1046-11-598 **D Bowman** (`bowman@math.niu.edu`), Northern Illinois University, Department of Mathematical Sciences, Watson Hall 320, Dekalb, IL 60115-2888, and **K J Campbell*** (`campbell@math.niu.edu`), Northern Illinois University, Department of Mathematical Sciences, Watson Hall 320, Dekalb, IL 60115-2888. *Classifying Sequential Closures of q-continued Fractions.* Preliminary report.

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

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

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