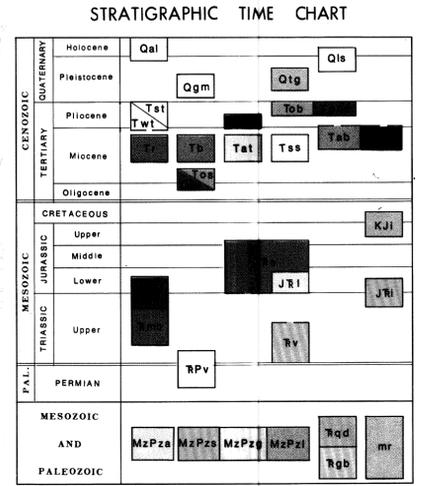


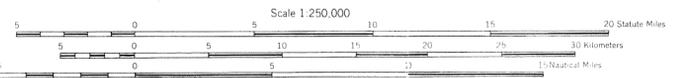
# GMS - 7

## GEOLOGIC MAP OF THE OREGON PART OF THE BAKER 1° by 2° QUADRANGLE



- ### EXPLANATION
- Qal Alluvium: Mainly valley fill and stream channel deposits consisting of unconsolidated silt, sand, and gravel.
  - Qls Landslide debris
  - Qig Terraces and fan deposits: Unconsolidated gravel, cobbles, and boulders with interbedded clay, silt, and sand.
  - Qgm Glaciofluvial deposits: Unsorted bouldery gravel, sand, and silt of terminal and lateral moraines.
  - Tob Basalt: Mostly thin, gently dipping flows of gray to black olivine-bearing basalt and basaltic andesite.
  - Tst Small mafic volcanic centers: probably the source of (Tob) flows.
  - Tst Tuffaceous sedimentary rocks: Poorly consolidated, water-laid siliceous volcanic ash, tuffaceous clay, siltstone, sandstone, minor diatomite, mud-flow deposits, air-fall and ash-flow tuffs, and some coarse epiclastic deposits. Chiefly lacustrine except in the northern part of the map area where the upper part of the sequence includes gravelly fluvial deposits.
  - Tst Basalt: Thin basalt flows and small eruptive centers. Locally overlies welded tuff of unit (Twt) and some sedimentary rocks of unit (Tst).
  - Twt Siliceous welded and non-welded tuff: Some tuffaceous sedimentary rocks included.
  - Tst Andesite and basalt: Poly-jointed flows of hypersthene andesite and basalt. The unit is exposed only in the northern part of the map area. Stratigraphic relations are uncertain.
  - Tst Mafic shield volcano: probably the source of (Tob) flows.
  - Tss Tuffaceous sedimentary rocks: Semi-consolidated to well-consolidated, bedded, fine-grained tuffaceous sandstone and water-laid tuff: lower amounts of arkosic sandstone and siltstone, impure diatomite, pumice and palagonite tuff.
  - Tst Ash flow tuffs and tuffaceous sedimentary rocks: Partly to densely welded siliceous ash-flow tuff. Includes some non-welded tuff and tuffaceous sedimentary rocks.
  - Tst Basalt and andesite: Checks flow on flow basalt. Includes some andesite flows, basaltic and andesite flow breccias, palagonite tuff and breccia, and minor siliceous tuff and tuffaceous sedimentary rocks. In southeast part of area includes some siliceous flows at top of section.
  - Tst Rhyolite and andesite: Rhyolite and subordinate andesite flows, flow breccia, welded and non-welded tuff, tuff breccia and small intrusive masses, commonly flow bedded and locally perlitic. Includes part of Dooley Rhyolite Breccia of Gilluly (1937).
  - Tos Volcaniclastic sedimentary rocks: Poorly sorted andesite and dacite pebble and boulder conglomerate, breccia and water-laid tuff.
  - Tos Andesite and dacite: Flows, breccia, tuff, and intrusive rocks consisting of porphyritic hornblende andesite and dacite.
  - JRI Limestone: Massive and thin-bedded limestone. Minor wacke, siltstone and arkosic sandstone.
  - JRI Sedimentary rocks: Volcanic wacke and siltstone. Some conglomeratic wacke and thin limestone lenses.
  - JRI Sedimentary rocks: Graywacke and laminated siltstone; minor chert, thin bedded limestone and conglomerate. Mapped as Elkhorn Formation by Probst (1962).
  - Rvd Limestone: Massive conglomeratic and coralline limestone interbedded with thin bedded pyritic and carbonaceous limestone.
  - Rv Volcanic and sedimentary rocks: Lava flows, flow breccia, agglomerate, tuff, volcaniclastic conglomerate, breccia, sandstone, siltstone. Chiefly andesite; some basaltic and rhyolitic rocks. Minor limestone.
  - mr Mixed sedimentary, volcanic and intrusive rocks: Windows and fault slices of older rocks in (Tst) terrane. Includes rocks typical of units (Rvd), (MzPza) and (MzPza).
  - RPV Volcanic and sedimentary rocks: Lava flows, flow breccia, and agglomerate; pyroclastic rocks; subordinate epiclastic conglomeratic sandstone, and argillite; minor chert and limestone. Volcanic rocks include spilitic and keratophyre. Includes Clover Creek Greenstone of Gilluly (1937).
  - MzPza Polished sedimentary and volcanic rocks and marble: Includes Burnt River Schist of Gilluly (1937), Phyllitic quartzite, quartz phyllite, pelitic phyllite, minor slate, conglomerate and marble (MzPzb). Mostly greenstone and greenschist (MzPzg). Marble with interlayered phyllite and slate (MzPzj); includes Nelson Marble of Probst (1967).
  - MzPza Sedimentary and volcanic rocks: Argillite, chert and tuff; subordinate lava flows, conglomerate, and limestone. Includes Elkhorn Ridge Argillite of Gilluly (1937).
- ### PLUTONIC ROCKS
- KJI Upper Jurassic-Lower Cretaceous plutons: Medium-grained hornblende and biotite quartz diorite and granodiorite. Some trondhjemite and gabbro.
  - JRI Upper Triassic - Lower Jurassic quartz diorite.
  - Rqd Pre-Upper Triassic intrusive complex: Chiefly quartz diorite and "white granite" (Rqd); gabbro and altered gabbro, minor peridotite, pyroxenite, and serpentinite (Rgbb).
  - Rgbb
- ### GEOLOGIC SYMBOLS
- Contact (dashed where gradual or inferred)
  - Fault showing downthrown side (dashed where inferred)
  - Fault, High-angle reverse
  - Anticline (showing trace of axial plane and bearing and plunge of axis. Dashed where approximately located)
  - Syncline (showing trace of axial plane and bearing and plunge of axis)
  - Strike and dip of beds or flows

prepared in cooperation with the U.S. Geological Survey, Menlo Park

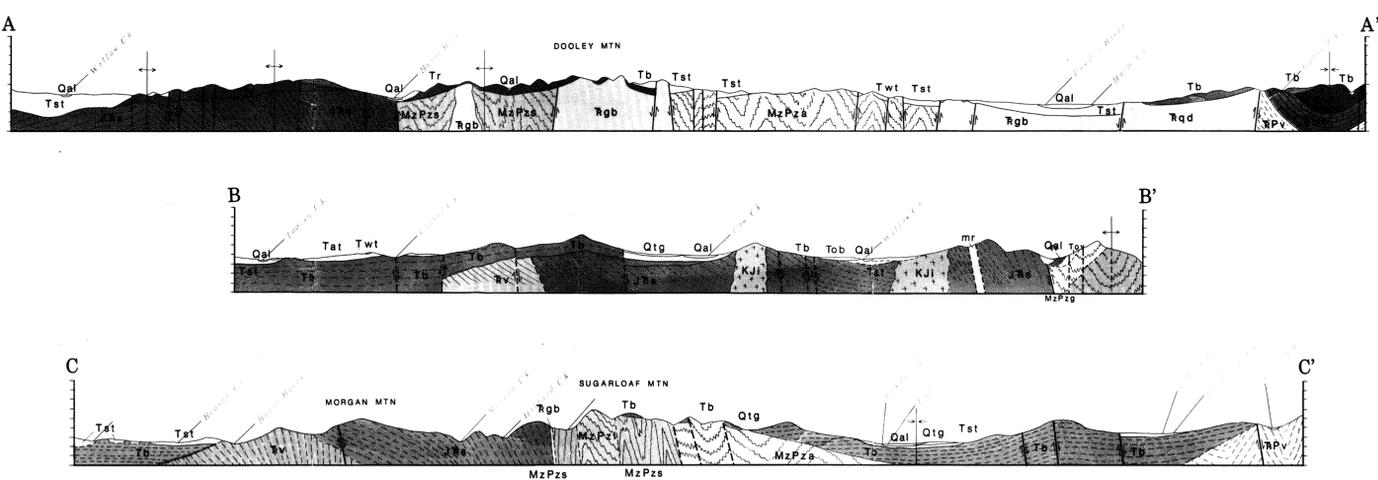


CONTOUR INTERVAL 200 FEET  
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS  
TRANSVERSE MERCATOR PROJECTION

1960 MAGNETIC DECLINATION FOR THIS SHEET VARIES FROM 19°30' EASTERLY FOR THE CENTER OF THE WEST EDGE TO 19°00' EASTERLY FOR THE CENTER OF THE EAST EDGE. MEAN ANNUAL CHANGE IS 0'02" WESTERLY.

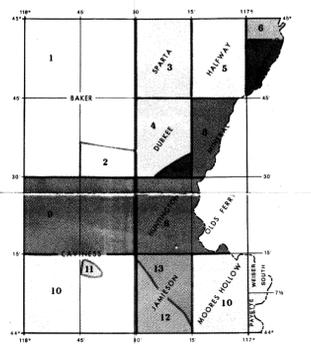
STATE OF OREGON  
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES  
1069 State Office Building, Portland, Oregon 97201

### Geologic Cross Sections



### SECTIONIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36



- ### GEOLOGIC MAPPING
- 1 Unpublished geologic map of the Baker 1° by 2° quadrangle, Oregon, by H.C. Brooks, 1958-1959 and G.C. Brooks, 1952-1953. Baker quadrangle, U.S. Geol. Surv. Prof. Paper 811, 879.
  - 2 Modified from Brooks, 1958-1959, geologic map of the Baker River Canyon area, northwestern Oregon. Standard fault, structural, and stratigraphic symbols.
  - 3 Brooks, H.C., 1962, Geologic map of the Baker quadrangle, Oregon. Dept. Geol. and Mineral Ind., OREGON.
  - 4 Brooks, H.C., 1967, Preliminary geologic map of the Burns quadrangle, Oregon. Dept. Geol. and Mineral Ind., OREGON.
  - 5 Pre-Geologic geology interpreted by H.C. Brooks.
  - 6 Reconnaissance mapping by J.R. McIntyre, H.C. Brooks, and T.L. Halliday in 1967-1972. Baker 1° by 2° quadrangle, Oregon. Dept. Geol. and Mineral Ind., OREGON.
  - 7 Mapping by T.L. Halliday in 1967-1972.
  - 8 Modified from Brooks, 1958-1959, the geology of the northern half of the Carleton quadrangle, Oregon. Dept. Geol. and Mineral Ind., OREGON.
  - 9 Reconnaissance mapping by G.C. Brooks in 1959-1970; some contacts according to reconnaissance mapping by H.C. Brooks.
  - 10 Hopper, A.S., 1968, The geology of the northern part of the Jackson Mountains area of eastern Oregon. Am. Assoc. Petrol. Geologists Bull., v. 42, p. 667-701.
  - 11 Carleton, J.L., 1954, The geology of the southern part of the Jackson Mountains, near Harney County, Oregon. Unpub. Geol. Surv. Prof. Paper 811, 879.
  - 12 Carleton, J.L., 1954, The geology of the northern part of the Jackson Mountains, Oregon. Unpub. Geol. Surv. Prof. Paper 811, 879.
  - 13 Carleton, J.L., 1954, The geology of the southern part of the Jackson Mountains, Oregon. Unpub. Geol. Surv. Prof. Paper 811, 879.

Geologic compilation by H. C. Brooks, J. R. McIntyre and G. W. Walker.

Cartography by S. R. Renoud, 1976