Historically, investigation of convergence of analytic continued fractions has primarily separated them into two categories: those that converge and those that do not. However, recent work by Bowman and McLaughlin has focused on those that diverge, but in a predictable manner. Employing their notion of the sequential closure of a sequence, we give a classification theorem for the sequential closures for limit 1-periodic $q$-continued fractions, that is, continued fractions of the form

$$
\frac{a_0 + \cdots + a_l q^l}{b_0 + \cdots + b_k q^k} \quad \frac{a_0 + \cdots + a_l q^{2l}}{b_0 + \cdots + b_k q^{2k}} \quad \frac{a_0 + \cdots + a_l q^{3l}}{b_0 + \cdots + b_k q^{3k}} \quad \cdots
$$

where $q, a_i, b_i$ are complex numbers, $|q| \neq 1$, and $l, k > 0$. (Received September 08, 2008)