NIRB Application for Screening #125833
Fridtjof Nansen - 2023 Northwest Passage

Application Type:	New
Project Type:	Tourism
Application Date:	6/18/2023 1:20:55 PM
Period of operation:	from 0001-01-01 to 0001-01-01
Proposed Authorization:	from 0001-01-01 to 0001-01-01
Project Proponent:	F.K. Warren Ltd. F.K. Warren Ltd. 2000 Barrington St., Suite 1212 Halifax Nova Scotia B3J 3K1 Canada Phone Number:: 902-423-8136, Fax Number:: 902-429-1326

DETAILS

Non-technical project proposal description

English: Hurtigruten Expeditions' Norwegian-flagged cruise ship MS FRIDTJOF NANSEN will be undertaking the following voyage in 2023:“Northwest Passage – In the Wake of the Great Explorers (Westbound)” Reykjavik, Iceland to Nome, Alaska 13 August to 7 September 2023. The vessel is anticipated to carry up to 480 passengers (guests) and 170 crew (including approx. 20 members of the expedition team). Additionally, there will be one contracted ice pilot aboard to assist the Master and navigation team. Activities feature a combination of on board and off ship activities, with the goal being to provide a well-rounded educational experience. Activities include educational presentations, Science Center, small boat cruising, guided kayaking excursions, ships cruising and community visits, where pre-arranged activities have been planned as well as wilderness areas away from communities for small group guided exploration.Operations have been planned to be fully self-sufficient and conducted in accordance with Canadian legislation. Activities will be managed by experienced officers, crew and expedition staff and will be within the search and rescue (SAR) capability of the Operator, including for medical evacuation, if required. Direct, indirect, and cumulative impacts of the proposed activity have been considered, as have alternatives. Provided that minimization and mitigation measures are adhered to, it is concluded that the proposed activity will have no more than a minor or transitory impact on the environment to be visited, including associated and dependent ecosystems. The voyage is proposed to occur during a period of minimum sea-ice. Sea-ice, and the breaking of ice will be avoided, if possible. It is not anticipated that wildlife or wildlife habitats will be disturbed.The cruise has been planned with a high degree of sensitivity to the local communities. Community visits have been planned for Pond Inlet, Gjøa Haven, and Cambridge Bay. When visiting communities, local services will be contracted, and guides employed. Consideration has also been given to Traditional Knowledge, and potential impact to communities nearby. Principals from the company are active in the industry and have worked with local and emergency officials at the federal, regional, and local levels to discuss and finalize plans for the trip.

French: Le navire de croisière MS FRIDTJOF NANSEN, immatriculé en Norvège, de Hurtigruten Expeditions effectuera le voyage suivant en 2023 :« Passage du Nord-Ouest - Sur les traces des grands explorateurs (vers l'ouest) » de Reykjavik, en Islande, à Nome, en Alaska, du 13 août au 7 septembre 2023.Le navire devrait accueillir jusqu'à 480 passagers (clients) et 170 membres d'équipage (dont environ 20 membres de l'équipe d'expédition). De plus, un pilote de glace contracté sera à bord pour assister le capitaine et l'équipe de navigation.Les activités comprennent une combinaison d'activités à bord et hors du navire, dans le but de fournir une expérience éducative complète. Les activités comprennent des présentations éducatives, un centre scientifique, des croisières en petits bateaux, des excursions en kayak guidées, des croisières en navire et des visites de communautés, où des activités préalablement organisées ont été planifiées, ainsi que des zones sauvages éloignées des communautés pour des explorations guidées en petits groupes.Les opérations ont été planifiées de manière à être totalement autonomes et menées conformément à la législation canadienne. Les activités seront gérées par des officiers, un équipage expérimenté et du personnel d'expédition, et se dérouleront dans les limites des capacités de recherche et de sauvetage (SAR) de l'exploitant, y compris pour une évacuation médicale, si nécessaire.Les impacts directs, indirects et cumulatifs de l'activité proposée ont été pris en compte, de même que les alternatives. À condition que des mesures de minimisation et d'atténuation soient respectées, il est conclu que l'activité proposée n'aura qu'un impact mineur ou transitoire sur l'environnement à visiter, y compris les écosystèmes associés et dépendants.Le voyage est prévu pendant une période de calme des glaces. Les glaces marines et leur bris seront évités, si possible. On ne prévoit pas de perturber la faune ou les habitats fauniques.La croisière a été planifiée avec une grande sensibilité envers les communautés locales. Des visites de communautés sont prévues à Pond Inlet, Gjøa Haven et Cambridge Bay. Lors des visites de communautés, des services locaux seront contractés et des guides seront employés. Une attention particulière a également été accordée aux connaissances traditionnelles et à l'impact potentiel sur les communautés environnantes. Les responsables de la société sont actifs dans le secteur et ont travaillé avec les autorités locales et d'urgence aux niveaux fédéral, régional et local pour discuter et finaliser les plans du voyage

Inuktitut: ᐄᐅᑎᖏᒍᑦ ᓄᒃᑕᖏᑎᑦ ᓄᐊᐅᐃᓗᖓ−ᐊᐅᓪᓚᖅ ᐅᒥᐊᖅᐸᐊᒃᑯᑦ MS FRIDTJOF NANSEN−ᑯᑦ ᐱᓕᓀᓴᖏᑐᑦ ᐅᑯᓂᖏᓗ ᐃᖏᕿᖏᓗᑎᒃ 2023−ᒥ:ᑕᖅᓗᑭᑎᐅᑦ ᐃᒪᖏᒍᑦ ᓱᖅᓗᐊᓗᑯᑦ ᐊᖏᑎᑎᒍᖏᒍᑦ − ᐊᖏᑯᑦᑐᓂ ᖁᓂᖏᑎᖅᐸᐊᑦ (Westbound) ᓇᑭᕕᒃ, ᐊᐃᖅᓴᖅᒥᑦ ᓅᒪ, ᐊᓴᖅᑲᒍᑦ 13−ᒥᑦ ᓱᑎᐱᓇ 7−ᒍᑦ 2023−ᒍᑦ. ᐅᒥᐊᖅᐸᐊᖏᑐᓂᐊᕿᑎᑦᑕᐅᐅᖅᓴᖏᑦ 480−ᓂᒃ ᐃᑭᒪᐸᓂᒃ (ᑐᐸᖅᒥᐸᑦ) ᐊᒪᒪ 170−ᓂᒃ ᐅᒥᐊᖅᐸᐊᖅᒥ (ᐃᓕᓴᐅᓵᖅᐅᓪᓗᑎᒃ 20−ᕿᓗᐃᑦ ᕿᓕᖏᑎᑦ). ᐊᒪᒪ ᓱᓕ, ᐊᑕᐅᓱᖅᒥᒃ ᑲᓐᑐᓂᖅᑎᑦᑕᖏᓂᐊᖏᑐᓂᖅ ᓱᓄᒥᒃ ᐊᖏᑎᑎᒥᒃ ᐅᒥᐊᖅᐸᐊᒥ ᐃᑲᐸᖏᓂᐊᖏᑐᑦ Master ᐊᒪᒪ ᑕᒪᒪᓵᒃᓄᓂᓂᒃ. ᐱᓕᓀᐊᒃᓴᑦ ᑕᓄᒃᓴᐅᑎᑦᑎᐸᑦ ᑲᑎᑦᑎᐊᓱᓂᒃ ᐅᒥᐊᖅᐸᐊᒥ ᐊᒪᒪ ᐅᒥᐊᖅᐸᐊᒥ ᐱᓕᓀᐊᖏᔪᖏᑕᖏᑐᓂᒃ, ᑐᖏᓕᖏᖏᓓᑎᒃ ᐃᓕᓴᐅᖅᑎᑦᑎᑦᑎᐊᕈᒪᖅᓗᑎᒃ. ᐱᓕᓀᐊᖏᔪᓕᒃᑐᑦ ᐃᓕᓴᐅᖅᑐᖏᑦᓴᓕᓀᓴᒍᑦ ᐅᓂᒃᑲᐅᓂᓄᓂᖅᑐᒃ, ᖁᑲᐅᓂᓄᖅᑐᑦᑕᖏᓂᐊᖏᑐᑦ, ᐅᒥᐊᖅᓴᐃᓄᑯᓂᖅᑐᑦ ᓄᖅᑲᒃᑕᓂᖅ ᐊᒪᒪ ᓄᓇᓕᖏᓄᑦ ᐱᓕᓀᐊᖅᐸᐊᑯᑦ ᓄᖅᑲᒃᑕᓂᖅ ᐊᒪᒪ ᓄᓇᓕᖏᓄᑦ ᐱᓕᓀᐊᖅᐸᐊᒥ ᐊᒪᒪ ᓄᓇᓕᖏᓄᑦ ᐱᓕᓀᐊᖅᐸᐊᒥ ᐱᓕᓀᐊᖏᔪᓕᒃᑐᑦ

ᖁᓂᖅᑐᓂᒃ.ᐊᐅᓪᓚᑎᓂᐅᔪᑦ ᕿᓇᒃᑕᐅᓕᒫᑦ ᓇᖅᑎᓂᖅ ᒪᑭᑕᔪᓇᓪᓚᕐᓂᐅᑎᓪᓗᑎᒃ ᐊᒻᒪ ᐱᓕᓇᐊᖅᑐᓗᑎᒃ ᒪᓕᒃᓗᒍ ᑲᓇᑕᒥ ᒪᓕᒐᓕᐊᖅᓯᒪᔪᑦ. ᐱᓕᓇᐊᒃᓴᑦ ᐊᐅᓪᓚᑕᐅᓂᐊᖅᑐᑦ ᐱᓕᓇᓕᒪᔪᓇᑦ ᐱᓕᓇᔭᓇᑦ, ᐃᖅᑲᓇᐃᖅᑎᓇᑦ ᐊᒻᒪ ᓇᖅᑐᓇᖅᑐᑦ ᐃᖅᑲᓇᐃᖅᑎᖅᑎᓂᓗᑦ ᐊᒻᒪ ᐱᖅᖃᓇᖅᑐᓂᓇᔭᓇᑦ (SAR) ᐊᐅᓪᓚᑎᓂᐅᔪᑦᑐᐅᔪᔪᒍᑦ ᐃᓪᒥᔾᐅᐅᓗᓂ ᐊᓐᓂᐊᖅᑐᓇᑦ ᑐᐊᕕᖅᓯᓇᑦ, ᐱᔪᓇᖅᑲᓪᓚᑦ ᑐᖅᑭᓪᓚᑎᓂᐅᑐᑦ ᐱᓕᓇᐊᑦ ᐃᓕᓴᕐᓂᐅᑐᑦ ᐱᓕᓇᐊᒃᓴᖅᓴᓕᐅᖅᓯᑦ, ᐊᓕᖅᓴᖅᑎᓕᐅᖅᓯᑦ, ᐱᓕᓇᐊᒃᓴᖅᓴᖅᑎᓕᐅᖅᓯᑦ ᐱᓕᓇᐊᒃᓴᖅᓴᓕᐅᖅᓯᑦ

Operations Phase: from 2023-08-21 to 2023-09-03

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Pond Inlet	Tourism Activities	Crown	Mittimaralik (Pond Inlet) – named in Inuktitut after an unknown ancient person presumed to be buried here is the largest community in Northern Baffin Island with mountains visible from all sides, is called the Jewel of the North. conveniently close to both Tamaarvik Territorial Park and Sirmilik National Park. ‘Mittimatalik’ is also home to the renowned Tununiq Arsarniit Theatre Group	-The entire region around Pond Inlet is scattered with archaeological sites of ancient Dorset and Thule peoples (the ancestors of modern Inuit people) from over 1,000 years ago.	Pond Inlet
Dundas Harbour / 74.53100243422496, -82.2539268997204	Tourism Activities	Crown	An outpost was established at the harbour in August 1924 as part of a government presence intended to curb foreign whaling and other activity. The Hudson's Bay Company leased the outpost in 1933. returned to the mainland 13 years later. Dundas Harbour was populated again in the late 1940s to maintain a patrol presence, but it was closed again in 1951 due to ice difficulties.	-Only the ruins of a few buildings remain, along with one of the northernmost cemeteries in Canada.[7] houses made of sod and whale ribs, qajaq (kayak) stands, even ingenious polar bear traps fashioned out of stone.	Pond Inlet
Croker Bay / 74.70361651918769, -83.14956475613525	Tourism Activities	Crown	– Home to the Croker Bay Glacier. An actively caving glacier often litters Croker Bay with numerous icebergs	.	Pond Inlet / Arctic Bay
Beechey Island / 74.73680793756577, -90.96348468677027	Tourism Activities	Crown	eechey Island is best known for containing three graves of Franklin	Five archaeological sites on Beechey Island and nearby Devon Island (the	Resolute

			expedition members, which were first discovered in 1850 by searchers for the lost Franklin expedition	Franklin wintering camp of 1845–46, Northumberland House, the Devon Island site at Cape Riley, two message cairns, and the HMS Breadalbane National Historic Site) were designated as the Beechey Island Sites National Historic Site of Canada.	
Prince Leopold Island / 74.05304308431185, -90.07473755483987	Tourism Activities	Crown	Ornithological field research began on the island in the 1950s, and an Environment Canada research station was established on the island in 1975. Research has been conducted on the island almost every year since then, for varying lengths of time during summer. Home to the Prince Leopold Island Migratory Bird Sanctuary The island is significant as a summer habitat and breeding ground for large populations of several arctic bird species	-Evidence of Inuit habitation in the form of house pits and bones from bowhead whales and other marine mammals is present on the north and southeast spits of the island	Arctic Bay / Resolute
Fort Ross / 72.01556395008022, -94.22477670547632	Tourism Activities	Crown	An abandoned former trading post on Somerset Island. Founded in 1937, it was the last trading post to be established by the Hudson's Bay Company. It was operational for only eleven years, being abandoned in 1948, as severe ice conditions in the surrounding waters made the site hard to reach and economically unviable	Only two of the four buildings remain: the post manager's house and the store. The store building was recently refurbished and strengthened, and is still used as a shelter by Inuit caribou hunters from Taloyoak, and as a refuge for researchers and small boat travellers passing through.	Taloyoak
Coningham Bay / 71.80040836929562, -96.74072954944009	Tourism Activities	Crown	Bay located in the Kitikmeot region of Nunavut	.	Taloyoak

Gjoa Haven / 68.64090543456493, -94.84051832864895	Tourism Activities	Crown	Gjoa Haven is an Inuit hamlet in Nunavut, above the Arctic Circle, located in the Kitikmeot Region, 1,056 km northeast of Yellowknife, Northwest Territories. It is the only settlement on King William Island. Gjoa Haven Inuit had oral traditions that helped explain the mystery of the lost Franklin expedition. The remains of his two ships were discovered nearby as a result, 170 years after the Inuit had first reported seeing them	Working in close partnership with the Nattilik Heritage Society's Inuit Guardians from Gjoa Haven, Parks Canada's underwater archaeologists were able to return to the Wrecks of HMS Erebus and HMS Terror National Historic Site to conduct important archaeological work. This work included navigating a remotely operated vehicle (ROV) under the ice at the site of HMS Erebus in April and May and diving at the site in September.	Gjoa Haven
Cambridge Bay / 69.14424612795644, -105.05573489032419	Tourism Activities	Crown	Cambridge Bay is the location of the Canadian High Arctic Research Station (CHARS) [49] campus. This multidisciplinary station is operated by Polar Knowledge Canada, a federal agency, and will operate year-round. Cambridge Bay is the centre of government for Kitikmeot, the administrative and transportation hub for this region of Nunavut. It is the largest stop for passenger and research vessels traversing the Northwest Passage.	rchaeological sites reveal ancient Inuit campsites and signs of the first European explorers. There are the tent rings and caches of an ancient dwelling area along the Cycle of the Seasons Trail	Cambridge Bay

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Pond Inlet	Coreen Green	Hamlet of Pond Inlet	2023-01-10
Cambridge Bay	Angela Gerbrandt	Hamlet of Cambridge Bay	2023-01-10
Gjoa Haven	Hamlet of Gjoa Haven	Hamlet of Gjoa Haven	2023-03-30

Authorizations

Indicate the areas in which the project is located:

Kitikmeot
North Baffin

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Canadian Wildlife Service	CWS Permit for Prince Leopold Island	Applied, Decision Pending		
Kitikmeot Inuit Association	Exemption for land use	Applied, Decision Pending		
Qikiqtani Inuit Association	Exemption for land use	Applied, Decision Pending		
Government of Nunavut, Department of Economic Development & Transportation	Outfitter's License	Applied, Decision Pending		
Government of Nunavut, Department of Environment	Wildlife Observation License	Applied, Decision Pending		
Government of Nunavut, Department of Culture, Language, Elders, and Youth	Archaeology Permit	Applied, Decision Pending		

Project transportation types

Transportation Type	Proposed Use	Length of Use
Water	Cruise Vessel Fridjof Nansen (140m length)	

Project accomodation types

Other,

Material Use

Equipment to be used (including drills, pumps, aircraft, vehicles, etc)

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Cruise vessel	1	140 Length / 24 m Width and 20890 Gross Tonnage	Carrying passengers and crew as well as provide accommodation and dining
Zodiacs	10-12	TBA	Transporting passengers and expedition leaders for sightseeing

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Gasoline	fuel	20	30	600	Liters	Using for the Zodiacs
Diesel	fuel	1	550	550	Metric Tons	light, low-Sulphur marine diesel oil.

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
0	Water only taken on for ballast operations as necessary, following Transport Canada guidelines for ballast operations.	

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Tourism Activities	Combustible wastes	TBA	Will be held onboard vessel until licensed waste operator removes waste	Normally separated and incinerated by an IMO type approved incinerator (or removed for recycling or disposal ashore in certified ports); however there is NO incineration while in the NWA
Tourism Activities	Greywater	TBA	Grey and black water are treated on board by an EVAC MSP VIII-sewage treatment system and will only be discharged well outside 12NM from shore, none while near communities. The ship will not will not discharge any treated or untreated waste water	Vessel has capacity to hold 325cbm grey water onboard
Tourism Activities	Hazardous	TBA	Separated and removed for recycling or disposal at certified reception port	.
Tourism Activities	Non-Combustible wastes	TBA	Food will be segregated and refrigerated for disposal at certified reception port or grained and disposed according to MARPOL regulations	.
Tourism Activities	Sewage (human waste)	TBA	Grey and black water are treated on board by an EVAC MSP VIII-sewage treatment system and will only be discharged well outside 12NM from shore, none while near communities. The ship will not will not discharge any treated or untreated waste water	.

Environmental Impacts:

Please see attached document.

Additional Information

SECTION A1: Project Info

SECTION A2: Allweather Road

SECTION A3: Winter Road

SECTION B1: Project Info

SECTION B2: Exploration Activity

SECTION B3: Geosciences

SECTION B4: Drilling

SECTION B5: Stripping

SECTION B6: Underground Activity

SECTION B7: Waste Rock

SECTION B8: Stockpiles

SECTION B9: Mine Development

SECTION B10: Geology

SECTION B11: Mine

SECTION B12: Mill

SECTION C1: Pits

SECTION D1: Facility

SECTION D2: Facility Construction

SECTION D3: Facility Operation

SECTION D4: Vessel Use

SECTION E1: Offshore Survey

SECTION E2: Nearshore Survey

SECTION E3: Vessel Use

SECTION F1: Site Cleanup

SECTION G1: Well Authorization

SECTION G2: Onland Exploration

SECTION G3: Offshore Exploration

SECTION G4: Rig

SECTION H1: Vessel Use

SECTION H2: Disposal At Sea

SECTION I1: Municipal Development

Description of Existing Environment: Physical Environment

The Canadian Arctic Archipelago comprises of 94 major and 36,469 minor islands, covering a vast area of 1.4 million square kilometers in Northern Canada's North Atlantic Ocean. Nunavut and Northwest Territories form the majority of this region, which is separated from the mainland and each other by the Northwest Passage, the largest high Arctic land area worldwide. The terrain is mostly tundra, with the exception of mountainous areas, and Canada's glacial ice is mostly located in the highlands.The archipelago experiences cold winters, averaging between -20°C and -35°C, and mild summers, with temperatures ranging from 10°C to 25°C, with a wide range of plant and animal life, including various land and marine mammals, insects, and birds. The islands also have a range of plant species, such as mosses, liverworts, and lichens.

Description of Existing Environment: Biological Environment

During the expedition through Nunavut, the Northwest Territories, and Yukon, there are various endangered species in both marine and land environments that the vessel could potentially encounter. The Species at Risk Act (SARA) aims to protect species from extinction and has identified several species in Northern Canada as endangered, such as Barren-ground Caribou (NWT), Beluga Whale (Nvt), Caribou (Nvt), Eskimo Curlew (NWT, Nvt, YT), Gypsy Cuckoo Bumble Bee (NWT, YT), Ivory Gull (NWT), Little Brown Myotis (NWT, YT), Northern Myotis (NWT, YT), Red Knot (NWT), Ross’s Gull (Nvt), and Whooping Crane (NWT).

Description of Existing Environment: Socio-economic Environment

During the transit of the Northwest Passage, passengers aboard the ship will have the chance to participate in a variety of activities both on and off the vessel. The proposed off-ship activities for the expedition include community visits, hiking, excursions on Zodiac boats, and opportunities for viewing and photographing nature and wildlife. These stops are anticipated to last from 5 to 8 hours. To ensure the safety of all individuals, briefings on proper conduct for shore excursions will be given to guests before departing the ship, taking into account Arctic weather conditions and respectful behavior when observing wildlife. The onboard Expedition Team will consider the advice of local communities, applicable permit conditions, guidelines and regulations, including those established by AECO for visits to remote communities, and historical and cultural sites. During all wildlife viewings and encounters, the team will follow the guidelines established by AECO and Canadian Wildlife Services (CWS), and any recommendations from local HTA/HTC will also be taken into consideration. Community visits are planned to Pond Inlet, Gjoa Haven and Cambridge Bay. We are looking forward to working with the communities to develop a program that allows the passengers to learn about the culture in a respectful and engaging manner. Passenger landing fees are paid to the respective Hamlets to ensure there is a fiscal benefit to the community. While the federal covid regulations have been dropped, we will adhere to any/all covid protocols requested by the communities. Appropriate archaeological permits have been applied for, and the onboard archaeologist will ensure all procedures are respected.

Miscellaneous Project Information

Identification of Impacts and Proposed Mitigation Measures

Please see attached document outlining impacts and mitigation measures.

Cumulative Effects

The concept of Cumulative Environmental Impacts refers to the combined effects of all activities, past and present, without considering which parties are responsible for each individual impact. Hurtigruten Expeditions has implemented all necessary measures to minimize potential negative impacts on the environment. However, achieving a net zero effect is practically unfeasible, and any activities conducted in the Arctic will inevitably have some degree of contribution to the cumulative environmental impact. Nonetheless, Fridtjof Nansen's proposed activities are expected to result in only minimal contributions to the cumulative impact.

Impacts

Identification of Environmental Impacts

	PHYSICAL	Designated environmental areas	Ground stability	Permafrost	Hydrology / Limnology	Water quality	Climate conditions	Eskers and other unique or fragile landscapes	Surface and bedrock geology	Sediment and soil quality	Tidal processes and bathymetry	Air quality	Noise levels	BIOLOGICAL	Vegetation	Wildlife, including habitat and migration patterns	Birds, including habitat and migration patterns	Aquatic species, incl. habitat and migration/spawning	Wildlife protected areas	SOCIO-ECONOMIC	Archaeological and cultural historic sites	Employment	Community wellness	Community infrastructure	Human health
Construction																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-
Operation																									
Tourism Activities		M	-	-	-	M	-	-	-	-	-	-	M		-	M	M	M	M		P	-	-	-	-	-
Decommissioning																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-	-

(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)

Project Location

List of Project Geometries

1	point	Pond Inlet
2	point	Dundas Harbour / 74.53100243422496, -82.2539268997204
3	point	Croker Bay / 74.70361651918769, -83.14956475613525
4	point	Beechey Island / 74.73680793756577, -90.96348468677027
5	point	Prince Leopold Island / 74.05304308431185, -90.07473755483987
6	point	Fort Ross / 72.01556395008022, -94.22477670547632
7	point	Coningham Bay / 71.80040836929562, -96.74072954944009
8	point	Gjoa Haven / 68.64090543456493, -94.84051832864895
9	point	Cambridge Bay / 69.14424612795644, -105.05573489032419