ᓄᓇᕘᒥ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖏᑦᑎᒍᑦ ᑐᒃᓯᖅᑑᑦ ᕿᒥᕐᕈᔭᒃᓴᖅ #125655

Shift-eDNA

ᑐᒃᓯᖅᑑᑕᐅᔪᖅ ᖃᓄᐃᑦᑑᓂᖓ:	New
ᐱᓕᕆᐊᕆᔭᐅᔪᒪᔫᑉ ᖃᓄᐃᑦᑑᓂᖓ:	Scientific Research
ᐅᓪᓗᖓ ᑐᒃᓯᖅᑑᑎᓕᐊᖏᓂᐅᑉ:	2/4/2022 10:43:58 AM
Period of operation:	from 0001-01-01 to 0001-01-01
ᑲᔪᓯᒃᑲᐃᔨᐅᓂᐊᕐᓯᒥᔭᐅᔪᑦ:	from 0001-01-01 to 0001-01-01
ᐱᓕᕆᐊᖅᑲᕈᒪᔪᖅ:	Loïc Sanchez Université de Montpellier, MARBEC Pl. Eugène Bataillon Montpellier Occitanie 34090 France ᐅᖄᓚᐅᑏᑦ: +33635305609, ᓱᑲᔪᒃᑯᑦ:

ᑐᓴᐅᒪᔭᒃᓴᑦ

ᖃᓄᐃᑦᑑᑎᓂᒃ ᐱᓕᕆᐊᖃᕐᓂᐊᕆᐊᖕᒐᓐᓂᒃ

ᖃᓪᓗᓈᑎᑐᑦ: Who?I am a French PhD student at the MARine Biodiversity Exploitation and Conservation (MARBEC) laboratory, in the Université de Montpellier. We are working in collaboration with Louis Bernatchez at the Université Laval. We will also collaborate with two groups of explorers, “La Voie Arctique” and “Le Vagabond”, who will sail on the arctic seas this summer. Both boats were designed to reduce all pollution and greenhouse gas emissions. What?Our goal is to sample environmental DNA (eDNA) in the Arctic regions of Canada, with a protocol completely carried out offshore (2 different boats). One boat will host 3 persons, the other one will host 4 persons. No facilities will be constructed. The analysis of eDNA will be carried out in France, and results will be shared with local communities and published in an open access journal. Sampling eDNA only requires to filter surface seawater: indeed, it has no impact on wildlife, it doesn’t affect the species behavior and provides better results than most conventional survey methods.Why?We hope to survey marine fish communities in coastal waters, in order to detect early species arrivals due to climate change. This region is one of the less surveyed on the globe, but also the region where climate change will have the strongest effects, and thus we expect strong changes in the fish communities. We believe it is of great importance to study the area to know which marine fish species are present in the local communities. Where?One of the boats will sail from Sachs Harbour (Inuvialuit), to Greenland, thus passing through Nunavut in its northernmost parts, and the second boat will sail in the Baffin Sea, from Grise Fiord to Saint Pierre & Miquelon. The Vagabond will pass near 6 local communities: Iqaluit, Pangnirtung, Qikiqtarjuaq, Clyde River, Pond Inlet, and Grise Fiord.When?The Vagabond boat will start from Grise Fiord in early September, while La Voie Arctique will start from Sachs Harbour in June, and get to Nunavut as soon as the weather and the winds allow.

ᐅᐄᑎᑐᑦ: Qui ?Je suis un étudiant en doctorat à au laboratoire MARBEC (MARine Biodiversity Exploitation and Conservation) à l’Université de Montpellier, et je travaille en collaboration avec Louis Bernatchez à l’Université de Laval. Ce travail se fera aussi en collaboration avec deux groupes d’explorateurs, « La voie arctique » et « Le Vagabond », qui navigueront à la voile dans les eaux arctiques cet été. Les deux bateaux sont optimisés pour réduire toute pollution et émissions de carbone.Quoi ? Notre but est d’échantillonner de l’ADN environnemental (ADNe) dans la région arctique du Canada, avec un protocole mené à bien en totalité au large, sur 2 différents bateaux. Il y aura 3 personnes à bord de l’un des bateaux, et 4 personnes à bord du second. Aucune construction d’infrastructure n’aura lieu durant l’expédition. L’analyse de l’ADNe sera réalisée en France, et les résultats seront partagés avec les communautés locales, puis publiés dans un journal en accès libre.L’échantillonnage de l’ADNe requiert seulement une filtration de l’eau de mer en surface : ainsi, elle n’a aucun impact sur la biodiversité locale, et n’affecte pas le comportement des espèces. Aussi, elle fournit de meilleurs résultats que les méthodes conventionnellement utilisées.Pourquoi ?Nous aimerions inventorier les espèces de poissons marins des eaux côtières afin de pouvoir détecter de potentielles arrivées d’espèces à cause du changement climatique. En effet, l’Arctique est une région des moins bien connues sur le globe, mais c’est aussi la région dans laquelle le changement climatique aura les effets les plus forts. Ainsi, on peut s’attendre à de fortes variations des assemblages d’espèces dans cette région, et c’est pour cela que nous pensons qu’il est d’importance capitale d’étudier cette zone.Où ? L’un des bateaux partira de Sachs Harbour (Inuvialuit) et naviguera jusqu’au Groenland, et passera donc au Nord du Nunavut. Le second bateau naviguera sur la Mer de Baffin, de Grise Fiord jusqu’à Saint-Pierre et Miquelon. En passant par ce trajet, le bateau sera amené à passer proche de 6 communautés locales : Iqualuit, Pangnirtung, Qikiqtarjuaq, Clyde River, Pond Inlet et Grise Fiord.Quand ? Le Vagabond démarrera de Grise Fiord début Septembre, tandis que La Voie Arctique partira de Sachs Harbour début Juin, rejoignant ainsi les eaux du Nunavut aussi tôt que les vents et la météo le permettront.

ᐃᓄᒃᑎᑐᑦ: ᑭᓇ?PhD−ᒧᑦ ᐃᓕᓐᓂᐊᖅᑎᐅᕗᖓ ᐅᕙᓂ, MARBEC ᖃᐅᔨᓴᕐᕕᖕᒥ (MARine Biodisity Exploitation and conservation) ᐅᕙᓂ, ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᒥ Montpellier−ᒥ, ᐱᓕᕆᖃᑎᖃᖅᐸᒃᓱᖕᒐᓗ ᓗᐃ ᔫᓇᑦᓯ−ᒥᒃ ᐅᕙᓂ, University of Laval−ᒥ. ᑕᒪᓐᓇ ᐱᓕᕆᐊᖑᓂᐊᕐᒥᔪᖅ ᐱᓕᕆᖃᑎᖃᕐᓗᑎᒃ ᒪᖀᖕᓂᒃ ᕿᓂᖅᑎᓂᒃ, ᐅᑭᐅᖅᑕᖅᑐᖅ ᐊᖅᑯᑎᖓ ᐊᒻᒪ Vagabond, ᐅᑭᐅᖅᑕᖅᑑᑉ ᐃᒪᖕᒥᓐᓂᒃ ᐃᖕᒋᕐᕋᓂᐊᖅᑐᑦ ᐊᐅᔭᐅᓂᐊᖅᑐᖅ. ᑕᒪᕐᒥᒃ ᐅᒥᐊᒃ ᐱᐅᓂᕐᓵᖑᔫᒃ ᓱᑭᐃᓗᐊᙱᓐᓂᕐᓴᐅᓗᑎᒃ ᐸᐅᒃᓴᓂᒡᓗ ᐃᓯᐊᕿᓗᐊᖁᓇᒋᑦ.ᑭᓱ? ᑐᕌᒐᖅᐳᑦ ᖃᐅᔨᓴᕐᓗᑕ ᐊᕙᑎᐅᑉ ᑭᓇᐅᔾᔭᑎᖓᓂᒃ

ᐅᑭᐅᖅᑕᖅᑐᒥ ᑲᓇᑕᒥ, ᒪᓕᒋᐊᓕᖅᑲᖅᓗᑎᒃ ᐃᒪᕕᖕᒥ, 2-ᓂᒃ ᐅᒥᐊᓂᒃ. ᐱᖓᓱᓂᒃ ᐃᓄᖕᓂᒃ ᐃᑭᒪᔪᖅᑲᖅᓂᐊᖅᑐᖅ ᐅᒥᐊᕐᒥ, ᐊᒻᒪ ᑎᓴᒪᑦ ᐃᓄᐃᑦ ᐃᑭᒪᔪᑦ ᐊᐃᑉᐸᖓᓂ. ᒪᑭᒪᔾᔪᑎᓂᒃ ᓴᓇᔪᖅᑲᔾᔫᙱᑦᑐᖅ ᓄᒃᑕᖅᑎᓪᓗᒋᑦ. eDNA−ᒧᑦ ᖃᐅᔨᓴᖅᓂᖅᓴᐅᔪᖅ ᑲᔪᓯᑎᑕᐅᓂᐊᖅᐳᖅ ᐅᐃᐅᐃᑎᑐᑦ, ᖃᓄᐃᓕᖓᓕᖅᓂᖅᓴᐅᔪᓪᓗ ᐊᒥᖅᑳᕿᑕᐅᓂᐊᖅᕗᑎᒃ ᓄᓇᓕᖕᓂ, ᐊᒻᒪᐃᓛᒃ ᑎᑎᖅᓯᒪᓕᖅᑎᑕᐅᓕᖅᒥᓗᑎᒃ ᒪᑐᐃᙵᖅᑐᒃᑯᑦ ᑎᑎᖅᓯᕙᓪᓕᐊᕝᕕᐅᕙᒃᑐᒥ.eDNA ᖃᐅᔨᓴᖅᓴᐃᑦ ᐃᒪᐅᑉ ᖄᖓᓂᑦ ᐃᒪᖅᒥᑦ ᓴᓗᒻᒪᖅᓴᐃᒋᐊᖅᑲᖅᑎᑦᑎᔪᑦ: ᑕᐃᒪᐃᓐᓂᖓᓄᑦ, ᐊᑦᑐᐃᓂᖅᑲᖏᑦᑐᖅ ᓄᓇᓕᓐᓂᑦ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᖅᔪᓐᓂᖏᑦ, ᐊᒻᒪ ᐊᑦᑐᐃᓂᖅᑲᖏᑦᑐᖅ ᐱᐅᓯᖏᓐᓂᑦ ᐆᒪᔪᐃᑦ. ᐊᒻᒪᓗᑦᑕᐅᖅ, ᐱᐅᓂᖅᓴᓂᒃ ᓴᖅᑮᕗᖅ ᐊᑐᖅᑕᐅᓚᐅᖅᑐᓂᒃ.ᑭᓯᒧᑦ?ᓈᓴᐃᔭᒪᓚᑦᑕ ᐃᒪᖅᒥᐅᑕᓂᒃ ᐃᖃᓗᖕᓂᒃ ᓯᓪᕙᖅᐸᓯᖕᒥ ᖃᐅᔨᔭᓐᓇᖅᓂᐊᕐᑦᑕ ᑎᑭᑐᐃᓐᓇᖅᐊᓕᖕᓂᒃ ᓯᓚ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓ ᐱᔾᔪᑎᒋᓪᓗᒍ. ᐃᓛᒃ, ᐅᑭᐅᖅᑕᖅᑐᖅ ᖃᐅᔨᒪᔭᐅᙱᓛᖑᖅᑲᑕᐅᕗᖅ ᓄᓇᖅᔪᐊᖅᒥ, ᑭᓯᐊᓂᓕᑦᑕᐅᖅ ᐊᕕᑦᑐᖅᓯᒪᔪᖅ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓ ᓴᓐᖏᓂᖅᐹᖑᖅᑲᑕᐅᒻᒪᑦ. ᑕᐃᒪᐃᒻᒪᑦ, ᓂᕆᐅᒋᔭᖅᑲᖁᓐᓇᖅᐳᑦ ᓴᙱᔪᓂᒃ ᐊᔾᔨᒌᙱᑦᑐᓂᒃ ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᖏᐊᖅᔪᓐᓂᖏᓐᓂᒃ ᑖᓂ ᐊᕕᒃᓯᒪᓂᖅᓴᐅᔪᒥ, ᑕᐃᒪᐃᓐᓂᖓᓄᓪᓗ ᑕᒪᓐᓇ ᑕᐃᒪᐃᒃᑯᓂ ᐃᓱᒪᒍᑦ ᐱᒻᒪᕆᐊᖑᓇᓯᒋᓪᓗᒍ ᖃᐅᔨᓴᖅᓂᐊᖅᓗᒍ ᑕᒪᓐᓇ.ᓇᓂ?? ᐅᒥᐊᑉ ᐃᓚᖓ ᓴᓵᑦᒥᑦ (ᐃᓄᕕᐊᓗᐃᑦ) ᐊᒻᒪ ᑲᓛᕐᓛᑦ ᓅᓐᓄᑦ ᐃᖅᑭᖃᓗᓂ, ᓄᓇᕗᒻᒧᑦ ᓅᓪᓗᓂ. ᐊᐃᑉᐸᖓ ᐅᒥᐊᖅ ᐃᖅᑭᖃᓂᐊᖅᑐᖅ ᕿᑭᖅᑖᓗᑉ ᐃᒪᖓᒍᑦ, ᐊᐅᓯᐃᑦᑐᒥᑦ ᓴᐃᓐᑦ−ᐱᐅᕐ ᐊᒻᒪ ᒥᑯᓚᓐᒧᑦ. ᐊᖅᑯᓰᓂᖅ ᑕᕝᕗᓇ ᐊᖅᑯᑎᒃᑯᑦ, ᐅᒥᐊᖅ 6−ᓄᑦ ᓄᓇᓕᖕᓄᑦ ᖃᓂᑦᑑᓂᐊᖅᑐᖅ: ᐃᖁᓗᐃᑦ, ᐸᓐᓂᖅᑑᖅ, ᕿᑭᖅᑕᕐᔪᐊᖅ, ᑲᖏᖅᑐᒑᐱᒃ, ᒥᑦᑎᒪᑕᓕᒃ ᐊᒻᒪ ᐊᐅᓯᐃᑦᑐᖅ.ᖃᑯᒍ? ᕿᒪᐳᐊᓐ ᐊᐅᓪᓛᖅᑐᖅ ᐊᐅᓯᐃᑦᑐᒥᑦ ᓯᑎᐱᕆᐅᑉ ᐱᒋᐊᖅᓂᖓᓂᑦ, ᐅᑭᐅᖅᑕᖅᑐᖅ ᐊᖅᑯᑎᖓ ᐊᐅᓪᓛᖅᑯᓂ ᓯᓪᕙᒥᑦ ᔫᓂᐅᑉ ᐱᒋᐊᖅᓂᖓᓂᑦ, ᓄᓇᕗᑦ ᐃᒪᖓᓄᐊᖅᓗᓂ ᐊᓄᖓᓕᑐᐊᖅᐸᑦ ᓯᓚᒧᓪᓗ.

Personnel

Personnel on site: 7

Days on site: 60

Total Person days: 420

Operations Phase: from 2022-01-03 to 2022-06-01

Operations Phase: from 2022-07-01 to 2022-10-01

Post-Closure Phase: from to

ᐱᓕᕆᐊᕆᔭᐅᓂᐊᖅᑐᑦ

ᓇᒥ	ᖃᓄᐃᑦᑑᒥᑦ ᐱᓕᕆᐊᖃᕐᓂᐊᖅᐸ	ᑭᒃᑯᑦ ᓄᓇᕐᑰᑖᓂ	ᑐᓴᐅᒪᔭᒃᓴᑦ ᓄᓇᐅᑉ ᖃᓄᖅ ᐊᑐᒐᐅᓚᐅᖅᓯᒪᔭᕆᐊᖕᒐᓐᓂᒃ	ᐃᑦᓴᕐᓂᑕᖃᕐᐱᐅᕙᓚᐅᖅᐸ ᐃᓄᒃᓄᑦ ᓇᔪᖅᑕᐅᖃᑦᑕᕐᓂᑰᕙᓗ ᑕᐃᑦᓯᒪᓂᑐᖃᐅᓕᖅᑐᖅ	ᖃᓂᒋᓐᓂᖅᐹᖅ ᓄᓇᓕᒋᔭᐅᔪᖅ ᐊᒻᒪᓗ ᓴᐳᒻᒥᒃᓰᐱᐅᕙᓗ ᓱᓇᓄᑦ
Sample 1 - Lady Ann Strait	Scientific/International Polar Year Research	Marine	N/A	N/A	Grise Fiord
Sample 2 - Sirmilik	Scientific/International Polar Year Research	Marine	N/A	N/A	Sirmilik National ParkPond Inlet
Sample 3 - Paterson Inlet	Scientific/International Polar Year Research	Marine	N/A	N/A	Pond Inlet
Sample 4 - Isabella Bay	Scientific/International Polar Year Research	Marine	N/A	N/A	Clyde River
Sample 5 - Home Bay	Scientific/International Polar Year Research	Marine	N/A	N/A	Qikiktarjuaq
Sample 6 - Exeter Bay	Scientific/International Polar Year Research	Marine	N/A	N/A	Qikiktarjuaq
Sample 7 - Hoare Bay	Scientific/International Polar Year Research	Marine	N/A	N/A	Pangnirtung
Sample 8 - Outer Cumberland Sound	Scientific/International Polar Year Research	Marine	N/A	N/A	Pangnirtung
Sample 9 - Cyrus Field	Scientific/International Polar Year Research	Marine	N/A	N/A	Iqaluit
Sample 10 - Hudson Strait	Scientific/International Polar Year Research	Marine	N/A	N/A	Iqaluit
Sample 11 - Hospital Bay	Scientific/International Polar Year Research	Marine	N/A	N/A	Grise Fiord
Sample 12 - Sverdrup Channel	Scientific/International Polar Year Research	Marine	N/A	N/A	Grise Fiord
Sample 13 - Aurland Fiord	Scientific/International Polar Year Research	Marine	N/A	N/A	Grise Fiord
Sample 14 - Henson Bay	Scientific/International Polar Year Research	Marine	N/A	N/A	Grise Fiord
Sample 15 - Yelverton Bay	Scientific/International Polar Year Research	Marine	N/A	N/A	Grise Fiord
Sample 16 - Ayles Fiord	Scientific/International Polar Year Research	Marine	N/A	N/A	Grise Fiord / Quttinirpaaq National Park

ᓄᓇᓕᐅᑉ ᐃᓚᐅᖃᑕᐅᓂᖓ ᓄᓇᓖᑦ ᐊᕕᒃᑐᖅᓯᒪᐅᕐᓂᖓᓄᑦ ᐃᑲᔪᑕᐅᔪᓐᓇᖅᑐᑦ

ᓄᓇᓕᒥᔪᖅ	ᐊᑏᑦ	ᑲᑐᔾᔨᐊᖃᑎᒌᒥᔪᖅ	ᖃᖕᒐᓗ ᑐᓴᖅᑎᑕᐅᓚᐅᕆᐊᖕᒥᓐᓂᒃ
Clyde River	Joshua	Nangmautaq HTA	2022-01-19
ᒥᑦᑎᒪᑕᓕᒃ	Jennifer	Mittimalik HTO	2022-01-19
ᐃᖃᓗᐃᑦ	amaruq@baffinhto.ca	Amaruq Hunters & Trappers Association	2022-01-19
ᐊᐅᔨᐃᑦᑐᖅ	gfiviq_hta@qiniq.com	Iviq Hunters & Trappers Association	2022-01-19
ᐸᖕᓂᖅᑑᖅ	pang@baffinhto.ca	Pangnirtung Hunters & Trappers Organization	2022-01-19
ᖅᑭᑭᖅᑕᖅᔪᐊᖅ	nattivak_hta@qiniq.com	Nattivak Hunters & Trappers Association	2022-01-19

ᓚᐃᓴᓐᓰᑦ ᐱᒧᖅᓇᐅᑏ ᐊᖏᖅᑕᐅᓯᒪᔪᑦ

ᓇᑭᒋᐊᖅᒋᓐᓂᒃ ᐱᓕᕆᐊᕆᐊᖑᐅᓂᐊᕐᑐᑦ ᑎᑎᕋᕐᓗᒋᑦ:

North Baffin
South Baffin

ᓚᐃᓴᓐᓰᑦ ᐱᒧᖅᓇᐅᑏ ᐊᖏᖅᑕᐅᓯᒪᔪᑦ

ᒐᕙᒪᒋᔭᐅᔫᑉ ᐊᕕᒃᑐᖅᓯᒪᐅᕐᓂᖓᓐᓂ ᒪᓕᒐᕐᓅᖓᔪᓂᒃ ᐱᖁᔭᕐᓅᖓᔪᓂᒡᓗ ᑲᒪᔫᑦ ᐱᔪᖅᓇᐅᑎᑖᕈᑎᓂᒃ ᓚᐃᓴᓐᓯᓗᒡᓗ ᑲᔪᓯᒃᑲᐃᔩᑦ	ᕐᑲᓄᐃᑦᑐᓪᓚᕆᐅᕙ ᓚᐃᓴᓐᓯᑖᕿᑕᐅᔪᖅ ᐱᔪᖅᓇᐅᑎᑖᕿᑕᐅᔪᖅ ᐊᖏᖅᑕᐅᔪᕐᓘᓐᓃᑦ	ᒫᓐᓇ ᕐᑲᓄᐃᓕᖓᕙ	ᐅᓪᓗᒥ ᑐᓂᔭᖅ/ ᑐᒃᓯᖅᑑᑕᐅᓚᐅᖅᓯᒪᔪᖅ	ᑭᒡᓕᕐᑲᕐᕕᖓ
Hunters and Trappers Associations/Organizations	I have contacted all concerned HTAs/HTOs and asked to consult with them. For now, I have received an answer from the Nangmautaq HTA, who said the board would review the project.	Applied, Decision Pending	2022-01-19	
ᑲᓇᑕᒥ ᐃᖏᕐᕋᔪᓕᕆᔩᒃᑯᑦ	I have contacted both Transport Canada and Global Affairs, I am still waiting to see if I need a licence.	Not Yet Applied	2022-01-21	
ᑲᓇᑕᒥ ᐃᕐᑲᓗᓕᕆᔩᑦ ᑕᕆᐅᓕᕆᔩᓪᓗ	I have contacted the Department of Fisheries and Oceans, who indicated we did not need a licence because we only filter seawater, we do not sample fish or fish parts.	Not Yet Applied	2022-01-05	

Project transportation types

Transportation Type	ᓱᓇᒨᑦ ᐊᑐᒐᐅᓂᐊᖅᐸ	Length of Use
Water	We will use a boat to go from Grise Fiord to Saint Pierre & Miquelon	

Project accomodation types

ᐊᓯᖓ,

ᐊᑐᒐᐅᓂᐊᖅᑐᖅ

ᐱᕐᑯᑦ ᐊᖏᔪᖅ ᐊᑐᖅᑕᐅᓂᐅᓴᔪᖅ ᐃᓚᖃᓯᐅᑎᓗᒋᑦ ᐃᑰᑕᐃᑦ, ᒥᓪᓗᐊᕈᑏᑦ, ᖃᖓᑕᓲᖅ, ᓄᓇᓯᐅᑦ ᐊᓯᖏᓪᓗ

ᐊᖏᔪᖅ ᐱᕐᑯᑦ ᐊᑐᒐᐅᓂᐊᖅᑐᖅ ᖃᓄᐃᑦᑑᓂᖓ	ᖃᑦᓯᐅᕚᑦ	ᐊᖏᓂᖏᑦ - ᐳᖅᑐᓂᖏᑦ	ᓱᓇᒧᑦ ᐊᑐᒐᐅᓂᐊᖅᐸ
Sailing Boat	1	15.3x4.2m	The sailing boat will be used to transport our team from Grise Fiord to the southern parts of Nunavut.
Athena Peristaltic Pump	2	22x33x17 cm	The peristaltic pump is a pump used to filter DNA in surface waters, without any contamination.

ᑎᑎᕋᐅᓯᖕᓗᒍ ᐅᖅᓱᒃᓴᐃᑦ ᐊᑦᑕᓇᖅᑐᖅᑖᓪᓗ ᐊᑐᖅᑕᐅᓂᐊᕐᓂᖏᑦ

ᓱᓇᒧᑦ ᐅᖅᓱᒃᓴᒡᒥᐊᖅ ᐊᑐᒐᐅᓂᐊᖅᐸ	ᖃᓄᐃᑦᑐᓪᓚᖕᐅᕙ ᐅᖅᓱᒃᓴᒡᒥᐊᖅ	ᖃᑦᓯᐅᕚᑦ ᐅᖅᓱᒃᓴᖃᐅᑏᑦ	ᐆᒃᓴᐅᒃ ᐃᒪᖃᖅᑎᒥᔪᙵᕐᓂᖓ	ᑲᑎᓪᓗᒍ	ᐆᒃᓴᐃᑦ ᐊᒥᖁᓂᖏᑦ	ᓱᓇᒧᑦ ᐊᑐᒐᐅᓂᐊᖅᐸ
Gasoline	fuel	1	4500	4500	Liters	In case of headwinds that would not let us sail

ᐃᒪᖅ ᐊᑐᖅᑕᐅᔮᖅᑐᖅ

ᐅᓪᓗ ᑕᒫᖅ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᖅ	ᖃᓄᖅ ᐃᒥᖅᑕᖃᑦᑕᕐᓂᐊᖅᐸᑦ	ᓇᑭᑦ ᐃᒥᖅᑕᖃᑦᑕᕐᓂᐊᖅᐸᑦ
0		

ᐊᑲᑕᔪᑦ

ᐊᑲᑕᔪᓪᓗᓂᐊᕐᓂᖅ

ᐱᓪᓗᐊᓗᐅᔾᔨᒪᔨᒍᑦ ᐱᓪᓗᐊᓗᐅᔾᔨᓂᐊᖅᑐᖅ	ᖃᐅᓄᐃᑦᑐᖅ ᐊᑲᑕᔪᖅ	ᖃᐅᓄᑎᒋ ᐊᑲᑕᔪᑦ ᓴᖅᑭᐊᓂᐊᖅᑐᓗᐅᔾᔪᑦ	ᖃᐅᓄᖅ ᐊᑲᑕᖅᑕᐅᓂᐊᖅᐸ	ᓴᓪᒻᒪᖅᓴᐅᑎᑲᓴᐅᖅᓯᓂᐅᓂᐊᖅᑐᑦ
Waste disposal	ᖃᔪᖅᑕᓪᓗᓂᖅ	4 people / 1 month	Can be disposed either in the water or burned on land	-

ᐊᔾᑎᑎᒥᐅᑕᓯᐅᑦ ᐊᑲᑐᖅᑕᐅᓂᒪᒻᒪᔨᑦ

Our protocol only requires to filter seawater, and thus produce no environmental impacts

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

ᐃᓐᓇ ᐊᕐᑎᐅᑦ ᖃᓄᐃᑦᑐᓕᕆᓂᖅ: ᓄᓇᑦ ᖃᓄᐃᑦᑐᓂᖅ

ᐃᓐᓇ ᐊᕐᑎᐅᑦ ᖃᓄᐃᑦᑐᓕᕆᓂᖅ: ᐅᒪᔪᖏᑕᖃᖅ

ᐃᓐᓇ ᐊᕐᑎᐅᑦ ᖃᓄᐃᑦᑐᓕᕆᓂᖅ: ᐃᓄᓕᓕᓂᕆᔨᖅᓯᑦ-ᐱᕐᓕᐊᔪᓕᓂᕆᔨᖅᓯᑦ

Miscellaneous Project Information

ᓄᓪᓄᐃᖏᑕᐅᓂᖅᑎᑦ ᐊᑲᑐᖏᑕᐅᓱᒪᔪᑦ ᖃᓄᐃᑦᑐᓂᖅᑎᑦ ᕿᓕᐅᒥᔪᓱᖏᑕᐅᓂᐊᖃᓂᖅᑎᑦᓗ

Cumulative Effects

Impacts

ᓄᓇᓄᐃᖅᑕᐅᓂᖅᑎᑦ ᐊᐢᑎᑎᐅᑕᓀᑦᑐᑦ ᐊᑲᖅᑕᐅᓱᒪᔪᑦ

	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
ᖃᓄᐃᓕᖅ																									
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ᐅᓴᖅᑕᕐᓂᖅ																									
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ᐃᑐᑦᑎᓇᓂᖅ																									
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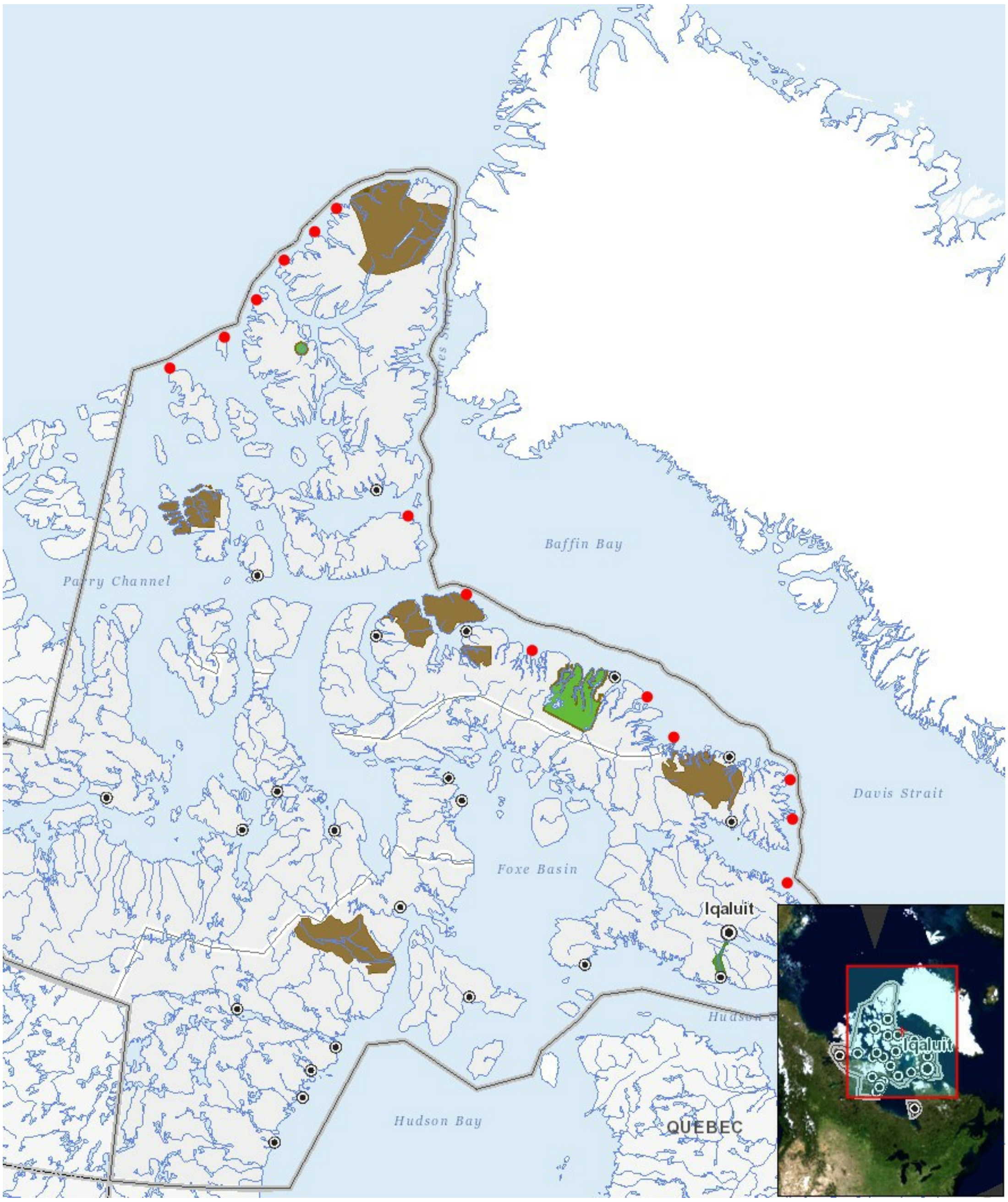
(P = ᐊᑲᐅᓯᕈᑎᐸᓐᓇᖅᑐᑦ, N = ᐊᑲᐅᖅᑭᑦᓴᑕᐅᐸᓐᓇᖅᑐᑦ ᑕᓪᓕᐅᒡᓴᓱᖅᑐᑕᐅᐸᓐᓇᖅᑭᑦᑐᓪᓗ, M = ᐊᑲᐅᖅᑭᑦᓴᑕᐅᐸᓐᓇᖅᑐᑦ ᑕᓪᓕᐅᒡᓴᓱᖅᑐᑕᐅᐸᓐᓇᖅᑐᑦᑐᓪᓗ, U = ᖁᐅᐅᒪᓐᓇᖅᑭᑦᑐᖅ)

ᓇᒦᒻᒪᖕᑳᖅ ᐱᓕᕆᐊᕆᔭᐅᔪᖅ



List of Project Geometries

1	point	Sample 1 - Lady Ann Strait
2	point	Sample 2 - Sirmilik
3	point	Sample 3 - Paterson Inlet
4	point	Sample 4 - Isabella Bay
5	point	Sample 5 - Home Bay
6	point	Sample 6 - Exeter Bay
7	point	Sample 7 - Hoare Bay
8	point	Sample 8 - Outer Cumberland Sound
9	point	Sample 9 - Cyrus Field
10	point	Sample 10 - Hudson Strait
11	point	Sample 11 - Hospital Bay
12	point	Sample 12 - Sverdrup Channel
13	point	Sample 13 - Aurland Fiord

14	point	Sample 14 - Henson Bay
15	point	Sample 15 - Yelverton Bay
16	point	Sample 16 - Ayles Fiord