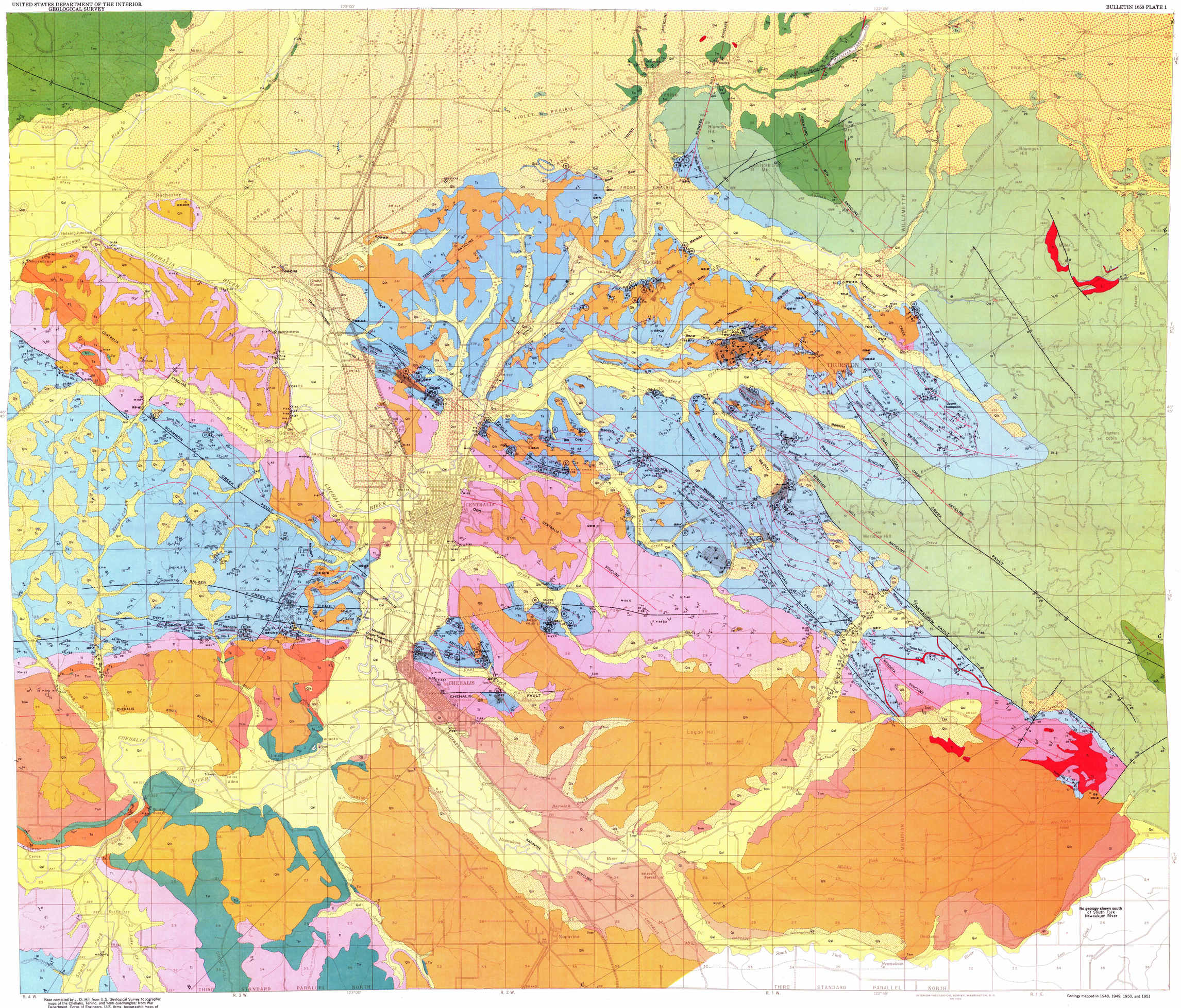

EXPLANATION

SEDIMENTARY AND EXTRUSIVE IGNEOUS ROCKS

QUATERNARY

Recent

Qal — Alluvium
Including low-level terrace, fluvial, and marsh deposits

Pleistocene and Recent

Qls — Landslide debris
Debris of Tertiary and Quaternary rocks

Pleistocene

Qvo — Vashon drift
Outwash sand, gravel, and marginal terrace deposits, Qvo; till, Qvt

Qt — Terrace deposits
Sand and gravel, unconsolidated

Qlh — Logan Hill formation
Partly weathered gravel and sand, with some till

TERTIARY

Miocene and Pliocene(?)

Tnm — Nonmarine sedimentary rocks
Poorly consolidated siltstone, sandstone, and conglomerate; contains fossil plants

Miocene

Ter — Columbia River(?) basalt
Dark-gray aphanitic basalt flow

Ta — Astoria(?) formation
Massive pebbly sandstone, with interbedded conglomerate and fossil wood

Eocene and Oligocene

Tl — Lincoln formation of Weaver
Siltstone, massive and tuffaceous, fossiliferous and concretionary. Only the innermost part is Eocene in age. Includes a basaltic sandstone in lower part

Eocene

Ts — Skookumchuck formation
Arkosic sandstone, siltstone, bone, and coal beds; some basaltic sandstone and conglomerate

Tn — Northcraft formation
Andesite and basalt lava flows, pyroclastic rocks, basaltic conglomerate, and sandstone

Tm — McIntosh formation
Tuffaceous marine siltstone and sandstone. Includes a volcanic sequence composed of basalt lava flows and breccia, Tmv

INTRUSIVE IGNEOUS ROCKS

Oligocene

Ti — Intrusive igneous rocks
Gabbro porphyry and porphyritic basalt

Contact
Long dashes where approximately located; short dashes where indefinite

Fault
Dashed where approximately located; dotted where concealed. u, upthrown side; D, downthrown side

Subsurface fault
Blocks on downthrown side, dotted where concealed

Axis of anticline, showing plunge
Dashed where approximately located; dotted where concealed

Axis of syncline, showing plunge
Dashed where approximately located; dotted where concealed

Inferred outcrop of principal coal beds
Dotted where concealed. 50, 29, reference numbers for measured coal sections

Strike and dip of beds

Strike and dip of overturned beds

Horizontal beds

Vertical beds

Direction and amount of apparent dip
Solid arrowhead where observation is in mine

Abandoned rock quarry

Sand or gravel pit

Strip pit for coal

Coal prospect

Portal to coal mine and underground workings; 31, map reference number

Vertical shaft

Rock tunnel

Area reported to be mined out

Test hole for oil and gas

Fossil locality
Fossil locality at point of strike and dip observation
f—Foraminifera
m—Megafossils
p—Plants
9—Reference number

Water well
CW—Centralia Water Department drill hole
FW—Foote water well

U.S. Geological Survey drill hole

Great Western Coal Co. drill hole

Thompson Creek Coal Co. drill hole

Mendota Coal Co. drill hole

Washington Union Coal Co. drill hole

Base compiled by J. D. Hill from U.S. Geological Survey topographic maps of the Chehalis, Tenino, and Yelm quadrangles; from War Department, Corps of Engineers, U.S. Army, topographic maps of the Gate and Meskill quadrangles; and from maps supplied by the Weyerhaeuser Timber Co. Culture revised from U.S. Army Air Force aerial photos, 1946, and from U.S. Geological Survey topographic maps of the Centralia and Salkum quadrangles

Geology mapped in 1948, 1949, 1950, and 1951

GEOLOGIC MAP OF THE CENTRALIA-CHEHALIS DISTRICT, WASHINGTON

Scale 1:48,000

1 0 4 MILES