DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE UNITED STATES BUREAU OF INDIAN AFFAIRS AND THE HUALAPAI TRIBE

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BRECCIA PIPE LOCATION MAP OF THE NORTHEASTERN HUALAPAI INDIAN RESERVATION AND VICINITY, ARIZONA

By

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SCALE 1:48,000

CONTOUR INTERVALS 10, 20, 40 AND 80 FEET

QUADRANGLE LOCATION

COLLAPSE FEATURE CLASSIFICATION

- S Sinkhole
- B Brecciated rock observed in the field.
- M Mineralized rock (either visible copper minerals or surface radiation ≥ 2 ½ times background) present.
- C1 Concentrically inward dipping beds and visible alteration (bleaching or limonite staining).
- C2 Concentrically inward dipping beds; no visible alteration.
- C3 Visible alteration; no visible dipping beds.
- C4 Distinctly circular feature, either due to vegetation or topography, no visible alteration or dipping beds.
- C? Questionable. A circular feature appears to be present, but with no obvious dipping beds, alteration, vegetation change or topography delineation.
- B Breccia pipes mapped by Huntoon and Billingsley, 1981, Billingsley and Huntoon, 1983 and this map.
- C Collapse features mapped by Huntoon and Billingsley, 1981, Billingsley and Huntoon, 1983, and this map.

776 Identification number of collapse feature. Assigned in order of field discovery.

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature. (Any use of trade names is for descriptive purposes only and does not imply endorsement by the USGS.) (Released in response to a freedom of information act request.)

Base from U.S. Geological Survey 1:24,000 Granite Park (1967), Mooky Puck Spring (1967), MT Logan (1967), MT Trumbull SE (1967), National Tank (1968), Prospect Point (1967), Supai Camp (1981), Vulcans Throne (1967), Vulcans Throne SE (1967), Vulcans Throne SW (1967), Whitmore Point (1967), Whitmore Point SE (1967), Whitmore Rapids (1967), 1:62,500 National Canyon (1962), and Tuckup Canyon (1962), Arizona.