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^{7}Li NMR Study of Yb_4LiGe_4: A Possible Kondo Insulator[1] M. J. GRAF, V. LANIO, Dept. of Physics, Boston College, Chestnut Hill, MA 02467, USA, P. CARRETTA, Dept. of Physics A. Volta, Univ. of Pavia, 27100 Pavia, Italy, YU. GRIN, S. PETER[2], Max-Planck-Institut fur Chemische Physik fester Stoffe, 01187 Dresden, Germany — We report on the temperature-dependent resistivity, magnetic susceptibility, and nuclear spin-lattice relaxation rate of polycrystalline Yb_4LiGe_4. The parent compound, Yb_5Ge_4, is known to be mixed valent. The increasing susceptibility and resistivity with decreasing temperature are consistent with a Kondo insulator. Measurements of the temperature dependent ^{7}Li spin-lattice relaxation rate $1/T_1$ show an increasing rate for decreasing temperature ($T > 50$ K), followed by a broad maximum near 30 K. These results are discussed in light of the heavy-fermion like nature of the material.

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