1116-VB-2821 **Bernd Sing*** (`bernd.sing@cavehill.uwi.edu`), Department of Mathematics, The University of the West Indies, Cave Hill, P.O. Box 64, Bridgetown, BB11000, Barbados. *Kempner series, their associated power series and logarithmic means.* Preliminary report.

A *Kempner series*, also known as *depleted harmonic series*, is formed by omitting all terms in the harmonic series whose denominator expressed in base 10 contain a certain digit (or string of digits). E.g., the series

$$K_1 = \frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{5} + \frac{1}{6} + \frac{1}{7} + \frac{1}{8} + \frac{1}{9} + \frac{1}{20} + \frac{1}{22} + \frac{1}{23} + \dots,$$

is the Kempner series that omits the digit '1'; this series is convergent with $K_1 \approx 16.17696$. We consider the properties of the associated power series

$$\frac{1}{2}z + \frac{1}{3}z^2 + \frac{1}{4}z^3 + \frac{1}{5}z^4 + \frac{1}{6}z^5 + \frac{1}{7}z^6 + \frac{1}{8}z^7 + \frac{1}{9}z^8 + \frac{1}{20}z^{19} + \frac{1}{22}z^{21} + \frac{1}{23}z^{22} + \dots.$$

This power series has radius of convergence $R = 1$, and while it is bounded on the unit circle, the unit circle is its natural boundary by Fabry's lacunarity condition. Such power series arise in the study of the logarithmic method, an Abel-type summability method. Here, we contrast and compare the power series we obtain for different Kemper series. (Received September 22, 2015)