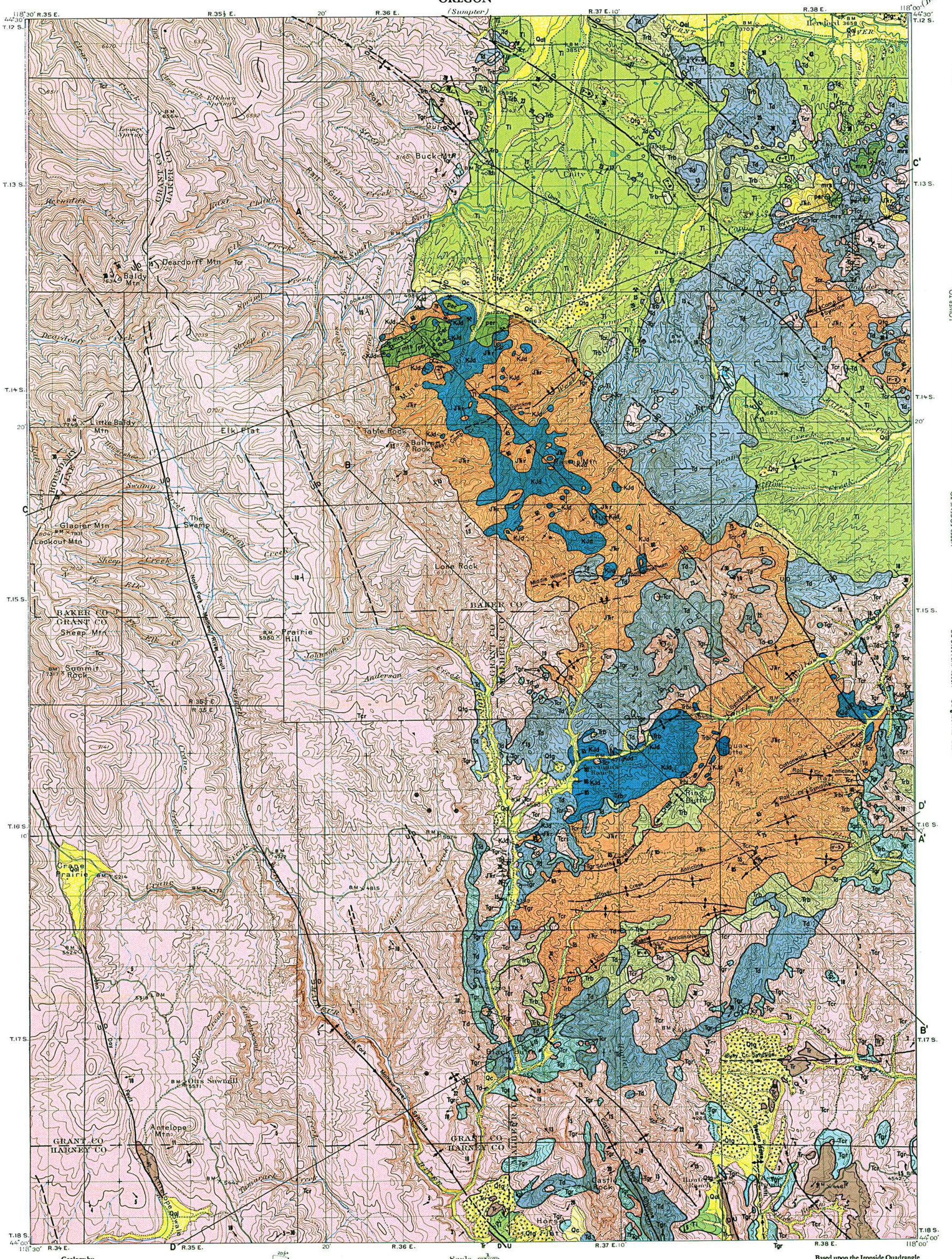
PLATE 1

GEOLOGIC MAP of the IRONSIDE MOUNTAIN QUADRANGLE OREGON



Geology by
W. D. Lowry and C. F. Wray

Scale $\frac{1}{125000}$

1 ½ 0 1 2 3 4 5 Miles

1 ½ 0 1 2 3 4 5 Kilometers

Contour interval 100 feet.
Datum is mean sea level.

APPROXIMATE MEAN DECLINATION 1906.
TRUE NORTH
MAGNETIC NORTH
20½°

Based upon the Ironside Quadrangle topographic map issued by the U. S. Geologic Survey, 1908.

EXPLANATION

RECENT

Qal — Alluvium
Silts, sands, and gravels deposited in flood plains of the Burnt and Malheur Rivers and their tributaries.

PLEISTOCENE

Qtg — Terrace Gravels
Eroded and terraced deposits of unconsolidated pebbles, cobbles, and boulders. Mostly on benches above the present flood plain of the Burnt River.

Qc — Colluvium
Accumulations of slide rock.

ANGULAR UNCONFORMITY

LOWER TO MIDDLE PLIOCENE

Ti — Idaho Group
Cream, buff, light-gray, well-bedded lake deposits of fine tuffaceous siltstone and interbedded light-gray, massive, vitric tuff. Local gravelly beds with oscillatory ripple marks. Massive pumiceous tuff, in part welded, mapped separately as Rattlesnake tuff member, Tr.

SLIGHT ANGULAR UNCONFORMITY

MIDDLE MIOCENE

Tcr — Columbia River Basalt
Lower part of series is largely dark gray basalt; upper part in western half includes lighter gray, platy basalt. Flow breccia and pillow basalt near Ironside Mountain.

DISCONFORMITY

LOWER MIOCENE

Tgr — Goodwin Ranch Tuff Breccia
Light-colored, thick-bedded to massive, tuffaceous, andesitic breccia with abundant pumice lapilli. Roundstones of Tureman Ranch Diorite occur locally at base.

MAJOR EROSIONAL AND PROBABLE

UPPER EOCENE TO LOWER OLIGOCENE

Td — Dooley Rhyolite
Varicolored rhyolitic lavas and breccias; includes black, columnar-jointed vitrophyre.

DISCONFORMITY

EOCENE

Trb, Trbi — Ring Butte Andesite
Light to dark gray, porphyritic andesitic lavas and breccias; dikes and plugs, Trbi.

MAJOR ANGULAR UNCONFORMITY

UPPER JURASSIC TO LOWER CRETACEOUS

KJd — Tureman Ranch Diorite
Light-colored, equigranular and porphyritic diorite and quartz diorite intrusives.

UPPER TRIASSIC TO MIDDLE JURASSIC

JTr — Rastus Formation
Closely folded, fracture-cleaved, gray, chlorite-bearing, limy, andesitic tuffs and rare, fine-grained, impure, quartzose sandstone.

MAJOR ANGULAR UNCONFORMITY

PRECAMBRIAN (?)

per — Ultramafic Intrusives
Peridotite, pyroxenite, and feldspathic, ultramafic intrusives with minor serpentine, chromite, and anthophyllite.

mrs — Mine Ridge Schists
Quartz-garnet, quartz-mica, hornblende, actinolite, and talc schists.

Contact
Dashed where approximately located

Alluvial contact

Axial trace of anticline, arrow indicates plunge

Axial trace of syncline, arrow indicates plunge

Axial trace of overturned fold

Postulated axial trace of fold

Strike and dip of beds

Strike and dip of overturned beds

Horizontal bed or flow

Apparent dip of bed or flow

Strike and dip of foliation—fracture cleavage in Rastus Formation, foliation in Tureman Ranch Diorite

Strike and dip of joint

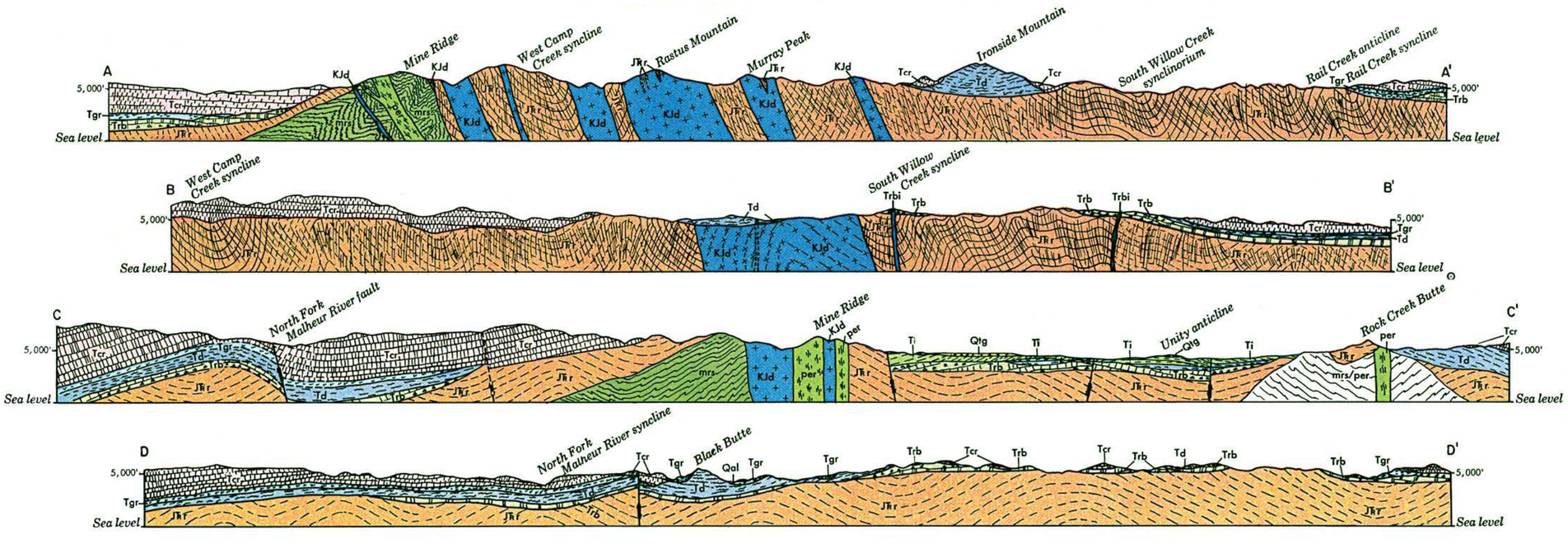
U D *Normal fault*

Mine

Prospect

F-6 *Fossil locality*

Generalized Geologic Sections



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