THE PUBLICLY AVAILABLE PREBIOTIC INTERSTELLAR MOLECULAR SURVEY (PRIMOS): EXPANDING SPECTROSCOPIC CHARACTERIZATIONS, EXTENDING TO NEW SOURCES, AND ADDING TO THE KNOWN MOLECULAR INVENTORY

BRETT A. McGUIRE, P. BRANDON CARROLL, *Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA 91125*; JOANNA F. CORBY, *Department of Astronomy, University of Virginia, Charlottesville, VA 22904*; RYAN A. LOOMIS, *Department of Chemistry, University of Virginia, Charlottesville, VA 22904*; GEOFFREY A. BLAKE, *Division of Chemistry and Chemical Engineering and Division of Geological and Planetary Sciences, California Institute of Technology, Pasadena, CA 91125*; JAN M. HOLLIS, *NASA Goddard Space Flight Center, Greenbelt, MD 20771*; FRANK J. LOVAS, *National Institute of Standards and Technology, Gaithersburg, MD 20899*; PHILIP R. JEWELL, and ANTHONY J. REMIJAN, *National Radio Astronomy Observatory, Charlottesville, VA 22903*.

The publicly available Green Bank Telescope **PR**ebiotic **I**nterstellar **MO**lecular **S**urvey (PRIMOS) conducted towards Sgr B2(N) provides high resolution, high-sensitivity observations with near-continuous frequency coverage from $\sim$300 MHz - 50 GHz. Of the eleven new molecular detections in the last year, five (45%) are a direct result of the PRIMOS observations. Further, these observations have recently been used to detect the predicted, but previously unobserved, $J = 1-0$ and $J = 2-1$ transitions of the newly detected l-C_3H^+ ion. Here, we discuss the analysis of these transitions, as well as recent work to extend the PRIMOS observations to three new regions of interest: VY Canis Majoris, IRC+10216, and NGC 2023. Finally, we highlight the utility of cm-wave surveys in new molecular detections, as well as the value of publicly-available surveys in the approaching era of data-enabled, analysis-limited astrochemistry.