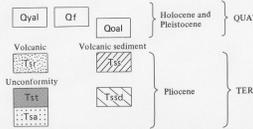


CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

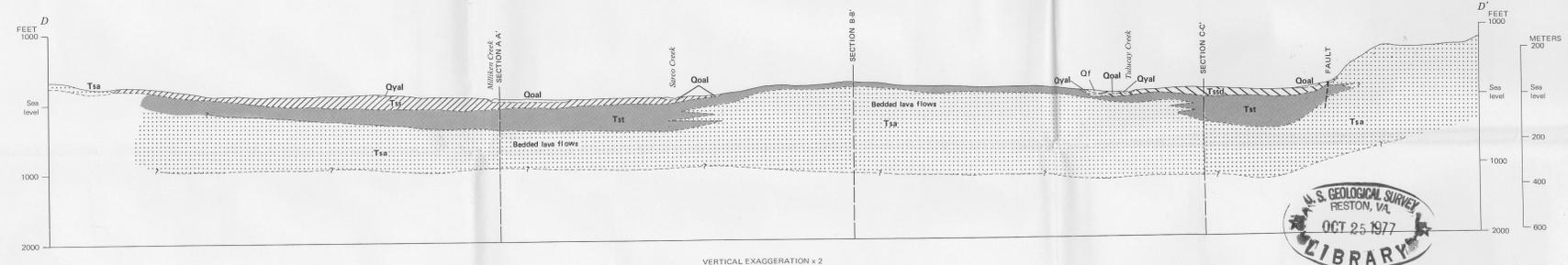
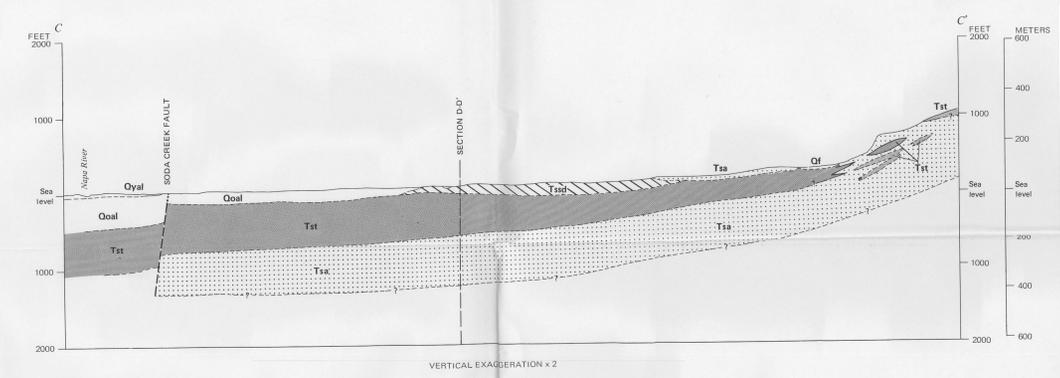
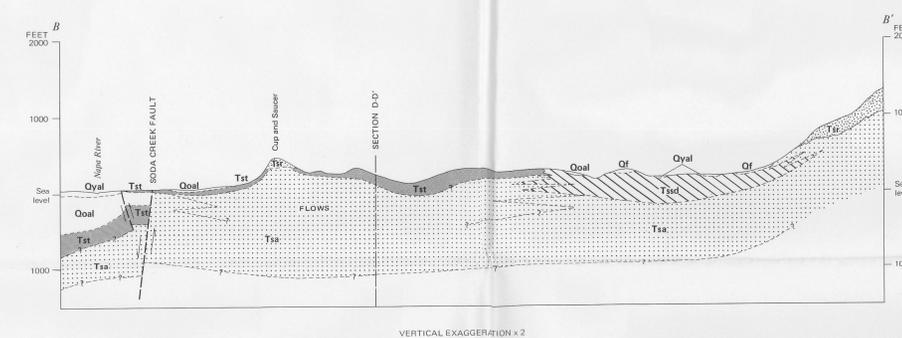
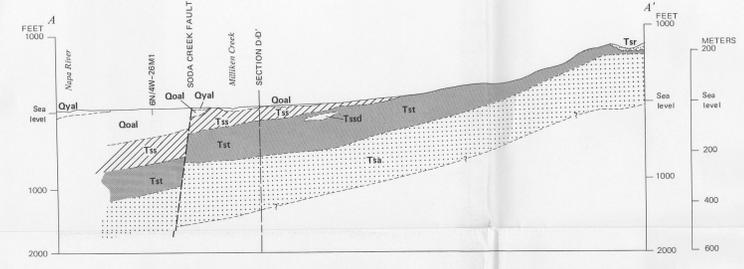
- SURFICIAL DEPOSITS**
- Qyal** - Younger alluvium - Moderately sorted, young alluvial fan deposits and variable fluvial deposits of unconsolidated gravel, fine sand, silt, and clay. Yields water freely to wells in Napa Valley and to some shallow wells along stream channels in study area. Moderately to highly permeable.
 - Qf** - Fan deposits - Steep alluvial fans along margins of Napa Valley, otherwise a thin veneer consisting of unconsolidated gravel, sand, silt, and clay. Deposits generally above water level. Moderately to highly permeable.
 - Ooal** - Older alluvium - Incised and dissected older alluvial fan deposits of poorly sorted coarse sand and weathered gravel with silt and clay. Mapped in part as Montezuma Formation by Weaver (1949). Principal source of water for Napa Valley; moderately permeable.
- SONOMA VOLCANICS**
- Tst** - Sedimentary deposits - Unconsolidated interbedded and intertonguing fine-grained clay and silt, tuffaceous sand, and volcanic gravel, with bedded tuff, clay, and diatomite. Mapped as Huilchie Formation by Kunkel and Upton (1960). Generally yields insufficient water for domestic use. Low permeability.
 - Tsd** - Rhyolite member - Banded rhyolite lava flows, locally contains intercalated rhyolite tuff and pebbly obsidian. Trench St. Helena rhyolite by Dornot (1905). Compact, brittle material of very low permeability except where jointed and fractured.
 - Tsa** - Diatomaceous deposits - Fine-grained massive diatomaceous clay with interbedded tuff, sand, and gravel. Yields water in small amounts, generally of poor quality. Low permeability.
 - Ttr** - Tuffaceous member - Pumice-rich ash-flow tuff, locally welded or partly welded; with intercalated bedded agglomeratic tuff, andesitic or basaltic lava flows, tuff breccia, bedded tuff, and pumice tuff. Principal source of water within the Milliken-Sarco-Tulucay Creeks area; locally yields water freely to wells. Moderately permeable.
 - Tta** - Andesitic member - Andesitic to basaltic lava flows of highly variable thickness and texture, locally containing thin intercalated agglomeratic volcanic sediment, diatomite, and tuff. Material with fine-grained texture generally yields no water, while that with vesicular and agglomeratic texture may be low to moderately permeable.

EXPLANATION

- CONTACT** - Dashed where approximately located; dotted where concealed; queried where doubtful
- FAULT** - Long dashed where approximately located; short dash where uncertain; dotted where concealed; U - upthrown; D - downthrown side
- ANTICLINE** - Showing trace of crestal plane. Dashed where approximately located
- SYNCLINE** - Showing trace of trough plane. Dashed where approximately located
- INFILTRATION BOUNDARY** - Dashed where approximately located
- WELL**
 - C1 - Location, letter, and number
 - J3 - Equipped with continuous recorder



CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 5 FOOT CONTOURS
DATUM IS MEAN SEA LEVEL



Areal geology, location of selected wells, and geologic sections in the Milliken-Sarco-Tulucay Creeks area, Napa County, California