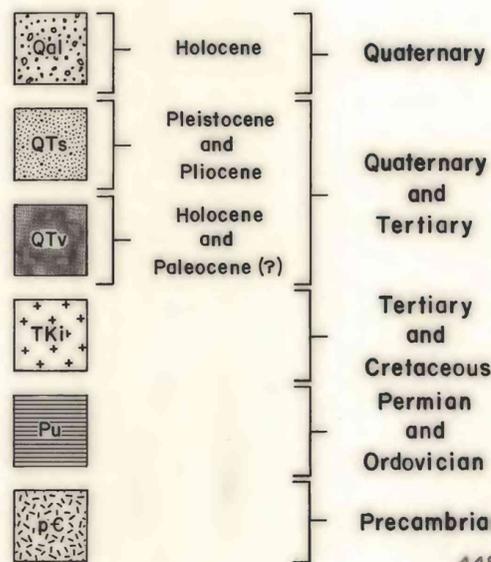


CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS AND WATER-YIELDING CHARACTERISTICS

**FLOOD-PLAIN ALLUVIUM--** Cobbles, gravel, sand, silt, clay lenses; unconsolidated, poorly sorted; derived from erosion of pre-existing rock and alluvial deposits; confined to small flood plains along present stream channels. Yields small to moderately large amounts of water (15 to more than 2,500 gal/min) to wells. Specific capacities of wells generally range from 1.5 to 160 gal/min.

**SEDIMENTS--** Boulders, cobbles, gravel, sand, silt, clay; alluvium, colluvium, glacial debris, lake deposits; variably consolidated; massive to well bedded; variably sorted. Differentiated from Qal by successive, thick, alternating sand-gravel and clay layers. Top of unit often described in drillers' logs as "gravel hardpan," "sandstone," or "cemented sand." Includes "coal" and highly organic clay beds near Salmon, Idaho. An important aquifer in the valleys for domestic, irrigation, and public water supplies. Yields range generally from 1 to 4,000 gal/min. Specific capacities of wells generally are from 1 to 300 gal/min.

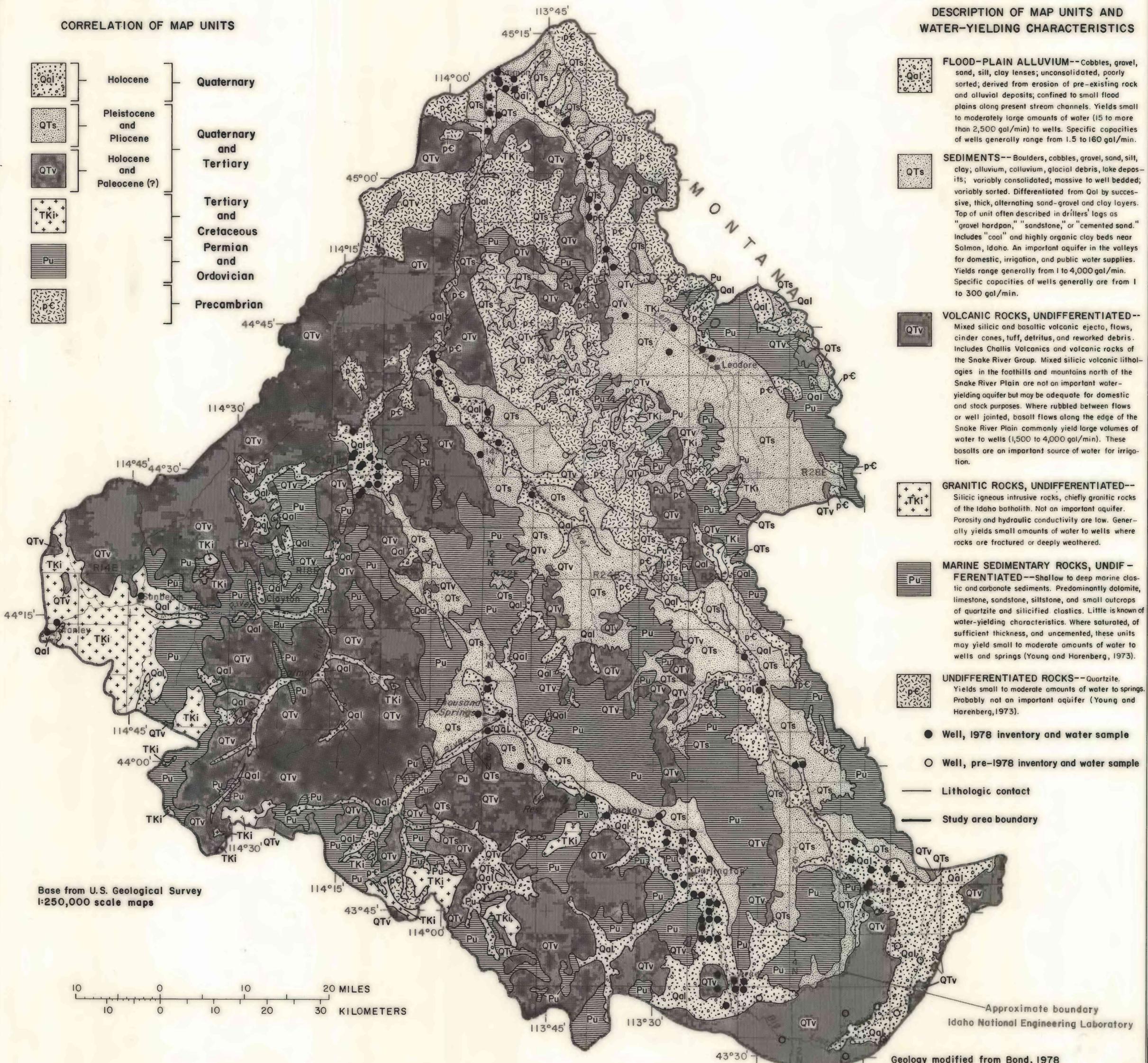
**VOLCANIC ROCKS, UNDIFFERENTIATED--** Mixed silicic and basaltic volcanic ejecta, flows, cinder cones, tuff, detritus, and reworked debris. Includes Challis Volcanics and volcanic rocks of the Snake River Group. Mixed silicic volcanic lithologies in the foothills and mountains north of the Snake River Plain are not an important water-yielding aquifer but may be adequate for domestic and stock purposes. Where rubble between flows or well jointed, basalt flows along the edge of the Snake River Plain commonly yield large volumes of water to wells (1,500 to 4,000 gal/min). These basalts are an important source of water for irrigation.

**GRANITIC ROCKS, UNDIFFERENTIATED--** Silicic igneous intrusive rocks, chiefly granitic rocks of the Idaho batholith. Not an important aquifer. Porosity and hydraulic conductivity are low. Generally yields small amounts of water to wells where rocks are fractured or deeply weathered.

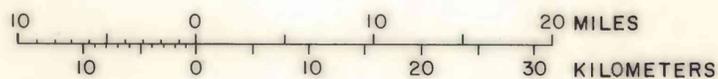
**MARINE SEDIMENTARY ROCKS, UNDIFFERENTIATED--** Shallow to deep marine clastic and carbonate sediments. Predominantly dolomite, limestone, sandstone, siltstone, and small outcrops of quartzite and silicified clastics. Little is known of water-yielding characteristics. Where saturated, of sufficient thickness, and uncemented, these units may yield small to moderate amounts of water to wells and springs (Young and Harenberg, 1973).

**UNDIFFERENTIATED ROCKS--** Quartzite. Yields small to moderate amounts of water to springs. Probably not an important aquifer (Young and Harenberg, 1973).

- Well, 1978 inventory and water sample
- Well, pre-1978 inventory and water sample
- Lithologic contact
- Study area boundary



Base from U.S. Geological Survey  
1:250,000 scale maps



Geology modified from Bond, 1978

GENERALIZED GEOLOGY OF EAST-CENTRAL IDAHO VALLEYS AND WATER-YIELDING CHARACTERISTICS OF ROCK UNITS

Approximate boundary  
Idaho National Engineering Laboratory