

REPORT—8WLC-LHA2324 Approval Without a License

Project Name: FMARS 2023: A second look at the Mars 160 Research Findings

Licensee: Shannon Rupert, The Mars Society

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Water Sources Used: Unnamed creek in the vicinity of the Flashline Mars Arctic Research Station, Devon Island

Water Quantity taken: Less than 0.075 m³/day

Water Source Coordinates: 75.433828 N, -89.836651 W

Waste Management and/or disposal: Greywater disposal on site (sump), solid waste disposal via Resolute

Sump Coordinates: 75.433828 N, -89.836651 W

Progressive Reclamation Work Undertaken:

All reclamation work for sites erected was completed during the license period. Water was taken from an unnamed stream in the vicinity of the Flashline Mars Arctic Research Station on Devon Island. Consumption did not exceed 0.075 m³/day and all water was collected via 5-gallon containers, with little or no impact on the environment, as care was taken to keep vehicle tracks on the rocks and not in any soft soils.

For greywater disposal, a sump pump was dug at the station. For the sump site, a shallow hole approximately 30 cm in depth was dug in the soil for disposal of wastewater. This hole was not environmentally mitigated at the end of this field season due to an accident that resulted in premature pull out of the crew. The sump pump however was removed. Impressions left in the soil will be rectified next summer.

Human waste was disposed of in two ways, neither of which have an impact on the local environment. Liquid human waste was contained in a drum and placed into a containment basin near the station. It will be removed at the beginning of next season. Solid human waste is burnt on site and the ashes were taken to Resolute for disposal.

Non-human waste was flown out at the end of the season for disposal as well.

Date submitted: January 28, 2024

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