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Low Temperature D.C. Electrical Transport in Nutite PETER LEMAIRE, JONATHAN LEMBECK, JOHN DISTIN, Central Connecticut State University — This work attempts to shed some more light on earlier work in the naturally occurring manganese oxide Nsutite $(Mn_{1-x}^{4+}Mn_x^{2+}O_{2-2x}(OH)_{2x})$ where x = 0.06 - 0.07, that showed non-linear I-V response, and what seemed to be metallic to non-metallic behavior below 140 K. New data of four lead voltage measurements at constant current shows transient voltages below 140 K, and the results of the data analyzed to obtain the electronic conductivity data between 40 K and 140K. The significance of these measurements and results will be discussed.

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