EXPLANATION

ALLUVIUM
Silt, sand, gravel, and occasional cobbles, overlying glacial deposits. Thicker than 15 m.

COLUMBIA RIVER BASALT
Black to dark-gray fine-grained basaltic lava flows, and breccia, commonly weathered to reddish-brown crumbly basalt and clay minerals. Crops out east of map area.

BASALTIC INTRUSIVES

OLIGOCENE MARINE SEDIMENTS UNDIFFERENTIATED
Interbedded mudstone, siltstone, and light-gray to olive-gray arkosic sandstone, occasionally calccreous and concretionary. These sediments are differentiated in the northern part of the mapped area and include:

Stilliton Formation
Interbedded mudstone, siltstone, and arkosic sandstone, occasionally containing fossil fragments of uppermost Eocene to early Oligocene age.

Pittsburg Bluff Formation
Consists of thin-bedded to massive sandstone and mudstone.

SPENCER FORMATION
Thin-bedded to massive, fine-grained, poorly sorted, light-gray and light-yellow to moderate olive brown, fossiliferous, micaceous, arkosic sandstone, occasionally pebbly, cross-bedded, carbonaceous, calcareous, and concretionary. Thin beds of mudstone only occur in the uppermost part of the formation.

YAMHILL FORMATION
Interbedded mudstone, siltstone, and basaltic sandstone, occasionally with thin-bedded arkosic sandstone and shale.

TILLAllDOK VOLCANICS
Complexly interbedded basalt flows, ash flows, tuff, breccia, and sandstone and shale.

GEOLOGIC SYMBOLS

Contact
Fault
Strike and dip
Quarry
Sample locality
Fossil locality
Current direction

SCALE 1:24000

CONTOUR INTERVAL 20 FEET

Plate I
GEOLOGIC MAP OF PORTIONS OF CENTRAL NORTH YAMHILL COUNTY AND SOUTHERN WASHINGTON COUNTY

GEOL OGY BY FATHI A. AL-ALAZZABY