



## **NIRB Uuktuutinga Ihivriughikhamut #126009**

### **One Ocean Expedition - Norwegian tall ship through Northwest Passage and the Nunavut region in 2025**

<b>Uuktuutinga Qanurittuq:</b>	New
<b>Havaap Qanurittunia:</b>	Scientific Research
<b>Uuktuutinga Ublua:</b>	11/20/2024 2:56:47 AM
<b>Period of operation:</b>	from 2025-08-05 to 2025-09-02
<b>Havauhikhaq</b>	Haakon Vatle
<b>Ikayuqtinga:</b>	Stiftelsen Seilskipet Statsraad Lehmkuhl Bradbenken 2, skur 7 Bergen Vestland 5003 Norway Hivayautit Nampanga:: 004797537984, Kayumiktukkut Nampanga::

# **QANURITTUT**

## **Tukihiannaqtunik havaariyauyumayumik uqauhiuyun**

Qablunaatitut: see attached document

Uiviititut: see attached document

Inuktitut: see attached document

Inuinnaqtun: see attached document

## **Personnel**

Personnel on site: 110

Days on site: 45

Total Person days: 4950

Operations Phase: from 2025-08-05 to 2025-09-02

Closure Phase: from 2025-08-13 to 2025-09-05

# Hulilukaarutit

Inigiya	Hulilukaarut Qanurittuq	Nunannga Qanurittaakhaanik	Initurlinga qanuritpa	Initurlinga utuqqarnitat unaluuniit Ingilraaqnitat Uyarannguqtut akhuurninnga	Qanitqiyauyuq qanitqiamut nunallaat kitulluuniit ahiruqtaiiyainnit nuna
Station work area 1	Researching	Marine	N/A	N/A	N/A
Station work area 2	Researching	Marine	N/A	N/A	N/A
Ikaluktutiak	Access Road	Municipal	N/A	N/A	N/A

## Nunaliin Ilauyun, Aviktuqhimayuniitunullu Ikayuuhiarunguyun

Nunauyuq	Atia	Timiuyuq	Upluani Uqaqatigiyaungmata
Information is not available			

# Angiuttauvaktunik

Naunaiqlugu nunanga talvani havauhikhaq ittuq:

Angiuttauvaktunik

Munariniqmut Ayuittiaqtuq	Angirutinga Qanurittuq	Tadja Qanurittaakhaanik	Ublua Tuniyauyuq/Uuktuqtuq	Umikvikhaa Ublua
Nunavunmi Ihivriuqniqmut Timiqutigiyanga	in the process of applying	Not Yet Applied		
Alaanut	Enviornmental Impact Screening Committee (EISC), application in progress	Not Yet Applied		
Pulaarviit Kaanata	Feedback from Parks Canada After discussing with our colleagues, we can confirm there is no Parks Canada specific permit requirement from a nautical or scientific perspective for your expedition	Active		
Iqalukhiurniqmut Tariuqmilu Kaanata	In the process of applying	Not Yet Applied		
Alaanut	Government of CanadaApplication for consent to conduct marine scientific research	Applied, Decision Pending		

## Project transportation types

Transportation Type	Qanuq Atuqtauniarmangaa	Length of Use
Water	Sail Training Ship Statsraad Lehmkuhl, Crew change in Cambridgebay	

## Project accomodation types

Alaanut,

# Ihuaqutivaluin Atuqtauyukhan

Hanalrutit atuqtaunahuat (ukuallu ikuutat, pampiutainnik, tingmitinik, akhaluutinik, hunaluuniit)

Hanalrutit Qanurittuq	Qaffiuyut	Aktikkulaanga – Qanurittullu	Qanuq Atuqtauniarmangaa
Kongsberg Discovery EK80 (38, 120, 200 kHz)	1	N/A	Single-beam echosounder, hull mounted sensor
RDI 75 kHz, Kongsberg Discovery CP 300 kHz	1	N/A	Acoustic Doppler Current Profilers, Hull mounted
WS700-UMB Smart Weather Sensor	1	N/A	Temperature, relative humidity, precipitation intensity, precipitation type, precipitation quantity, air pressure, wind direction, wind speed, radiation Mast mounted sensor
Three Ocean Sonics hf hydrophones	1	N/A	record passive acoustics, hull mounted sensor
WS100 Radar Precipitation Sensor / Smart Disdrometer	1	N/A	Mast mounted sensor for Rain/precipitation quantity, rain/precipitation type (Rain, snow, sleet, freezing rain, hail)
Apogee SI-421-SS. Narrow field of view infrared radiometer sensor	1	N/A	Mast mounted Sea Surface skin temperature
CTD rosette	1	n/A	Temperature, conductivity, dissolved oxygen, chlorophyll A, turbidity, backscatter pH, PAR Seabird SBE19plus V2 SBE43 DO CHL-a & TURBIDITY ECO-FLNTU SATPAR PAR-LOG ICSW, SATPAR SURFACE/REFERENCE PAR SBE18 pH
Ferrybox, sensors of flow through system	1	N/A	installed on board Temperature, conductivity, dissolved oxygen, turbidity, chlorophyll A
Quantum SQ-522 PAR sensor	1	N/A	Mast mounted sensor, Optical sea awarness
WP2 plankton net, mesh size of 180 micrometer.	1	N/A	Zooplankton Zooplankton net deployed from vessel
Onboard filtration and qPCR/sequence analyses and water filtered for post cruise lab analysis	1	N/A	Water samples for eDNA analysis, Water samples collected from vessel flow through system and water bottles on CTD rosette (12x2.5l) for microplastics analysis, isotope analysis
Box corer	1	50cm x 50cm	seafloor sediment extraction
Multicorer	1	6 corers à 10cm diameter	seafloor sediment extraction

**Qanurittuq Urhuqyuaq unalu Qayangnaqtut Hunavaluit Aturningga**

<b>Qanurittuq urhuqyuaq hunavaluit aturninnga:</b>	<b>Urhuqyuaq Qanurittuq</b>	<b>Qaffiuyut qattaryut</b>	<b>Qattaryuk Aktikkulaanga</b>	<b>Atauttimut Qaffiuyut</b>	<b>Ilanga</b>	<b>Qanuq Atuqtauniarmangaa</b>
Arctic grade Marine Gas Oil Sulphur content <0.05% Alternativt Marine Gas Oil Sulphur content <0.05%. Usually only filled 85%	fuel	3	1179	3537	Cubic Meters	Fuel for the sailingship Statsraad Lehmkuhl
16% Formaldehyde	hazardous	1	0.1	0.1	Liters	preservation of benthic invertebrates
Ethanol	hazardous	6	1	6	Liters	preservation of benthic invertebrates anf fish larvae
4% Formaldehyde	hazardous	8	1	8	Liters	preservation of zooplankton samples

#### **Imaqmik Aturninnga**

<b>Ubluq qanuraaluk (m3)</b>	<b>Aturumayain imavaluin utiqittagaani qanuq</b>	<b>Atulirumayain imavaluin utiqittagani humi</b>
0		

# Iqqakuq

## Ikkakunik Munakgiyauyunik

Havauhikhaq Hulilukaarut	Qanurittuq Iqqakut	Ihumagiyauyuq Qanuraaluktut Atuqtait	Qanuq Iqqakuurniarmangaa	Halummaqtirarnirutikhan piyutin
Waste disposal	Ikulalaaqtun iqqakuuvaluin	N/A	we will keep our waste on board the ship until we reach anchorage to avoid stressing the area	N/A
Marine Based Activities	Anaagun (inuin anaaguin)	N/A	The ship has treated sewage on board which according to international regulations	only cleaned and treated Sewage will be released

### Avatiliriniqmut Ayurhautingit:

Aquatic species, including habitat and migration / spawning --> hunting, spawning areas will be avoided. Effect on migration will be minimal as the ship will only sail through the areas, with short station stops of <24hours along the way for sampling activities.

# **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**

LOA (in reference to fees etc.): 84,60 m LPP: 72,40 m Max Beam (Hull only): 12,60 m Moulded depth: 7,32 m Max. Draft: 5,50 m Max. Air draft above sea level: 48,00 m Highest mast above main deck: 45,00 m Fuel tank capacity: 90 m<sup>3</sup> Fresh water capacity in tanks: 120 m<sup>3</sup> GRT: 1516 t NRT: 454 t Displacement: 2231 t Number of sails: 22 Total Sail area: 2026 m<sup>2</sup> Max. speed: Engine: 10 knots / Sail: 17 knots Crew and trainees Max. number of voyage trainees 150 Crew: 25 Seating area below deck: 80 + 96 Machinery Main Engine: Bergen Diesel-KRM6 -750 rpm 827 kW Gear: Volda ACG - 450 Propulsion system: Rolls Royce / Kamewa: CCP 4 bl. dia. 2,25 m 794 kW Bow thruster: Rolls Royce Type 45 TV 270 kW Steering gear: Rolls Royce / Frydenbø HS 40 Generator 1 og 2: Caterpillar – C 7.1 -150 kW Shaft generator: ABB, PTO 300 kW Batteri: Kongsberg Marine 360 kWh Emergency generator: Volvo Penta-TAMD 71B/Stamford 90 kW Electrical power system: 400 V – 50Hz, 230 V - 50Hz - three phase Main switchboard aft: ABB - 230 V Main switchboard forward: Rolls Royce/ TB- Austevoll 400 V / 230 V Emergency switchboard: TB- Austevoll 230 V HSG switchboard: Rolls Royce / TB Austevoll Automation: Rolls Royce: ACON Safety equipment MOB rescue boats: (2) 6 person Zodiac 600 w/ 90 / 80 HK outboards Liferafts: (2) 65 person DKR + Viking open (4) 50 person DKS Viking (8) 25 person DK+ Viking Evacuation slides (Inflatable): (2) Viking Minislides Survival suits (Full body): (181) Viking Lifejackets (Thermal): (195) adult / 40 (16) child / 10 infant Firefighting equipment Addressable alarm system: ACON IAS system Engine room: Halotron inert gas remote extinguishing Emergency generator room: Halotron inert gas remote extinguishing Accommodation and storage areas: Marioff Hi-fog water mist extinguishing Battery room: Marioff Hi-fog water mist extinguishing Navigation equipment Radar (ARPA): (2) X-Band KM 25 Kw ECDIS (Full): (2) K-NAV Stand Alone AIS: Simrad AI 70 Navtex: Furuno NX 700 BGPS: Kongsberg SeaPos 320 Gyro compass: Simrad /Robertson GC 80 Echo sounder: Skipper GDS 101 Doppler Speed Log: Furuno DS 80 Radio Station GMDSS A3 MF/HF: Sailor CU5100 250W DSC VHF: Sailor RT5022 DSC SAT-C: Sailor 6110 mini-CEPIRB: Tron 30 S MK II Radar Transponder: Tron SART Satcom Voice/Data: Sailor VSAT 900 High Power Satcom Voice/Data: Iridium Pilot Captain Phone Internal communication PA/Intercom: Vingtor Marine VMP-32/FUEL: arctic grade marine gas oil. Sulphur content <0.05%

## **SECTION H2: Disposal At Sea**

## **SECTION I1: Municipal Development**

### **Qanurittuq Ittunik Avatinga: Avatingalluanga**

### **Qanurittuq Ittunik Avatinga: Inuuhimayunut Avatinga**

### **Qanurittuq Ittunik Avatinga: Inungit-maniliurutingit Avatinga**

## **Miscellaneous Project Information**

### **Naunaiyainiq ukuninnga Ayurhauitingit unalu Piumayaat Ikiikliyuumiutinahuarutit**

### **Tamatkiumayunik Ihuikgutivaktunik**

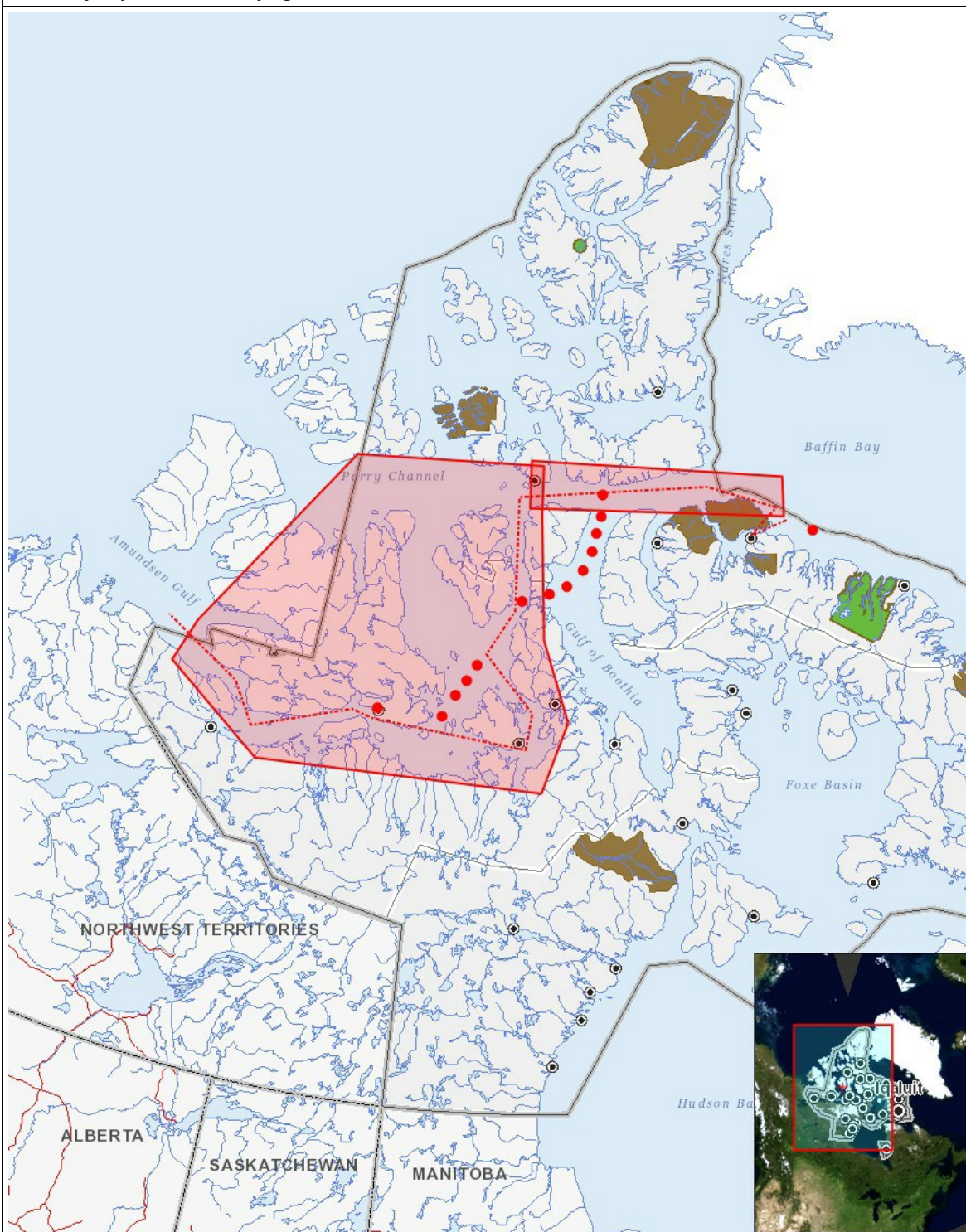


Impacts

Ilitariyauniq Avatiliriniqmut Ayurhautingit

	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
Havakvinga	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aulapkaininnga																									
Researching		U	U	U	-	U	U	U	U	U	U	U	U		U	U	U	M	U		U	U	U	U	U
Access Road		U	U	U	-	U	U	U	U	U	U	U	U		U	U	U	M	U		U	U	U	U	U
Piiqtauniq																									
Researching		U	U	U	-	U	U	U	U	U	U	U	U		U	U	U	M	U		U	U	U	U	U
Access Road		U	U	U	-	U	U	U	U	U	U	U	U		U	U	U	U	U		U	U	U	U	U

(P = Nakuuyuq, N = Nakuungittut unalu mikhilimaittuq, M = Nakuungittut unalu mikhittaaqtuq, U = Naluyauyuq)



#### List of Project Geometries

- |   |          |   |
|---|----------|---|
| 1 | polygon  | Station work area 2   |
| 2 | polygon  | Station work area 1   |
| 3 | polyline | Polyline is alternativ route, if weather conditions or other conditions demands/allows us |
| 4 | point    | Polyline is alternativ route, if weather conditions or other conditions demands/allows us |
| 5 | point    | Polyline is alternativ route, if weather conditions or other conditions demands/allows us |
| 6 | point    | Polyline is alternativ route, if weather conditions or other conditions demands/allows us |

7 point	Polyline is alternativ route, if weather conditions or other conditions demands/allows us
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14 point	Polyline is alternativ route, if weather conditions or other conditions demands/allows us
15 point	Polyline is alternativ route, if weather conditions or other conditions demands/allows us
16 point	Polyline is alternativ route, if weather conditions or other conditions demands/allows us
17 point	Ikaluktutiak