Precolumbian Hohokam Petroglyphs at Signal Hill, Saguaro Nat’l Park, Tucson, AZ
The rock art found within Saguaro National Park was created by the prehistoric Hohokam people. They may have pecked these petroglyphs more than a thousand years ago while on hunting and gathering expeditions. As we discover more about these petroglyphs we develop a better understanding of the Hohokam culture.

Rock art is found throughout the American Southwest, wherever prehistoric peoples lived or journeyed. At Saguaro National Park many expressions of rock art, known as petroglyphs, were pecked into stones.

We do not know what these petroglyphs mean. They could have religious or ceremonial significance. They may be solstice markers, clan symbols, decorative motifs, or simply ancient graffiti.

Petroglyphs at Signal Hill conform to the distinctive Hohokam style. In Tucson, abstract designs outnumber life forms at most sites. Human stick figures, game animals, dogs, lizards, snakes, and geometric shapes are frequently portrayed. Spirals and designs with circles are quite common and often are part of elaborate meander or net designs. Simple Hohokam stick figures contrast with filled-in bodies typical of Anasazi petroglyphs. Some of the rock art designs made here appear on Hohokam pottery.

Environmental conditions and visitors take their toll on the rock art. Saguaro National Park has an active program to monitor the condition of this and other cultural resource sites. Help preserve these irreplaceable works of art by staying on the trail. Do not climb on the rocks.
Granodiorite is the rock type (more Plagioclase & less K-spar)
Modern gang symbol
Desert Varnish: a black Manganese Oxide Mineral deposit that forms the canvas for the ancient petroglyph artist (pre-Columbian: Hohokam >800 years) to carve their artwork on to. It may take 1,000’s of years to form in desert environments.
Cross-sections of des. varnish

Desert Varnish (Clays + MnO + FeO) 1,000-year-old on GRANODIORITE with Hohokam Petroglyphs, Tucson AZ

@500x PPL

@400x PPL

@400x XN & cyp plate

@400x XN
Microbe spheres (coated with MnO & FeO) that grow in clay on surface of rock: Granodiorite, Signal Hill, Saguaro NP Thin Section
Desert Varnish: a black Manganese Oxide - bacterial origin/silica gel - Mineral/Clay deposit that forms the canvas for the ancient petroglyph artist (pre-Columbian: Hohokam) to carve ('peck') their artwork. It may take 1,000's of years to form in desert environments.

**MnO** black 'varnish' grows in mineral sutures (grayish feldspars & quartz + biotite & amphibole = Granodiorite); MnO is leached during clay formation (chemical weathering) also, silica gel may form trapping micro-organisms.
Plagioclase rich ‘Granodiorite’ from which Desert Varnish forms

Zoned, twinned Labradorite plagioclase feldspar
Magnetite, biotite & altered amphibole (chloritized) in Qtz., Plagioclase feldspar
Orthoclase (Biaxial -)

Plagioclase (Labradorite)
Larger Plagioclase Phenocryst: zoned (sericite coating) Albite & Carlsbad Twinning

Biotite
Note: Biotite & Magnetite
Myrmekite intergrowth (Quartz & Orthoclase)

Biotite w/ Magnetite
Hummingbirds fly.
Peccary (Javelina): *Tayassu sp.*: Artiodactyl - Dicotylidae

Canines = tusks