



Appendix - Kitikmeot Sea Science Study [Scientific Research License #04 013 25R-M] **Annual Report and 2026 plans**

2025 Annual Summary: Appendix Figure 1 illustrates the locations visited during the 2025 Kitikmeot Sea Science Study aboard the *CCGS Sir Wilfrid Laurier* as well as year-round Community-based sampling activities conducted from Kugluktuk.

2026 Plans:

Our ship-based oceanographic programs will take place between 20 September and 30 September 2026. Appendix Figure 2 illustrates the regions we propose to conduct oceanographic sampling activities and deploy year-round moorings in 2026.

Ship-based Oceanographic Sampling, CCGS Sir Wilfrid Laurier: As in 2025, we aim to focus our mooring deployment and water and benthic sampling activities aboard the *CCGS Sir Wilfrid Laurier* across the Kitikmeot region, including: the Finlayson Islands, Coronation Gulf, Bathurst Inlet, Queen Maud Gulf, Icebreaker Channel, and Simpson Strait, as shown in Appendix Figure 2 (SWL). Our focus for 2026 will be the continuation of work carried out previous years (2017-2019, 2022-2025), with a focus on recovering the moorings deployed in 2026. Our planned sampling, instruments, and techniques are the same as in our original permit.

Our proposed observational activities on the *CCGS SWL* include: a) recovery and re-deployment of long-term moorings (Appendix Figure 2); and, b) measurement of physical and geochemical properties of seawater, via electronic instruments deployed from the ship and via water sample collection, and collection of benthic samples via bottom grab. As described in our original permit, mooring instrumentation will be mounted on recoverable sub-surface moorings that reach from the bottom to within 15m of the surface. Pairs of moorings include sensors for measuring currents and ice thickness and sensors measuring temperature and salinity and optically observed biological parameters (fluorescence, light intensity, turbidity, etc).

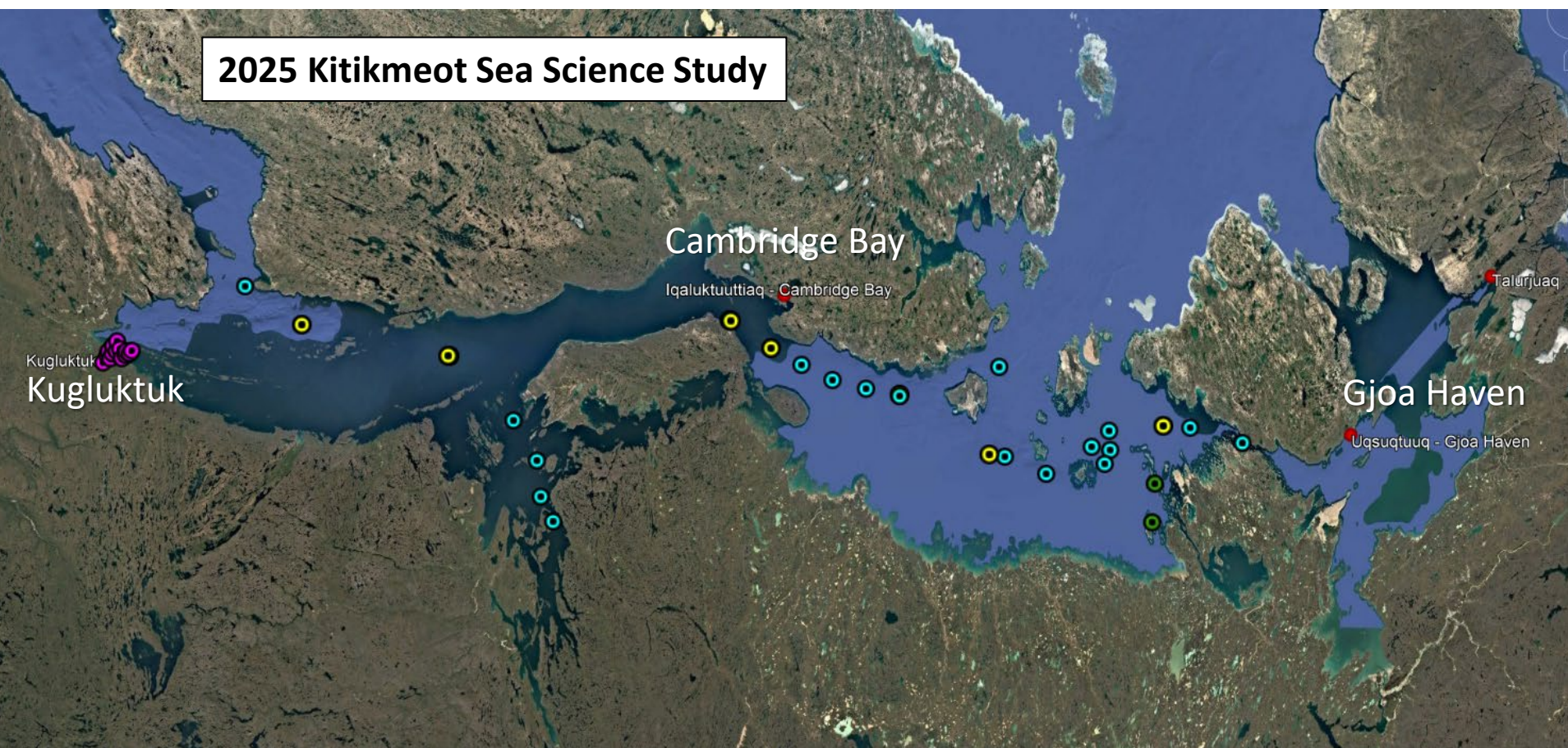
Ship-based Oceanographic Sampling, R/V Martin Bergmann: No K3S research activities will take place aboard the *R/V Martin Bergmann* in 2026. We anticipate continuing our water and benthic sampling activities aboard the *R/V Martin Bergmann* in the vicinity of Sherman Inlet and Sherman Basin in 2027.

Community-Based Oceanographic Sampling: We also have plans continue to work with community partners in Kugluktuk to conduct local sampling activities in 2026. As in 2025, we will continue to work with the Kugluktuk Hunters and Trappers Organization and the Canadian Rangers Ocean Watch program to collect year-round observations of river to ocean gradients from the Coppermine River into Coronation Gulf. This sampling will include collecting observations of physical and geochemical parameters using local platforms in Kugluktuk and will take place from early throughout the year in the new year (January to - December 2026).

There will be approximately 5 – 6 sampling events throughout the year, depending on weather conditions and safe travel considerations. Wintertime transects will be conducted by snow machine and summertime transects will be conducted by small boat.

As our program covers the entire year, we request that our research license allow sample collection activities in the above-mentioned regions from January 2026 to December 2026.

Appendix Figure 1. Kitikmeot Sea Science Study activities conducted in 2025



- 2025 Community Based Monitoring Stations (Kugluktuk)
- 2025 Sampling sites visited aboard the *CCGS Sir Wilfrid Laurier*
- 2025 Year-Round Moorings deployed aboard the *CCGS Sir Wilfrid Laurier* (recovery 2026)
- 2024 Year-round moorings deployed aboard the *RV Martin Bergmann* (recovery 2026)

Appendix Figure 2. Kitikmeot Sea Science Study proposed activities for 2026

