



NIRB Uuktuutinga Ihivriughikhamut #125498

OP NANOOK-NUNALIVUT 2020

Uuktuutinga Qanurittuq: New

Havaap Qanurittunia: Defence

Uuktuutinga Ublua: 12/23/2019 2:58:05 PM

Period of operation: from 0001-01-01 to 0001-01-01

Piumayaat Angirutinga: from 0001-01-01 to 0001-01-01

Havauhikhaq Ikayuqtinga: Sarah Rahmer
Defence Construction Canada
180 Kent St
Ottawa ON K1P 0B6
Canada
Hivayautit Nampanga:: 343-550-8984, Kayumiktukkut Nampanga::

Days on site: 30

Total Person days: 6000

Operations Phase: from 2020-02-20 to 2020-03-31

Hulilukaarutit

| Inigiya | Hulilukaarut Qanurittuq | Nunangga Qanurittaakhaanik | Initurlinga qanuritpa | Initurlinga utuqqarnitat unaluuniit Ingilraaqnitat Uyarannguqtut akhuurninnga | Qanitqiyauyuq qanitqiamut nunallaat kitulluuniit ahiruqtaiiyainnit nuna |
|-------------------|-------------------------|----------------------------|-----------------------|---|---|
| OP NUNALIVUT 2020 | Other | Crown | 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:

Kivalliq
North Baffin

Angiuttauvaktunik

| Munariniqmut Ayuittiaqtuq | Angirutinga Qanurittuq | Tadja Qanurittaakhaanik | Ublua Tuniyauyuq/Uuktuqtuq | Umikvikhaa Ublua |
|------------------------------|---------------------------|----------------------------|-------------------------------|------------------|
| Information is not available | | | | |

Project transportation types

| Transportation Type | Qanuq Atuqtauniarmangaa | Length of Use |
|------------------------|--|---------------|
| Air | CC-177 (Globemaster), CC-138 (Twin Otter), and CC-130 (Hercules) | |
| Land | by foot | |

Project accomodation types

Alaanut,

Ihuaqtivaluin Atuqtauyukhan

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

| Hanalrutit Qanurittuq | Qaffiuyut | Aktikkulaanga – Qanurittullu | Qanuq Atuqtauniarmangaa |
|---|-----------|---------------------------------|--|
| BV206 | 2 | L5.72m/W2.01m/H2.72m/Wt:8,500kg | transportation of troops and equipment |
| Light Over Snow vehicles with Qamutiik | 200 | L3.00m/W1.30m/H1.20m/Wt140kg | Transportation of troops and equipment |
| Heaters | 10 | L1.24m/W2.55m/H1.20m | Heating tents |
| 5kw Generator | 2 | L2.0m/W1.1m/H0.2m | Temporary power |
| Tent group including Colman stove and lantern | 15 | L3m/W3m/H2.5m | shelter |
| CC-138 Twin Otter Aircraft | 2 | L15.1m/W9.81m/H5.66m/Wt5,600kg | Transportation of troops and equipment |
| CC-130 Hercules | 1 | L30m/W40m/H11m/Wt34,400kg | Transportation of troops and equipment |
| CC-177 Globemaster | 1 | L53m/W52m/H17m/Wt128,100kg | Transportation of troops and equipment |
| CH-146 Griffon | 1 | L17.1m/W14m/H4.6m/Wt5355kg | Transportation of troops and equipment |
| Snowmobile | 20 | 3X1.3 | transportation |

Qanurittuq Urhuqyuaq unalu Qayangnaqtut Hunavaluit Aturninnga

| Qanurittuq urhuqyuaq hunavaluit aturninnga: | Urhuqyuaq Qanurittuq | Qaffiuyut qattaryut | Qattaryuk Aktikkulaanga | Atauttimut Qaffiuyut | Ilanga | Qanuq Atuqtauniarmangaa |
|---|----------------------|---------------------|-------------------------|----------------------|--------|-------------------------|
| Information is not available | | | | | | |

Imaqmik Aturninnga

| Ubluq qanuraaluk (m3) | Aturumayain imavaluin utiqittagaani qanuq | Atulirumayain imavaluin utiqittagani humi |
|-----------------------|---|---|
| 0 | | |

Iqqakuq

Ikkakunik Munakgiyauyunik

| Havauhikhaq Hulilukaarut | Qanurittuq Iqqakut | Ihumagiyauyuq Qanuraaluktut Atuqtait | Qanuq Iqqakuurniarmangaa | Halummaqtirarnirutikhan piyutin |
|------------------------------|-----------------------|--|-----------------------------|------------------------------------|
| Information is not available | | | | |

Avatiliriniqmut Ayurhauingit:

Two personal visited Rankin Inlet to discuss the potential of conducting an explosives range during OP NANU with an official from the local Municipal Office. Our intent is to gain local knowledge on preferred location, impact to the environment and local species, impact to food sources, and to ascertain the general thoughts from the community on the prospect of an explosives range. Detailed EOD/UXO plan: No actual military ordnance, only bulk explosives and explosive accessories, will be used during the explosives range. As such, the possibility of a resulting UXO and a subsequent EOD plan does not exist. However, the possibility of a misfire does exist. In the event of a misfire, we will follow appropriate CAF procedures. Standard misfire wait times will apply (30mins for non-electric misfires, 10mins for electric misfires). On completion of misfire wait times, the RSO only will investigate the misfire and determine the most suitable course of action. The misfired initiation set will be replaced with a new initiation set. Detonation will be attempted with the new initiation set. The intent is to trial two separate techniques to explosively open a hole. The first employs a directional shape charge while the second employs a bore hole in the ice and the explosives are placed under water. The storage of the explosives will be in a sea container located at the FOL. Standard mitigation measures (bubble curtain) will not be employed to reduce the effect on the marine environment. However, there are natural environmental mitigation measures based on the chosen location. Due to the increased depth (~33m) of the chosen site, disturbance to the seabed will be less than in shallower depths. The chosen location is surrounded by islands with steep terrain. The location of the islands in relation to the detonation site will help to both provide frontal protection to personnel and to minimize propagation of the blast-wave toward the community.

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

Qanurittuq Ittunik Avatinga: Avatingalluanga

sea ice, frozen/ice covered shoreline

Qanurittuq Ittunik Avatinga: Inuuhimayunut Avatinga

unknown

Qanurittuq Ittunik Avatinga: Inungit-maniliurutingit Avatinga

N/A

Miscellaneous Project Information

Naunaiyainiq ukuninnga Ayurhauingit unalu Piumayaat Ikkliyuumiutinahuarutit

Impacts are intended to be minimal - small holes in ice. Mitigation is to make blasting of ice minimal to disturb only small portion of ice and nothing else around it.

Tamatkiumayunik Ihuikgutivaktunik

unkown

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 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other | - | - | - | - | U | - | - | - | U | U | - | U | - | - | U | U | U | - | - | - | - | - | - | - | - |
| Piiqtauniq | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

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

Havaariyauyukhamut Nayugaa



List of Project Geometries

| | | |
|----|-------|-------------------|
| 1 | point | OP NUNALIVUT 2020 |
| 2 | point | OP NUNALIVUT 2020 |
| 3 | point | OP NUNALIVUT 2020 |
| 4 | point | OP NUNALIVUT 2020 |
| 5 | point | OP NUNALIVUT 2020 |
| 6 | point | OP NUNALIVUT 2020 |
| 7 | point | OP NUNALIVUT 2020 |
| 8 | point | OP NUNALIVUT 2020 |
| 9 | point | OP NUNALIVUT 2020 |
| 10 | point | OP NUNALIVUT 2020 |
| 11 | point | OP NUNALIVUT 2020 |
| 12 | point | OP NUNALIVUT 2020 |

| | | |
|----|-------|-------------------|
| 13 | point | OP NUNALIVUT 2020 |
| 14 | point | OP NUNALIVUT 2020 |
| 15 | point | OP NUNALIVUT 2020 |
| 16 | point | OP NUNALIVUT 2020 |
| 17 | point | OP NUNALIVUT 2020 |
| 18 | point | OP NUNALIVUT 2020 |
| 19 | point | OP NUNALIVUT 2020 |