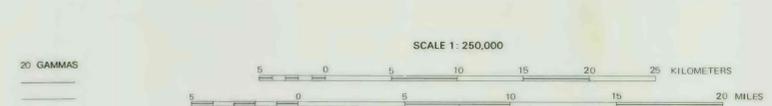


Original surveys supervised by B.R.G.M.
1:250,000 assembly by the Rhotifex Geological Mission, 1980.
For survey details see Airborne Magnetometer and Scintillation Counter
Survey Reports of 1961-1962, 1965-1966, 1966-1967.

CONTOUR INTERVAL 20 GAMMAS
500 GAMMA CONTOUR
100 GAMMA CONTOUR
20 GAMMA CONTOUR
MAGNETIC LOW
RADIOMETRIC CONTOUR
FIDUCIAL POINTS
FLIGHT LINES

LEGEND



MAGNETIC INTERPRETATION OF THE WADI AR RIKA QUADRANGLE, SHEET 22G

by
Andrew Griscom
1982

Magnetic interpretation on a Universal Transverse Mercator projection. Geology is mosaicked to a UTM grid but geologic base adapted from lithologic maps prepared by the Rhotifex Geological Mission are on Lambert Conformal projection.
Geologic base and Geologic Explanation adapted from Barnes and Johnson (1960)

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.

EXPLANATION

- MAGNETIC INTERPRETATION: Boundary between rock units of different magnetic properties... M, R, GGR, B, Z, ZR, 60, Linear magnetic anomaly probably caused by a dike.
- INTRUSIVE ROCKS AND COMPLEXES: Alkalic granite, Granite, calc-alkaline granite, quartz monzonite, Granodiorite, Heterogeneous granitic rocks, Diorite and quartz diorite, Undifferentiated gabbro and diorite, Gabbro, Biotite granite, Ultramafic rocks, Graphic, microgranite porphyry, quartz porphyry, and granophyre, Syntectonic granitic rocks, Migmatite zones, Extrusive-intrusive complex of ultramafic to mafic composition.

LAYERED ROCKS 1

- PREDOMINANTLY VOLCANIC ROCKS: proximal volcanic sequences, Undifferentiated metavolcanic rocks, Metavolcanic rocks of basaltic to andesitic composition, Metavolcanic rocks of dacitic to rhyolitic composition, Agglomerate and breccia.
- UNDIFFERENTIATED VOLCANIC-SEDIMENTARY ROCKS: distal volcanic sequences, Mixed metavolcanic and metasedimentary rocks.

LAYERED ROCKS 2

- Strongly metamorphosed and deformed; original volcanic and sedimentary character blurred or destroyed. Quartzo-feldspathic schist, Biotite schist, Chlorite-sericite schist, Amphibolite, Biotite-hornblende-garnet gneiss, Amphibolite, and biotite-hornblende schist, Heterogeneous paragneiss.

MINERALIZATION

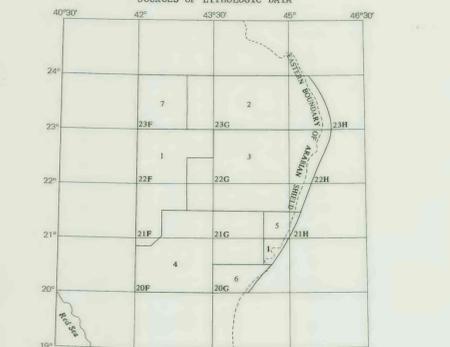
- gold, copper, zinc, lead, iron oxide, silver, pyrite-rich sequence and/or hydrothermal alteration.

GEOCHRONOLOGICAL DATA

- K-Ar method, Rb-Sr method, Pb-Pb method, method reported age, rock sampled, sample location source.

- Data sources: a. Brown, G. F., Hedge, C. E., and Marvin, Richard, 1978, Tabulation of Rb-Sr and K-Ar ages... b. Aldrich, L. T., 1978, Radiometric age determinations... c. Kroner, A., Roodol, M. J., Ramsay, C. R., and Jackson, N. J., 1979... d. Stacey, J. S., Gramlich, J. W., Delevaux, M. H., Doe, B. R., and Roberts, R. J., 1980.

SOURCES OF LITHOLOGIC DATA



- 1. Jackson, R.O., and others, 1963
2. Rhotifex Geological Mission, 1979
3. Barnes, D., and Johnson, P.R., 1980
4. Rhotifex Geological Mission, 1980
5. Kashkary, A. A. R., 1974
6. Kellogg, R. S., USGS, unpublished geologic maps, 1981
7. Letalnet, J., 1979

OTHER SYMBOLS

- Alluvium-bedrock boundary, Geologic boundary, Fault, Fault inferred under alluvium.