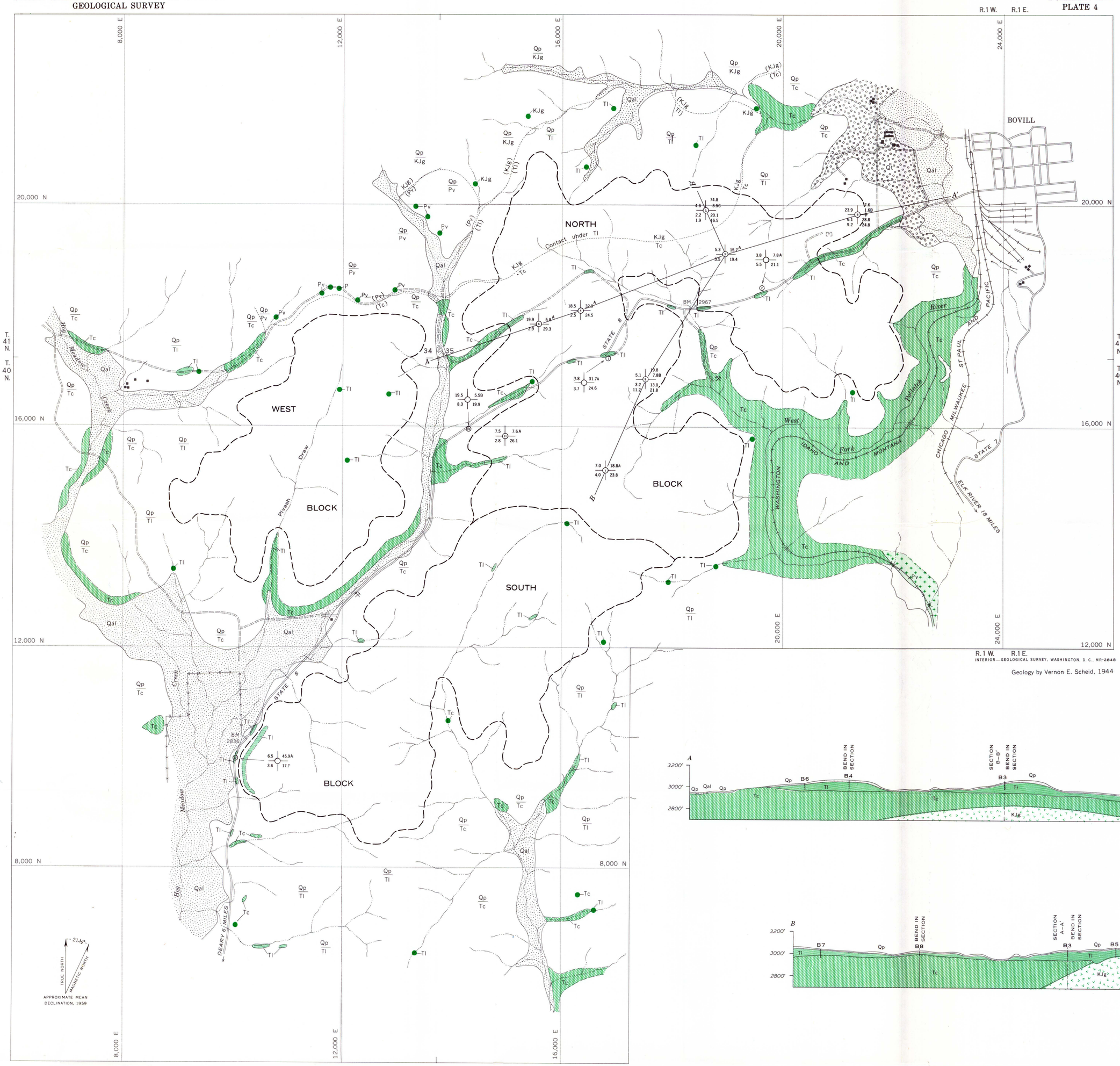
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BULLETIN 1091
PLATE 4




## EXPLANATION

**Qal** — Alluvium

**Qt** — Terrace deposits

**Qp** — Palouse formation
*Massive brown and reddish-brown loess; stratified in some places*

**Tl** — Latah formation
*Chiefly clay, with some beds of sand and gravel*

**Tc** — Columbia River basalt
*Massive flows vesicular lava, volcanic breccia, and pillow lava. Well-defined columnar structure in many places. Upper flows, Tcu; lower flows, Tcl. Clay derived from the weathering of basalt is found in the upper part of the lower flows*

**KJg** — Granodiorite and related intrusive rocks
*Light-gray, medium-grained granodiorite predominates over small amounts of quartz monzonite, tonalite, granite, and syenite. Considered to be part of the Idaho batholith*

**Pv** — Volcanic rocks
*Pink, gray, and dark-purple porphyritic lava and purple to black flow breccia*

QUATERNARY · TERTIARY · JURASSIC OR CRETACEOUS · PERMIAN(?)

Tl — Outcrop too small to map

Contact
*Dashed where approximately located*

(KJg) / (Tc) — Concealed contact
*Contact is beneath the Palouse and (or) Latah formation*

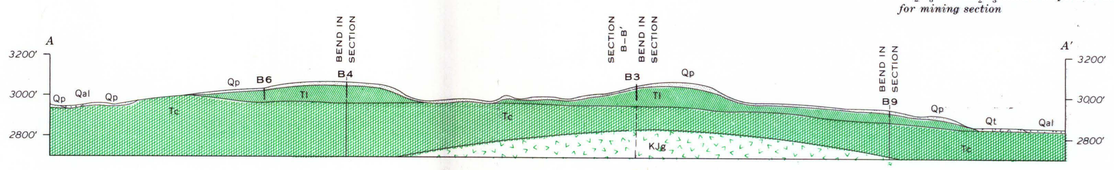
Outline of clay blocks

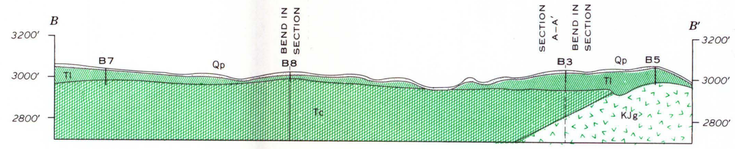
Qp / Tl — Double symbols indicate inferred bedrock underlying the Palouse formation

Gravel pit

Overburden, in feet | Mining section, in feet, A, B, C
Available $Fe_2O_3$ | Available $Al_2O_3$

Drill hole
*Drill-hole number, in circle refers to logs and assay data. Mining section shows thickness of clay, in feet, having 20 percent or more $Al_2O_3$ and 5 percent or less $Fe_2O_3$. No figures given where section is less than 5 feet thick or contains less than 20 percent $Al_2O_3$ or more than 5 percent $Fe_2O_3$. A, transported clay; B, clay derived from basalt; C, clay derived from granodiorite. When two lines of figures are given, the upper line is for transported clay and the lower line is for clay derived from basalt, except when indicated to be derived from granodiorite. Available $Fe_2O_3$ and $Al_2O_3$ shown in percent and are average for mining section*




Geology by Vernon E. Scheid, 1944

R.1 W. R.1 E.
INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C., MR-2848

# GEOLOGIC MAP OF THE BOVILL CLAY DEPOSIT, LATAH COUNTY, IDAHO

Scale 1:12 000

1000 0 1000 2000 3000 4000 5000 Feet