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SCIENTIFIC RESEARCH LICENSE

LICENSE NUMBER 02 023 25R-M

ISSUED TO:

Terry Trevino

The Mars Society

256 North Willard Street

San Francisco, CA

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TEAM MEMBERS:

E.Apollonio, P.Bagley, A. Castelblance, L. Thomas, S. Verhaeghe,

D. Wallace, R. Nichols, T. Jahn, I. Pragati, P. Kumar, B. Maloney, A. Greco,

J.Colletto, C.Trevino, A.Poliane, R. Woods, M. Beach, M. Robbins

TITLE: FMARS 2025: A Second Look at the Mars 160 Research Findings

OBJECTIVES OF RESEARCH:

In 2025, our team of planetary scientists will continue the environmental research focus established during the 2024 campaign. We will maintain ongoing atmospheric and geophysical monitoring across Devon Island and the Resolute Bay region. Specifically, we will continue tracking passive and active radiation exposure using dosimeters inside and outside the research station. We will also continue our radon gas monitoring efforts, established in 2023, to examine its fluctuation and potential health relevance in polar field environments. Methane gas sampling and detection near permafrost thaw zones will also be continued, offering further insight into Arctic outgassing events. Additionally, we will advance our ongoing study of nano plastics, collecting snow and water samples from the Haughton River, glacial runoff zones, and nearby ice fields. Adding capture and analysis of meltwater runoff from thawing permafrost zones near the Haughton impact structure. This will include sampling surface water for pH, conductivity, microbial content, and particulate loads. The aim is to identify patterns in permafrost hydrology and assess any emergent biogeochemical risks as climate variability increases.

TERMS & CONDITIONS:

The holder of the license will be bound by the terms and conditions of the Nunavut Impact Review Board Screening Decision Report (07LN014) and the Department of Culture & Heritage archaeological sites terms and conditions. These terms and conditions will form part of this license.

DATA COLLECTION IN NU:

DATES:

July 3,2025 to August 3,2025

LOCATION: Devon Island

Scientific Research License 02 023 25R-M expires on December 31,2025 Issued at Iqaluit, NU on March 24,2025

James Shirley Science Advisor

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