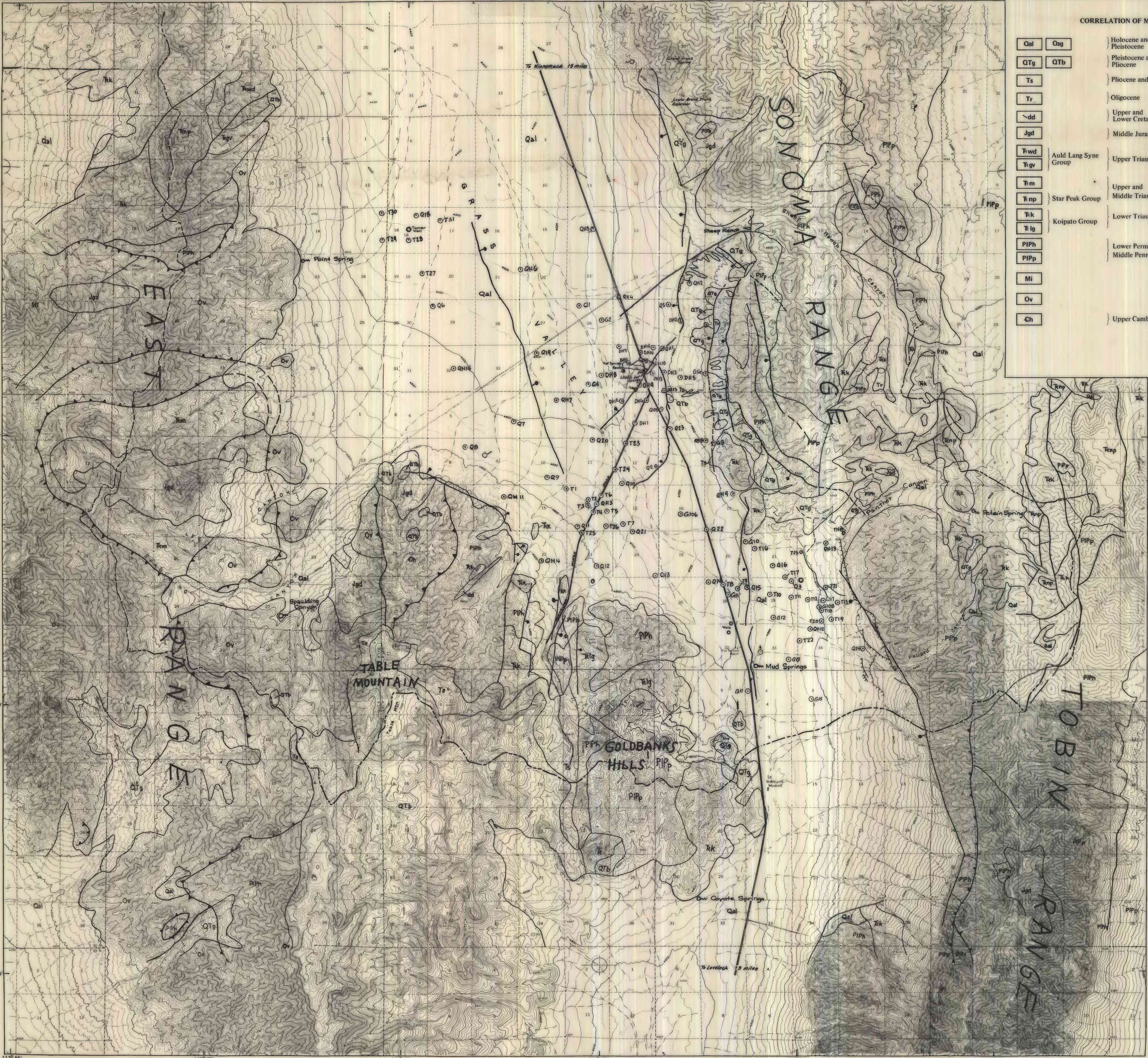




CORRELATION OF MAP UNITS

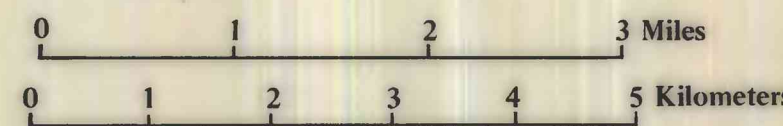
Qal	Qsg	Holocene and Pleistocene	QUATERNARY
QTg	QTb	Pleistocene and Pliocene	
Ts		Pliocene and Miocene	TERTIARY
Tr		Oligocene	
dd		Upper and Lower Cretaceous	CRETACEOUS
Jgd		Middle Jurassic	
Fwd			JURASSIC
Fgv	Auld Lang Syne Group	Upper Triassic	
Rm		Upper and Middle Triassic	TRIASSIC
Rnp	Star Peak Group	Middle Triassic	
Rk		Lower Triassic	PERMIAN AND PENNSYLVANIAN
Rlg	Koipato Group	Lower Triassic	
PIPh		Lower Permian and Middle Pennsylvanian	PERMIAN AND PENNSYLVANIAN
PIPg			
Mi			MISSISSIPPIAN (?)
Ov			ORDOVICAN
Ch		Upper Cambrian	CAMBRIAN

DESCRIPTION OF MAP UNITS

- Qal ALLUVIUM - Unconsolidated fluvial deposits from gravel to silt and clay
- Qsg SINTER GRAVEL - Opaline and chalcidonic sinter near Leach Hot Springs
- QTg GRAVEL - Unconsolidated to semiconsolidated deposits from gravel to silt and clay
- QTb BASALT
- Ts SEDIMENTARY ROCKS - Semiconsolidated deposits ranging from ash and tuff and tuffaceous sandstone to claystone
- Tr RHYOLITE TUFF
- dd DIABASE DIKE
- Jgd GRANODIORITE
- Fwd WINNEMUCCA AND DUN GLEN FORMATIONS - Limestone, dolomite, sandstone, and fine-grained clastic rocks
- Fgv GRASS VALLEY FORMATION - Mudstone and sandstone
- Rm METASEDIMENTARY ROCKS
- Rnp NATCHEZ PASS AND PRIDA FORMATIONS - Limestone, dolomite, siltstone and sandstone
- Rk KOIPATO GROUP - Undifferentiated volcanic and sedimentary rock
- Rlg LEUCOGRANITE - Related to Koipato Group
- PIPh HAVALLAH FORMATION - Quartzite, chert, argillite, limestone, sandstone, and greenstone
- PIPg PUMPERNICKEL FORMATION - Greenstone, chert, and argillite
- Mi INSKIP FORMATION - Sandstone, conglomerate, quartzite, and siltstone with minor schist and limestone
- Ov VALMY FORMATION - Argillite, chert, greenstone, and vitreous quartzite
- Ch HARMONY FORMATION - Sandstone and conglomerate with minor argillite and limestone

EXPLANATION

- Contact
- Normal fault - Ball and bar on downthrown side
- Thrust fault - Sawteeth on upper plate
- Basin boundary
- Test well
- Pumped well
- Flowing artesian well
- Chemical sampling site in stream
- Spring



Base from U.S. Geological Survey
Leach Hot Springs, 1961; Kyle Hot
Springs, 1961; Mt. Tobin, 1961;
and Dun Glen, 1961; 1:62,500

Geology by M.G. Johnson, 1977,
and F.H. Olmsted and others, 1975

PLATE 1. Generalized geologic map of Southern Grass Valley area showing locations of wells, springs, and hydrologic drainage divide