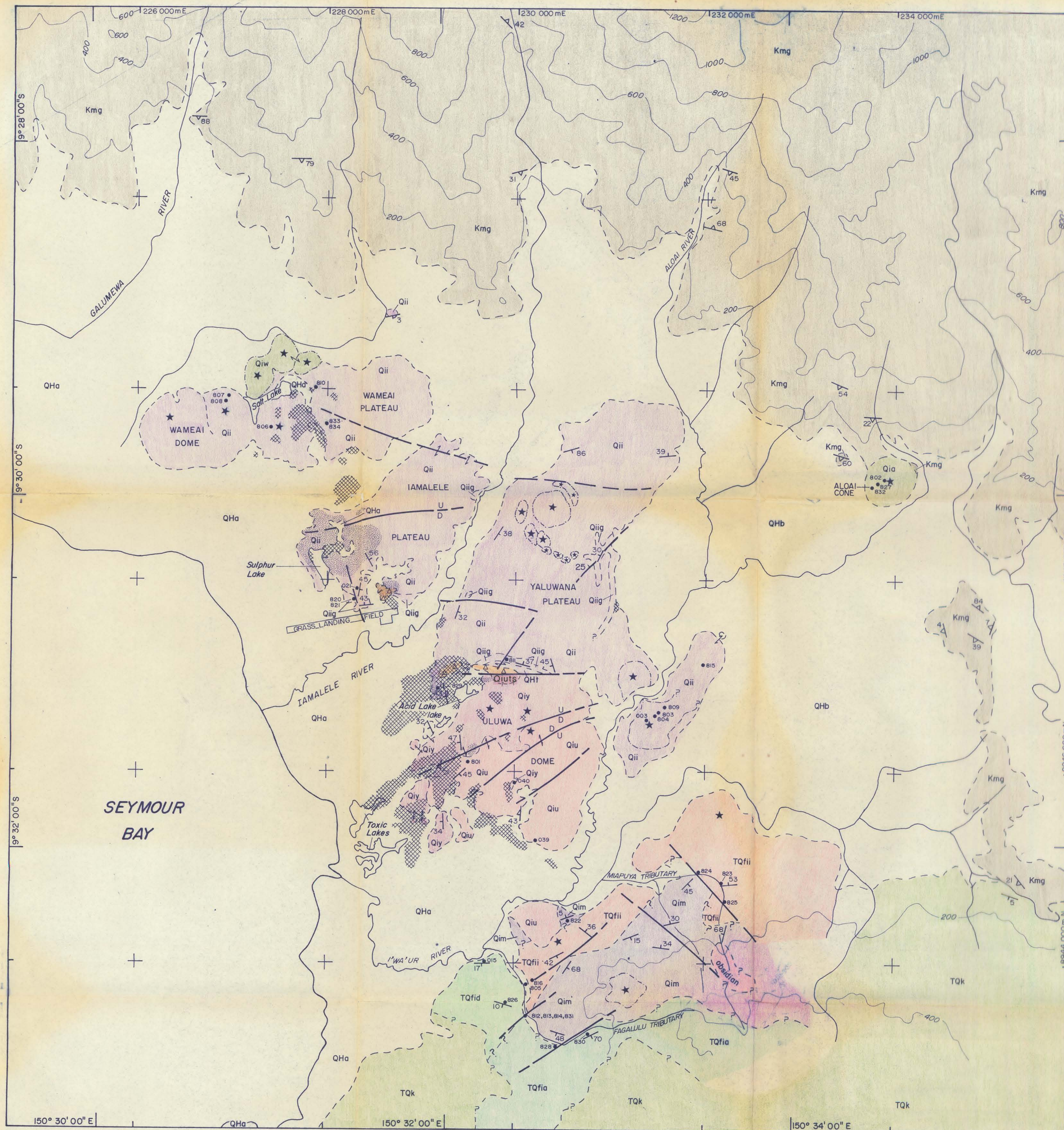




# EXPLANATION

## GEOLOGY

### ALLUVIUM

- QHa Unconsolidated river gravel, sand and silt
- QHi Talus deposits
- QHB Boulder terrace with developed soil horizon

### KUKUIA VOLCANICS

- TQk Undifferentiated Kukuia Volcanics
- Iamalele volcanics
  - Qiu Uluwa obsidian: gray to black rhyolite obsidian, locally finely banded black obsidian and biotite
  - Qiy Yaluwana tuff: rhyolite air-fall tuff with minor ignimbrite and obsidian
  - Qimmm Mona malala rhyolite: flow-banded rhyolite; outcrop (?) / float around sample location 829
  - Qiw Wameai andesite: high-Mg basaltic andesite, high-Mg andesite and high-K andesite lava flows
  - Qia Aloo andesite: high-Mg basaltic andesite lava flows and scoreaceous debris
  - Qii Iamalele ignimbrite: biotite rhyolite and dacite ignimbrite, pumiceous to densely welded, includes units rich in volcanic glass (Qig), locally flow banded
  - Qim Miapuya ignimbrite: feldspar dacite to rhyolite tuff with intercalated lava flows, locally pumiceous, contains minor volcanic glass
- Fagalulu volcanics
  - TQfii I'wa'ur ignimbrite: unconsolidated to poorly welded pumiceous biotite rhyolite, and dacite tuff and tuff breccia
  - TQfia I'wa'ur andesite: blocky lava flows intercalated with andesite tuff with locally well developed platy fracturing, and andesite tuff breccia
  - TQfid I'wa'ur dacite: dacite tuff, locally well developed platy fracturing
  - TQfiib I'wa'ur basaltic andesite: vesicular basaltic andesite flow(s) at sample location 805

### D'ENTRECASTEAUX COMPLEX

- Kmg Gudani Metamorphics: biotite-quartzofeldspathic gneiss with ~10% intercalated amphibolite, well banded, includes common pegmatite veins that locally contain kyanite

- Geologic contact, inferred where queried
- Strike and dip of bedding
- Strike and dip of foliation
- Strike and dip of fault with relative motion
- Volcanic centre, inactive crater, cone or dome; larger features have star only
- Hydrothermal breccia
- Active thermal area
- Inactive thermal area, hydrothermal alteration (advanced argillic or argillic)
- Rock sample for major element and/or REE analysis (All 3-digit sample numbers preceded by 125, except 000 series which are preceded by 139, i.e. 834 = 125834, 015 = 139015)

Geologic mapping by P.A. Mitchell, P.S. Thompson, H.S. Yousif, Y. Yawal

Australian Map Grid, Zone 56

PLATE 1 : IMALELE, FERGUSSON ISLAND, D'ENTRECASTEAUX ISLANDS, PAPUA NEW GUINEA

Scale: 1:20000

Draughted: L.V. Leonard  
Date: May 1986