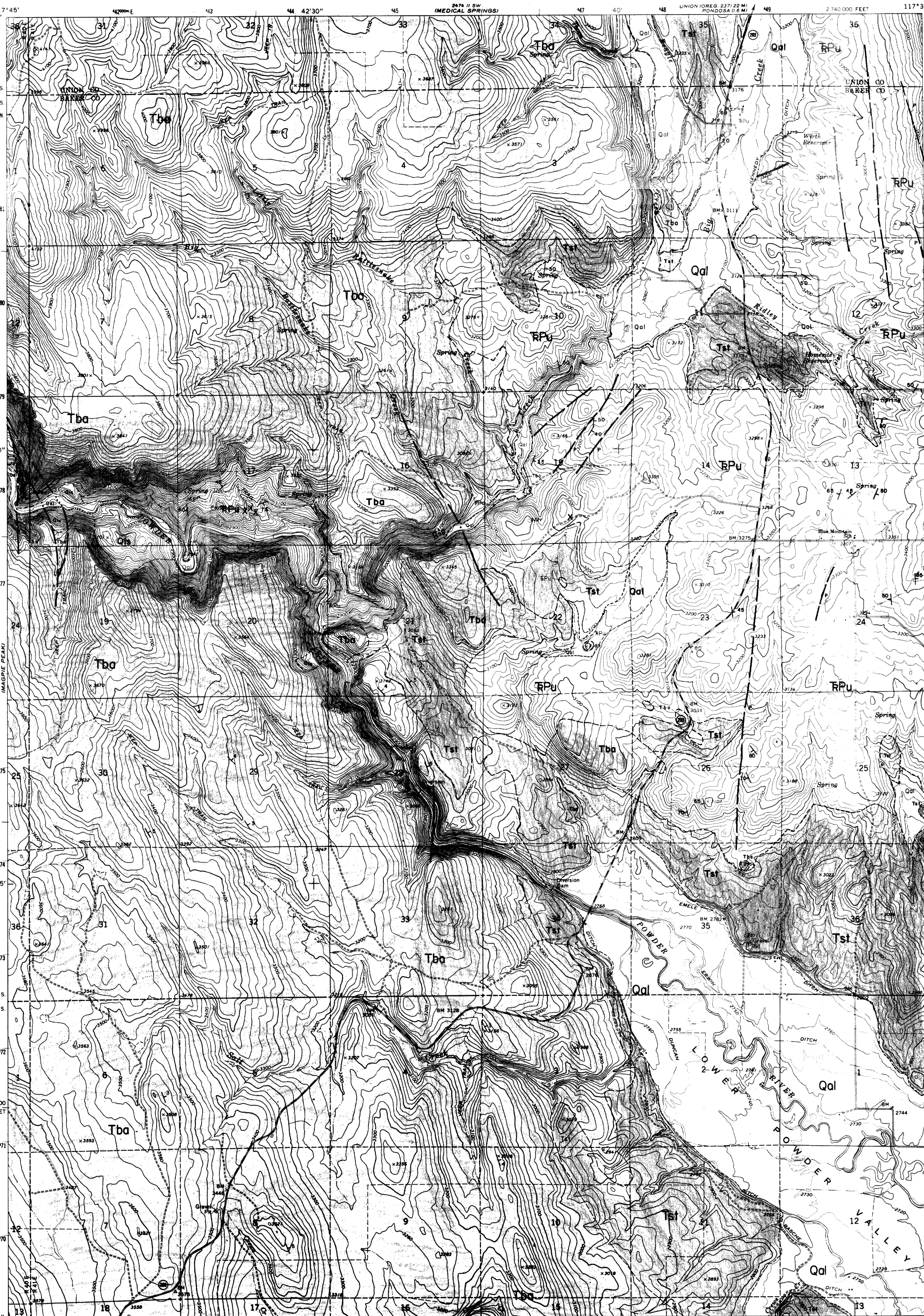
STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
R. E. CORCORAN, STATE GEOLOGIST

PRELIMINARY GEOLOGIC MAP of the KEATING NW. QUADRANGLE OREGON



Base Map from USGS 7½' 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

UTM GRID AND 1967 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

Prepared and Published by the Cartographic Section of the Department of Geology and Mineral Industries R. E. Corcoran, State Geologist, S. R. Renoud, Chief Cartographer.

ROAD CLASSIFICATION
Heavy-duty — Light-duty
Unimproved dirt
State Route

QUADRANGLE LOCATION

CHRONOLITHOGRAPH
(TIME ROCK CHART)

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

EXPLANATION

Qal Mainly valley fill and stream-channel deposits consisting of unconsolidated silt, sand, and gravel.

Qls Landslide debris.

Tst Lacustrine and fluviatile deposits: *Poorly to moderately well consolidated, white, or light shades of gray, yellow, or brown water-laid deposits of silicic ash and pumice; lesser amounts of sandstone, siltstone, and diatomite. Mostly fine grained and moderately [illegible] bedded. Mostly lacustrine; some fluvial deposits including gravel locally, particularly in the upper part of the section; [illegible] includes thin, welded and nonwelded ash-flow and air-fall tuff beds. Silicic 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 tuffs and sedimentary rocks including fluviatile gravels rich in rounded fragments of pre-Cenozoic rocks. Flows range from 10 [illegible] to 80 feet in thickness. Flow tops commonly are scoriaceous. Platy jointing and columnar jointing are locally prominent. [illegible] minerals, zeolites, calcite, common [illegible], and chalcedony are alteration products in fractures and open spaces. Upper Miocene [illegible] based on plant remains found in tuff interbeds (Gilluly, 1937).*

TRPu Volcanic and sedimentary rocks: *Clover Creek Greenstone of Gilluly (1937). Lava flows, flow breccia, agglomerate, and tuff; volcaniclastic conglomerate, breccia, sandstone, and siltstone; lesser argillite, chert, and minor limestone. Greenschist-facies metamorphism. Volcanic rocks range from spilite through [illegible]-andesite to highly silicic keratophyre [illegible] quartz keratophyre. Abundant small [illegible] 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 *(ball and bar on downthrown side)*
Concealed fault

Bedding
Strike and dip of bed
Strike of vertical bed

Prospect
Shaft
Adit

Geology by: Howard C. Brooks

Cartography by C. A. Schumacher, 1977