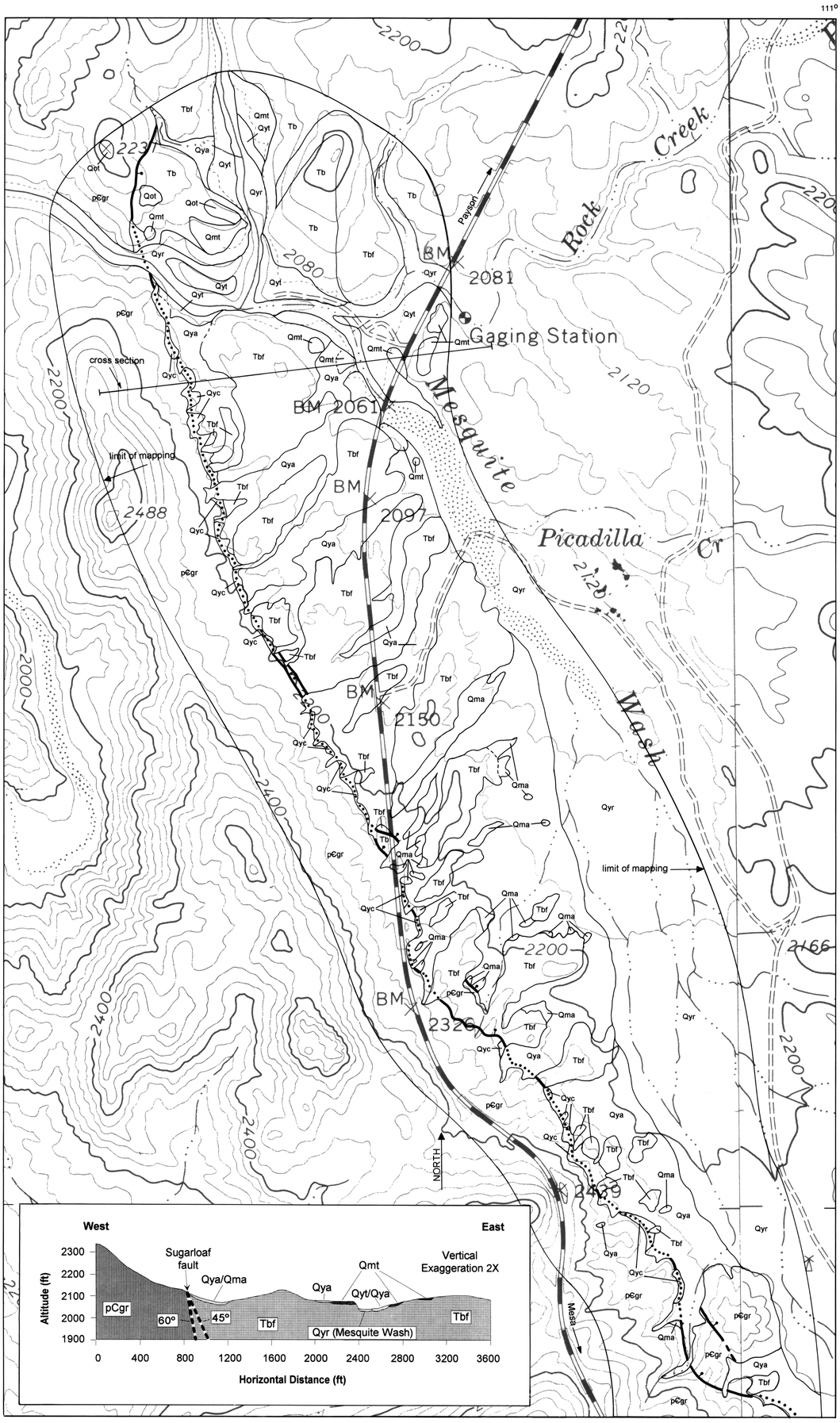

Plate 1. Strip Surficial Geologic Map Along the Central Section of the Sugarloaf Fault.

Map Explanation

Piedmont Units

Qyc Holocene colluvial deposits on the fault scarp. Thin, poorly sorted, unbedded, locally derived hillslope deposits that mantle bedrock and fault zones. Uppermost colluvium involved in active hillslope processes and is very young. Typically thickens downslope and grades into young alluvial deposits.

Qya Holocene piedmont alluvial deposits associated with small tributary streams. This unit includes active stream channels, young terraces, and alluvial fans. Along much of the fault zone, these deposits fill the floors of valleys cut into Tertiary basin-fill deposits, and represent a substantial late Holocene aggradation event. Terraces are locally entrenched up to 3 m (10 ft) by arroyos.

Qma Late to middle Pleistocene piedmont alluvial deposits associated with small tributary streams. The limited Pleistocene deposits preserved in the map area are remnants of much more extensive alluvial fans that formerly filled valley floors. These dissected fan surfaces are typically 2 to 3 m (6 to 10 ft) above modern channels.

Tbf Tertiary basin-fill deposits. They are remnants of the alluvial fan deposits that filled the Mesquite basin in the middle and late Miocene. They are now deeply dissected, characterized by rounded ridges and valleys up to 15 m (50 ft).

Axial Stream Units

Qyr Modern river channels and low bars of Mesquite Wash and Sycamore Creek. These generally coarse deposits are very young and are probably subject to erosion or further deposition during floods.

Qyt Low Holocene terraces found along Mesquite Wash and Sycamore Creek. Relatively thin terrace deposits characterized by dark, organic-rich soils that typically sustain riparian vegetation; terraces typically are mantled by fine overbank deposits of sand and silt. They are less than about 5 m (15 ft) above active channels. Some of these areas may be subject to inundation during extreme floods.

Qmt Higher late and middle Pleistocene terraces found along Mesquite Wash and Sycamore Creek. Relatively thin, fairly coarse terrace deposits characterized by reddened, clay-rich soils and varnished gravel clasts. They are up to about 15 m (45 ft) above active channels.

Qot Very old, very high early(?) Pleistocene terrace remnants found at least 25 m (80 ft) above Sycamore Creek. Relatively thin, coarse, pockets of stream gravel characterized by degraded soils and variably varnished gravel clasts.

Bedrock Units

Tb Tertiary basalt flows, probably correlative with the Hickey basalts of central Arizona. Probably of middle Miocene age.

pCgr Coarse-grained Precambrian granite. Granite typically is highly weathered in and adjacent to the Sugarloaf fault zone.

Unit contacts are dashed where uncertain

Faults

Normal faults are shown by heavy lines, solid where exposed, dotted where inferred beneath young deposits. Bar and ball on downthrown side.

0 .5 1 mile

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