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# Woolly Erionite from the Reese River Zeolite Deposit, Lander County, Nevada, and its Relationship to Other Erionites

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**Abstract:** Woolly erionite from the Reese River deposit, Nevada, is identical in appearance to that at the type locality, near Durkee, Oregon. Both of these erionites differ in appearance from all other erionite reported in the past 20 years from diverse rocks throughout the world which are described as prismatic or acicular in habit. The non-woolly erionites are especially common as microscopic crystals in diagenetically altered vitroclastic lacustrine deposits of Cenozoic age. The Reese River woolly erionite fills joints in gray to brownish-gray lacustrine mudstone of probably Pliocene age, in a zone about 1 m thick beneath a conspicuous gray vitric tuff. Compact masses of long, curly, woolly erionite fibers are in the plane of the joint and locally are associated with opal. Indices of refraction are  $\omega = 1.468$  and  $\varepsilon = 1.472$ ; hexagonal unit-cell parameters are  $a = 13.186(2) \text{ \AA}$ ,  $c = 15.055(1) \text{ \AA}$ , and  $V = 2267.1(0.9) \text{ \AA}^3$ . A chemical analysis of woolly erionite yields a unit-cell composition of:  $\text{Na}_{1.01}\text{K}_{2.84}\text{Mg}_{0.3}\text{Ca}_{1.69}\text{Al}_{8.18}\text{Si}_{27.84}\text{O}_{72} \cdot 28.51\text{H}_2\text{O}$ .

**Key Words:** Authigenesis • Erionite • Fiber • Tuff • Zeolite

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