

À l'attention de :

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$\gamma_b \Delta^c \dot{\gamma} \Pi \sigma^b \quad \Lambda c_n d^{\gamma b} \gamma \sigma d n d^{\alpha} l^a \sigma^b$

ᑭᓪᐱᕐ ᐸᓄᓇ: A survey of narwhal, beluga and bowhead whales will be conducted in the Canadian Arctic in August 2023. The last survey of all the narwhal stocks simultaneously occurred in 2013 and since then, there is further research which supports potential movement of narwhals among previously defined summering regions. As a result, surveys of all the stocks within a short period of time is needed. This survey will cover areas previously surveyed for these stocks in 2013, while incorporating information and knowledge from the communities Hunters and Trappers Organizations that was sought during a scoping meeting in January 2020, and satellite telemetry of narwhals from 2012-2018 to determine high-use areas. Surveys will be flown in a DeHavilland Twin Otter (DH-6) equipped with bubble windows and a camera hatch at the rear. Overlapping photographs will be taken along transect lines from an altitude of 610 m (2000 ft). Two camera systems will be installed in the twin otter camera hatch. Each system will consist of a Nikon D850 camera, a Garmin GPS unit and a laptop computer. Geo-referenced images will be saved on the laptop in real time and analyzed for all marine mammal sightings after the survey. This survey will provide updated abundance estimates for all the Canadian Baffin Bay narwhal stocks, Cumberland Sound beluga whales, and Eastern Canada- West Greenland bowhead whales. Updated abundance estimates are needed to ensure sustainable harvests in Nunavut.

Délégation : Une enquête sur le narval, le béluga et la baleine boréale sera menée dans le Haut-Arctique canadien en août 2023. La dernière étude de tous les stocks de narvals simultanément a eu lieu en 2013 et depuis lors, d'autres recherches soutiennent le mouvement potentiel des narvals entre les régions d'estivage précédemment définies. Par conséquent, il est nécessaire d'effectuer des enquêtes sur tous les stocks dans un court laps de temps. L'étude couvrira les zones déjà étudiées pour ces stocks en 2013, tout en incorporant les informations et les connaissances des organisations de chasseurs et de trappeurs des communautés qui ont été demandées lors d'une réunion de cadrage en janvier 2020, et la télémétrie par satellite des narvals de 2012 à 2018 pour déterminer les zones à forte utilisation. Les relevés seront effectués à bord d'un DeHavilland Twin Otter (DH-6) équipé de fenêtres à bulles et d'une trappe à caméra à l'arrière. Des photographies se chevauchant seront prises le long des lignes de transect à une altitude de 610 m (2000 ft). Deux systèmes d'appareil photo seront installés dans la trappe de l'appareil photo du Twin Otter. Chaque système sera composé d'un appareil photo Nikon D850, d'une unité GPS Garmin et d'un ordinateur portable. Les images géoréférencées seront sauvegardées sur l'ordinateur portable en temps réel et analysées pour toutes les observations de mammifères marins après l'étude. Cette étude fournira des estimations d'abondance actualisées pour tous les stocks canadiens de narvals de la baie de Baffin, les bélugas de la baie de Cumberland et les baleines boréales de l'est du Canada et de l'ouest du Groenland. Des estimations actualisées de l'abondance sont nécessaires pour garantir des récoltes durables au Nunavut.

[illegible]

Inuinnaqtun: Naunaiyautit tuugait, arvit arvillu havaktauniaqtut uvani Kanatami anginiqhakkut Ukiuqtaqtumi uvani Niqiliqivik 2023. Kinguliit naunaiyautit tamaita tuugadjat tamayait attautimiiut uvani 2013mi talvangalu, piqaqtuq hivumut ihivgiugutininik kitut ikayuutauyut ingutaaqniqmik kiklinik kinguani naunaiyaghimayut auyami aviktungniini. Talvuuna, naunaiyainiq tamainnik piqarninnga

naittumik ikaarnimik ihariagiyauyuq. Naunaiyautit pidjutiginiaqtait kitut kinguani naunaiyaqtauyut hapkununga pihimayainun uvani 2013mi, ilaubleugit kangiqhidjutit uvalu ilihimayatik hapkununga nunallaani Anguniaqtit Katimayit tapkua qiniqtauyut katimatilugit uvani Ubluqtuhivia 2020, uvalu satellite telemetry natqait hamanga 2012-2018 ihumaliugutikhat angiyumik-atungnikkut nayugait. Ihivriudjutikhangit tingminiaqtun talvani DeHavilland Twin Ottermi (DH-6) piqaqtun puptalaanik igalaarnik piksaliurutmiklu piksaliurutmik. Qaliriiknigit piksat piyauniaqt nalruyunik 610-miitamik (2000 ft). Malruk piksaliutit auladjutait iliuraqtauniaqtut uvani twin otter piksaliut. Tamangnik hanaqidjutikharnik piqarniaqtun Nikon D850nik piksaliurutmik, Garmin GPSnik iglukharnik qaritauyangniklu qaritauyangnik. Nunamiutanik ilidjuhikgivakgainik piksaliukhimayunik tutkikhaktaulutik mikharut laptop nik havakhikhimayunik uvunlu kinikhianikmun ihiviuktauyukhanik tamainik taryumiutanik nirginitik takungnakpaktukhanik talvanga ihiviukhinikmun naunaiyainikmun naunaitkutakhanik. Una naunaiyaut tunihiniaqtuq nutaanguqtiqhimayunik amigainiit itqungniarutit tamainun Kanatami Qikiqtaalungmi narwhalnik, Cumberland Soundmi qilalukkat, kivataanilu Kanatami-Kalaaliit arvit. Nuutaanguqtiqhimayut amigaitilaangit nallautiqhimayut piqaqtukhat naunaiyaiyaangat atuqtauhiimaagiaqaqtunik anguniaqtakharnik Nunavunmi.

Personnel

Personnel on site: 16

Days on site: 22

Total Person days: 352

Operations Phase: from 2023-08-04 to 2023-08-25

$$\Lambda \subset \mathbb{N} \triangleleft \mathbb{N} \xrightarrow{\sigma} \mathbb{N} \xrightarrow{\sigma^b} \mathbb{N}^c$$

| ᐱᓯ | ᖃᓄᐃᑐᒥᑦ ᐱᑕᓚᐳᖃᖅᓂᐳᑦ | ᑭᐃᑦ ᓄᓇᖃᑖᑦ | ᑐᔨᐅᒪᖃᖅᓴᑦ ᓄᓇᐅᑦ ᖃᓄᖃᖅ ᐳᑐᒪᐅᑕᐅᖃᖅ ᓯᒪᖃᓚᐳᖅᓴᑦᓂᖅ | ᐃᑦᓴᖅᑕᖃᖅᐱᐅᑕᐅᑦᐅᑦ ᐃᓄᖅᓄᑦ ᓇᓴᖃᑕᐅᖃᑦᑕᖅᓂᐳᑦ ᑕᐃᑦᓯᒪᓂᑐᖃᐅᑕᖃᑐᖃᖅ | ᖃᓂᖅᓂᖃᖅᑖᖃᖅ ᓄᓇᑕᓯᖃᐅᓴᖃᖅ ᐳᒪᒫᓗ ᓴᐸᓯᖃᖅᐱᐅᑕᐅᑦ ᓯᓇᓄᑦ |
|-----------------------------|--|---------------------------|---|---|--|
| Jones Sound | Scientific/International Polar Year Research | Inuit Owned Surface Lands | N/A | N/A | Grise Fiord, Nunavut |
| Norwegian Bay | Scientific/International Polar Year Research | Inuit Owned Surface Lands | N/A/ | N/A | Grise Fiord, Nunavut |
| Foxe Basin | Scientific/International Polar Year Research | Inuit Owned Surface Lands | N/A | N/A | Sanirajak, Nunavut |
| East Baffin Island/Somerset | Scientific/International Polar Year Research | Inuit Owned Surface Lands | N/A | N/A | Resolute Bay, Arctic Bay, Pond Inlet, Clyde River, Qikiqtarjuaq, Pangnirtung, Taloyoak |

[illegible]

| ᓄᓇ ᑦᓴᖅ | ᐋᑏᑦ | ᕐᑐᔭᐱᑦᓂᑎᑦᒃᓴᖅ | ᖅᓴᓴᐱ ^ᖅ ᐱᙳᖅᑎᑕᐅᓇᐅᓴᐱᐱᑦᒃᓴᖅ |
|---------------|-------------------|--|--------------------------------------|
| Clyde River | James Arreak | Nangmautaq Hunters and Trappers Organization | 2022-12-21 |
| ᐃᔭᐱᐱᑦᐱᖅ | Amy Barnabas | Ikajutit Hunters & Trappers Association | 2022-12-21 |
| ᓴᓂᑦᓴᖅ | Lizzie | Sanirajak Hunters and Trappers Association | 2022-12-21 |
| ᐢᑦᑎᑕᑕᓇᖅ | Jennifer | Mittimatalik Hunters & Trappers Organization | 2022-12-21 |
| ᑦᑭᑭᑦᑕᑦᐱᑦᐱᖅ | Martha Nuqingaq | Nattivak Hunters & Trappers Organization | 2022-12-21 |
| ᖅᕐᐅᐱᐱᑦᑐᖅ ᑦᓴᓴᑦ | Nancy Amarualik | Resolute Bay Hunters & Trappers Organization | 2022-12-21 |
| ᑦᓴᓂᖅᓴᖅᓴᖅ | Mark Kilabuk | Pangnirtung Hunters & Trappers Organization | 2022-12-21 |
| ᐱᐅᐱᐱᑦᑐᖅ | Louisa | Iviq Hunters & Trappers Association | 2022-12-21 |
| ᑕᓴᑦᐱᑦᐱᖅ | Jimmy Oleekatalik | Spence Bay Hunters and Trappers Organization | 2022-12-21 |

ᄒᄆᅃᆫ ᄇᄊᅃᄂᆺ ᄈᅃᆯᅃᄌᄆᄆᄆᄆᄆᄆ

$a^b r^c \Lambda_{\sigma} \Delta_{\tau} \delta \sigma \Delta^{\tau b} \gamma^c$ $\partial \partial \gamma^c \omega^c$:

Transboundary

Kitikmeot

Kivalliq

North Baffin

South Baffin

[illegible]

| ሀገራዊ ጥቅም ጥያቄዎች/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች | ጥያቄዎች/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች | ጥያቄዎች/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች | ጥያቄዎች/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች | ጥያቄዎች/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች |
|---|---|---|---|---|
| Hunters and Trappers Associations/Organizations | Letters of support have been received from five of the nine Hunters and Trappers Organizations to date. | Active | 2023-04-01 | 2024-04-01 |
| Hunters and Trappers Associations/Organizations | We are waiting for letters of support from four of the nine Hunters and Trappers Organizations. One has provided verbal support but not a letter yet. Three have no yet reviewed or responded. | Applied, Decision Pending | | |
| ጥያቄዎች/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች | NWA and MBS applications have been submitted. | Applied, Decision Pending | 2023-01-27 | |
| ጥያቄዎች/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች ሰነድ/ጥያቄዎች | NWA and MBS applications have been submitted. | Applied, Decision Pending | 2023-01-25 | |

Project transportation types

| Transportation Type | How the Data will be Collected | Length of Use |
|---------------------|--|---------------|
| Air | Twin otters will be used to fly systematic survey lines. | |

Project accomodation types

ᠮᠤᠩᠭᠠᠨ ᠶᠤᠨ

$\triangleleft^b C d^c$
$$\Delta^b C d_c n_\sigma \Delta^q \sigma^q$$
[illegible]

4907D C⁵ D⁵ 4^b D^{5b} C D⁷ L⁷ D⁷

There will be no environmental impacts on the land as we will use already demarcated landing strips where fuel is regularly cached. There will be minimal noise disturbance to wildlife as we fly at an altitude of 1000-2000ft.

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 11: Municipal Development

L^ae d'c'nd' b'm d'c' c'n d'st: m'd' b'm d'c'st

L^ae **A**d **N**o **96** **D**c **C**o **n**s **t**: **D**e **L**i **b**e **r**e **f**e **r**e

ᐱᓪᑲ ᐳᑦᐅᐃᔭᒃ ᑖᑲᓄᐃᕐᑐᓚᓂᐁᓂᑦ: ᐃᓄᓚᓂᑦᐅᐃᕐᑐᓚᓂᑦ-ᐱᑦᓚᐳᓚᓂᑦᐅᐃᕐᑐᓚᓂᑦ

Miscellaneous Project Information

[illegible]

Cumulative Effects

Impacts

$\mathbb{C} \rightarrow \mathbb{C} \Delta^{\mathfrak{b}} \mathbb{C} \rightarrow \sigma^{\mathfrak{a}} \mathfrak{r}^{\mathfrak{c}} \quad \mathbb{A} \mathbb{C} \cap \Gamma \rightarrow \mathbb{C} \mathfrak{c}^{\mathfrak{c}} \mathbb{C} \quad \mathbb{A}^{\mathfrak{b}} \mathbb{C}^{\mathfrak{b}} \mathbb{C} \rightarrow \mathfrak{r}^{\mathfrak{c}} \mathbb{C} \rightarrow \mathfrak{r}^{\mathfrak{c}}$

[illegible][illegible]

| | | |
|---|----------|-----------------------------|
| 1 | polyline | Jones Sound |
| 2 | polyline | Norwegian Bay |
| 3 | polyline | East Baffin Island/Somerset |
| 4 | polyline | Foxe Basin |

- | | | |
|---|----------|-----------------------------|
| 1 | polyline | Jones Sound |
| 2 | polyline | Norwegian Bay |
| 3 | polyline | East Baffin Island/Somerset |
| 4 | polyline | Foxe Basin |

