

TERTIARY	Tg	CRYSTALLINE, PLUTONIC, AND LACCOLITHIC ROCKS
	Tvy	YOUNGER VOLCANIC ROCKS.-- Dominantly silicic ash-flow tuffs and lavas
	Tvo	OLDER VOLCANIC ROCKS.-- Dominantly intermediate to silicic and mafic lavas, tuffs, and volcanoclastic sedimentary rocks
CRETACEOUS	Ku	SHALE.-- With lesser amounts of sandstone and limestone
	Kl	LIMESTONE AND DOLOMITE.-- Minor shale
PALEOZOIC	Pzm	MIXED SEDIMENTARY ROCKS.-- Includes orthoquartzite, sandstone, limestone, and siltstone

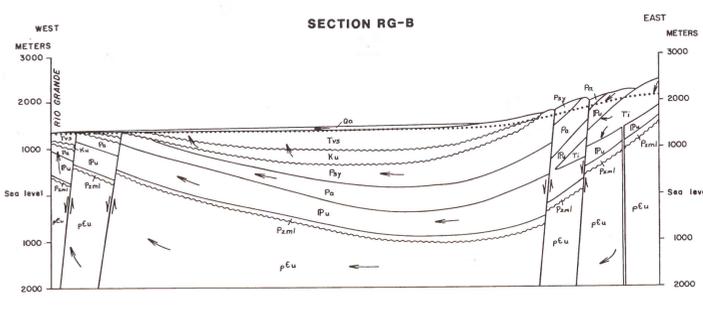
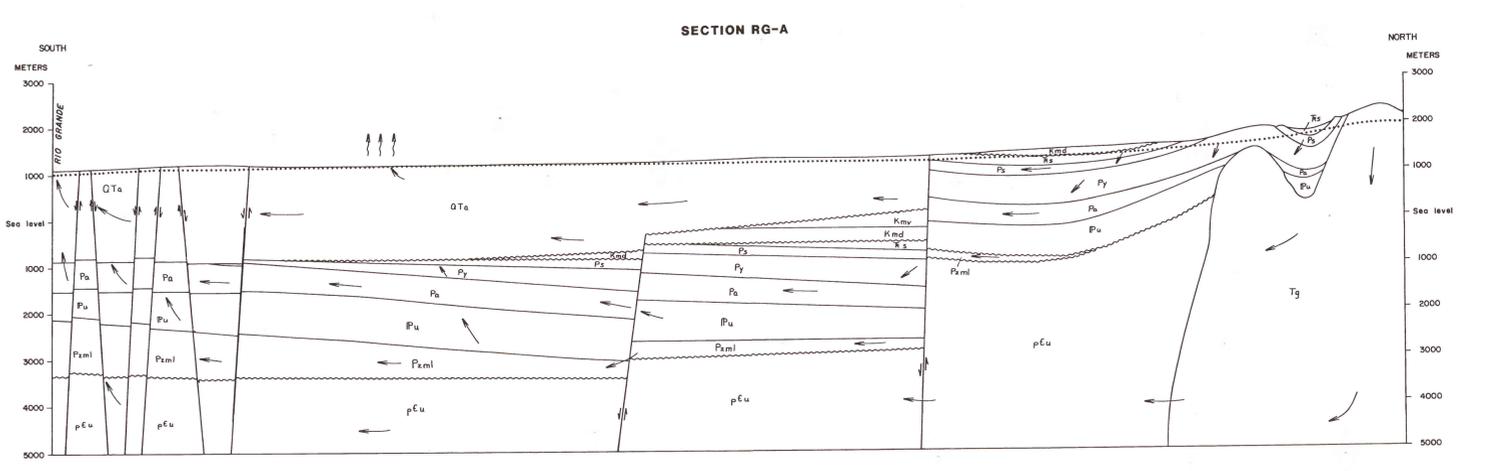
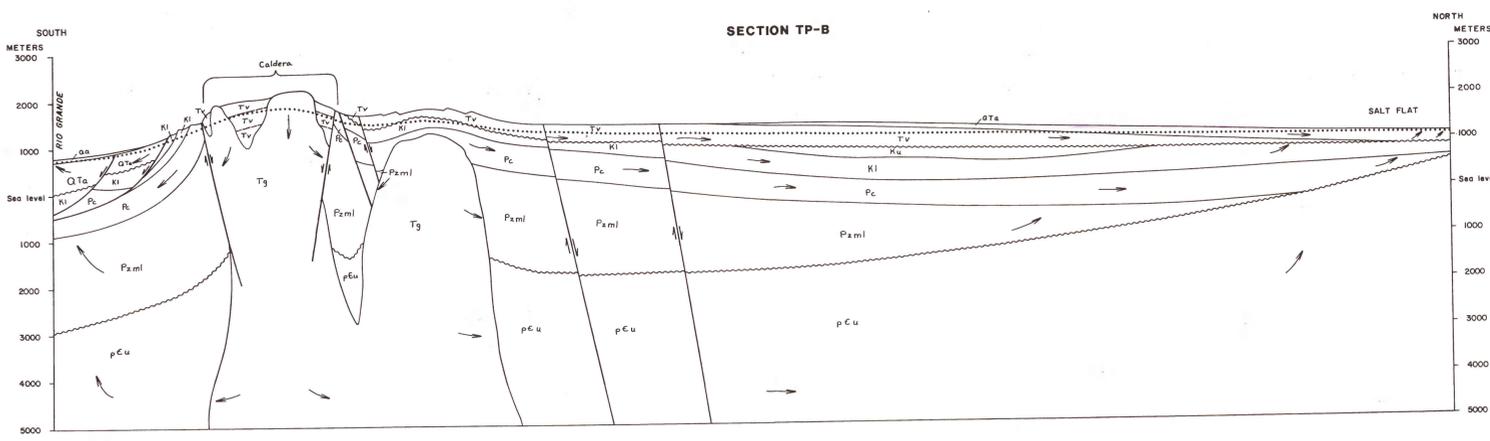
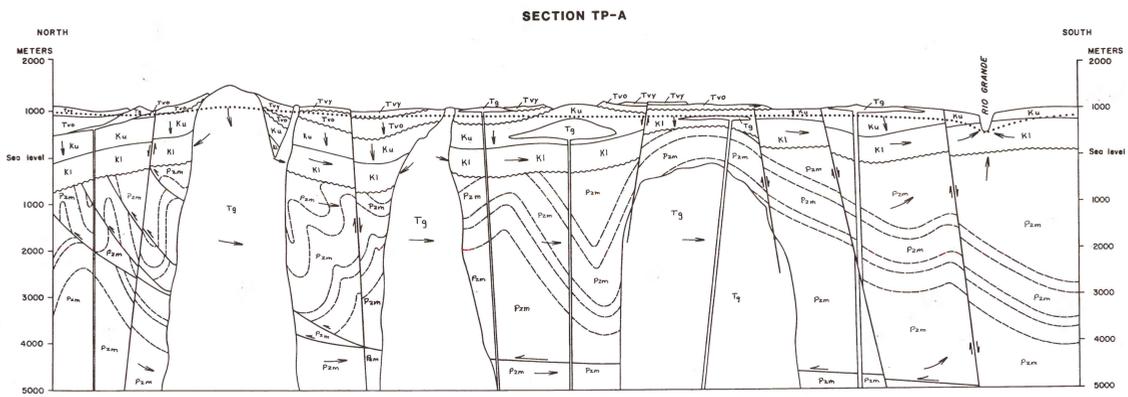
QUATERNARY AND TERTIARY	Qa	BASIN-FILL ALLUVIUM
TERTIARY	Tg	CRYSTALLINE PLUTONIC ROCKS
	Tv	VOLCANIC ROCKS.-- Includes silicic ash-flow tuffs and lavas, basaltic lavas, and minor tuffaceous sedimentary rocks
UPPER CRETACEOUS	Ku	SHALE.-- With minor lenses of sandstone, siltstone, limestone, and lignite
LOWER CRETACEOUS	Kl	LIMESTONE.-- With lesser sandstone, shale, and conglomerate
PERMIAN	Pc	LIMESTONE.-- Locally includes sandstone, shale, and conglomerate
MIDDLE AND LOWER PALEOZOIC	Pzml	SANDSTONE, SHALE, LIMESTONE, NOVAULITE, AND CHERT
PRECAMBRIAN	pCu	METAMORPHIC ROCK.-- Includes metaquartz amphibolite, phyllite, schist, and slate

QUATERNARY AND TERTIARY	Qta	BASIN-FILL ALLUVIUM
TERTIARY	Tg	CRYSTALLINE PLUTONIC ROCK
CRETACEOUS	Kmv	SANDSTONE, SILTSTONE, AND SHALE
	Kmd	SHALE AND MINOR SANDSTONE
TRIASSIC	As	SILTY CLAYSTONE IN UPPER HALF, SILTY SANDSTONE IN LOWER HALF
PERMIAN	Ps	LIMESTONE AND MINOR SANDSTONE LENSES
	Py	LIMESTONE, RED CLASTIC SEDIMENTARY BEDS, AND GYPSUM
PENNSYLVANIAN	Pu	LIMESTONE WITH LESS ABUNDANT ARKOSIC SANDSTONE, SHALE, AND GYPSUM
MIDDLE AND LOWER PALEOZOIC	Pzml	LIMESTONE, DOLOMITE, LESS ABUNDANT SANDSTONE, SHALE, SILTSTONE, AND QUARTZITE
PRECAMBRIAN	pCu	GRANITE, SCHIST, GNEISS, QUARTZITE, AND AMPHIBOLITE

QUATERNARY	Qa	ALLUVIUM
TERTIARY	Ti	FINE-GRAINED INTRUSIVE ROCK
	Tvs	TUFFACEOUS SEDIMENTARY ROCKS, LAHARIC BRECCIA FLOWS, AND CONGLOMERATE
CRETACEOUS	Ku	SHALE.-- With minor sandstone, siltstone, and conglomerate
	Psy	LIMESTONE, SANDSTONE, SILTSTONE, CLAYSTONE, AND GYPSUM
PERMIAN	Pa	LIMESTONE AND SANDSTONE.-- With minor shale and siltstone
PENNSYLVANIAN	Pu	LIMESTONE AND LESS ABUNDANT SHALE
MIDDLE AND LOWER PALEOZOIC	Pzml	LIMESTONE, DOLOMITE, LESS ABUNDANT SANDSTONE, SHALE AND QUARTZITE
PRECAMBRIAN	pCu	GRANITE, SCHIST, QUARTZITE, AND AMPHIBOLITE

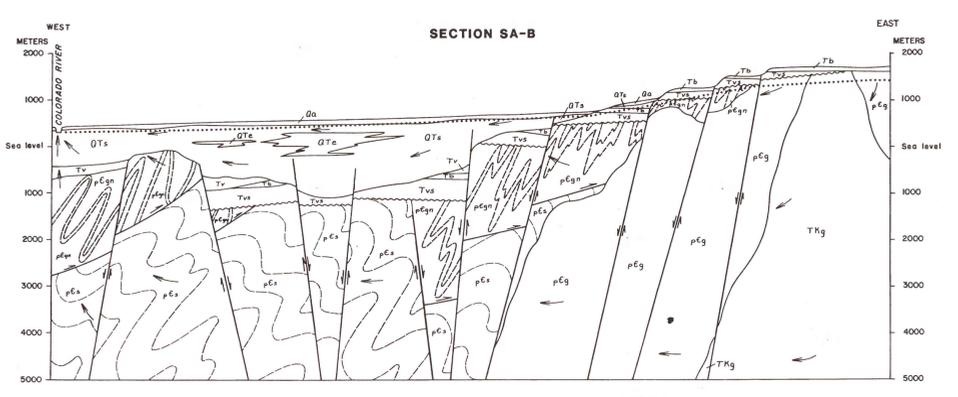
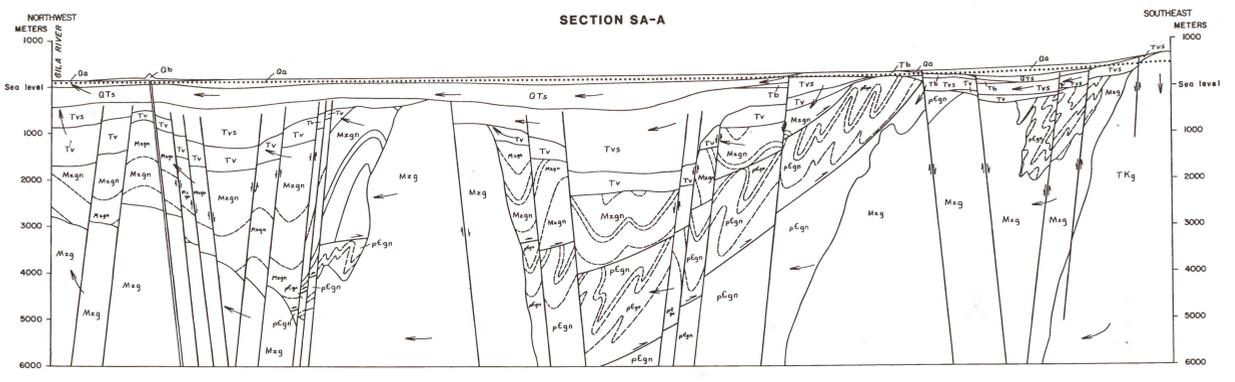
QUATERNARY	Qb	BASALTIC LAVA FLOWS AND CINDER CONE
QUATERNARY AND TERTIARY	Qa	ALLUVIUM
QUATERNARY AND TERTIARY	Qts	BASIN-FILL ALLUVIUM.-- Fine-grained except adjacent to hills
TERTIARY	Tb	BASALTIC LAVA FLOW.-- Highly jointed and fractured
	Tvs	TUFFACEOUS SEDIMENTARY ROCKS.-- Contains minor basaltic and andesitic lava flows, and minor ash-flow tuffs
TERTIARY AND CRETACEOUS	TKg	CRYSTALLINE PLUTONIC ROCKS
MESOZOIC	Mzg	CRYSTALLINE PLUTONIC ROCKS
	Mzgn	METAMORPHIC ROCKS.-- Mainly crystalline gneiss and schist but may contain some plutonic rocks
PRECAMBRIAN	pCgn	METAMORPHIC ROCKS.-- Mainly gneiss and schist

QUATERNARY	Qa	ALLUVIUM
QUATERNARY AND TERTIARY	QTe	EVAPORITE DEPOSITS.-- Includes clay and silt
QUATERNARY AND TERTIARY	Qts	BASIN-FILL ALLUVIUM.-- Fine-grained except adjacent to hills
TERTIARY	Tv	VOLCANIC ROCKS.-- Mainly silicic ash-flow tuff and tuffaceous sedimentary rock
	Tb	BASALTIC AND ANDESITIC LAVA FLOWS.-- Generally highly jointed and fractured
TERTIARY AND CRETACEOUS	TKg	CRYSTALLINE PLUTONIC ROCKS
PRECAMBRIAN	pCg	CRYSTALLINE PLUTONIC ROCKS
	pCgn	CRYSTALLINE GNEISSIC ROCKS.-- Locally contains cross-cutting mafic dikes
	pCs	CRYSTALLINE MICA AND CHLORITE SCHIST, PHYLLITIC SLATE, AND AMPHIBOLITE



EXPLANATION

- CONTACT
- - - CONTACT WITHIN GEOLOGIC UNITS
- ↔ FAULT.-- Arrows show relative direction of movement
- ~ UNCONFORMITY
- WATER TABLE
- DIRECTION OF GROUND-WATER FLOW



0 5 10 15 20 25 KILOMETERS
VERTICAL EXAGGERATION X5

DIAGRAMMATIC SECTIONS OF HYDROGEOLOGIC ENVIRONMENTS IN THE BASIN AND RANGE PROVINCE