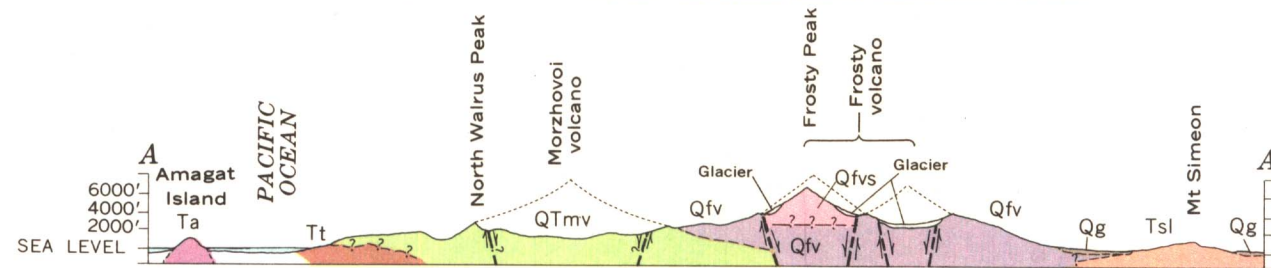


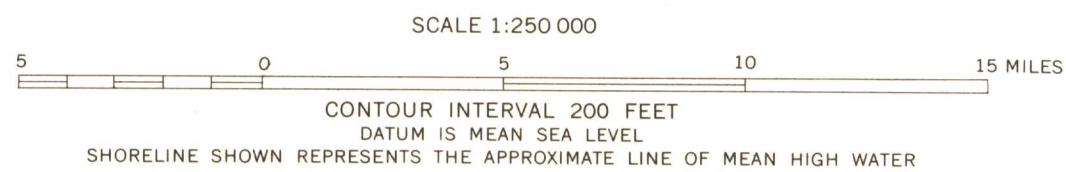
Base from U. S. Geological Survey 1:250,000 topographic quadrangles of Fort Randall, 1950 and False Pass, 1949

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C. 10190

Geology by H. H. Waldron, 1947



GEOLOGIC RECONNAISSANCE MAP AND SECTION OF FROSTY PEAK VOLCANO AND VICINITY



EXPLANATION

- |                                                |                                                              |                                                                                                                                                                                      |
|------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recent                                         | Qa                                                           | Alluvium<br>Recent stream and beach deposits of sand, silt, clay, and gravel                                                                                                         |
|                                                | Qd                                                           | Dune sand<br>Only larger deposits shown                                                                                                                                              |
|                                                | Qg                                                           | Glacial drift<br>Undifferentiated till and stratified drift                                                                                                                          |
| Pleistocene                                    | Qfvs                                                         | Frosty Peak volcanics<br>Light-gray porphyritic basalt flows and interbedded pyroclastic deposits. Qfvs, volcanic rocks of the summit cone                                           |
|                                                | Qfv                                                          |                                                                                                                                                                                      |
| Upper Tertiary                                 | QTmv                                                         | Morzhovoi volcanics<br>Porphyritic olivine basaltic lavas and interbedded pyroclastic deposits, and some volcanic sedimentary rocks                                                  |
|                                                | Tt                                                           | Tachilini formation<br>Poorly consolidated marine sandstone, graywacke, grit and pebble conglomerate, and some black shale                                                           |
| Middle Tertiary                                | Td                                                           | Quartz diorite<br>Medium to coarsely crystalline quartz diorite stocks intruded into Belkofski tuff                                                                                  |
|                                                | Tb                                                           | Belkofski tuff<br>Well-bedded basaltic tuff, agglomerate, and volcanic sedimentary rocks. Includes some interbedded basalt flows, and sills, dikes, and plugs of basalt and andesite |
| TERTIARY ROCKS WHOSE RELATIVE AGES ARE UNKNOWN |                                                              |                                                                                                                                                                                      |
|                                                | Tsl                                                          | Basalt flows of Mt. Simeon<br>Olivine basalt flows                                                                                                                                   |
|                                                | Ta                                                           | Hornblende-andesite plugs                                                                                                                                                            |
|                                                | Tov                                                          | Volcanic rocks of Thinpoint Lagoon<br>Predominantly basaltic lapilli tuff, and some basaltic flows, breccia, and agglomerate                                                         |
|                                                | --- Contact<br>Dashed where approximately located            |                                                                                                                                                                                      |
|                                                | --- Indefinite, inferred or gradational contacts             |                                                                                                                                                                                      |
|                                                | --- Inferred fault<br>Dotted where concealed                 |                                                                                                                                                                                      |
|                                                | --- Strike and dip of beds                                   |                                                                                                                                                                                      |
|                                                | --- Inferred former profile of volcano shown in section A-A' |                                                                                                                                                                                      |

QUATERNARY

TERTIARY