

Abstract Submitted
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Very low temperature specific heat and magnetoresistance of $\text{PrOs}_4\text{Sb}_{12}$.¹ BOHDAN ANDRAKA, University of Florida — Heavy fermion character of $\text{PrOs}_4\text{Sb}_{12}$ has been concluded based on its superconducting properties, such as large values of the discontinuity in C and upper critical field slope at T_c (1.85 K). On the other hand, normal state properties do not provide any strong evidence of the heavy fermion behavior. In particular, m^* enhancement measured by the de Haas van Alphen technique in overcritical fields and below 700 mK is typical of transition metals, suggesting that the heavy fermion state is either suppressed by magnetic fields or collapses at low temperatures. We reexamine these possible scenarios using new magnetoresistance and specific heat, down to 50 mK, data.

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