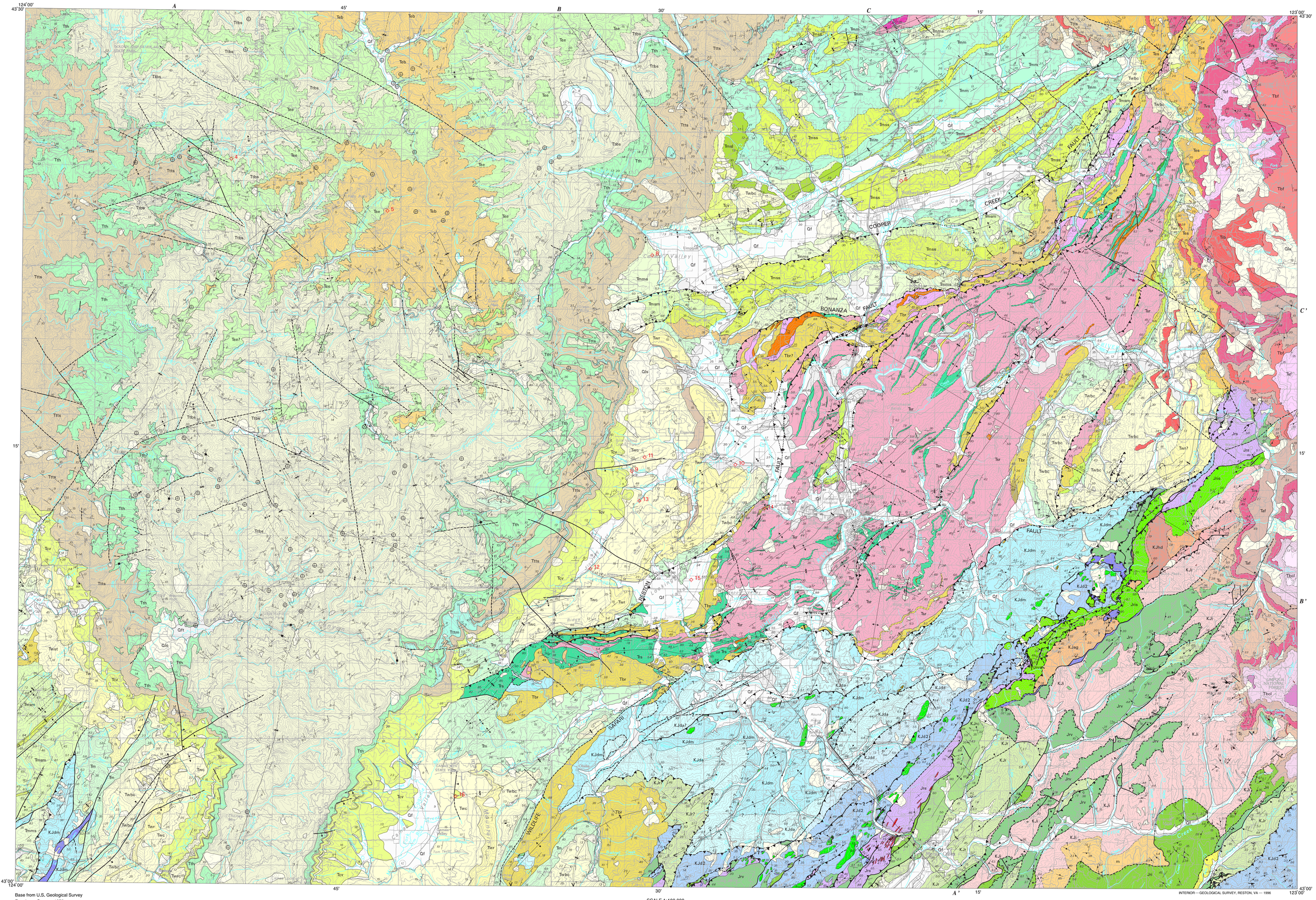
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

Prepared in cooperation with the
OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

OPEN-FILE REPORT 00-376
Version 1.0
Pamphlet accompanies map



Base from U.S. Geological Survey
Roseburg, Oregon, 1979
UTM Projection Zone 10

SCALE 1:100 000

1 0 1 2 3 4 5 6 7 8 MILES
1 0 1 2 3 4 5 6 7 8 9 KILOMETERS

CONTOUR INTERVAL 50 FEET
AREAS NOT SURVEYED IN DETAIL INDICATED BY BROKEN LINES
NATIONAL GEODETIC VERTICAL DATUM OF 1929
DEPTH CURVES IN FEET—DATUM IS MEAN LOWER LOW WATER
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
1991 MAGNETIC DECLINATION AT SOUTH EDGE OF SHEET VARIES FROM 17° TO 18° EAST

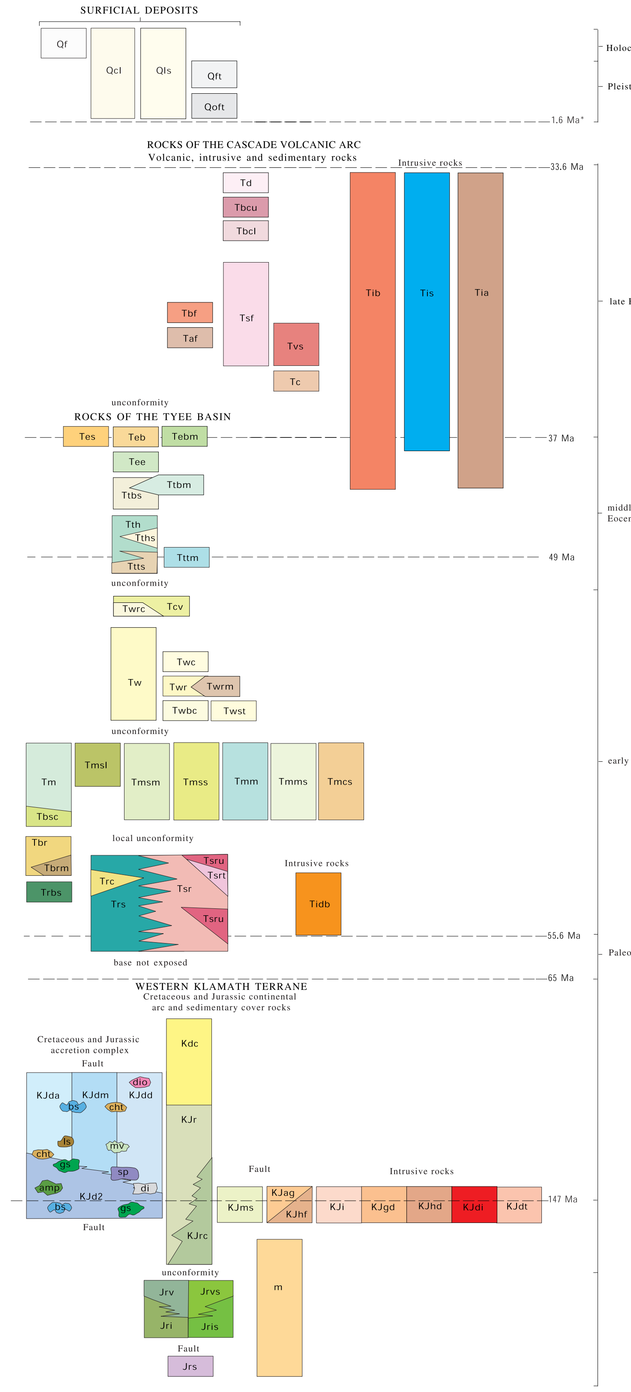
INTERIOR—GEOLOGICAL SURVEY, RESTON, VA — 1996

Geology mapped 1990-1996

Geologic field assistance by Mike Gallagher, Lars Cherichetti, Brett Smith, Cheryl Hummon, Tracey Felger, Mark Abolins and Mike Sinor

GIS by Karen Wheeler with contributions by Robert Givler, Christopher DuRoss, Johanna Fenton, Tracey Felger and Mike Sinor

CORRELATION OF MAP UNITS



*time scale from Berggren and others 1995

LIST OF MAP UNITS

SURFICIAL DEPOSITS

- Qf **Fluvial deposits (Holocene)**
- Qcl **Colluvium (Holocene and Pleistocene)**
- Qls **Landslide deposits (Holocene and Pleistocene)**
- Qfl **Fluvial terrace deposits (Pleistocene)**
- Qofl **Older fluvial terrace deposits (Pleistocene)**

ROCKS OF THE CASCADE VOLCANIC ARC
Volcanic, intrusive and sedimentary rocks

- Td **Upper dacite (late Eocene)**
- Tbcu **Tuff of Bond Creek (late Eocene)**
- Tbcl **Upper unit (late Eocene)**
- Tsf **Lower unit (late Eocene)**
- Tbf **Rhyolite and dacite flows (late Eocene)**
- Taf **Basalt of Brown Mountain (late Eocene)**
- Tvs **Andesite flows (late Eocene)**
- Tc **Volcanolithic sandstone, conglomerate, and laharic breccia (late Eocene)**
  Colestin Formation (late Eocene?)

Intrusive rocks

- Tib **Diabase and basalt intrusions (late and middle Eocene)**
- Tis **Rhyolite and dacite intrusions (late and middle Eocene)**
- Tia **Andesite dikes and sills (late and middle Eocene)**

ROCKS OF THE TYEE BASIN

- Tes **Spencer Formation (late and middle Eocene)**
- Teb **Bateman Formation (late and middle Eocene)**
- Tebm **Bateman Formation mudstone (late and middle Eocene)**
- Tee **Elkton Formation mudstone (middle Eocene)**
- Tbs **Tyee Formation (middle and early Eocene)**
- Ttbm **Baughman Member (middle Eocene)**
- Ttbm **Baughman Member mudstone (middle Eocene)**
- Tth **Hubbard Creek Member (middle and early Eocene)**
- Ths **Hubbard Creek Member sandstone (middle Eocene)**
- Tts **Tyee Mountain Member (middle and early Eocene)**
- Ttm **Tyee Mountain Member mudstone (middle and early Eocene)**

Umpqua Group (early Eocene and late Paleocene)

- Tcv **Camas Valley Formation (early Eocene)**

White Tail Ridge Formation (early Eocene)

- Tw **White Tail Ridge Formation, undivided (early Eocene)**
- Twrc **Rasler Creek tongue (early Eocene)**
- Twc **Coquille River Member (early Eocene)**
- Twr **Remote Member (early Eocene)**
- Twrm **Mudstone (early Eocene)**
- Twbc **Berry Creek Member (early Eocene)**
- Twst **Unnamed siltstone member (early Eocene)**

Tenmile Formation (early Eocene)

- Tm **Tenmile Formation, undivided (early Eocene)**
- Tmsl **Slope mudstone (early Eocene)**
- Tmsm **Turbidite sandstone and mudstone (early Eocene)**
- Tmss **Turbidite sandstone (early Eocene)**
- Tmm **Basin plain mudstone (early Eocene)**
- Tmms **Mudstone and turbidite sandstone (early Eocene)**
- Tmcs **Submarine fan channel sandstone (early Eocene)**

Bushnell Rock Formation (early Eocene)

- Tbsc **Slater Creek Member (early Eocene)**
- Tbr **Bushnell Rock Formation conglomerate (early Eocene)**
- Tbrm **Debris flow deposits (early Eocene)**

Siletz River Volcanics (early Eocene and late Paleocene)
Roseburg member (early Eocene and late Paleocene)

- Trs **Turbidite sandstone and mudstone (early Eocene and late Paleocene)**
- Trc **Conglomerate (early Eocene)**
- Trbs **Basaltic sandstone (early Eocene)**
- Tsr **Submarine basalt flows (early Eocene and late Paleocene)**
- Tsru **Subaerial basalt flows (early Eocene and late Paleocene)**
- Tsrt **Basaltic tuff (early Eocene)**

Intrusive rocks

- Tidb **Diabase (early Eocene)**

WESTERN KLAMATH TERRANE
Cretaceous and Jurassic Accretion Complex

Dothan Formation (Early Cretaceous and Late Jurassic)

- KJda **Turbidite sandstone broken formation (Early Cretaceous and Late Jurassic)**
- KJdm **Mudstone matrix melange (Early Cretaceous and Late Jurassic)**
- KJdd **Phyllitic siltstone and metagreywacke (Early Cretaceous and Late Jurassic)**
- KJd2 **Semischist and phyllite (Early Cretaceous and Late Jurassic)**
  Formation contains tectonic blocks of Early Cretaceous and Late Jurassic amphibolite (amp) **and blueschist** (bsb); **Early Cretaceous to Late Triassic(?) chert** (cht); **diorite** (di and dio); **greenstone** (gs); **Late Cretaceous Whitsett limestone** (ls); **meta-volcanic rocks** (mvs); **serpentine** (sp)

Jurassic Continental Arc Complex and Sedimentary Cover

Myrtle Group (middle Cretaceous to Late Jurassic?)

- Kdc **Days Creek Formation (middle to Early Cretaceous)**
- KJr **Riddle Formation (Early Cretaceous and Late Jurassic?)**
- KJrc **Conglomerate (Early Cretaceous to Late Jurassic?)**
- KJms **Metasedimentary rock (Early Cretaceous and Late Jurassic)**
- KJag **Augen gneiss (Cretaceous and/or Late Jurassic?)**
- KJhf **Mafic silicified hornfels (Cretaceous and/or Late Jurassic)**

Mesozoic Intrusive Complex

- KJi **Intrusive rocks (Cretaceous and/or Jurassic)**
- KJgd **Granodiorite (Cretaceous and/or Jurassic)**
- KJhd **Hornblende diorite (Cretaceous and/or Jurassic)**
- KJdi **Diorite (Cretaceous and/or Jurassic)**
- KJdt **Tectonized diorite (Cretaceous and/or Jurassic)**
- m **Metamorphic complex (Jurassic or older)**
- Jrv **Rogue Volcanics? (Late Jurassic?)**
- Jri **Mafic intrusive unit (Late Jurassic?)**
- Jrvs **Schistose Rogue Volcanics? (Late Jurassic?)**
- Jris **Schistose mafic intrusive unit (Late Jurassic?)**
- Jrs **Serpentinized ultramafic rock (Jurassic?)**

Contact

60 — **Fault**—Dashed where inferred; dotted where concealed; ball on downthrown side

30 — **Thrust fault**—Teeth on upper plate; dip of fault and slip direction shown where exposed

15 — 15 — **Detachment fault**—Dashed where inferred; teeth on upper plate, normal displacement

Strike and dip of beds

- 20 **Inclined**
- 60 **Overturned**
- **Horizontal**

Strike and dip of foliation; arrow shows lineation

- 20 **Inclined**
- 85 **Vertical**
- **Crenulation**
- **Minor fold axis**

Fold axis

- **anticline**—upright; overturned
- **syncline**—upright; overturned
- **Flow direction from lava tubes and pillow elongation**
- L **Lake**
- **Exploratory well, see Table 1**
- **Apparent dip of strata on cross section**

GEOLOGIC MAP AND DATABASE OF THE ROSEBURG 30 x 60' QUADRANGLE, DOUGLAS AND COOS COUNTIES, OREGON

By

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