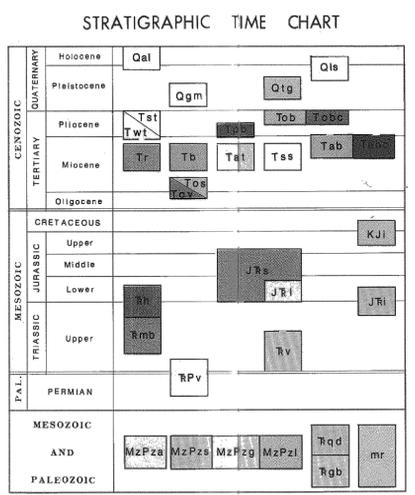


GMS - 7

GEOLOGIC MAP OF THE OREGON PART OF THE BAKER 1° BY 2° QUADRANGLE



- ### EXPLANATION
- Alluvium: Mainly valley fill and stream channel deposits consisting of fine sand, silt, clay, and gravel.
 - Landslide debris
 - Terrace and fan deposits: Unconsolidated gravel, cobbles, and boulders with interstitial clay, silt, and sand.
 - Glaciofluvial deposits: Unsorted bouldery gravel, sand, and silt of terminal and lateral moraines.
 - Basalt: Mostly thin, easily dipping flows of gray to black olivine-bearing basalt and basaltic andesite.
 - Small mafic volcanic centers: probably the source of (Tob) flows.
 - Tuffaceous sedimentary rocks: Poorly consolidated, water-laid silty to silty-ash, tuffaceous clay, siltstone, and stone, 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 grossly fluvial deposits.
 - Basalt: Thin basalt flows and small eruptive centers. Locally overlies welded tuff of unit (Twt) and some sedimentary rocks of unit (Tst).
 - Siliceous welded and non-welded tuff: Some tuffaceous sedimentary rocks welded.
 - Andesite and basalt: Poly-flocculent flows of hypersthene andesite and basalt. The unit is exposed only in the northern part of the map area. Stratigraphic relations are uncertain.
 - Mafic shield volcano: probably the source of (Tob) flows.
 - Tuffaceous sedimentary rocks: Semi-consolidated to well-consolidated, indurated, fine-grained tuffaceous sediments and water-laid tuff, lesser amounts of arkosic sandstone and siltstone, impure diatomite, pumicite and poignonic tuff.
 - Ash flow tuffs and tuffaceous sedimentary rocks: Partly to densely welded siliceous ash-flow tuff. Includes some non-welded tuff and tuffaceous sedimentary rocks.
 - Basalt and andesite: Chiefly flow on flow basalt. Includes some andesite flows, basaltic and andesitic flow breccias, poignonic tuff and breccia, and minor siliceous tuff and tuffaceous sedimentary rocks. In southern part of area includes some siliceous flows at top of section.
 - Rhyolite and andesite: Rhyolite and subordinate andesite flows, flow breccias, welded and non-welded tuff, tuff breccias and small intrusive masses, commonly flow banded and locally perlitic. Includes part of Dooley Rhyolite Breccia of Gilluly (1937).
 - Volcaniclastic sedimentary rocks: Poorly sorted andesite and dacite pebble and boulder conglomerate, breccia and water-laid tuff.
 - Andesite and dacite: Flows, breccia, tuff, and intrusive rocks consisting of porphyritic andesite and dacite.
 - Limestone: Massive and thin bedded limestone. Minor wacke, siltstone and arkosic sandstone.
 - Sedimentary rocks: Volcanic wacke and siltstone. Some conglomeratic wacke and thin limestone lenses.
 - Sedimentary rocks: Graywacke and laminated siltstone; minor chert, thin bedded limestone and conglomerate. Mapped as Harlow Formation by Probst (1962).
 - Limestone: Mosses conglomerate and coralline limestone interbedded with thin bedded pyritic and carbonaceous limestone. Mapped as Harlow Formation by Probst (1962).
 - Volcanic and sedimentary rocks: Lava flows, flow breccia, agglomerate, tuff, volcaniclastic conglomerate, breccia, sandstone and siltstone, chiefly andesitic, and limestone, and rhyolite rocks. Minor limestone.
 - Mixed sedimentary, volcanic and intrusive rocks: Windows and fault slices of older rocks in (Qgm) and (MzPzS) units. Includes rocks typical of units (Qgm), (MzPzS) and (MzPzL).
 - Volcanic and sedimentary rocks: Lava flows, flow breccia, and agglomerate; pyroclastic rocks; subordinate epiclastic conglomerate, sandstone, and siltstone; minor chert and limestone. Volcanic rocks include spilitic and basaltic. Includes Clover Creek Group of Gilluly (1937).
 - Foliated sedimentary and volcanic rocks and marble: Includes Barre River Schist of Gilluly (1937). Phyllite, quartzite, quartz phyllite, pelitic phyllite, minor slate, conglomerate and marble (MzPzS). Mostly greenstone and greenschist (MzPzS). Marble with interlayered phyllite and slate (MzPzS); includes Nelson Marble of Probst (1962).
 - Sedimentary and volcanic rocks: Argillite, chert and tuff; subordinate lava flows, conglomerate, and limestone. Includes Elkhorn Ridge Argillite of Gilluly (1937).
- ### PLUTONIC ROCKS
- Upper Jurassic-Lower Cretaceous plutons: Medium-grained hornblende and biotite quartz diorite and granodiorite. Some trondhjemite and gabbro.
 - Upper Triassic - Lower Jurassic quartz diorite.
 - Pre-Upper Triassic intrusive complex: Chiefly quartz diorite and "ultra" granite (Rmb) andesite and altered gabbro, minor peridotite, pyroxenite, and serpentinite (Rgb).
- ### GEOLOGIC SYMBOLS
- Contact (dashed where gradational 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

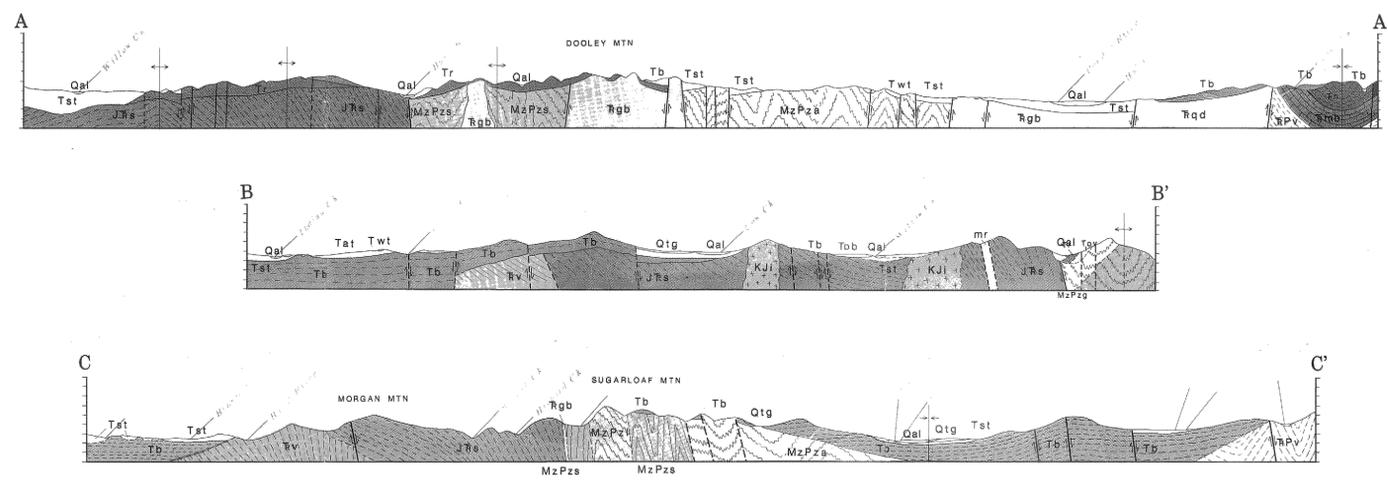


CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
TRANSVERSE MERCATOR PROJECTION

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

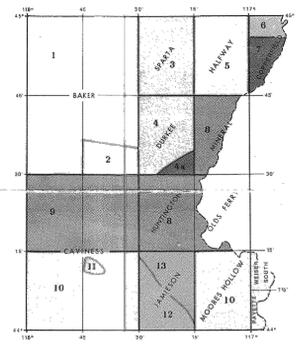
STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
1069 State Office Building, Portland, Oregon 97201

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



1. United States Geological Survey, 1937-1938, 1939-1940, and 1941-1942, Baker 1° by 2° Quadrangle, Oregon.
2. Modified from Gilluly, J. P., 1937, Geology and structure of the Baker River drainage area, northeastern Oregon. Stanford Univ. Studies 1937, 1938.
3. Probst, J. L., 1962, Geology of the Baker quadrangle, Oregon. Dept. Geol. and Mineral Ind., Oregon State Univ., Corvallis, Oregon, 1962, 1963.
4. Probst, J. L., 1962, Geology of the Baker quadrangle, Oregon. Oregon State Univ., Corvallis, Oregon, 1962, 1963.
5. Probst, J. L., 1962, Geology of the Baker quadrangle, Oregon. Oregon State Univ., Corvallis, Oregon, 1962, 1963.
6. Probst, J. L., 1962, Geology of the Baker quadrangle, Oregon. Oregon State Univ., Corvallis, Oregon, 1962, 1963.
7. Probst, J. L., 1962, Geology of the Baker quadrangle, Oregon. Oregon State Univ., Corvallis, Oregon, 1962, 1963.
8. Probst, J. L., 1962, Geology of the Baker quadrangle, Oregon. Oregon State Univ., Corvallis, Oregon, 1962, 1963.
9. Probst, J. L., 1962, Geology of the Baker quadrangle, Oregon. Oregon State Univ., Corvallis, Oregon, 1962, 1963.
10. Probst, J. L., 1962, Geology of the Baker quadrangle, Oregon. Oregon State Univ., Corvallis, Oregon, 1962, 1963.
11. Probst, J. L., 1962, Geology of the Baker quadrangle, Oregon. Oregon State Univ., Corvallis, Oregon, 1962, 1963.
12. Probst, J. L., 1962, Geology of the Baker quadrangle, Oregon. Oregon State Univ., Corvallis, Oregon, 1962, 1963.
13. Probst, J. L., 1962, Geology of the Baker quadrangle, Oregon. Oregon State Univ., Corvallis, Oregon, 1962, 1963.

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

Cartography by S. R. Renoud, 1976