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Deviation in magnetoresistive Kohler's rule due to Martensitic transformation in V_3Si ¹ S. MORAES, O. GAFAROV, A.A. GAPUD, University of South Alabama, J.R. THOMPSON, University of Tennessee and Oak Ridge National Laboratory, D.K. CHRISTEN, Oak Ridge National Laboratory, A.P. REYES, National High Magnetic Field Laboratory — Preliminary results are presented on a comparison between two very clean, single-crystal samples of the A15 superconductor V_3Si . Three independent measurements on the same samples – namely: (i) resistivity versus temperature, (ii) magnetic susceptibility, and (iii) nuclear magnetic resonance – confirm that (a) both samples have a high residual resistivity ratio and (b) the Martensitic transformation is manifest in one sample, but suppressed in the other. This provides the opportunity to study how the Martensitic transformation causes the magnetoresistivity of V_3Si to deviate from Kohler's Rule, adding more detailed information to results obtained previously. Results and analysis are discussed.

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