

11 June 2025 NPC File No. 150787

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# **Cassel Kapolak**

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### **Carson Gillis**

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## **Terry Trevino**

The Mars Society (Proponent)
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Dear Caroline Whittle, Jared Ottenhof, Mosha Cote, Richard Dwyer, Tracey McCaie, Cassel Kapolak, Carson Gillis, and Terry Trevino:

# RE: NPC File No. 150787 [FMARS Arctic Environmental & Astrobiological Field Study 2025]

The following works and activities have been proposed in the above-noted project proposal:

- 1. AMENDMENT to scientific research activities: Building on findings from the 2017 MARS160 mission and the 2023–2024 research campaigns, the 2025 season continues the environmental, astrobiological, and operational field research program in the unique Arctic Mars analogue environment. The project includes biological, geological, hydrological, and radiation studies, with new attention given to meltwater runoff and metallic signatures within the central crater zone.
  - a. Water Sampling and Nanoplastics Analysis

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- b. Permafrost and Hydrology Monitoring
- c. Cyanobacteria and Stromatolite Studies
- d. Radiation and Radon Monitoring
- e. Exploration of Crater Center
- f. Thermal Imaging Drone Survey
- 2. Summary of proposed modifications:
  - a. Gray Water System Upgrade: Installation of a low-impact gray water management system to reduce surface discharge and improve environmental compliance. This system will reduce the pH of the grey water back to the natural pH of 7.
  - b. Work extending onto Inuit-Owned Lands: potential collection of a geo-tagged stromatolite sample (pending paleontological permit) for radiocarbon dating and genomic sequencing.
- 3. Associated NPC File Nos.: 148522, 150130, and 150428; Associated NIRB File Nos.: 05YN077 and 07LN014
- 4. Location: Qikiqtani Region and North Baffin Planning Region; [Tallurutit (Devon Island), at the Flashline Mars Arctic Research Station (FMARS) near the Haughton Impact Crater]

A complete description of the project proposal reviewed by the Nunavut Planning Commission (NPC) can be accessed online using the link below.

The NPC has completed its review of the above-noted project proposal. The works and activities associated with this proposal were previously reviewed by the NPC, including environmental and astrobiological scientific research activities, and conformity determinations were issued on 7 April 2017, 14 June 2023, and 29 May 2024 which still apply. It conforms to the North Baffin Regional Land Use Plan (NBRLUP) and the proponent has undertaken to comply with the applicable conformity requirements of Appendices C, H, and I of the NBRLUP. In addition, associated activities were previously screened by the Nunavut Impact Review Board, including environmental and astrobiological scientific research activities (NIRB File No. 05YN077 and 07LN014).

The above-noted project proposal is exempt from screening by the NIRB because the NPC is of the understanding that the inclusion of stromatolite collection does not change the general scope of the original or previously amended project activities since this new activity belongs to a class of works or activities set out in an Exemption Agreement between the NIRB and the Government of Nunavut Department of Culture and Heritage (GN-CH) pursuant to Schedule 12-1 (item 7) of the *Nunavut Agreement* and the exceptions noted in Section 12.4.3 (a) and (b) of the *Agreement* do not apply. Finally, the NPC does not have concerns regarding the cumulative impacts of the project proposal.

By way of this letter, the NPC is forwarding the project proposal to the regulatory authorities identified by the proponent. Project materials, including the applicable conformity requirements, are available at the following address: <a href="https://lupit.nunavut.ca/portal/registry/registry.aspx?appid=150787">https://lupit.nunavut.ca/portal/registry/registry.aspx?appid=150787</a>.

This conformity determination applies only to the above-noted project proposal as submitted. The regulatory authorities to which this letter is addressed are responsible under the *Nunavut Agreement* to implement any of the applicable conformity requirements by incorporating the requirements directly, or otherwise ensuring that they must be met, in the terms and conditions of any authorizations issued.

My office would be pleased to discuss how best to implement the applicable requirements and to review any draft authorizations that regulatory authorities wish to provide for that purpose.

If you have any questions, please do not hesitate to contact me at the email address or telephone number below.

Sincerely,

Devid Hende

Daniel Haney (he/him) | Ċσ⊳- H⊲Δσ

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