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Studies on Single Crystal CeCo3B2 LONG PHAM, Department of Physics, University of California, Davis, California, 95616, VLADIMIR SIDOROV, Vereshchagin Institute of High Pressure Physics, 142190 Troitsk, Russia, JASON LASHLEY, JOE THOMPSON, Los Alamos National Laboratory, Los Alamos, New Mexico 87545, HANOH LEE, ZACH FISK, Department of Physics, University of California, Davis, California, 95616 — Magnetization, resisitivity, and specific heat measurements, under pressure, on weak ferromagnet CeCo3B2 are reported. This hexagonal structure with space group P6/mmm (D^1_{6h}), and one formula unit per unit cell, forms in the $CaCu_5$-type structure. At ambient pressure, dc and ac susceptibility displayed an ordering below a T_{curie} of $\sim$210K, with the highly anisotropic ordering along the c axis, which is weakly suppressed with the application of pressure(-4 K/GPa). Along the ordering axis, the saturation moment, taking into account the linear behavior at higher fields, reaches only $\sim 0.01\mu_B$ at 2K. This work was supported by NSF-DMR 0433560.

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