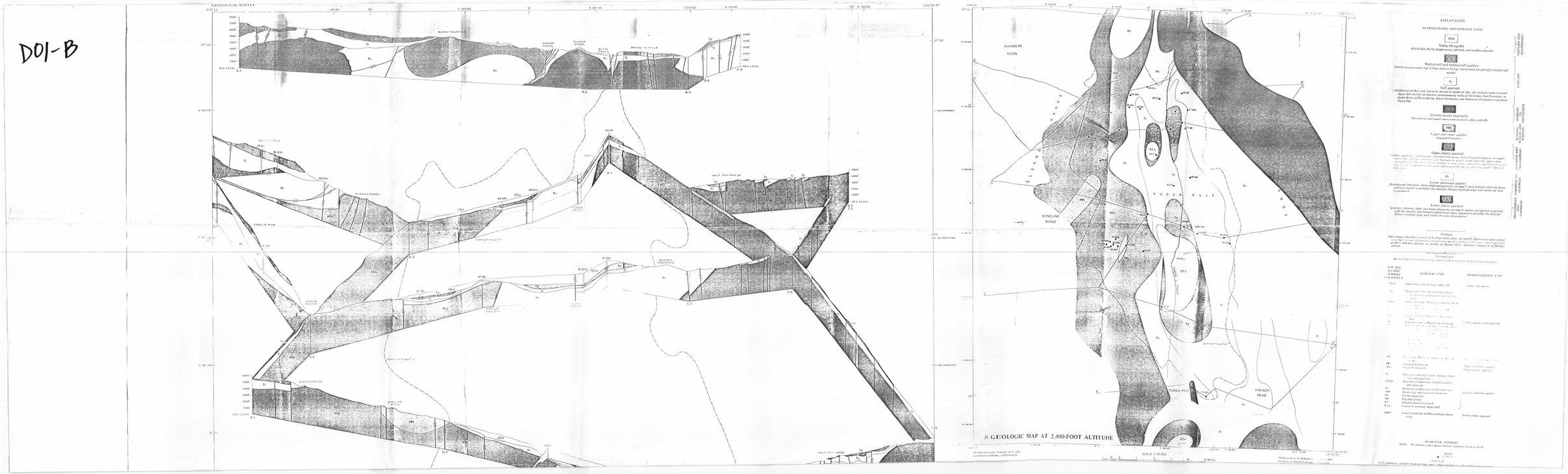
D01-B


GEOLOGICAL SURVEY
B. GEOLOGIC MAP AT 2,400-FOOT ALTITUDE
SCALE 1:24 000
EXPLANATION
HYDROLOGIC AND GEOLOGIC UNITS
Valley-fill aquifer
Alluvial fan, fluvial, lacustrine, lahchid, and mudflow deposits
Welded-tuff and bedded-tuff aquifers
Densely to unwelded tuff of Paiute Canyon Group, interbedded ash-fall tuff is bedded-tuff aquifer
Tuff aquitard
Ash-fall and ash-flow tuff, mainly altered to zeolite or clay; also includes tuffaceous and clayey lake and playa deposits, predominantly rocks of the Indian Trail Formation, in Shales Rock of Rocks Spring, Sutcliff Formation, and Wahmonie Formation in southern Yucca Flat
Granite stocks (quartz)
Granodiorite and quartz monzonite in stocks, dikes, and sills
Upper clastic aquitard
Lower carbonate aquifer
Dolomites and limestones; most permeable rocks are in Bird Spring Formation; on map C, where one pattern is overtop, with fine pattern, these rocks are considered to probably the shelf part Tertiary hydrologic-tight and within the zone of saturation
Lower clastic aquitard
Quartzites, siltstones, shales, and minor limestones; on map C, narrow-line pattern is overtop, with fine pattern, these rocks are considered to probably the shelf part Tertiary hydrologic-tight and within the zone of saturation
Contact
Upper/upper subsurface contact of hydrologic units, on map C, sketched at approximate altitude of 4,800 feet; lower/upper subsurface contact between the upper clastic aquitards at the 2,400-foot altitude, on vicinity of Rainier Mesa, sketched contact at 4,700 feet altitude
Normal fault
Bar and ball on downthrown side; dashed where inferred, dotted where concealed
MAP AND SECTION SYMBOLS FOR PANEL C
GEOLOGIC UNIT
HYDROLOGIC UNIT
Quaternary and Tertiary valley fill
Valley-fill aquifer
Paiute Canyon Group and Indian Trail Formation, undifferentiated
Volcanics from Mountain Springs Formation
Rocks of Spring Mountains—Pavits Spring Formation
Rocks of Paiute Canyon Group
Tuff aquifers and aquitards
Tertiary intrusive rocks
Tertiary clastic aquitard
Paleozoic carbonate rocks, includes minor clastic and quartzite
Dolomites and limestones of Ordovician to Devonian age
Dolomites and limestones of Devonian age
Devils Gate and Nevada Formations
Lower carbonate aquifer
Pilot Shale
Eureka Quartzite
Ely Springs Dolomite
Hidden Canyon Formation
Lower clastic aquitard
Carrara Formation, upper half
Lower Cambrian and Precambrian clastic rocks
SYMBOLIC SYMBOLS
NOTE: All altitudes and contours in feet, datum is mean sea level
Line with
Low with
RAINIER MESA
SYNCLINE RIDGE
YUCCA FLAT
FRENCH PEAK
BURNT MOUNTAIN
TIPPIPAH SPRING
CLIMAX STOCK
BUTTE FAULT
RHYOLITE HILLS
HALF PINT RANGE
ELEANA RANGE
SYNCLINE RIDGE
STOCKADE WASH
GROUSE CANYON
BANDED MOUNTAIN
TIPPIPAH FAULT
YUCCA FAULT
Bedrock geology by William C. Gardner, Jr., Alfred from data