

PRELIMINARY
GEOLOGIC MAP
of the
KEATING NW. QUADRANGLE
OREGON

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
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CHRONOLITHOGRAPH
(TIME ROCK CHART)

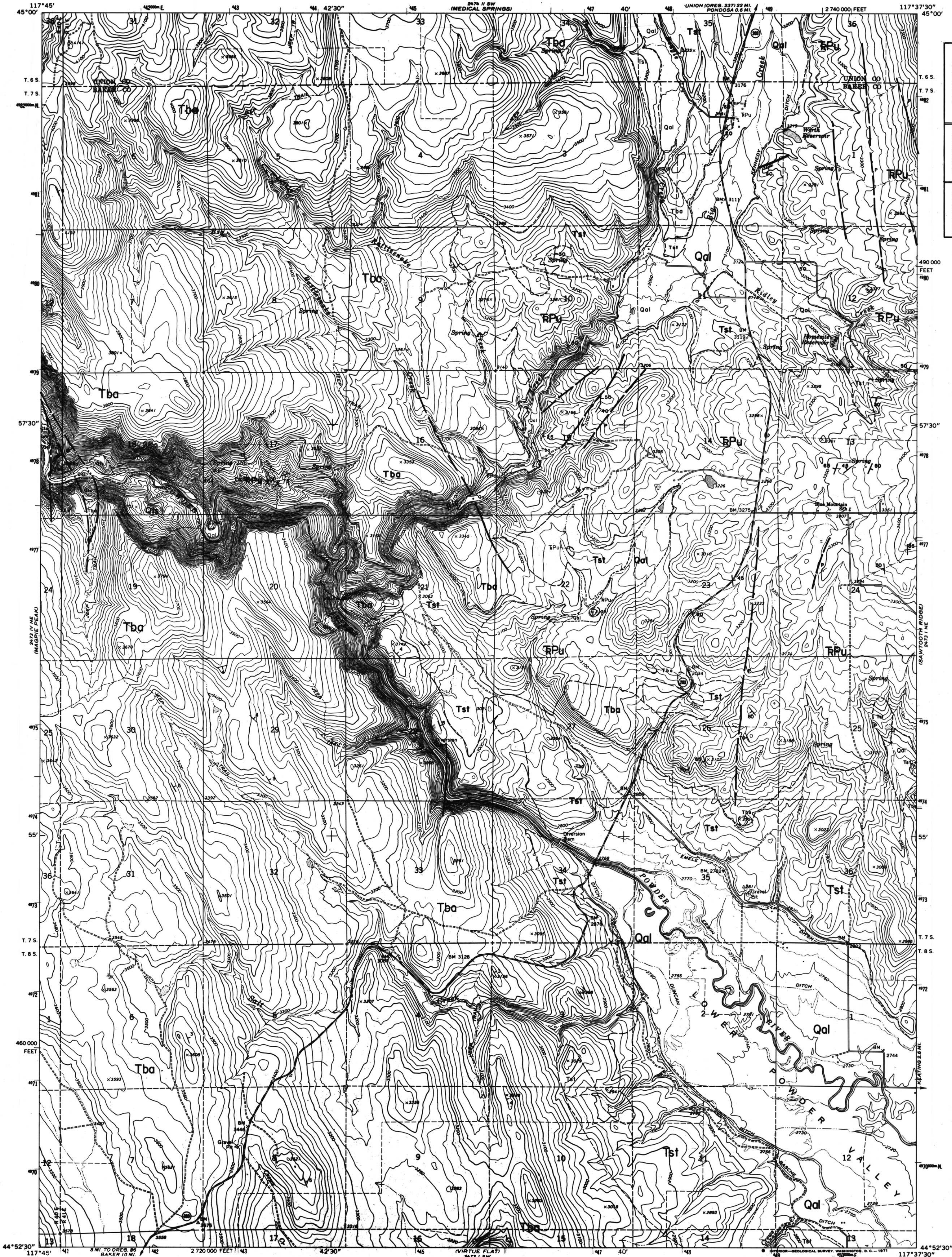
CENOZOIC	QUATERNARY	Holocene	Qal	Qls
		Pleistocene		
TERTIARY		Pliocene	Tba	Tst
		Miocene		
MESOZOIC	TRIASSIC	Upper		Rpu
PALEOZOIC	PERMIAN			Rpu

EXPLANATION

- Qal Mainly valley fill and stream-channel deposits consisting of unconsolidated silt, sand, and gravel.
- Qls Landslide debris.
- Tst Lacustrine and fluvial deposits: Poorly to moderately well consolidated, white, or light shades of gray, yellow, or brown water-laid deposits of siliceous ash and pumice; lesser amounts of sandstone, siltstone, and diatomite. Mostly fine grained and moderately well bedded. Mostly lacustrine; some fluvial deposits including gravel locally, particularly in the upper part of the section; also includes thin, welded and non-welded ash-flow and air-fall tuff beds. Siliceous vitroclastic material commonly altered to secondary silica minerals, alkali feldspar, zeolites, and clay minerals. Vertebrate fossils indicate unit is mostly of lower Pliocene (Clarendonian) age. Fossil plants indicate some beds are of Miocene age. Overlies and interfingers with basalt flows of unit Tba.
- Tba Basalt and andesite: Dark gray to black, locally reddish and dark greenish gray. Chiefly flow-on-flow basalt; some andesite in the northern part of the map area. Includes thin interbeds of poorly to semi-consolidated tuffaceous sedimentary rocks including fluvial gravels rich in rounded fragments of pre-Cenozoic rocks. Flows range from 10 feet to 80 feet in thickness. Flow tops commonly are scoriaceous. Platy jointing and columnar jointing are locally prominent. Clay minerals, zeolites, calcite, common opal, and chalcedony are alteration products in fractures and open spaces. Upper Miocene age based on plant remains found in tuff interbeds (Gilluly, 1937).
- Rpu Volcanic and sedimentary rocks: Clover Creek Greenstone of Gilluly (1937). Lava flows, flow breccia, agglomerate, and tuff; volcanoclastic conglomerate, breccia, sandstone, and siltstone; lesser argillite, chert, and minor limestone. Greenschist-facies metamorphism. Volcanic rocks range from spilitic through meta-andesite to highly siliceous keratophyre and quartz keratophyre. Abundant small intrusive masses. Volcanic rocks and marine sedimentary rocks are interbedded. Poor exposures, facies changes, and complex structure make detailed mapping difficult. Age, Permian and Upper Triassic.

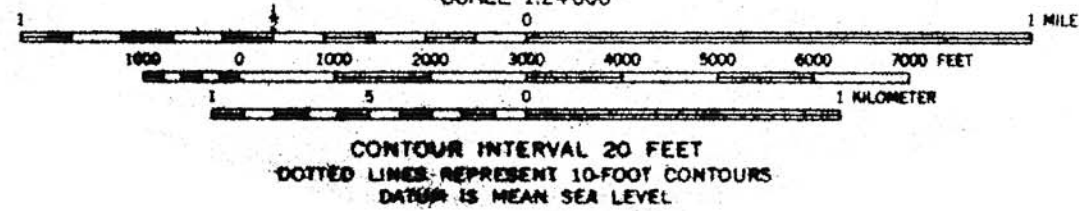
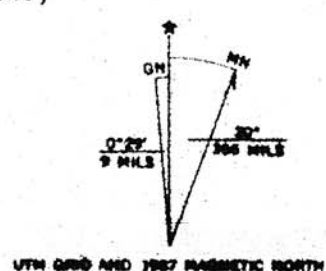
GEOLOGIC SYMBOLS

- Contacts
- Approximate contact
- Faults
- Definite fault
- Approximate fault
- Possible fault (photointerpreted)
- Normal fault (half and bar on downthrown side)
- Concealed fault
- Bedding
- Strike and dip of bed
- Strike of vertical bed
- Prospect
- Shaft
- Adit



Base Map from USGS 7 1/2' series (Topographic)

Control by USGS and USC&GS
Topography by photogrammetric methods from aerial photographs taken 1966. Field checked 1967
Polyconic projection. 1927 North American datum
10,000-foot grid based on Oregon coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks, zone 11, shown in blue
Fine red dashed lines indicate selected fence lines



Prepared and Published by the Cartographic Section of the Department of Geology and Mineral Industries
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ROAD CLASSIFICATION

- Heavy-duty
- Light-duty
- Unimproved dirt
- State Route

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Cartography by: C. A. Schumacher, 1977