



LIST OF MAP UNITS

QUATERNARY SEDIMENTARY ROCKS

Qu UNDIVIDED QUATERNARY DEPOSITS

TERTIARY VOLCANIC ROCKS

Tb BASALT FLOWS

UPPER PROTEROZOIC TO LOWER PALEOZOIC  
 VOLCANIC AND SEDIMENTARY ROCKS

j JIBALAH GROUP

UPPER PROTEROZOIC VOLCANIC  
 AND SEDIMENTARY ROCKS

SHAMMAR GROUP(?)

sv Undivided silicic volcanic rocks

cgl Conglomerate

b Basalt

HULAYFAH GROUP

hu Undivided basalt, andesite, and sedimentary rocks

hw Wacke

hb Basalt

LOWER PROTEROZOIC INTRUSIVE ROCKS

gb GABBRO

gph GRANOPHYRE

ga ALKALI GRANITE

g UNDIVIDED GRANITE

qd QUARTZ DIORITE

d MICRODIORITE

FAULT-ZONE ROCKS

(Stratigraphic relationships unknown)

mt HIGHLY DEFORMED SILICIC VOLCANIC ROCKS

mw METAWACKE

mb METABASALT

a AMPHIBOLITE

cg CUMULUS GABBRO

um UNDIVIDED ULTRAMIFIC ROCKS

EXPLANATION OF MAP SYMBOLS

- CONTACT--Dashed where approximate, dotted where concealed
- FAULT--Showing dip; dotted where concealed; arrows show direction of strike slip
- 50 STRIKE AND DIP OF BEDS--Inclined, showing inclination
- 70 STRIKE AND DIP OF SPINEL FOLIATION--Inclined, showing inclination
- 85 STRIKE AND DIP OF FOLIATION
- Inclined, showing inclination
- Vertical
- X 710 LOCATION OF GEOCHRONOLOGY SAMPLE--Showing age in millions of years
- 576 LOCATION OF GEOCHEMISTRY SAMPLE--Showing last three numbers of six-digit number. Numbers preceded by "x" have a sample number prefix of 227; all others have a sample number prefix of 206

LITHOLOGY

Marble

This report has not been edited or reviewed for conformity with U.S. Geological Survey standards and nomenclature.

GEOLOGIC MAP OF THE HULAYFAH AREA, KINGDOM OF SAUDI ARABIA

TECTONIC HISTORY OF THE NORTHERN NABITAH FAULT ZONE, ARABIAN SHIELD, KINGDOM OF SAUDI ARABIA

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