

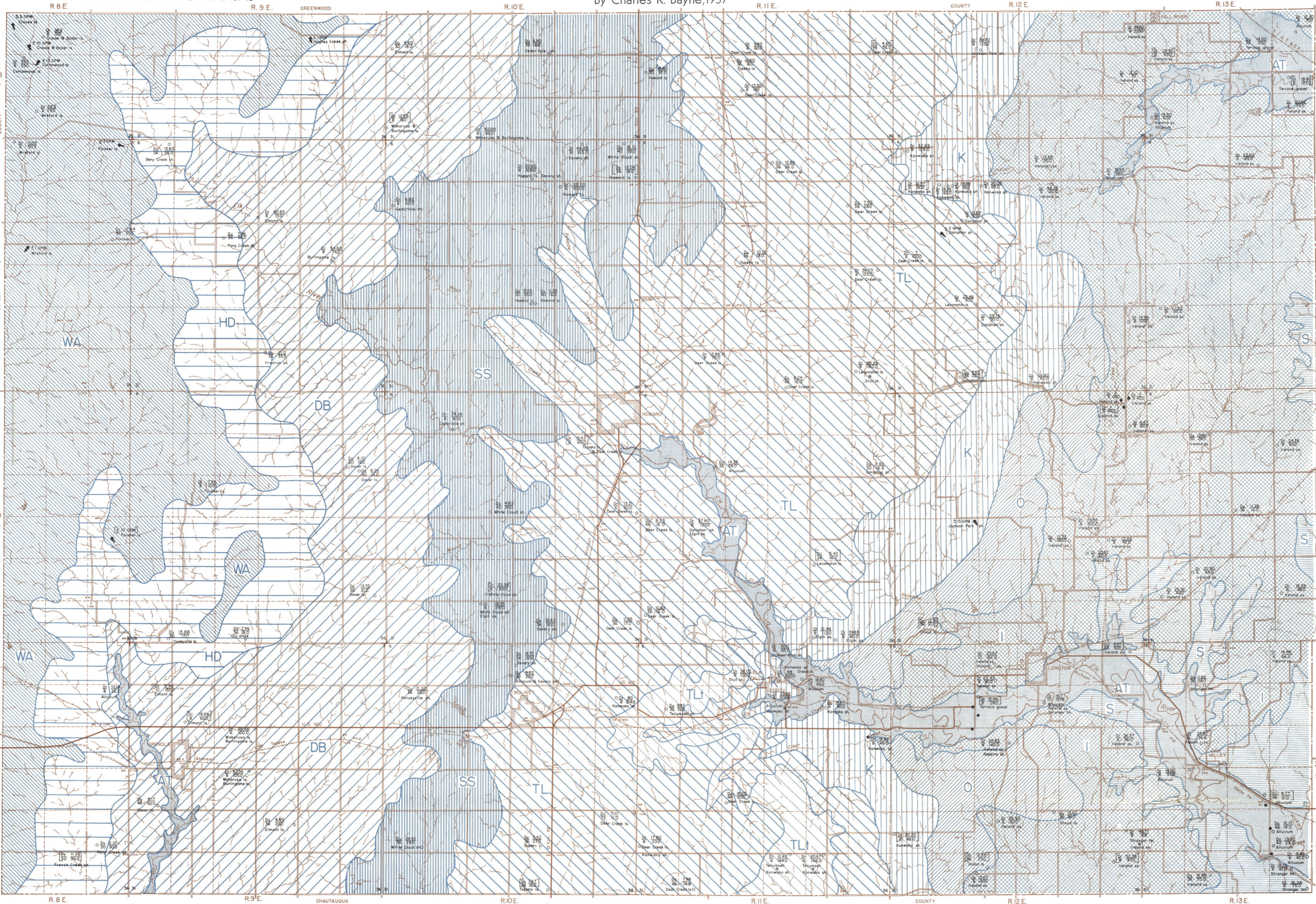
Ground-Water Resources of Elk County, Kansas

STATE GEOLOGICAL SURVEY OF KANSAS

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VOLUME 14, PLATE 3

compiled 1949



EXPLANATION

- Domestic and stock well
 - Flowing well
 - ⊙ Spring
 - Test hole
- Dr. (a) 0.05 (c) [brackets indicate water Element Lx (a)]
 Dr. (b) 0.05 (c) [brackets indicate water Element Lx (a)]
- (a) Type of well Dr, drilled; Du, dug
 - (b) Diameter of well, in inches
 - (c) Depth to water level below land surface, in feet. Reported depth shown in nearest tenth of foot; measured depth shown in nearest hundredth of foot
 - (d) Depth of well below land surface in feet. Reported depth shown to nearest foot; measured depth shown to nearest tenth of foot
 - (e) Principal aquifer or aquifers

Ground-Water Regions

- Region WA**
The aquifers of this area are chiefly the Wreford limestone and the limestones of the Council Grove group. Water of good quality is obtained at depths ranging from 10 feet to as much as 120 feet. Yields of 20 to 50 gallons a minute can be developed in the Wreford. Yields from limestones of the Council Grove group are generally small.
- Region HD**
Sandstones and sandy shales of the Admire and upper Wabaunsee groups are the principal aquifers of this region. Wells generally range from 10 feet to 35 feet in depth. Yields are small and the quality of the water not as good as from the Wreford-American region. Majority of wells are dug wells for reservoir space.
- Region DB**
Principal aquifers of this region are the thin limestones of the middle Wabaunsee group. Depth of wells ranges from 20 feet to 150 feet. Yields of wells are generally small and the quality of the water good.
- Region SS**
Principal aquifers of this region are sandstones and sandy shales in the lower part of the Wabaunsee group. Wells are generally shallow and yields are small. Quality of water in this region ranges from good to poor.
- Region TL, TLt**
Limestones of the Topeka, Deer Creek, and Leocompton formations are the principal aquifers of this region. Wells range in depth from 20 feet to as much as 150 feet. Yields are generally small and water is suitable for domestic uses although generally hard. Sandstones in upper part of the Tecumseh shale yield water to wells in the central and southern part of the region. Water is generally soft but sometimes high in fluorides.
- Region K**
Sandstones of a channel nature are the principal aquifers of this region. Wells range in depth from 30 feet to as much as 200 feet. Yields are moderate and quality of water generally good.
- Region O**
The Plattsmouth member of the Oread limestone is the principal aquifer of this region. Some water may be obtained from sandstones of the Snyderville shale in the eastern part of the region. Depth of wells ranges from 25 feet to 125 feet. Yield of wells is small and quality of the water generally is good.
- Region I**
The Ireland sandstone is the principal aquifer of this region. Depth to water ranges from 30 feet to as much as 200 feet. Yield of wells is moderate and quality of the water good.
- Region S**
Sandstones and sandy shales of the Stranger-formation are the principal aquifers of this region. Depths to water range from 20 feet to as much as 100 feet. Yields of wells are generally small and the quality of water poor.
- Region AT**
Sands and gravels in the Alluvial and Terrace deposits of the stream valleys are the principal aquifers of this region. Thickness of these deposits ranges from a few feet to about 40 feet. Yields of wells are large to moderate and the quality of the water is generally good.