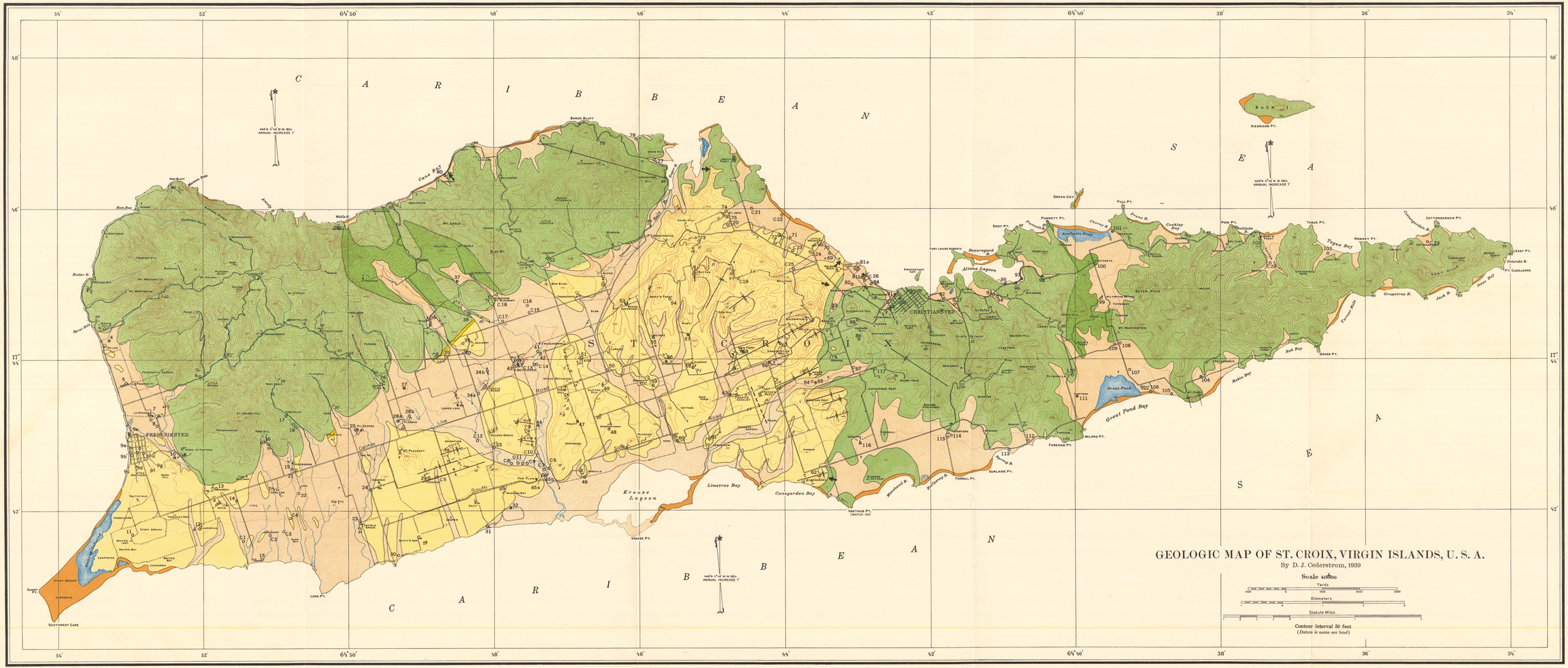

GEOLOGIC MAP OF ST. CROIX, VIRGIN ISLANDS, U. S. A.

By D. J. Cederstrom, 1939

Base from U. S. Coast and Geodetic Survey
Chart No. 3242. Revised April 1939

EXPLANATION

QUATERNARY — Recent

Beach deposits
(Largely calcareous sand. Small areas of fossil reef included. Yields small amounts of rather highly mineralized water to a few wells)

Alluvium
(Clayey and sandy fill of local origin. Arkosic areas underlain by diorite rocks and marly areas underlain by Tertiary rocks. Maximum thickness known is 80 feet. Yields ample water to dug and drilled wells pumped by wind power. Several developed wells obtain more than 40 gallons a minute from the alluvium. Mineralization of water variable)

TERTIARY — Miocene

Kingshill marl
(Relatively soft white to buff homogeneous marl, thin-bedded white limestones, and limy rocks of coral-reef origin in which stratification is lacking. In a few places small pebbles included in marly or limestone rocks. Maximum thickness greater than 600 feet. Supplies many wells with small quantities of water. Generally a poor water-bearing formation. Mineralization of the water moderate to high)

Oligocene

Jealousy formation
(Gray clay of maximum thickness greater than 1400 feet. Contains detrital material in places. Basal limestone conglomerate and other minor conglomeratic beds are included. Basal conglomerate makes the only known outcrop of this formation. Not a water-bearing formation)

Early Tertiary or late Cretaceous

Diorite intruded into Mount Eagle volcanics
(Gray coarse-grained rock with granitic texture. Black fine-grained selvage included. Weathered portion appears to be a very good water bearer. Mineral content moderate)

CRETACEOUS — Upper Cretaceous

Mount Eagle volcanics
(Water-sorted volcanic tuffs, dark marine limestones, volcanic breccias, and minor (?) volcanic flows. Supplies small quantities of water to many wells. Somewhat larger supplies may be available. Mineral content moderate)

Known fault

Inferred fault

Axis of syncline

Axis of anticline

Strike and dip of beds

Strike of vertical beds

Observed outcrop

Well
(Number referred to in table of well records)

Spring