

HIGHLIGHTS AND BREAKTHROUGHS

Comparing clays from Mars and Earth: Implications for martian habitability

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Abstract: Griffithite, from Miocene volcanic and sedimentary rocks in Griffith Park, Los Angeles, is described by Treiman et al. in this issue. This is a ferrian, trioctahedral saponite with all the Fe³⁺ in a distorted octahedral site. It is a close analog of the saponite identified by Mars Science Laboratory at Gale Crater. The martian saponite is likely diagenetic, rather than clastic, and thus may represent the presence of a once-habitable fluvio-lacustrine environment on Mars. **Keywords:** Mars, Saponite, Griffithite, Mars Science Laboratory

³⁺
Fe