

GEOLOGY GENERALIZED FROM HOARE AND COONRAD (1978)

SURFICIAL DEPOSITS

AND METAMORPHIC ROCKS

$\boxed{G_1}$ } PRIMARY/SECONDARY } or TERTIARY

$\boxed{T_1} \boxed{T_2} \boxed{T_n}$ } TERTIARY

Ka
Late Cretaceous
Maastrichtian ?
CRETACEOUS

[illegible]

Jk	Jva
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 Middle to Lower
Upper Jurassic

JURASSIC

Jb	Jam	Jt
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 JURASSIC

Lower Cretaceous MZPz MESOZOIC

Pzss } PALEOZOIC
 Pzmg } PALEOZOIC

DESCRIPTION OF MAP UNITS

Qu UNCONSOLIDATED SEDIMENTARY DEPOSITS

Q1a	TORJAK BASALT
QTb	SEMI-CONSOLIDATED MARINE BEACH SEDIMENTS

K₆ BUCKIA RIDGE (GRAYWACKE) - Chiefly interbedded calcareous graywacke, siltstone, and coal.

Keg GRAYWACKE AND CONGLOMERATE - Marine graywacke, siltstone, and conglomerate; commonly calcareous and fossiliferous; tuffaceous and tuffaceous sediments commonly laminated.

Jvb VOLCANIC AND SEDIMENTARY ROCKS = Andesitic, trachytic, and basaltic flows and breccias and volcanogenic sedimentary rocks

Volc VOLCANIC AND SEDIMENTARY ROCKS (Upper Triassic) - Locally differentiated marine unit of cherty rocks, siltstone, claystone, shale, sandstone, and conglomerate.

91 Limestone (Famian) - Locally differentiated this unit of marine limestone; generally to has strong fetid odor

gcl MARBLEIZED LIMESTONE - Locally differentiated

Tim MAFIC INTRUSIVE ROCKS - Diabase, basalt, dioritic, and gabbroic dikes and sills locally

Jd GABBROIC ROCKS - Commonly shows compositional layering and generally associated with ultramafic rocks.

rocks, and gabbro altered by greenschist facies metamorphism and calcium metasomatism

--- Contact. Known, approximately located, gradational, and inferred. Most contacts between are probably faults

- - - Fault or fault zone. Dashed where approximately located, inferred, or concealed

RED MOUNTAIN ULTRAMAFIC BODY

GEOCHEMICAL SAMPLE SITES

★ CONCENTRATE (OVERSTREET, AND OTHERS, 1973)

⊙ BEACH AND STREAM SEDIMENTS (BERRYHILL 1963)

- STREAM DRAINAGE SEDIMENT (CLARK, GRYBECK, HESSIN, AND OTHERS, 1970)

ABUNDANCE

PARTS PER MILLION (PPM)

PERCENTILE VALUE OR GREATER IN TWO OR MORE
GEOCHEMICAL DETERMINATIONS AS SHOWN IN HISTOGRAMS
(SHEET 1)

△ OR GREATER CONCENTRATIONS DETERMINED IN
STREAM-DRAINAGE SITE SAMPLES ARE SHOWN WITH
HISTOGRAMS (SHEET 1)

DISCUSSION OF GEOCHEMISTRY

ABUNDANCE OF CHROMIUM AS GEOCHEMICALLY DETERMINED IN VARIOUS
SAMPLE MEDIA COLLECTED FROM LOCATIONS THROUGHOUT THE GOODNEWS AND
HAGEMASTER ISLAND QUADRANGLES REGION. SHEET 1 COVERS THE ENTIRE

ARE SIMILAR ON BOTH SHEETS. DATA PRESENTED HAVE BEEN COMPILED FROM ANALYSES AND LOCATIONS REPORTED BY BARNES AND OTHERS (1978) REBBYHILL (1062), CLARK CRYSTOK, GREENWOOD, AND STUBBS (1971).

(1973).

THE RESPECTIVE SAMPLE POPULATIONS (BETWEEN 800 AND 900 SAMPLES) APPEAR TO PROVIDE REPRESENTATIVE CONCENTRATION STATISTICS. MAN-

SARILY ANOMALOUS (SEE HISTOGRAM OF ROCK ANALYSES DATA FROM RED MOUNTAIN ULTRAMAFIC BODY ON SHEET 2). ANALYSES OF OLIVINE CRYSTALS

IZED GEOLOGIC MAP DATA INCLUDED IN SHEET 1, THE MORE DETAILED GEOLOGIC MAP OF THE REGION (HOARE AND COONRAD, 1978), AND MERTI REPORTS (1940, 1960, 1976). OTHER RELEVANT LITERATURE

This report is preliminary and has not been edited or reviewed for

