



EXPLANATION

UNCONSOLIDATED DEPOSITS

Recent

- Qal** Younger alluvium
(Along the Willamette River and its principal tributaries from the east, reddish-brown gravel and sand with some silt; thin and porous at most places. Along smaller tributaries from the east and tributaries from the west, poorly sorted sand and gravel with much silt; perviousness highly variable)
- Qoa** Older alluvium and related deposits
(In the region south of Salem, terraces and benches of porous gravel and sand to sandy silt; flow toward the north. In the region north of Salem, reddish-brown fine sand and silt enclosing pervious coarse sand and gravel of low permeability; several intertonguing bodies of gravel and sand along edge of valley plain)
- Qt** Terrace deposit and related alluvial material
(Terrace deposit: poorly sorted coarse gravel and sand, thoroughly decomposed for several feet below the land surface. Alluvial material: gravel, sand, and silt, in some places stratified and slightly cemented. In large part of low perviousness)

Quaternary

- Qu** Older alluvium and terrace deposits undivided

Consolidated Rocks

- Tu** Sedimentary and volcanic rocks, undifferentiated
(Shale and earthy sandstone of marine and nonmarine origin, buff and buff-colored sandstone, and nonvolcanic rocks of Tertiary age (T₁). In northeastern part of area, uppermost rocks are nonvolcanic and fragmental volcanic, and slightly consolidated sandstone and conglomerate, in part probably of Pleistocene age (C₁). Stratigraphy and water-bearing properties are described in text)

Well, nonflowing
#507

Well, flowing
#225

Well, unsuccessful or abandoned
(Numbers refer to description in text)

Contour lines showing approximately the height of the water table on November 1, 1935, in feet
(Datum is mean sea level; contour interval 10 feet; dashed contours are hypothetical. Water is unappreciated or perched locally in northern part of the valley)

Contour lines showing approximately the height to which water will rise in tightly cased deep wells, in feet above mean sea level
(Distinct from water-table contours only in the northern part of the valley)

This explanation applies to the northern and southern parts of the map

GEOLOGIC MAP OF THE NORTHERN PART OF THE WILLAMETTE VALLEY, OREGON

Shows ground-water levels in 1935 and location of typical wells

Scale 1:125,000

0 10 Miles

1942

Base from topographic maps by U. S. Geological Survey and from county soils maps by U. S. Bureau of Soils; principal roads corrected to 1938.

Geology by A. M. Fieser, in 1928-29. Water-level contours based on data by U. S. Geological Survey in 1928-30 and by U. S. Engineer Department in 1935-36.