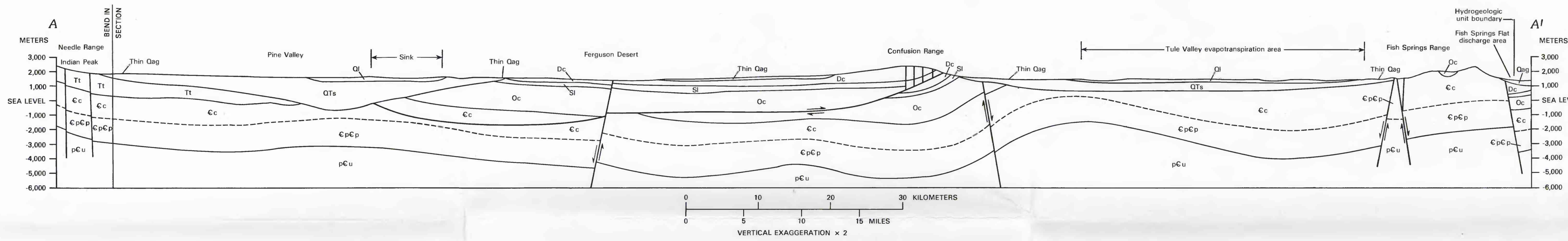


GEOLOGIC SECTION



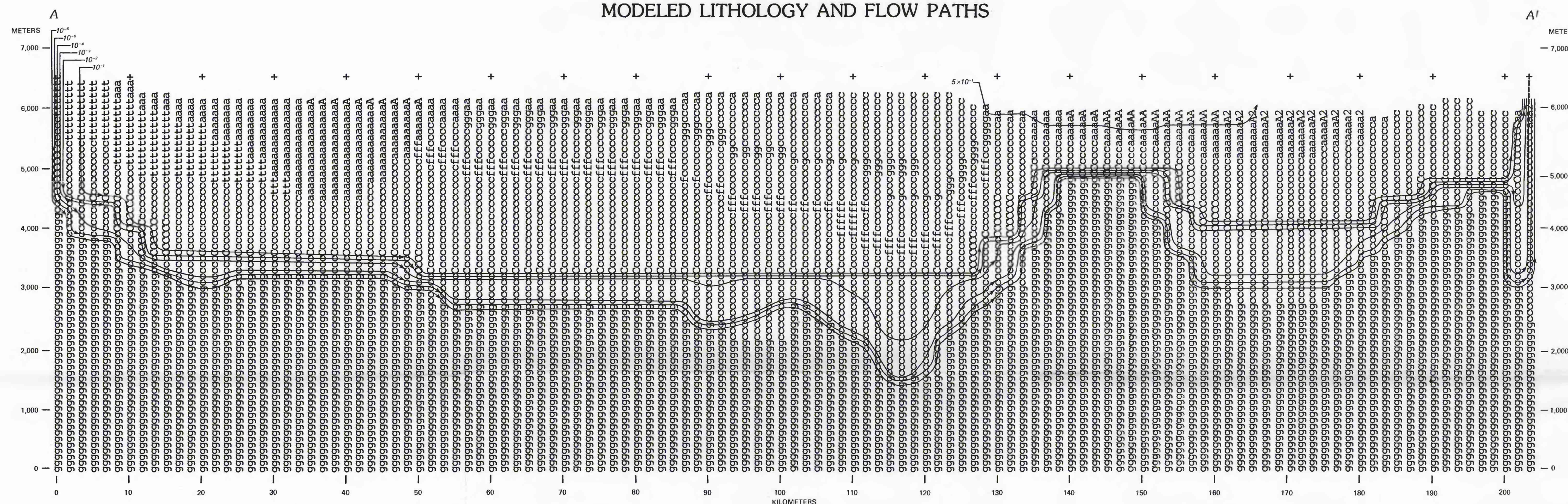
EXPLANATION

GEOLOGIC UNITS

- Qag** BASIN FILL (QUATERNARY)-Alluvial deposits of sand, gravel, boulders, and intermixed clay and silt; grades from primarily coarse material at mountain fronts to primarily finer material at basin center
- Ql** LACUSTRINE DEPOSITS (QUATERNARY)-Clay, silt, sand, gravel, and marl in valley flats; may include some alluvial deposits
- QTs** BASIN FILL (QUATERNARY AND TERTIARY)-Unconsolidated to well-cemented (with calcium carbonate) alluvial deposits consisting of materials ranging in size from clay to boulders; may include limestone, conglomerate, and lacustrine and colluvial deposits in subsurface; locally contains volcanic deposits
- Tt** ASH-FLOW TUFFS (TERTIARY)-Predominantly ash-flow tuffs, commonly includes lesser amounts of andesitic and rhyolitic lava flows and volcanic sandstone
- Dc** DEVONIAN ROCKS-Limestone and dolomite, includes lesser amounts of shale and sandstone
- Sl** LAKETOWN DOLOMITE (SILURIAN)-Dolomite
- Oc** ORDOVICIAN ROCKS-Limestone, dolomite, quartzite, and shale
- Cc** UPPER AND MIDDLE CAMBRIAN ROCKS-Limestone and dolomite and lesser amounts of shale
- CpCp** PROSPECT MOUNTAIN QUARTZITE (LOWER CAMBRIAN AND UPPER PRECAMBRIAN)-Predominantly quartzite and lesser amounts of shale, sandstone, and argillite
- pCu** UNDIFFERENTIATED PRECAMBRIAN ROCKS-Metasedimentary rocks, chiefly quartzite and argillite

- GEOLOGIC CONTACT-Dashed where inferred
- FAULT-Arrows show relative direction of movement
- A—A' LINE OF SECTION

MODELED LITHOLOGY AND FLOW PATHS



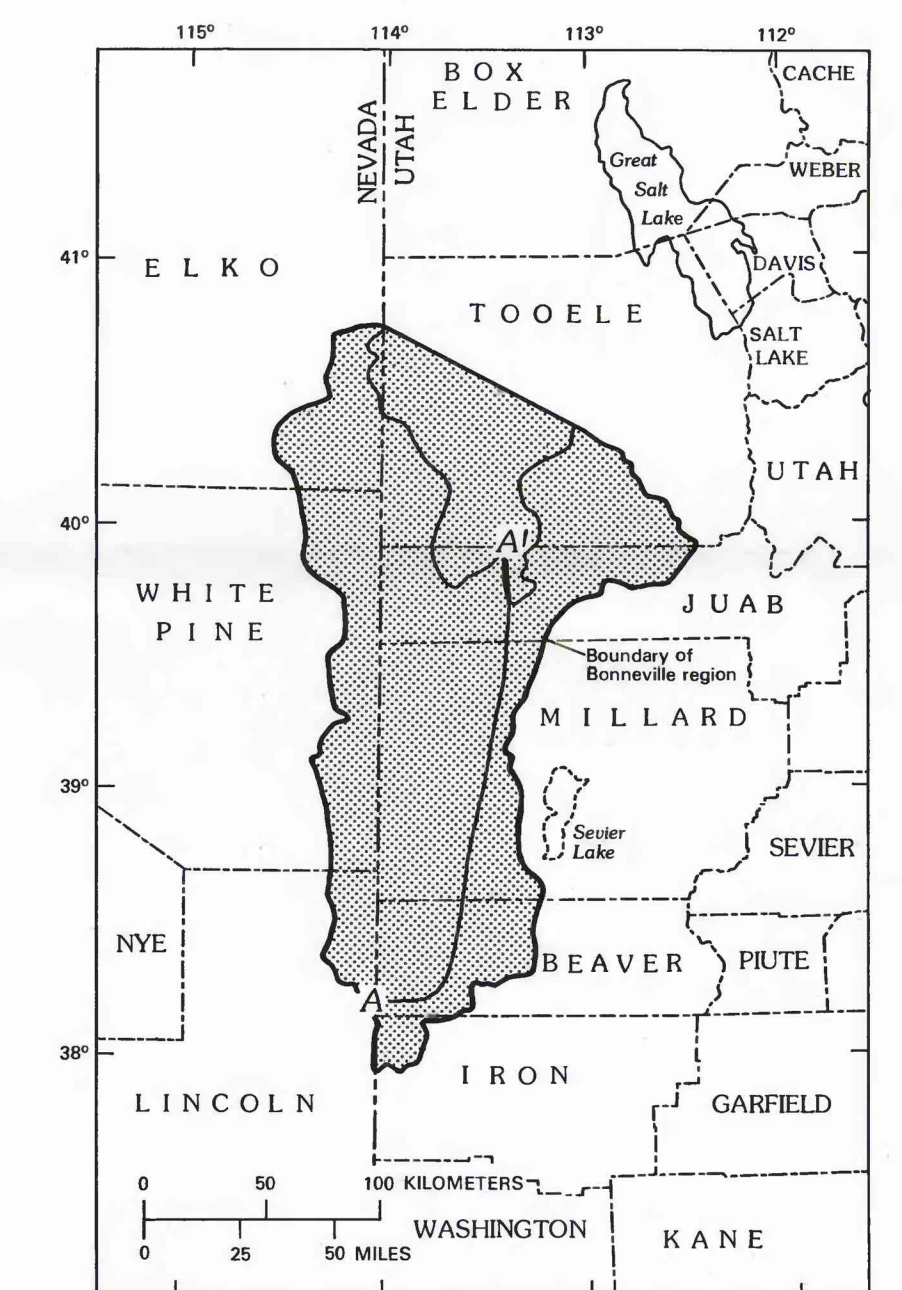
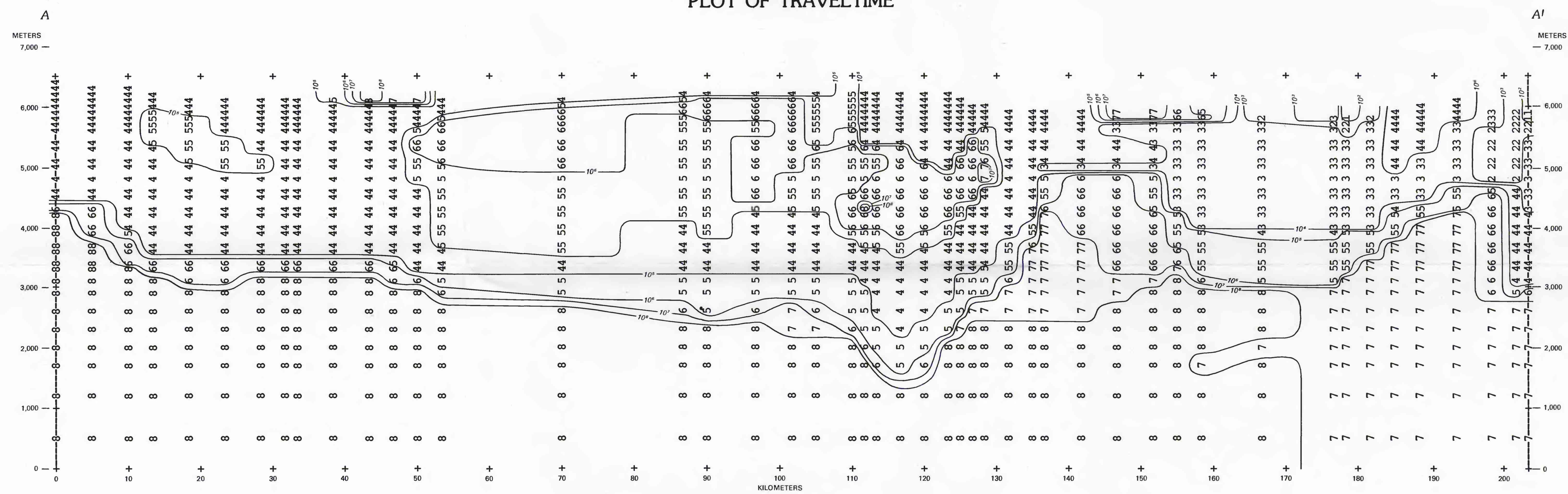
HYDROGEOLOGIC UNITS
CORRESPONDING UNITS ON GEOLOGIC SECTION

- a** COARSE-GRAINED BASIN FILL Qag, QTs
 - A** FINE-GRAINED BASIN FILL Ql
 - t** ASH-FLOW TUFF Tt
 - c** CARBONATE ROCKS-Low permeability Dc, Sl, Oc, Cc
 - C** CARBONATE ROCKS-High permeability Dc, Sl, Oc, Cc
 - f** FINE-GRAINED CLASTIC ROCKS Oc
 - g** CRYSTALLINE ROCKS-Lower part of section Oc, CpCp, pCu
 - 2** DISCHARGE AREA
- ^{10⁻⁴} DIRECTION OF GROUND-WATER FLOW-Number is dimensionless relative volume of flow in section below flow line

PLOT OF TRAVELTIME

- 7** EXPONENT OF TIME-A display of "7" indicates that the time is greater than or equal to 1,000,000 years and less than 10,000,000 years. Time is from the point to discharge area. Traveltime is computed for each active node, but depending on scale and block dimensions may not be displayed everytime
- ^{10⁻⁴} RELATIVE TRAVELTIME FROM POINTS ON LINE TO DISCHARGE AREA-Areas of longest traveltimes originate in the recharge area. No isolated areas of long traveltime are surrounded by areas of shorter traveltime. However, some areas of longest traveltime are too small to portray at the scale shown

PLOT OF TRAVELTIME



LOCATION OF MODELED
HYDROGEOLOGIC SECTION

HYDROGEOLOGIC SECTION A-A' SHOWING GROUND-WATER FLOW PATHS AND RELATIVE TRAVELTIMES,
BONNEVILLE REGION, UTAH AND NEVADA