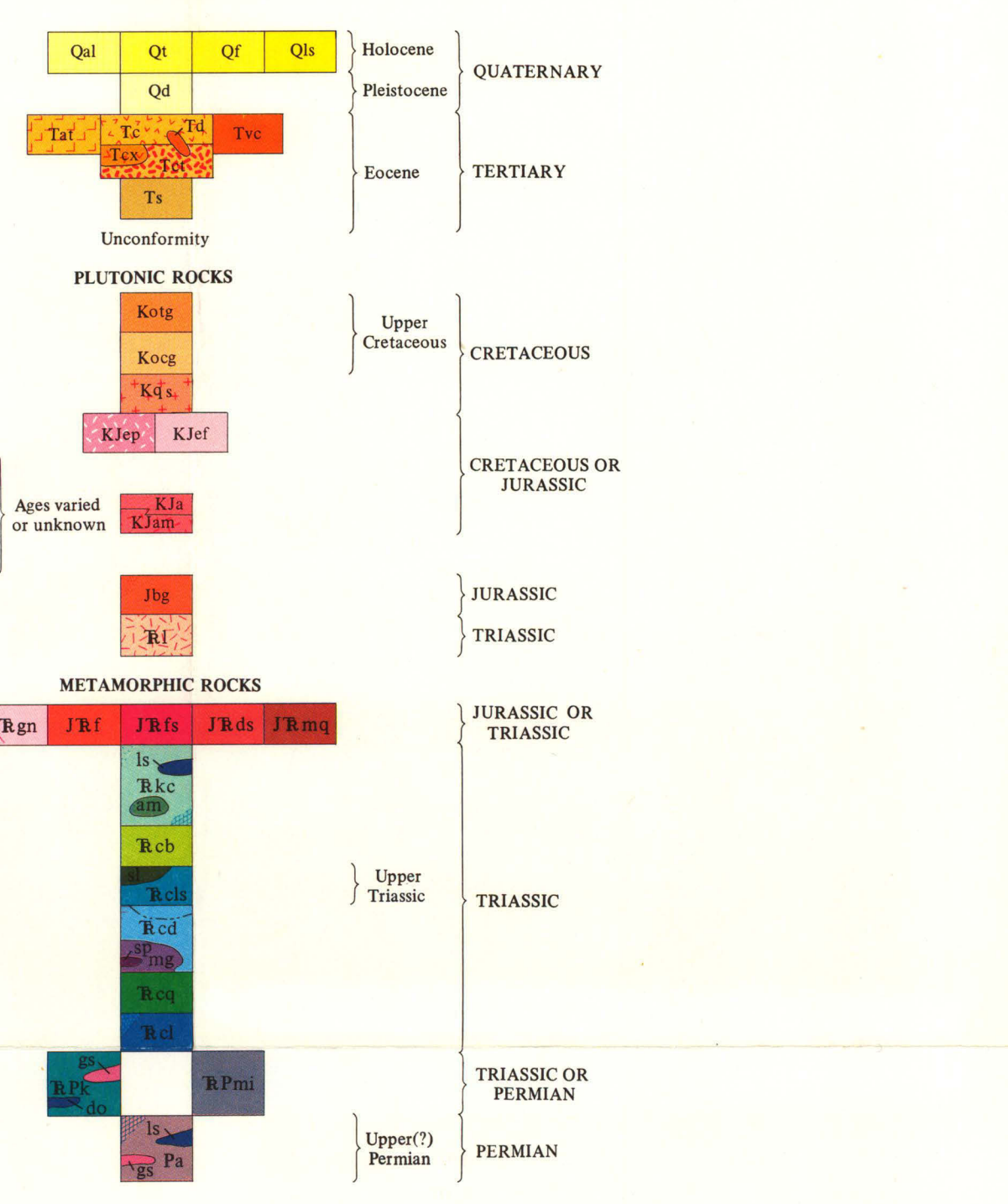


CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- VALLEY FILL (HOLOCENE)**
- Qal Alluvium
 - Qt Talus deposits
 - Qf Alluvial fan deposits
 - Qts Landslide west of Boober Lake
 - Qd GLACIAL DRIFT (PLEISTOCENE) - Silt, sand, and gravel
 - Taf ANDESITE OF TWIN PEAKS (EOCENE) - Includes flows, flow breccia, and pyroclastic rocks
- DACITE OF CARTER MOUNTAIN (EOCENE)**
- Tc Quartz-bearing flows
 - Tex Quartz-poor flows
 - Td Intrusive rocks
 - Tve VOLCANIC ROCKS, UNDIVIDED (EOCENE) - Includes, tuffs, flows, intrusive rocks, locally interbedded sedimentary rocks. Probably correlative with volcanic rocks of Carter Mountain
 - Ts SANDSTONE AND CONGLOMERATE (EOCENE) - Found only adjacent to and beneath volcanic rocks
- UNCONFORMITY**
- PLUTONIC ROCKS**
- ROCKS OF THE OKANOGAN GNEISS DOME (UPPER CRETACEOUS)**
- Kotg Tonasket Gneiss; layered cataclastic gneiss
 - Kocg Cataclastic granitoid gneiss; chiefly quartz dioritic in composition
 - Kas QUARTZ MONZONITE WEST OF SALMON CREEK (CRETACEOUS)
- EVANS LAKE PLUTON (CRETACEOUS OR JURASSIC) - Quartz monzonite and granodiorite**
- Klep Porphyritic phase
 - Klef Fine-grained phase
- GRANITIC ROCKS IN DIKES AND SMALL MASSES - (Ages varied or unknown)**
- a Apatite, alkali, and pegmatite
 - f Felsic and intermediate rocks
 - d Mafic rocks; chiefly diorite, quartz diorite, and gabbro
- AENEAS CREEK PLUTON AND PROBABLE CORRELATIVE MASSES (CRETACEOUS OR JURASSIC)**
- KJa Granodiorite and quartz monzonite
 - KJam Mafic early phase
 - dm DUNN MOUNTAIN PLUTON AND PROBABLE CORRELATIVE MASSES - (Age varied or unknown); probable correlative masses on Funk Mountain, Happy Hill, and north of Scotch Creek Grange Hall
- BLUE GOAT PLUTON (JURASSIC) - Granodiorite; stippled area southeast of Bald Butte denotes zone where abundant fine-grained granodioritic dikes intrude pluton**
- Jbg
- LOOMIS PLUTON (TRIASSIC) - Quartz diorite**
- L
- METAMORPHIC ROCKS**
- JRgn GRANITOID GNEISS (JURASSIC OR TRIASSIC) - Locally layered, characterized by varied texture and composition, commonly ranging from fine-grained diorite to coarse-grained porphyroblastic granodiorite, each covering areas of a few thousand square yards. Terrane containing abundant coarse K-feldspar porphyroblasts identified by open rectangles
- METAMORPHOSED HYPABSSAL INTRUSIVE ROCKS IN DIKES AND SMALL MASSES (JURASSIC OR TRIASSIC)**
- JRf Rocks of felsic and intermediate composition
 - JRfs Trachytoid monzonite
 - JRds Metadiorite and meta-quartz diorite northeast of Salmon Creek
 - JRmq Meta-quartz diorite southeast of Lemansky Lake
 - Rkc METAMORPHIC COMPLEX OF CONCONULLY (TRIASSIC) - Dominant lithology pelitic phyllite with locally abundant thin-bedded metasilstone, metasandstone, and metalmestone in the northern part; grades to coarser grained schist and gneiss of equivalent compositions to west and southwest. Stippled pattern at and near Funk Mountain indicates terrane abundantly intruded by felsic and intermediate rocks; line pattern along Sinlahkin Creek indicates terrane intruded by abundant blastoporphyrific metadacitic dikes and sills that are possibly correlative with unit JRf
 - Is Metalmestone; locally silicified
 - am Amphibolite and metagabbro
- CAVE MOUNTAIN FORMATION (TRIASSIC)**
- Rcb SALALTIC METAVOLCANIC MEMBER - Volcanic flows and inter-layered pyroclastic and epiclastic rock
 - Rcl SLATE AND METALMESTONE MEMBER (UPPER TRIASSIC) - Dark-gray slate and phyllite thinly interbedded with dark-gray, silty, slaty, or phyllitic metalmestone. Probably the unit that yielded fossils of Triassic age reported by Waters and Krauskopf (1941) and Misch (1949a, 1966)
- METALMESTONE; locally silicified**
- Pa
- MAFIC INTRUSIVE ROCK (TRIASSIC OR PERMIAN) - Greenish-gray, typically massive amphibolite, gneiss, metadiorite, metagabbro, and less abundant felsic variants, in small scattered bodies that intrude the metamorphic terrane**
- Rpm
- ANARCHIST GROUP (UPPER(?) PERMIAN) - Siliceous metalmestone, slate, phyllite, and distinctive chert-pebble metaconglomerate. Quarried at tentatively correlated green siliceous metaconglomerate exposures locally fuchsite-bearing, west of Wagonroad Coulee. Line pattern north and west of Sinlahkin Creek identifies terrane intruded by abundant blastoporphyrific metadacitic dikes and sills possibly correlative with unit JRf**
- Rsg
- METALMESTONE**
- Rsd
- Greenstone; includes metamorphosed pyroclastic rocks that grade locally to epiclastic rocks, massive lava flows, and locally to amphibolite**
- Rsp
- CONTACT, SHOWING DIP; WHERE DOTTED AND DASHED BETWEEN UNITS INDICATE INTRA FORM LINE**
-
- FAULT, SHOWING DIP - Dashed where approximately located; dotted where concealed; queried where doubtful**
- - - - -
- THRUST OR LOW-ANGLE REVERSE FAULT - Sawtooth on upper plate; dashed where approximately located; dotted where concealed; queried where doubtful**
- ▲▲▲▲▲
- ANTICLINE, SHOWING TRACE OF AXIAL PLANE AND BEARING OF AXIS**
- ⌒
- OVERTURNED ANTICLINE, SHOWING TRACE OF AXIAL PLANE AND DIRECTION OF DIP OF LIMBS; DASHED WHERE INFERRED**
- ⌒
- OVERTURNED SYNCLINE, SHOWING TRACE OF AXIAL PLANE AND DIRECTION OF DIP OF LIMBS; DASHED WHERE INFERRED**
- ⌒
- PLANAR AND LINEAR FEATURES. Symbols may be combined; point of observation of linear feature at arrowhead except where combined with planar feature**
-
- MINOR FOLD AXIS, SHOWING DIRECTION OF PLUNGE. Amount of plunge shown where measured in the field**
- ⌒
- INCLINED**
- ⌒
- HORIZONTAL**
- ⌒
- STRIKE AND DIP OF BEDS. Also indicates layering in volcanic flows. Wavy tails indicate undulating beds; dot indicates top of beds known from sedimentary features**
- ⌒
- INCLINED**
- ⌒
- VERTICAL**
- ⌒
- HORIZONTAL**
- ⌒
- OVERTURNED**
- ⌒
- STRIKE AND DIP OF FOLIATION. Primary structure in plutonic rocks; secondary structure in metamorphic rocks. Wavy tails indicate undulating foliation**
- ⌒
- INCLINED**
- ⌒
- VERTICAL**
- ⌒
- HORIZONTAL**
- ⌒
- Multiple**
- ⌒
- Miscellaneous symbols**
- ⊙ Fossil locality. Fossil debris only; no diagnostic fossils found during present study
 - ⊙ Fluorite-bearing vein(?) quartz. Massive, locally brecciated, in a large outcrop 2 miles southeast of Mud Lake; associated with silicification of adjacent, brecciated metalmestone (Rcq)
 - ⊙ Locality of analysed specimen. Numbers correspond to those in tables in text. Symbol shows kind of analytical data. Dot omitted where locality coincides with structure symbol
 - ⊙ Isotopic age
 - ⊙ Modal
 - ⊙ Chemical
 - ⊙ Spectrographic
- Veins. Associated metal or material shown where known (Cu, Pb, skarn, etc.) Carbonate veins shown by "CO"; F, fluorite**
-
- Vertical**
- ⌒
- Inclined**
- ⌒
- Attitude varied or not recorded**
- ⌒
- Zone of alteration, pyrite bearing**
- ⌒
- Prospect**
- ⌒
- Adit**
- ⌒
- Caved adit**
- ⌒

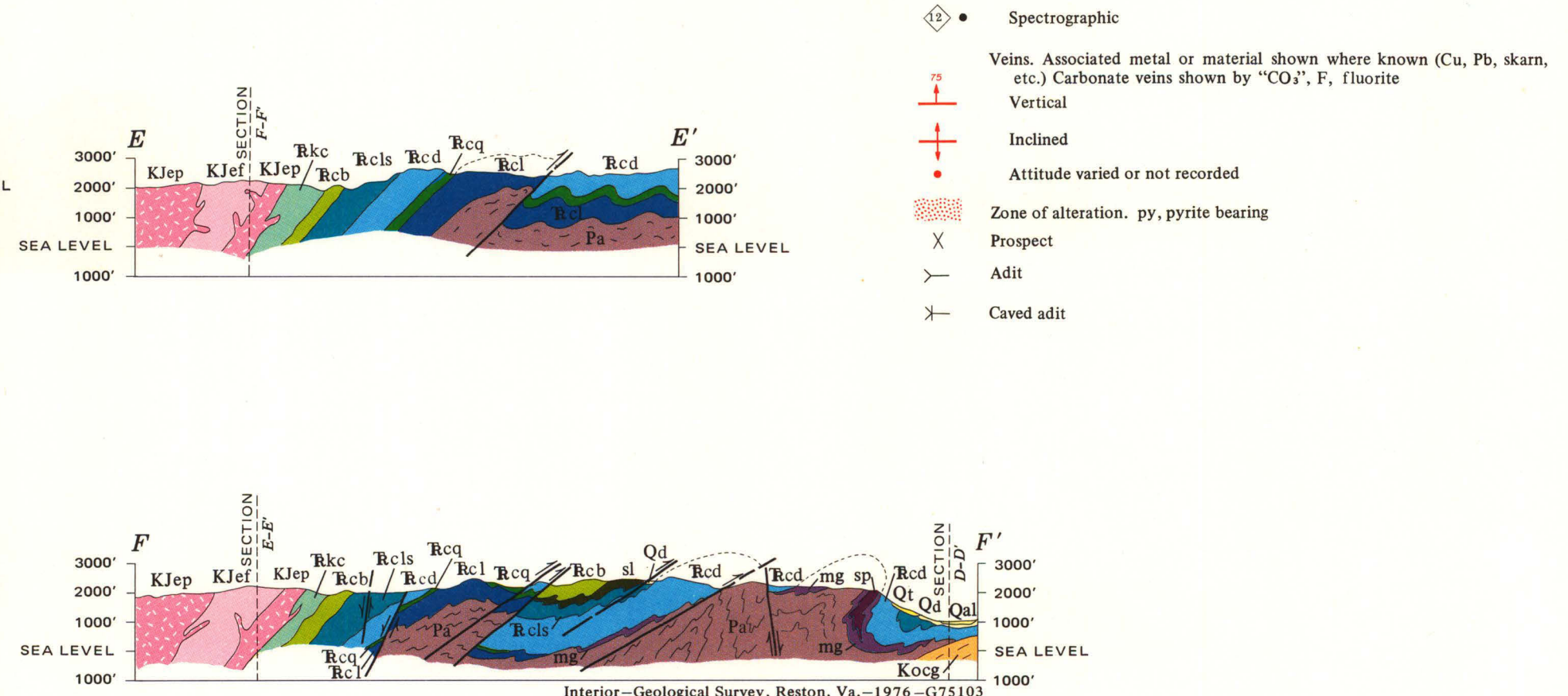
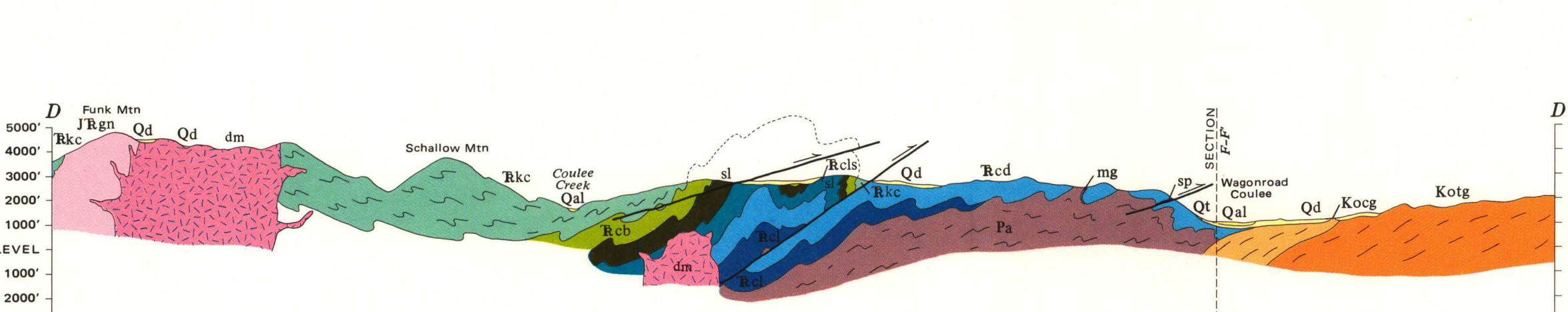
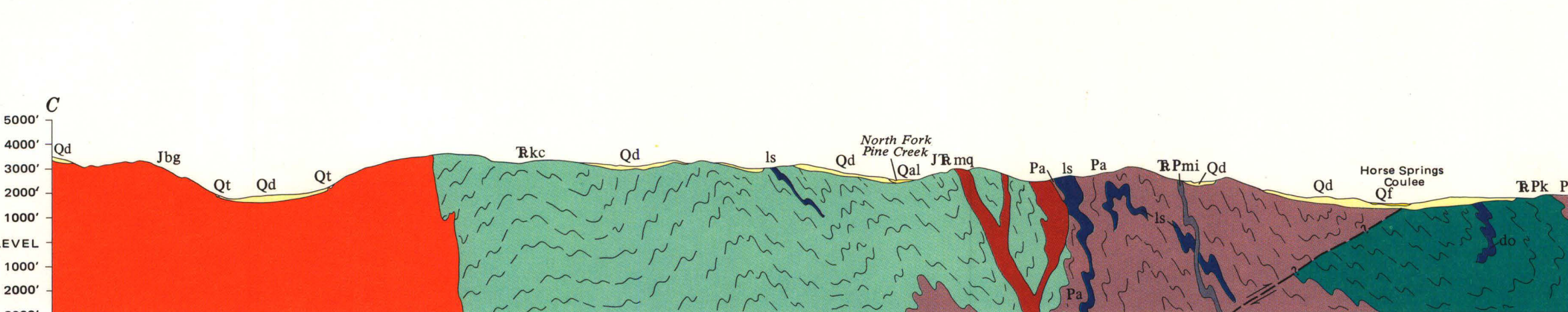
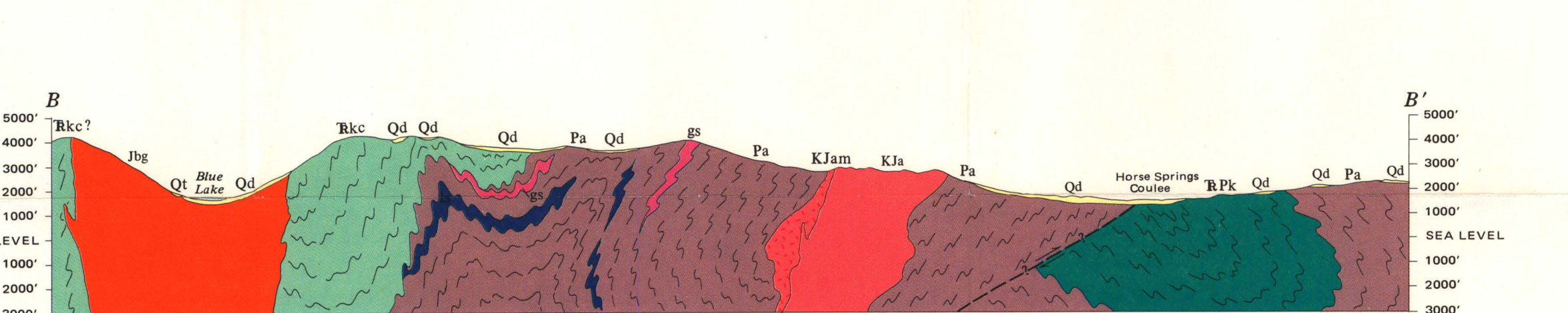
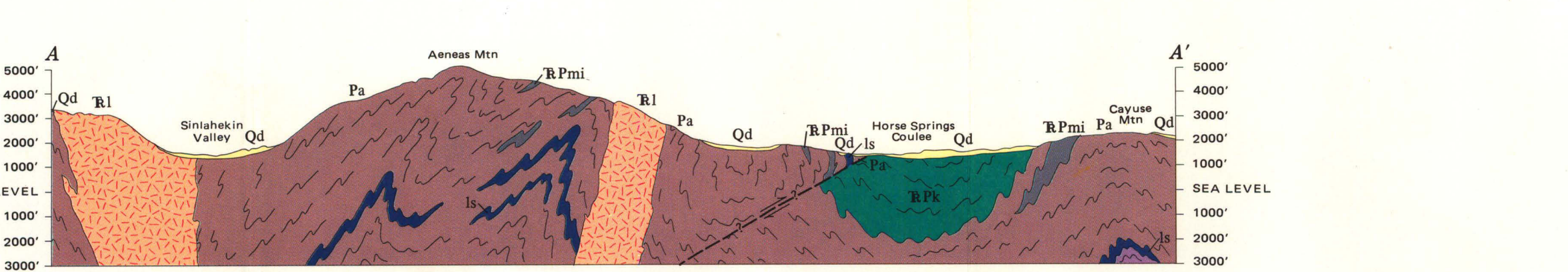
Base from U.S. Geological Survey, 1957 10,000-foot grid based on Washington coordinate system, north side 1000-metre Universal Transverse Mercator grid ticks, zone 11

SCALE 1:62 500

CONTOUR INTERVAL 80 FEET
DASHED LINES REPRESENT 40-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

Geology by C. D. Rinehart, 1965-69; K. F. Fox, Jr., 1965, 1968; J. C. Moore, 1966, 1968

QUADRANGLE LOCATION



GEOLOGIC MAP OF THE CONCONULLY QUADRANGLE, OKANOGAN COUNTY, WASHINGTON