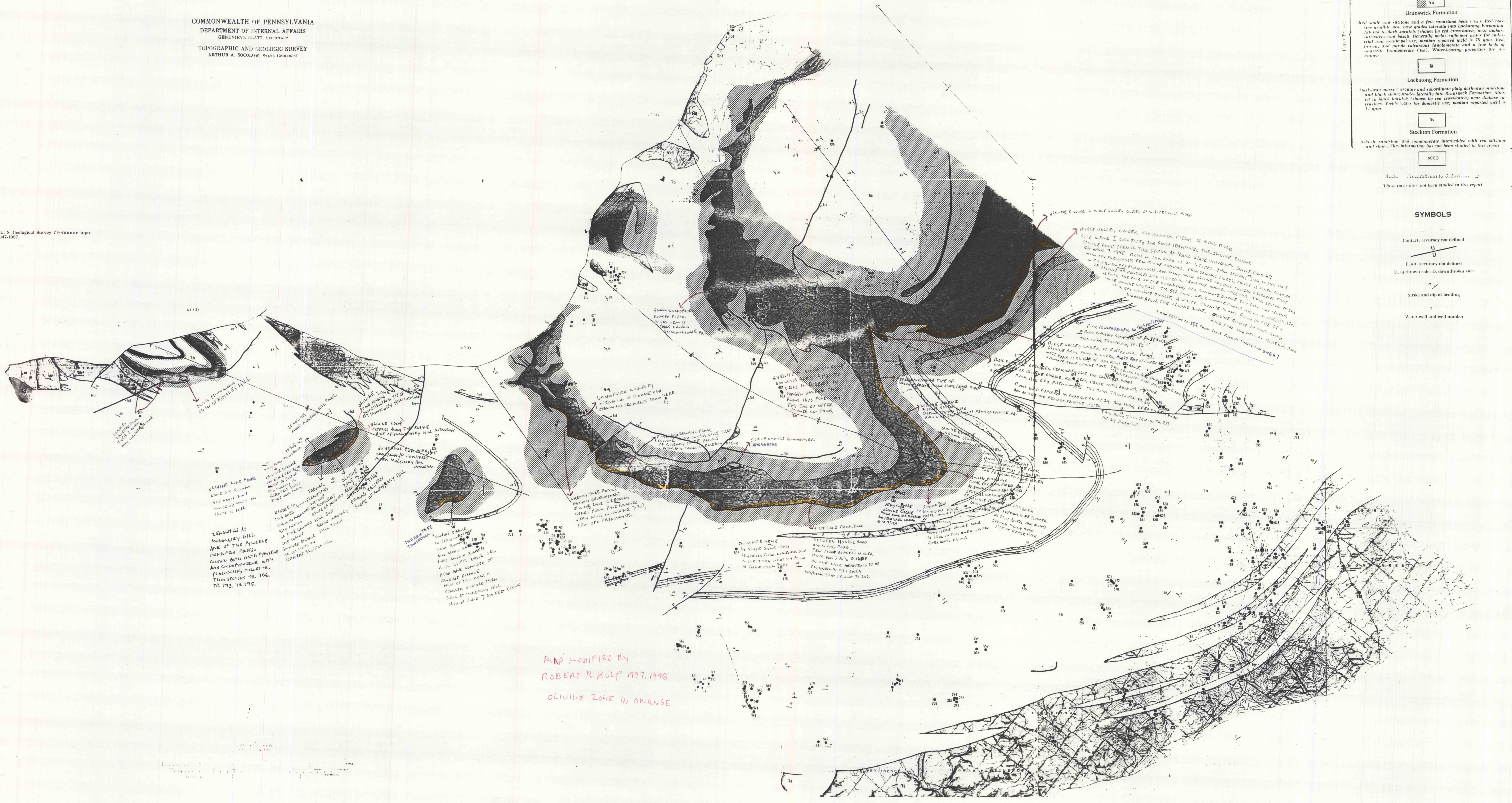


COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF INTERNAL AFFAIRS  
GENEVIÈVE ELATT, SECRETARY  
TOPOGRAPHIC AND GEOLOGIC SURVEY  
ARTHUR A. SUGOLOW, STATE GEOLOGIST

Base map from U. S. Geological Survey 7 1/2-minute topographic maps, 1947-1957.



**EXPLANATION**

- Basalt
- Lava flows. Not tapped by wells
- Diorase
- Diabase
- Diabase and sills. Yields water for domestic use; median reported yield is 3 gpm
- Brunswick Formation
- Best shale and siltstone and a few sandstone beds (S<sub>1</sub>). Red massive crystalline iron. Some grades laterally into Lockatong Formation. Altered to dark argillites (shown by red cross-hatch) near diabase intrusions and basalt. Generally yields sufficient water for industrial and municipal use; median reported yield is 75 gpm. Red, brown, and purple calcareous fossiliferous and a few beds of quartzite sandstone (S<sub>2</sub>). Water-bearing properties are unknown
- Lockatong Formation
- Dark-gray massive argillite and subordinate platy dark-gray mudstone and black shale grades laterally into Brunswick Formation. Altered to black horstels (shown by red cross-hatch) near diabase intrusions. Yields water for domestic use; median reported yield is 14 gpm
- Stockton Formation
- Arkose sandstone and conglomerate interbedded with red siltstone and shale. This information has not been studied in this report
- Rock. Occurrences to Crovician
- These rocks have not been studied in this report

**SYMBOLS**

- Contact accuracy not defined
- Fault accuracy not defined
- U, upthrown side; D, downthrown side
- Strike and dip of bedding
- Water well and well number

MAP MODIFIED BY  
ROBERT R. KULP 1977, 1978  
OLIVINE ZONE IN ORANGE