U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

OPEN-FILE REPORT 2007-1089
SHEET 1 of 8
Pamphlet accompanies map

Geologic linework in Universal Transverse Mercator projection, North American datum 1983, zone 4

Topographic base and bounding latitude-longitude ticks from U.S. Geological Survey, Niihau North and Niihau South (1984), 1:25,000. Transverse Mercator projection based on Clarke spheroid of 1866. Old Hawaiian datum

Grid on map from UTM zone 4, International spheroid

Base, intended for visual reference only, is fitted to GIS-based coastline by inspection

SCALE 1:100 000

0 4 8 KILOMETERS

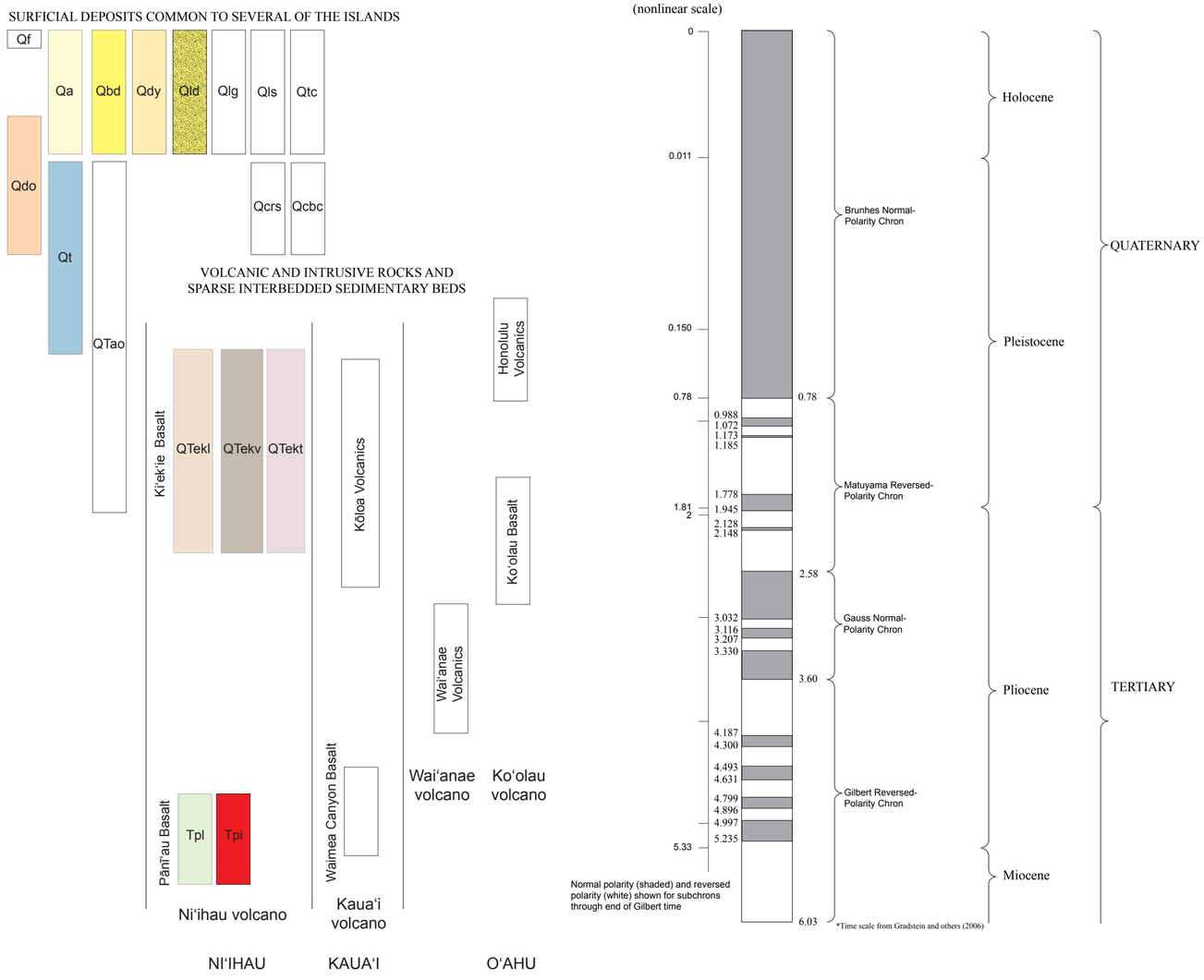
CONTOUR INTERVAL 10 METERS

Geology from Stearns (1947)

Digital compilation by S.E. Watkins and K.M. Brunt. Fitted to modern topographic base by S.E. Watkins, 2004

CORRELATION OF MAP UNITS

[Boxes without color show ages of correlative stratigraphic formations on adjacent islands not depicted on this map]



LIST OF MAP UNITS ON SHEET 1 (THIS MAP)

See explanatory pamphlet for complete descriptions

SURFICIAL DEPOSITS COMMON TO SEVERAL OF THE ISLANDS

Qa **Alluvium (Holocene)**

Qbd **Beach deposits (Holocene)**

Qdy **Younger dune deposits (Holocene)**

Qld **Lake deposits (Holocene)**

Qdo **Older dune deposits (Holocene and Pleistocene)**

Qt **Tephra (Pleistocene)**

Concordant to discordant, probably disconformable

VOLCANIC AND INTRUSIVE ROCKS ON THE ISLAND OF NI'IHAU

Ki'eki'e Basalt (Pleistocene and Pliocene)—Divided into:

QTekl **Lava flows**

QTekv **Vent deposits**

QTekt **Tuff**

Concordant to discordant, probably disconformable

Pāhi'au Basalt (Pliocene and Miocene)—Divided into:

Tpl **Lava flows**

Tpi **Intrusive rocks**

—— **Contact**—Approximately located

—— Dike—Showing trend of intrusions in unit Tpi. Depiction partly schematic owing to exposure mostly in cliffs

× **Fossiliferous marine limestone occurrences**—Showing two sites

Geologic Map of the State of Hawai'i, Sheet 1—Island of Ni'ihau

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Available on World Wide Web at http://pubs.usgs.gov/of/2007/1089/