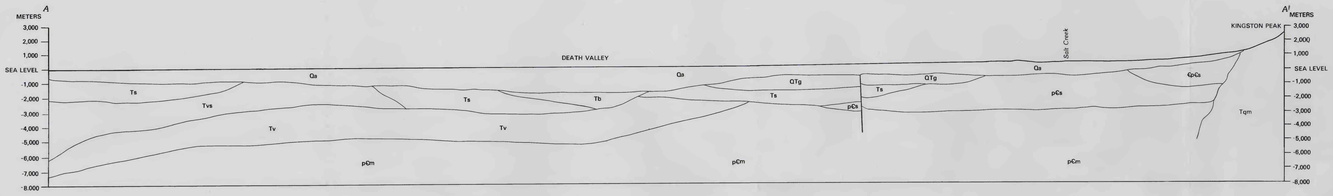
GEOLOGIC SECTION



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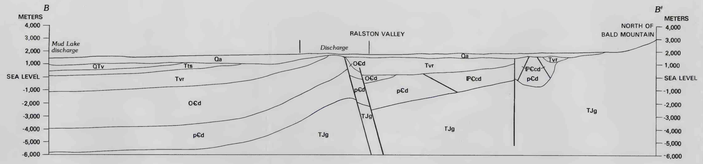

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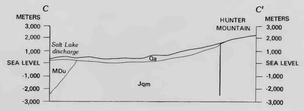
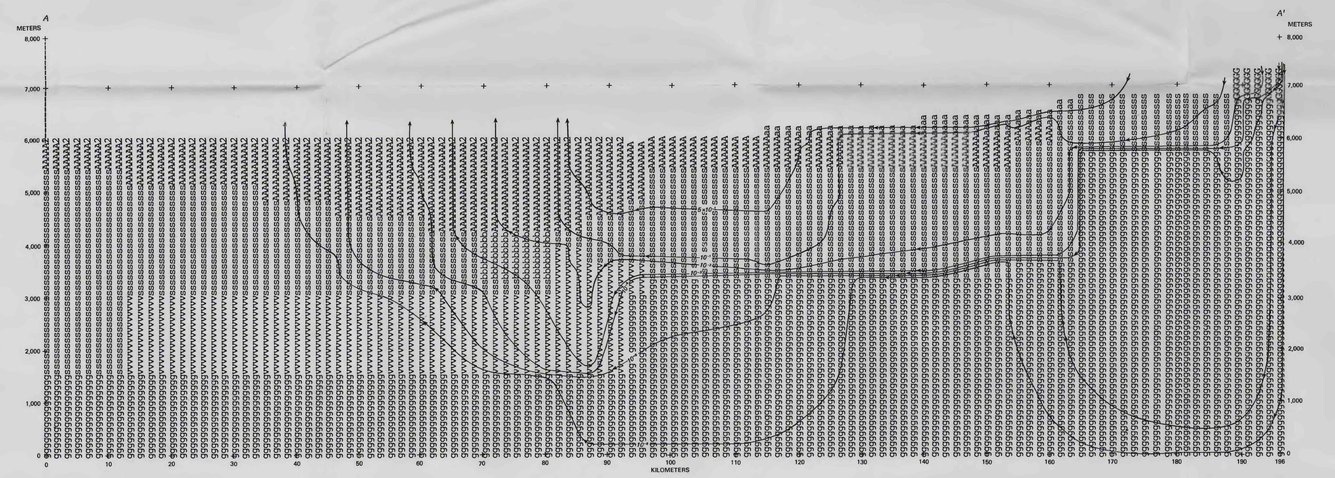
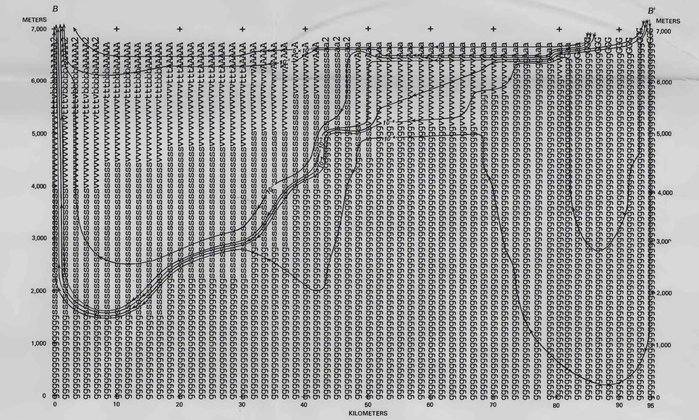


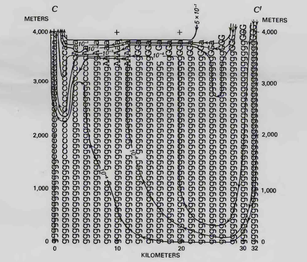
HYDROGEOLOGIC SECTION SHOWING MODELED LITHOLOGY AND FLOW PATHS



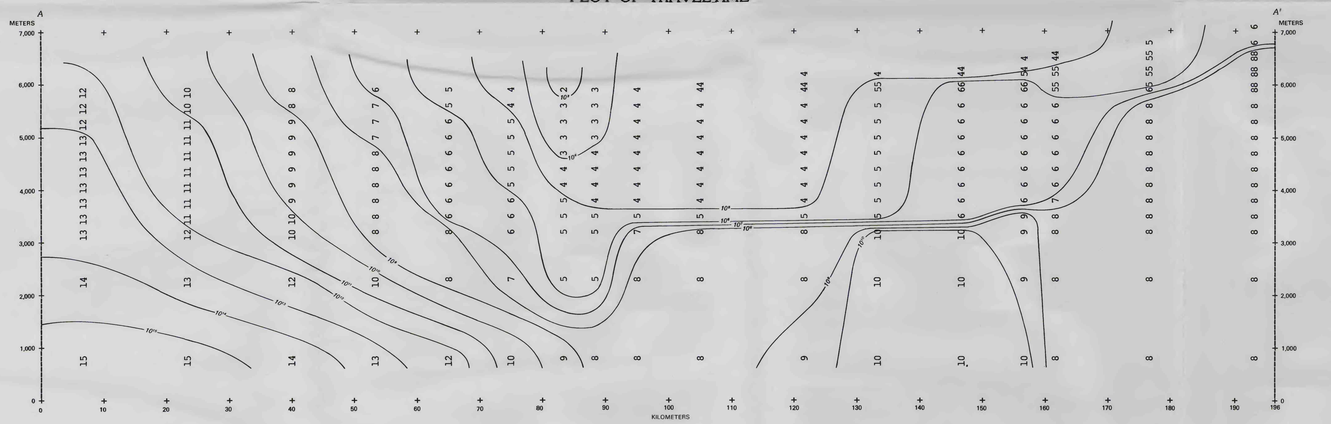
HYDROGEOLOGIC SECTION SHOWING MODELED LITHOLOGY AND FLOW PATHS



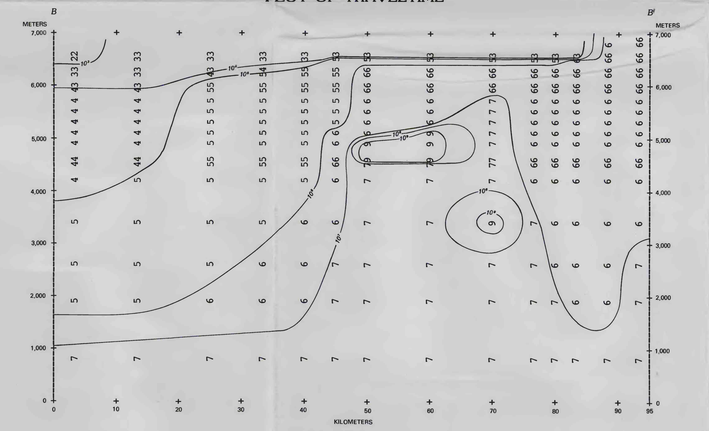
HYDROGEOLOGIC SECTION SHOWING MODELED LITHOLOGY AND FLOW PATHS



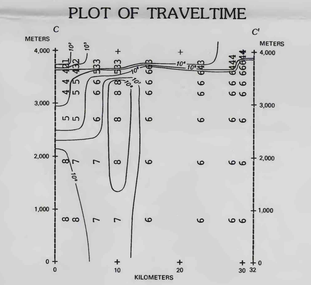
PLOT OF TRAVELTIME



PLOT OF TRAVELTIME



PLOT OF TRAVELTIME



LOCATION OF MODELED HYDROGEOLOGIC SECTIONS

EXPLANATION

GEOLOGIC SECTIONS

Qa	BASIN FILL (QUATERNARY)-Silt, sand, gravel, evaporite rocks, and dune sand
QTg	BASIN FILL (QUATERNARY AND TERTIARY)-Gravel, conglomerate, sandstone, and lesser amounts of shale and tuff
QTv	BASALTS (QUATERNARY AND TERTIARY)
Tb	BASALTS (TERTIARY)-Basalt lava flows and minor andesite and rhyolite flows
Ts	SEDIMENTARY ROCKS (TERTIARY)-Sandstone, conglomerate, and minor shale; may include interbeds of basalt, tuff, and evaporite rocks
Tvs	SEDIMENTARY AND VOLCANIC ROCKS (TERTIARY)-Sandstone, conglomerate, tuff, and silicic and mafic lava flows
Tts	TUFFS AND VOLCANICLASTIC ROCKS (TERTIARY)
Tvr	TUFFS AND LAVA FLOWS (TERTIARY)-Ash-flow tuffs, silicic and intermediate lavas, and minor intrusive rocks
Tv	UNDIFFERENTIATED VOLCANIC ROCKS (TERTIARY)-Silicic volcanics, lava flows, pyroclastics, tuffs, and minor sedimentary rocks
ℙCcd	PENNSYLVANIAN THROUGH UPPER CAMBRIAN ROCKS-Predominantly limestone and dolomite and lesser quantities of shale and sandstone
MDu	MISSISSIPPIAN AND DEVONIAN ROCKS-Limestone and dolomite
OCd	ORDOVICIAN AND CAMBRIAN ROCKS-Sandstone, conglomerate, and minor volcanic and carbonate rocks
€pCs	CAMBRIAN AND PRECAMBRIAN ROCKS-Sandstone, quartzite, shale, and minor limestone, dolomite, and schist
pCd	PRECAMBRIAN ROCKS-Argillite, schist, quartzite, conglomerate, and minor limestone
pCs	SEDIMENTARY AND METAMORPHIC ROCKS (PRECAMBRIAN)-Quartzite, argillite, conglomerate, shale, carbonate, and diabase sills
pCm	METAMORPHIC ROCKS (PRECAMBRIAN)-Gneiss, schist, crystalline basement rocks, and shale

INTRUSIVE ROCKS

Tqm	QUARTZ MONZONITE (TERTIARY)
TJg	GRANITIC ROCKS (TERTIARY TO JURASSIC)-Granite to diorite
Jqm	HUNTER MOUNTAIN QUARTZ MONZONITE (LOWER JURASSIC)

GEOLOGIC CONTACT

FAULT

EXPLANATION

HYDROGEOLOGIC SECTIONS		CORRESPONDING UNITS ON GEOLOGIC SECTIONS
a	UPPER COARSE-GRAINED BASIN FILL	Qa
A	LOWER COARSE-GRAINED BASIN FILL	Qa,QTg
b	LAVA FLOWS	QTv,Tb
s	COARSE-GRAINED CLASTIC ROCKS	Ts,Tvs,OCd,€pCs,pCs
t	ASH FLOW TUFF	Tts
v	UNDIFFERENTIATED VOLCANIC ROCKS	Tvr,Tv
c	CARBONATE ROCKS	ℙCcd,MDu
g	CRYSTALLINE ROCKS-Lower part of section	pCm, Tqm, TJg, Jqm
G	CRYSTALLINE ROCKS-Upper part of section	Tqm, TJg, Jqm
2	DISCHARGE AREA	None

→10⁻⁷→ DIRECTION OF GROUND-WATER FLOW-Number indicates relative volume of flow in section below flow line

EXPLANATION

PLOT OF TRAVELTIME

7 EXPONENT OF TIME-A display of "7" indicates that the time is greater 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

—10⁻⁷— 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

HYDROGEOLOGIC SECTIONS A-A', B-B', AND C-C' SHOWING GROUND-WATER FLOW PATHS AND RELATIVE TRAVELTIME, DEATH VALLEY REGION, NEVADA AND CALIFORNIA