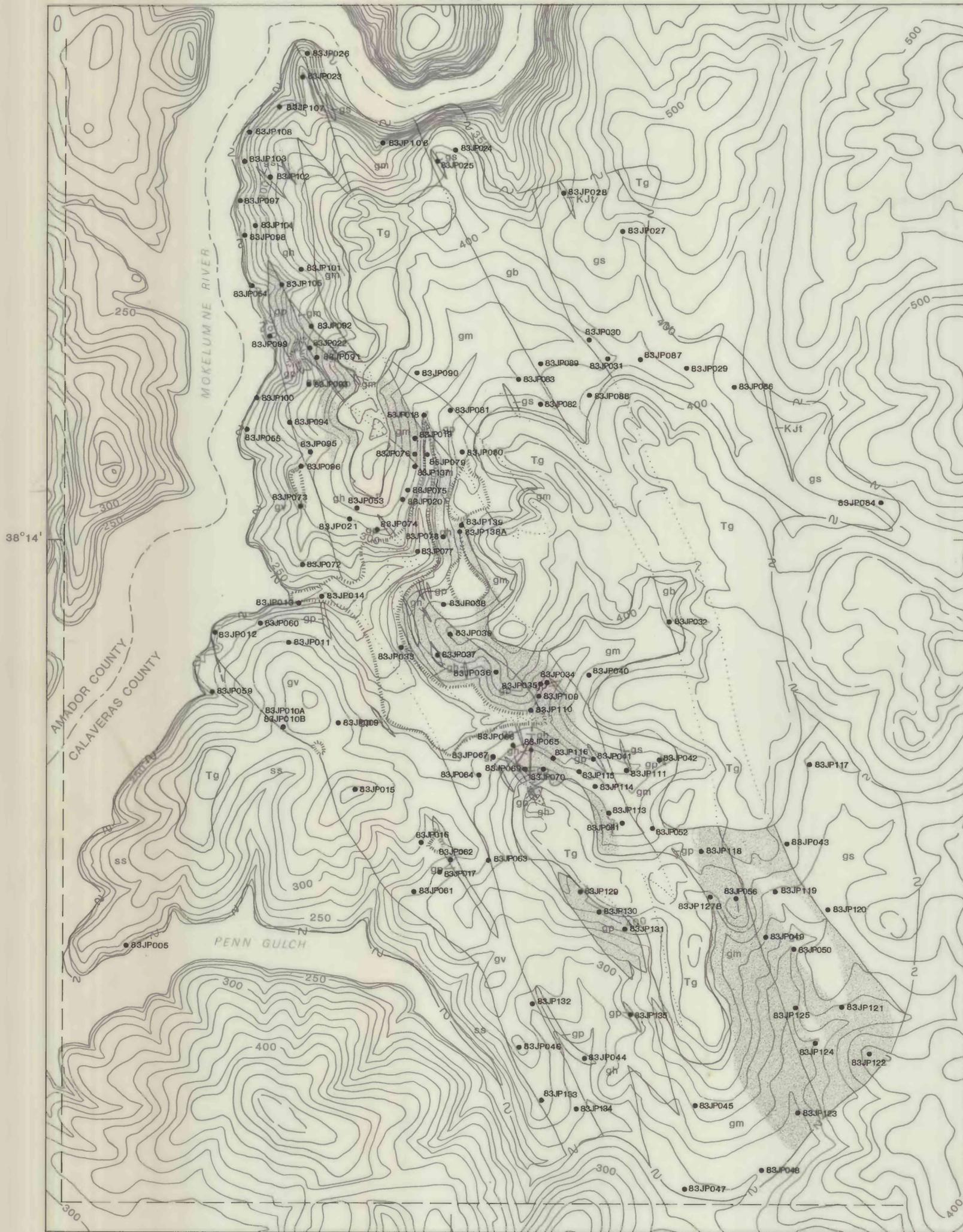


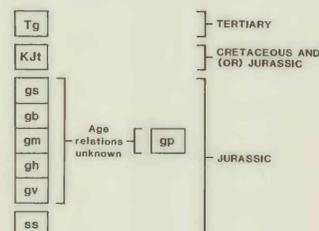
120°52'30"



EXPLANATION

- CONTACT--Dotted where concealed
- - - - FAULT--Dashed where approximate; dotted where concealed
- BOUNDARY OF MINE TAILINGS
- - - BOUNDARY OF MAPPING
- 83JP005 GEOCHEMICAL SAMPLING SITE
- GRID AXES USED TO DETERMINE COORDINATES OF SAMPLING SITES
- AREA OF HYDROTHERMAL ALTERATION

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- Tg GRAVEL (TERTIARY)--Conglomerate
- KJt TRONDHEJEMITE (CRETACEOUS AND (OR) JURASSIC)
- GOPHER RIDGE VOLCANICS (JURASSIC)--Divided into:
  - gs Felsic quartz porphyry intrusive unit--Felsic quartz porphyry and schistose quartz porphyry
  - gs Siliceous tuff unit--Siliceous felsic tuff, quartz-sericite schist, and fine-grained felsic tuff
  - gb Basalt unit--Pillow basalt, quartz-sericite schist, and tuff
  - gm Mafic to intermediate tuff unit--Mafic to intermediate tuff, quartz-sericite schist, vesicular basalt, and porcelaneous tuff
  - gh Heterogeneous tuff unit--Crystal-lithic tuff, quartz-sericite schist, lapilli tuff, graywacke, vesicular basalt, and porcelaneous tuff
  - gv Vent complex unit--Agglomerate, lapilli tuff, porcelaneous tuff, graywacke, and vesicular basalt
  - ss SALT SPRING SLATE (JURASSIC)

Base from East Bay  
Municipal Utility District

Geology mapped by  
J.A. Peterson, 1983



0 400 800 1200 1600 2000 FEET

0 100 200 300 400 500 METERS



AREA OF MAP

CONTOUR INTERVALS 10 AND 20 FEET

MAP SHOWING THE SIMPLIFIED GEOLOGY OF THE PENN MINE AND THE LOCATION OF GEOCHEMICAL SAMPLE SITES

by  
Jocelyn A. Peterson  
1985

This map is preliminary and has not been reviewed for conformity with Geological Survey editorial standards and stratigraphic nomenclature.