



EXPLANATION

- Bedrock and alluvium--metavolcanic-metasedimentary rocks, greenschist facies: anb, andesitic breccia; anc, andesitic clastite, commonly calcareous; anp, andesitic porphyry; anpz, andesitic pyroclastite; ant, andesitic tuff; anv, andesitic volcanic rocks; dap, dacitic porphyry; dat, dacitic tuff; dav, dacitic volcanic rocks; m, marble; ss, calcareous sandstone; sh, argillite; vc, volcanic clastite; vt, volcanic tuff
- Vertical dike, showing strike, thickness in meters--ld, leucocratic dike; md, diabasic dike
- Quartz vein, qv, showing strike, dip, plunge of slickensides, and thickness in meters--all quartz veins have hydrothermally altered walls, a fraction to many meters thick. Alteration adjacent to quartz vein commonly is highly pyritized and oxidized reddish brown. Alteration joints and small shear zones, with or without quartz veins, are abundant throughout district, but are not depicted on map
- Fault, inferred--mostly hypothetical and based on lineaments
- Shear fracture--sf, shear fracture; rsf, reddish-brown; small zone of intense propylitic alteration, highly calcareous with abundant oxidized pyrite
- Strike and dip of beds
- Compositional layering, showing strike and vertical dip
- Schistosity, showing strike and vertical dip
- Cleavage, showing strike and vertical dip
- Cleavage, showing strike and dip
- Vertical joint, showing strike--r, reddish-brown color caused by oxidized pyrite in propylitized walls
- Joint, showing strike and dip
- Horizontal joint--r, reddish-brown color caused by oxidized pyrite in propylitized walls
- Ancient gold-quartz mine and dumps
- Ancient gold-quartz prospect, small pit or trench, commonly with associated eluvial placer
- Ancient gold placer tailings and pits
- F-3 Sampling trench, showing trench number
- F-7 Sampling pit, showing pit-line number
- Ancient stone fence
- Ancient stone ruins of buildings
- Ancient cemetery, c
- Ancient stone ruins of market place (suq), s

Control by K. S. McLean and M. B. Almutairi.
Photogrammetrically compiled by F. G. Lavery. Supplementary
data by C. M. Robb.

Geology mapped by D. L. Schmidt in 1973.

**ANCIENT PLACERS AND GOLD-QUARTZ VEINS IN THE JABAL MOKHYAT AREA,
KINGDOM OF SAUDI ARABIA**
by Dwight L. Schmidt