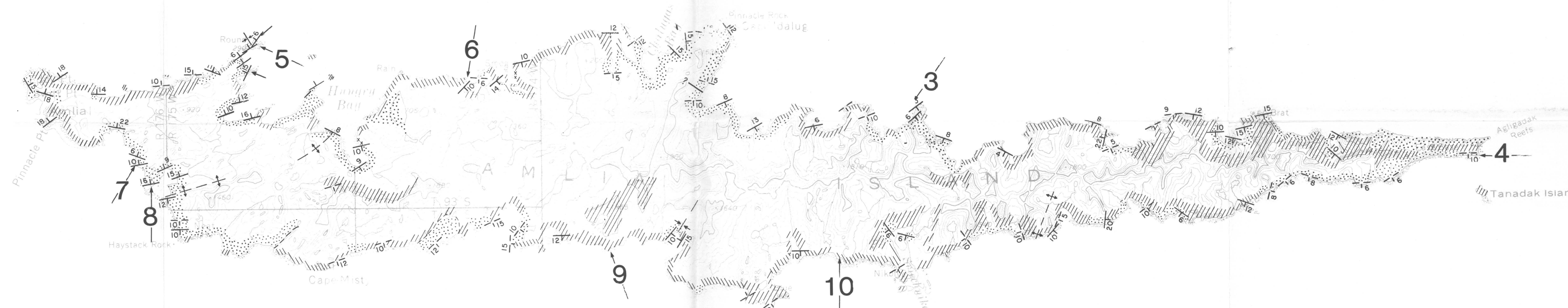
4



5



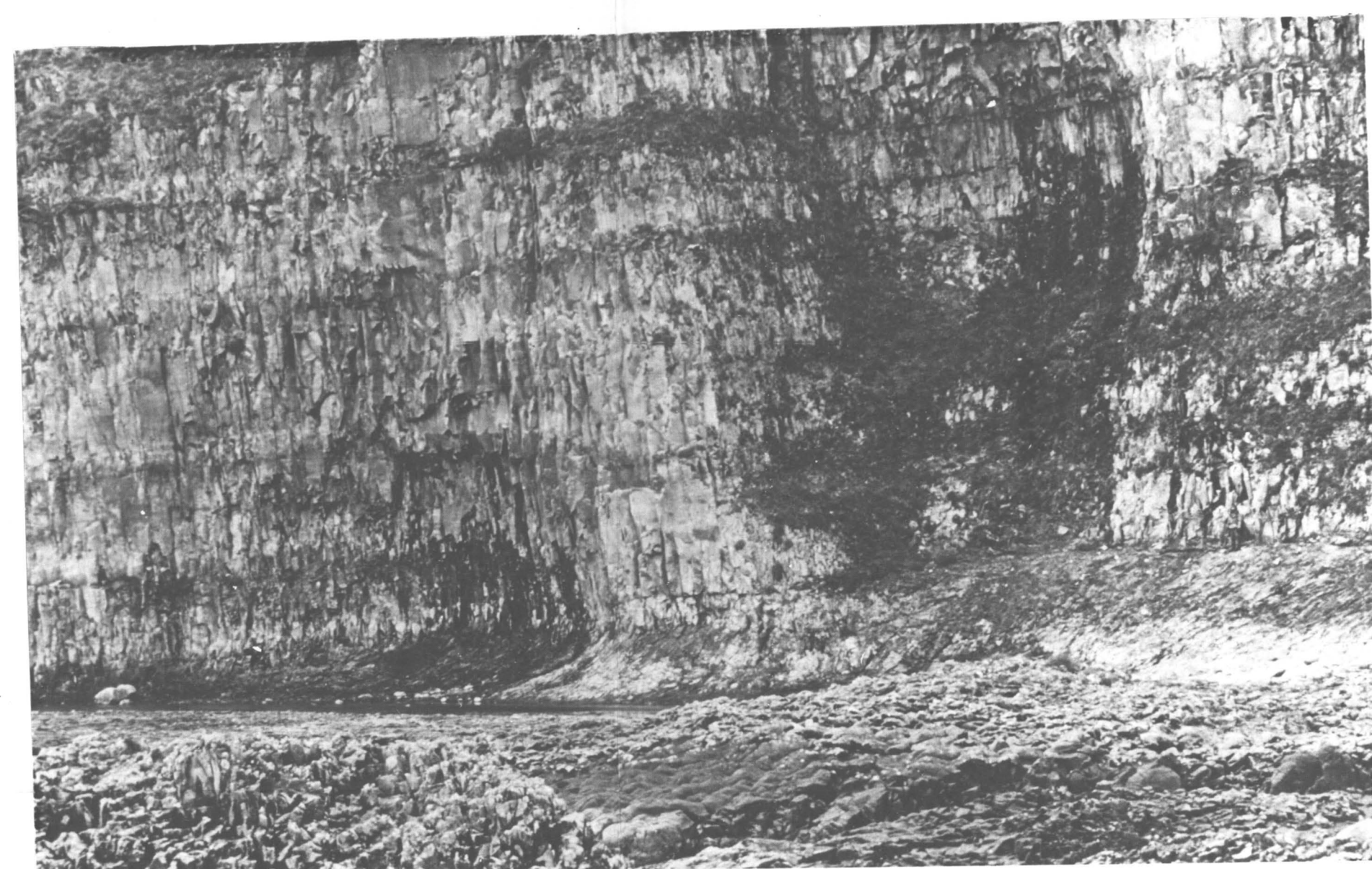
6



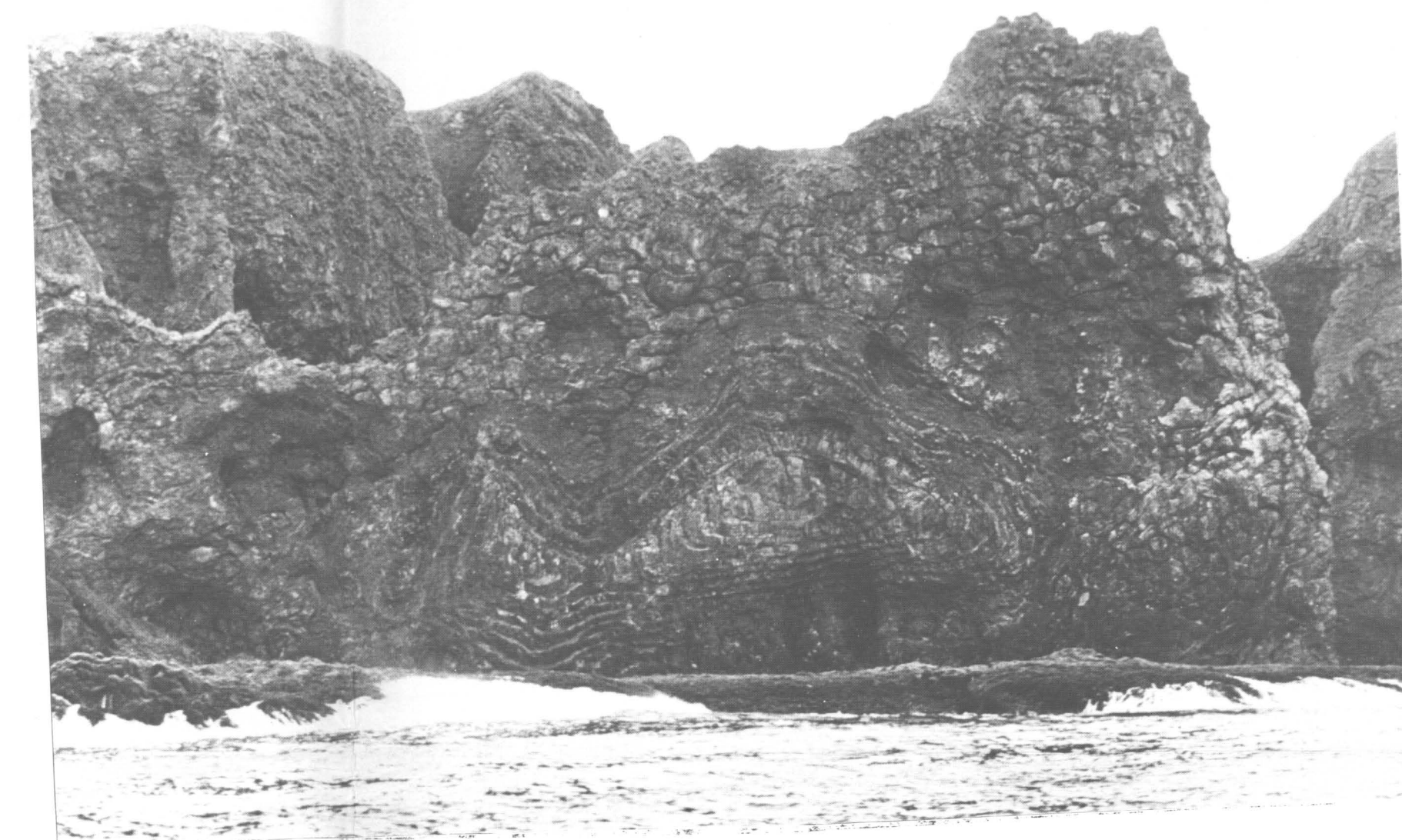
7



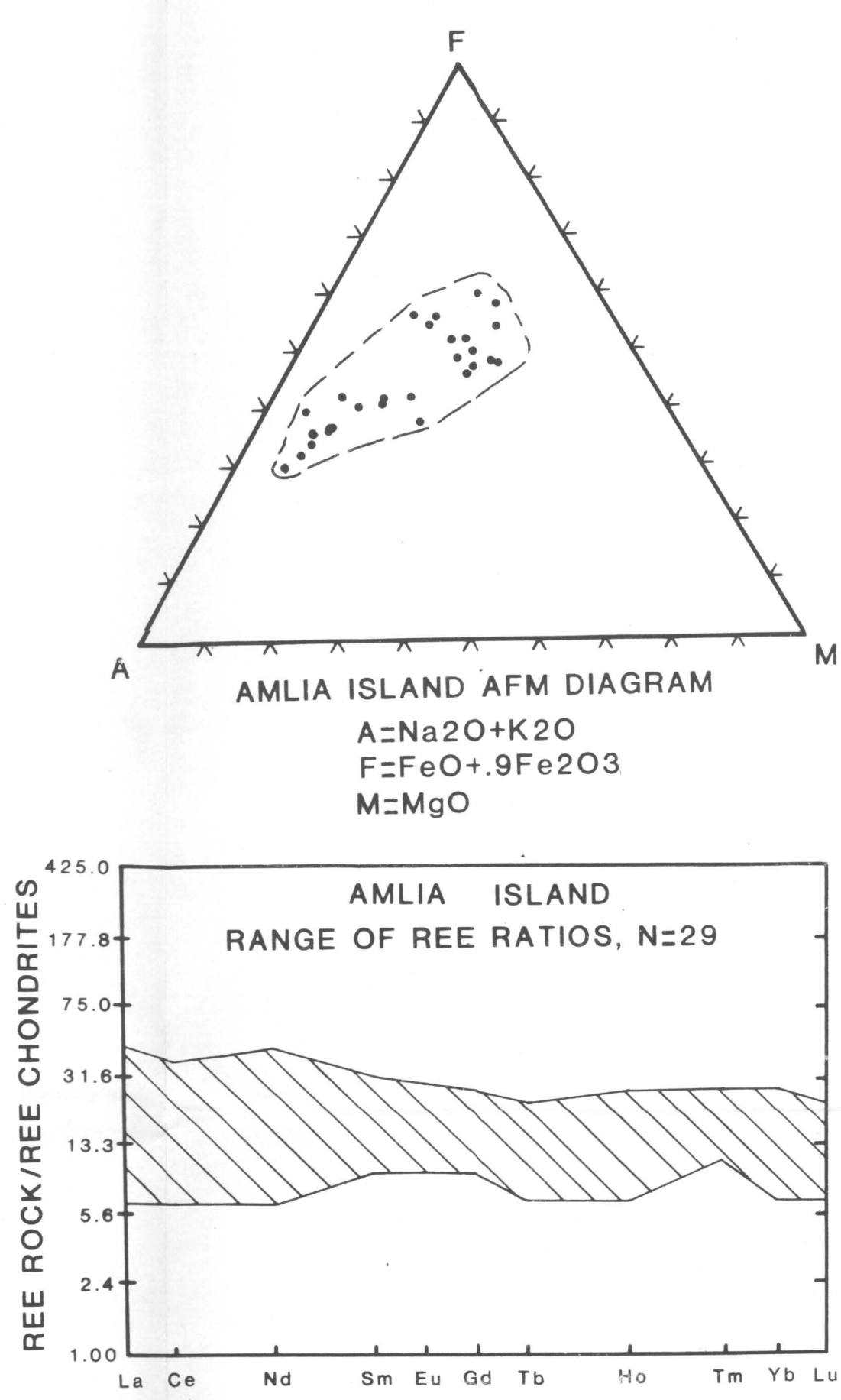
8



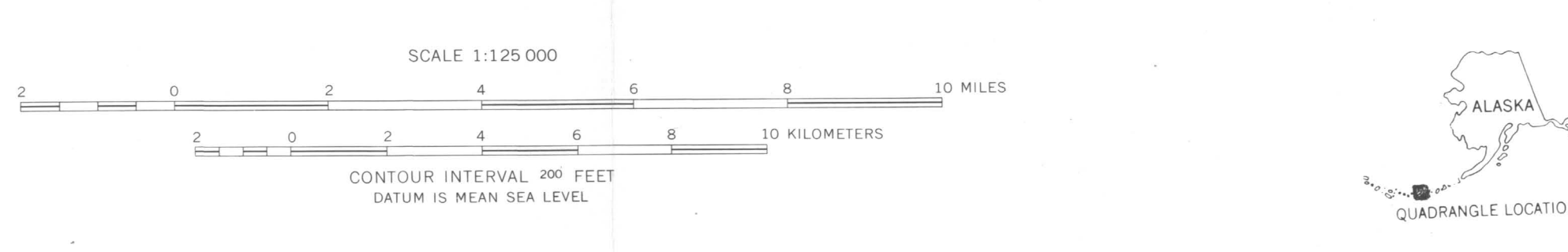
9



10



- SEDIMENTARY ROCKS**
- Sandstone, conglomerate, and breccia. Nonmarine and shallow marine. Diatoms and pollen and spores indicate a late Miocene age. Locally contains logs and coaly organic debris.
 - Sandstone, siltstone, mudstone, and siltstone conglomerate and breccia. Volcanogenic turbidites interbedded with debris flow, pillow lavas, and massive volcanic flows. Monofossils on Amlia Island indicate an age of late Eocene or early Oligocene.
- IGNEOUS ROCKS**
- Plutonic rocks composed of granodiorite and quartz diorite. Matrix phenocrysts are mainly hornblende and biotite. Radiometric ages from Heaver Bay pluton (Atka Island) include 21.9 ± 3.4 (hornblende); 19.0 ± 0.8 m.y. (biotite); 15.7 ± 0.1 m.y. (zircon/uranium, zircon).
 - Massive volcanic flows and flow breccia. Locally may include all complexes. Includes basaltic and basaltic andesites; interfingers with late Eocene-early Oligocene sedimentary rocks and pillow flows.
 - Pillow basalt; phenocrysts of plagioclase and clinopyroxene in tachylyte groundmass. Locally altered to prehnite and pumpellyite. Pillow flow interfingers with massive flows and sedimentary rocks of late Eocene or early Oligocene age.



RECONNAISSANCE GEOLOGIC MAP OF ATKA AND AMLIA ISLANDS, ALASKA
BY
J.R. HEIN, HUGH MCLEAN, AND T.L. VALLIER
1981

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature. Any use of trade names is for descriptive purposes only and does not imply endorsement by the USGS.