Abstract Submitted for the MAR13 Meeting of The American Physical Society

Multiple magnetic transitions of the pseudo-1D antiferromagnet CoNiTAC DANIEL TESKE, Oklahoma Panhandle State University, JOHN E. DRUMHELLER, Montana State University — Magnetic susceptibility and crystal growing methods are reported for the pseudo-one-dimensional antiferromagnet  $[(CH_3)_3 NH] Co_{1-x}Ni_xCl_3 \cdot 2H_2O$  (abbreviated CoNiTAC). For high quality single crystals in the Ni mole fraction range 0.1 < x < 0.6, two magnetic transitions with transition temperatures separated on the order of 0.1 K were observed. This indicates the possibility of a transition due to a change in the canting angle.

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Date submitted: 09 Nov 2012

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