A high percentage of the photolineaments compiled while preparing a photo geologic map of the Tortolita Mountains quadrangle were found to be directly or spatially related to geologic features mapped subsequently (Banks and others, 1977). The majority of the photo lineaments fall into two groups ranging 0.5–2.5 m and 0.5–3.5 m. Photo lineaments in the first group are mapped as individual straight lines, faults, and lines cutting terrane rocks (Banks and others, 1977). Photo lineaments (vegetation alignments) in alluvial areas trend parallel to and often extend from faults, joints, and lines in exposed bedrock areas. Modern cutting alluvial deposits commonly change course where intersected by a vegetation alignment; however, faulting of the gravels on the wash bottom was not observed. Therefore, none of the alluvial lineaments were produced by movement along a fault, or along a joint in the underlying rock. Linear features, however, trend the same as the adjacent Red Rock quadrangle, but they do not correspond to descriptions by Sherman and Anthony (1964) of washline fences in the Tucson basin, south of the Tortolita Mountains quadrangle. Vegetation alignments are more dense in a 5-mile-wide, north–south strip west of Red Rock Canyon. The preferential growth of vegetation probably reflects a better access to soil moisture supplied by the ephemeral streams along the underlying paleosol. The occurrence of a few isolated exposures of Tertiary volcanic rocks within this band suggests the presence of a fault or rift with subsurface
text on each side of the 5-mile-wide strip. Barton (1962) came to a similar conclusion based on a gravity profile across this same 5-mile-wide strip along Red Rock Road (now Gulf Line Drive).

**REFERENCES**


