

Archaeological Surveys in Connection with Mineral Exploration and Exploitation Activities, South Greenland, 2024



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Cover photo: Aerial view towards the head of the Kangerluarsuk fjord looking northeast (photo: C.K. Madsen 2024).

Archaeological Surveys in Connection with Mineral Exploration and Exploitation Activities, South Greenland, 2024

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Prepared for:

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TANBREEZ Mining Greenland A/S

5 November 2024

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Executive Resume

In accordance with the Greenlandic Heritage Act (Inatsisartutlov nr. 11 af 19. Maj, 2010, om fredning og anden kulturarvsbeskyttelse af kulturminde § 12), Greenland National Museum & Archives (NKA) has the legal mandate to require archaeological surveys prior to planned activities that may have disturbing or negative impacted on protected heritage sites, whether already registered or previously undiscovered. Any party planning activities can also request the NKA to carry out such archaeological surveys. The party planning such activities is liable for any and all costs associated with the archaeological surveys (§ 14).

With this mandate, NKA and the Kujataa UNESCO World Heritage office carried out archaeological surveys in mineral exploration license area MEL 2010-24 (Rimbal Pty. Ltd.) and mineral exploitation license area MIN 2020-54 (TANBREEZ Mining Greenland A/S) on September 1-2 and 6, 2024, logistically aided by contractor 60° North Greenland ApS. The archaeological surveys resulted in the following observations and recommendations:

In mineral exploration **license area MEL 2010-24**, the archaeological survey aimed to precision map already registered Thule Inuit site NKAH 853, Tupersiatsiaat, as well as to assess the potential and need for further surveys along the northern coast and valleys of the license area. On the Inussuerunneq headland and by Tupersiatsiaat 12 (11 new and 1 already registered) features (fox traps, cairns, and a Thule culture tent foundation) were recorded and mapped. Only 6 of these features are protected by the Greenlandic Heritage Act. The Thule Inuit tent foundation at NKAH 853, Tupersiatsiaat, must be investigated archaeologically prior to any disturbing activity, whereas the 5 heritage features on the Inussuerunneq headland may now be considered registered and can be removed if required by mining activities (although we recommend they be left untouched if possible). The remaining 6 features on the Inussuerunneq headland post-date 1900 and are not protected by the Greenlandic Heritage Act. Further, based on the 2024 survey, the NKA requires that the northern coast of the license area be archaeologically surveyed prior to any disturbing activity.

In mineral exploitation **license area MIN 2020-54**, the aim of the archaeological survey was to check a planned ATV-track from the Kangerluarsuk to the top of "Kringlerne" for any potential heritage conflicts. 4-6 features (1-3 tent foundations, 2 fox traps, 1 shooting blind) were recorded at registered at NKAH 857. NKAH 857 may not be disturbed by activities without further archaeological investigation, but lies more than 20 m from, and thus not threatened by, the planned track. Of the 6 other features recorded (tent rings and cairns), only 1 (cairn 24_006) is protected and in conflict with the planned track. With the 2024 survey, the latter feature has been recorded, no further investigations is needed, and it may be removed if required.

In summary, NKA has no objections and concerns regarding the establishment of the planned ATV-track/gravel road in license area MIN 2020-54.

Kalaallisuuata naalisarnera

Eqqissimatitsisarneq aamma allatigut kulturikkut eriagisassanik kulturikkut kingornussatut illersuineq pillugu Inatsisartut Inatsisaat nr.11, 19.maj 2010-meersoq (Uani "kulturikkut eriagisassatut inatsimmi" taallugu, § 12) tunngavigalugu Nunatta Katersugaasivia Allagaateqarfiatalu (NKA) sumiiffimmi sanaartornissaq sioqqullugu kulturikkut eriagisassaqaarnerseq misissussallugu piumasarinnaavaa, sanaartornermi kulturikkut eriagisassat eqqissimatitat nalunaarsoriigaagaluarpata imalunniit ilisimareerseqanngikkaluarpataluunniit innarlerneqannginnissaat qulakkeerneaqqaartussaavoq. Kikkulluunniit nunaminertani suliaqarnissamik sanaartornissamilluunniit pilersaaruteqartut nammineerlutik NKA-mut attaveqarsinnaapput piumasaralugu nunaminertaq soqutigisartik itsarnisarsiorluni misissoqullugu. Itsarnisarsiorluni misissuuitsinermi aningaasartuutit tamarmik sanaartorniartunit akilerneqassapput.

Nunaminertami aatsitassarsiorfissatut misissugassami MEL 2010-24 (Rimbal Pty.Ltd) aamma aatsitassanik paaanissamut akuerineqartumi MIN 2020-54 (TRANBREEZ Mining Greenland A/S Inatsit tunngavigineqartoq tunuliaqutaralugu NKA aamma UNESCO kujataata aqutsisoqarfia itsarnisarsiorlutik misissuisimapput ulluni 1.-2. aamma 6.september 2024, misissuinermi suliffeqarfik 60 North Greenland Aps itsarnisarsiuunik angallassillunilu isumaginnittuavoq.

Nunaminertami aatsitassarsiorfissatut missugassami MEL 2010-24-imi itsarnisarsiuut pingaarnertut misissorpaat sionatigut sumiissusersineqarsimasoq Thule kulturimeersut najorsimasaat NKA 853-imik ilisarnaatilik, taamatuttaarlu licenseqarfiusup avannamut kita-tungaa qoorortaalu siunissami sukumiinersusumik misissorneqarnissaa nalilersorneqarpoq. Sumiiffimmi Inussuerunnermi aamma Tupersuatsiaat kangerliumarngani kulturikkut eriagisassanik aqqaneq marlunnik (12) nalunaarsuisoqarpoq (11-it nutaat ataaserlu ilisimaneqareersoq) eriagisassat nassaarineqartut tasaanerupput terianniat pullataat, inussuit taavalu tupersuaqarfikut Thule kulturimeersut. Taakkunanga arfinillit (6) Kulturmindelov tunngavigalugu eqqissimatitaapput. Tupersuatsiaani tupersuaqarfikoq Thule kulturimeersoq NKAH 853 sumiiffiimi sanaartortoqarnissaa sioqqullugu itsarnisarsiuunit misissoqqissaarneqassaaq. Eriagisassat sinneri tallimat uani nalunaarusiami nalunaarsoreernikutut nalilerneqarput, taamaattumik aatsitassarsiorortoqarnerani suliaqarnermi piiginnarneqarsinnaalerput (taamaakkaluartoq ajornanngippat innarlerneqannginnissaat kissaatiginarpoq). Innersuatsiaat nuaniittut nalunaarsukkat arfinillit (6) ukiut 1900-it kingornarnisaammata Kulturmindelovimit illersugaanngillat. Kingullertut aatsitaassarsiorluni paaaffissatut nunaminertap misissugassap avannamut sineriaata paaaffigilinnginnerani itsarnisarsiorluni misissorneqarnissaa NKA'p kissaatigivaa.

Aatsitassarsiorluni paaanissamut nunaminertami akuerineqartumi MIN 2020-54-imi itsarnisarsiuut Kangerluarsummiit Killavaat Alannguata qaavanut ATV-it aqutigiligassaat sanaartortoqarnerani eriagisassanik innarligassaqaarnerseq pingaarnertut misissorpaat. Eriagisassat sisamat / arfinillit sumiiffimmiapput (1-3 tupersuaqarfikut, teriannianut pullatit marluk taavalu taluliat) taakkulu NKA 857-ip eqqaaniittut nalunaarsorneqarput. NKAH 857 itsarnisarsiorluni misissueqqissaartoqartinnagu sanaartoortunit innarlerneqannginnissaa piumasarineqarpoq, aqqusiniassarli eriagisassaniit

minnerpaamik 20 meterinik ungasissuseqassappat eriagisassaat innarlerneqarnissaminnut ulorianartorsiornaviangillat. Nalunaarsugaareersuni arfinilinni (tupeqarfikut inussuillu) taamaallaat ataaseq (inussuk 24_006) kulturmindelov tunngavigalugu innarleqqusaanngilaq aqqusiniassap iluaniimmat. Ukioq 2024-imi misissuinermi qulaani taaneqartoq inussuk nalunaarsorneqarpoq annerusumillu misissoqqittariaarummat pisariaqassappat piiginnarneqarsinnaavoq (ajornnanngippalli kissaatiginaraluarpoq innarlerneqannginnissaa).

Ataatsimut isigalugu NKA sumiiffiimi licenseqarfiusumi MIN 2020-54-imi ATV-nut aqqusiassami illua-tungiligassaqaranilu aarleqqutissaqanngilaq.

Dansk resume

I overensstemmelse med Inatsisartutlov nr. 11 af 19. Maj, 2010, om fredning og anden kulturarvsbeskyttelse af kulturminde (herefter blot "Kulturmindeoven", § 12), kan Grønlands Nationalmuseum & Arkiv (NKA) kræve en arkæologiske besigtigelse af områder forud for anlægs- eller byggeaktiviteter, hvis disse potentielt kan have en negativ eller ødelæggende indvirkning på fredede fortidsminder, uanset om fortidsminderne allerede er registrerede eller ukendte. Enhver der planlægger aktiviteter i åbneland, kan også på egen hånd anmode NKA om at få foretaget en arkæologiske besigtigelse. Uanset, er det bygherren alene, der bekoster udgifterne i forbindelse med en sådan arkæologiske besigtigelse.

Med denne hjemmel udførte NKA og Kujataa UNESCO Verdensarvskontor arkæologiske besigtigelser i mineral efterforskningslicens MEL 2010-24 (Rimbal Pty. Ltd.) og mineral udnyttelseslicens MIN 2020-54 (TANBREEZ Mining Greenland A/S) 1.-2. og 6. september, 2024, logistisk støttet af mineselskabernes entreprenør 60° North Greenland ApS.

I mineral efterforskningslicensområde MEL 2010-24 var den arkæologiske besigtigelse primært rettet imod at præcisionskortlægge det allerede registrerede Thule kultur site NKAH 853, samt at vurdere potentialet og behovet for yderligere besigtigelser langs licensområdets nordlige kyst og dalstrøg. På næsset Inussuerunneq og ved bugten Tupersiatsiaat blev der registreret 12 (11 nye, 1 kendt) anlæg (rævefælder, varder og et teltfundament fra Thule kultur). Kun 6 af disse anlæg er dog beskyttet ved Kulturmindeoven. *Teltfundamentet fra Thule kulturen ved NKAH 853, Tupersiatsiaat, skal undersøges arkæologisk forud for nogen forstyrrende aktiviteter. De øvrige 5 fortidsminder betragtes med denne rapport som registrerede og kan efter behov fjernes i forb. med mineaktiviteter (selvom vi anbefaler at de efterlades urørte, hvis muligt).* De øvrige 6 anlæg på næsset Inussuerunneq er fra efter år 1900 og derfor ikke omfattet af Kulturmindeoven. Endelig er det NKA's vurdering, at licensområdets nordlige kyststrækning skal besigtiges arkæologisk forud for forstyrrende aktiviteter.

I mineral udnyttelseslicensområde MIN 2020-54, var den arkæologiske besigtigelse rettet imod at checke et planlagt ATV-vejtrace fra fjorden Kangerluarsuk til toppen af "Kringlerne" for evt. konflikter med fortidsminder. 4-6 fortidsminder (1-3 teltfundamenter, 2 rævefælder og 1 skydeskjul) blev registreret ved NKAH 857. *NKAH 857 må ikke udsættes for nogen forstyrrende aktiviteter før den er yderligere arkæologisk undersøgt, men ligger mere end 20 m fra det planlagte vejtrace og er derfor ikke umiddelbart truet.* Af de 6 øvrige registrede anlæg (teltringe og varder), er kun 1 (varde 24_006) beskyttet af Kulturmindeoven og i konflikt med det planlagte vejtrace. Med 2024 besigtigelsen betragtes sidstnævnte som registreret, ingen yderligere undersøgelser krævet og anlægget kan fjernes, hvis nødvendigt (selvom vi anbefaler at det efterlades urørte, hvis muligt).

Sammenfattende har NKA ingen indsigelser eller bekymringer i forhold til etablering af det planlagte ATV-vejtrace i licensområde MIN 2020-54.

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1. Introduction

In accordance with the Greenlandic Heritage Act (Inatsisartutlov nr. 11 af 19. Maj, 2010, om fredning og anden kulturarvsbeskyttelse af kulturminde § 12), Greenland National Museum & Archives (NKA) has the legal mandate to require the execution of archaeological surveys prior to planned activities that may have disturbing or negative impacted on protected heritage sites. The party planning such activities is liable for any and all costs associated with the archaeological surveys (§ 14).

The Greenlandic Heritage Act defines (§ 5) protected heritage sites as all man-made features on the land predating 1900 CE, as well as all graves located outside of churchyards. Within a 20 m buffer zone around such protected man-made heritage features, no activity other than pedestrian access may take place; within a 2 m buffer zone no activity whatsoever may occur.

In May 2024, NKA received through the Mineral Licence and Safety Authority an application for mineral exploration activities from Rimbald Pty. Ltd. for license no. MEL 2010-24, a license area cross-cutting the peninsula between the fjords Kangerluarsuk and Tunulliarfik (Figure 1). As these planned activities included driving in the terrain and drilling in the area around the bay Tupersiaat with protected heritage site NKAH 853 (Figure 2), NKA on May 15 replied to the application requiring the prior execution of an archaeological survey, as well as recommending further archaeological surveys be undertaken in the larger license area before the start of exploration activities.

August 16, 2024, NKA received confirmation through the mining company's contractor 60° North Greenland ApS that they wanted the archaeological survey carried out in 2024, as well as a survey of a planned atv road running from the inner part of Kangerluarsuk fjord to a drill site area on top of the mountain "Kringlerne" in TANBREEZ Mining Greenland A/S's exploitation area MIN 2020-54 (Figure 3).

1.1. Project Description

In mineral exploration license area MEL 2010-24 (Figure 1), there are no fixed plans for project development, but drilling/driving activities were proposed for the northern coastline bordering the Tunulliarfik fjord, including the bay Tupersiaat with protected heritage site NKAH 853 (Figure 2). Because the Tunulliarfik fjord has been intensively used both during the Norse period (c. AD 980-1450 CE) and Thule culture (c. AD 1450-1800), there are good reasons to suspect that there are still unrecorded, protected heritage sites, especially along the coastline's headlands and up the valleys.

In mineral exploitation license area MIN 2020-54 (Figure 1), a gravel track running from the fjord and up to the top of "Kringlerne" (Figure 3) is planned for future transportation of a larger drilling rig and equipment, an road track running close to several registered heritage sites.

Because the heritage sites in both areas were registered prior to access of precision mapping technology, there are inconsistencies in their geographic mapping and the aim of the NKA 2024 archaeological survey was to map in detail potentially impacted heritage sites, as well as to identify any heritage features that may have been overlooked. The main priority was the gravel track in license area MIN 2020-54, but because we were heading back to Nuuk via Tunulliarfik, we also had a chance to visit and assess the northern coastline of MEL 2010-24.

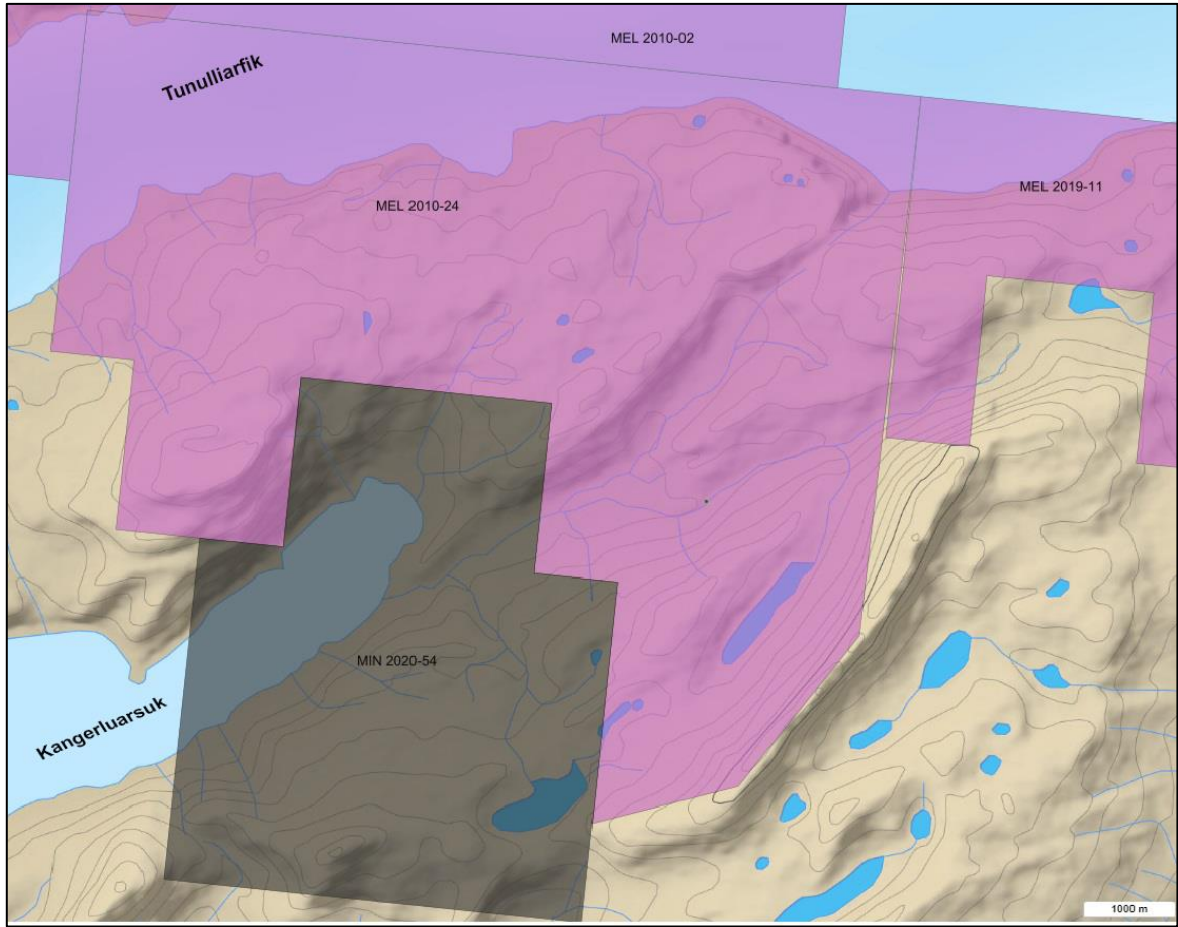


Figure 1. Map showing the extent of mineral exploration license MEL 2010-24 (purple) and the neighboring exploitation license MIN 2020-54 (grey) between the fjords of Kangerluarsuk and Tunulliarfik, South Greenland (data source: greenmin.gl 2024).

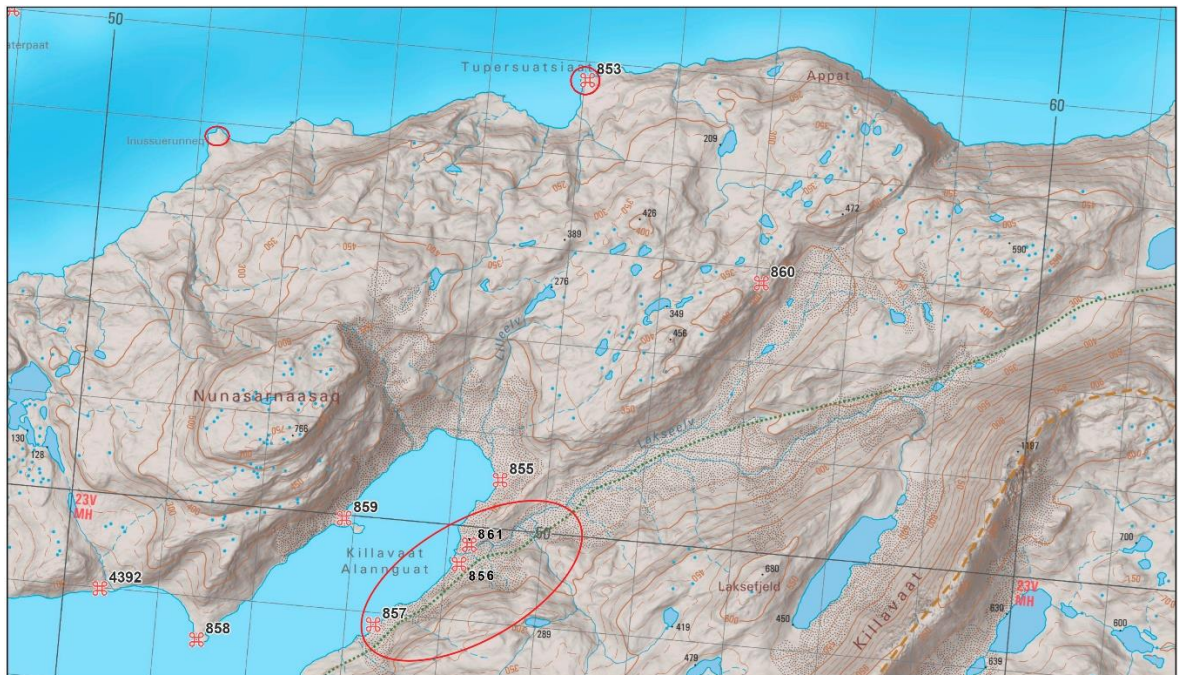


Figure 2. Map showing previously recorded heritage sites (red crosses) in or near the two mineral license areas and the survey areas (red ovals) (data source: Nunniffit.gl 2024).

1.2. Participants, Logistics, Timeframe

The survey was carried out by NKA staff Christian Koch Madsen (CKM) & Michael Nielsen (MN), joined by UNESCO park ranger Arnaq (Else) Bjerger Petersen (EBP) free of cost. Logistic coordination and support was provided 60° North Greenland ApS, to whom we are very grateful for their flexibility and responsiveness.

Because the archaeological survey was carried out in connection with other fieldwork and affected by poor weather, the survey was spread out over several days between August 31 – September 2, 2024:

August 31: CKM arrived to Narsarsuaq from Copenhagen via Kangerlussuaq – with further delays – ca. 17:00. Here he met Michael Nielsen (MN) and we were transported by boat to Qaqortoq, arriving around 19:30 and quartered in Blue Ice's yellow house.

Weather: Sunny in Narsarsuaq, but quite windy out the fjord.

September 1: In the morning, CKM, MN were joined by EBP and ca. 11:15 we sailed from Qaqortoq with 60° North's boat towards the head of Kangerluarsuk, arriving at the designated starting point for the survey ca. 12:00. From there we surveyed the lower part of the planned road up the valley, but because of the lacking data and map material, we went to far up the valley, an area which can now also be considered surveyed (Figure 3). 17:00 we were picked up at the mouth of the river and sailed back to Qaqortoq 18:30.

Weather: Completely cloudless sunshine, warm and still all day.

September 2: The survey team was supposed to have started on another project in the mountains north of Narsarsuaq, but because of extremely poor weather the coming days, we cancelled this fieldwork and instead suggested to complete the survey of the planned road in the Tanbreez area while the weather was good. With the willing help of 60° North this was arranged and 14:30 CKM and EBP flew in helicopter with Greg Barnes and geologist to the top of the road, where the survey team was dropped off. The plan was to walk from here to the fjord, where we would be picked up at the site NKAH 855 (Figure 2) at 18:00. However, because the helicopter was running low on fuel, we were picked up already at 17:00, just as we had crossed Lakseelv (Salmon River), and returned to Qaqortoq.

Weather: Completely cloudless sunshine, warm and still until evening, when rain clouds started coming in.

September 6: CKM and MN were to fly from Narsarsuaq to Nuuk late afternoon, but we suggested to carry out a minor assessment survey in license area MEL 2010-24, because we would be passing by on our way to the airport. We were picked up by 60° North and sailed towards Narsarsuaq 11:00. We arrived at the first headland W of Tupersiatsiaat c. 12:15. We spent some 45 min. surveying the area: then headed to Tupersiatsiaat, where we mainly focused on locating and documenting the site NKAH 853. A few stone features a little distant could be seen from the site and further surveys should be carried out if the area is impacted by exploration activities. Arriving in Narsarsuaq, we learned that our flight was postponed to the afternoon September 7.

Weather: Sunny with some clouds and a brisk fjord wind, which made landing with boat troublesome.

1.3. Field methods

The archaeological survey was carried out by 2-3 people systematically walking along the planned road or coastline with a distance of ca. 50 m or as decided by the terrain (narrow or steep areas). Single features were positioned with handheld GPS (Garmin Etrex Solar), photographed and described. Two sites (NKAH 853 and 857) drone surveyed with an Autel Evo II rotor drone for precision mapping of the features (Figures ? & ?).

2. Previous investigations

2.1. List of previous relevant reports

Kapel, Hans 1989. *Arkæologiske baggrundsundersøgelser i forbindelse med råstofeftersøgning i Kangerluarsuk*, Narsaq Kommune. Kalaallit Nunaata Katersigaasivia/The Greenland Museum, Nuuk: 31 pages.

Møller, Niels Algreen 2007. *Kangerluarsuk 2007 Archaeological Survey*. Nunatta Katersugaasivia Allagaateqarfialu/Greenland National Museum and Archives, Nuuk: 22 pages.

Petersen, Marianne 1988. *Arkæologiske interesser i Highwoodgruppens koncessionsområde ved Appat, Narsaq kommune kortlagt i juli 1988*. Kalaallit Nunaata Katersigaasivia/The Greenland Museum, Nuuk: 18 pages.

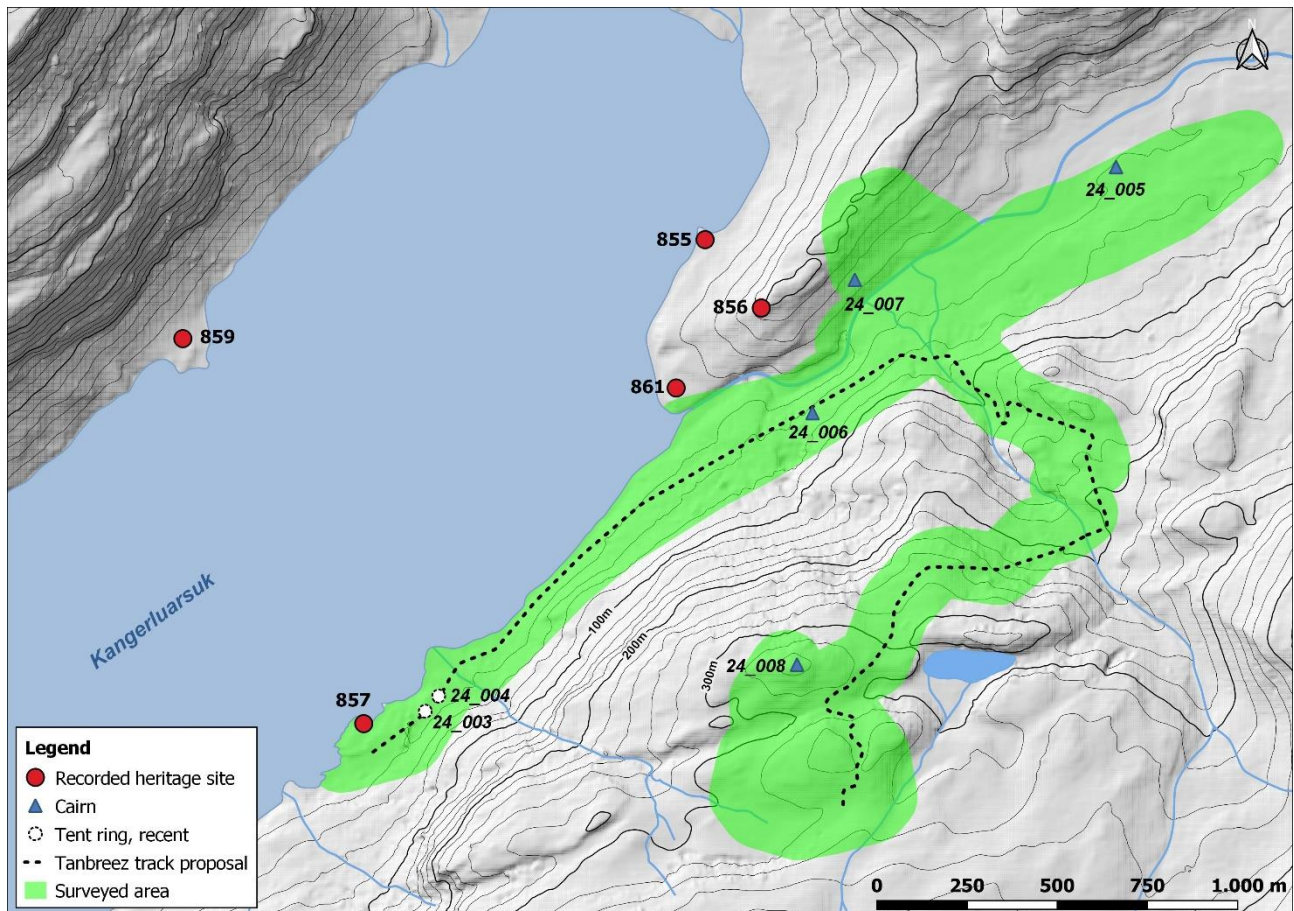


Figure 3. Map showing the proposed ATV-track, the area surveyed, and sites identified (map: NKA 2024).

3. Results of the investigation

The 2024 archaeological survey managed to identify examples of four different types of features, which are defined, described, and dated as follows:

- Tent foundations; are low – ca. 0.3-1 m wide – foundations made of stone and turf that secured the skin canvas of Inuit tents to the ground. Tent foundations were used throughout the Thule culture (c. AD 1200-1800), but also continued in recent use up until around WWII. However, the shape and built of the foundations often allows the archaeologists to estimate the age of the tent foundations.
- Tent rings; are circles of stones left from securing the canvas of a tent (skin, canvas, or plastic) to the ground. Tent rings have been used by all the cultures in Greenland and can thus be very old. On the other hand, new tent rings are still being created by campers even today. However, it is possible for the archaeologists to distinguish between older and newer tent rings from their shape, built, and level of the stones relative to the present ground surface.
- Cairns; are stone built markers in the landscape. Composite cairns consist of several stones piled/stacked on top of each other with varying precision and to varying height, which along with lichen growth can sometimes, but rarely, help determine the age of the cairns. Single stone cairns are made by placing a single stone on a prominent natural rock or boulder formation, thereby creating an expedient, visible marker. Single stone cairns are often used as route markers or were part of caribou drive systems by the Thule Inuit, but are otherwise impossible to date.
- Fox traps; of the stone built type come in two basic forms in South Greenland: fox traps with chamber were – as suggested by the name – a small stone set chamber covered by piles of stone and with an opening, through which the fox would enter the trap to get at the bait. The bait was rigged and connected to a trap door by the opening, which would fall and trap the fox alive. Stone built fox traps with chamber were introduced by the Norse, but have continued in use until today, and they are almost impossible to date. Deadfall fox traps consist of a flat stone or wooden frame carrying several heavy stones, surrounded by a stone ring to keep the fox from getting out (and ravens getting in). Once the baited rig was disturbed, the flat stone or frame would fall, crush, and kill the fox. The deadfall fox traps seem to have been introduced post WWII, at least post 1900.

In the following, the results of the 2024 archaeological survey and the description of the individual features are separated on the two license areas MIN 2020-54 and MEL 2010-24.

3.1. Identified sites and features in license area MIN 2020-54

A total of 11 features were recorded in exploitation license area MIN 2020-54, as summarized in Table 1. Figure 3 provides an overview map with indication of all these sites.

Table 1 Sites recorded in license area MIN 2020-54

| Site name | No. | Feature type | LAT/LON (WGS84) |
|---------------------|----------|---------------------------------------------------------------|------------------------|
| Killavaat Alannguat | NKAH 857 | Thule Inuit summer camp w. 3-5 protected features (protected) | 60.872298 / -45.859126 |
| Killavaat Alannguat | 24_001 | Fox trap, deadfall (not protected) | 60.872206 / -45.859980 |
| Killavaat Alannguat | 24_002 | Fox trap, chamber (protected) | 60.872339 / -45.859507 |
| Killavaat Alannguat | 24_003 | Tent ring, very recent (not protected) | 60.872851 / -45.855929 |
| Killavaat Alannguat | 24_004 | Tent ring, very recent (not protected) | 60.873240 / -45.855282 |
| Lakseelv 1 | 24_005 | Cairn, unknown age (not impacted) | 60.886597 / -45.821047 |
| Lakseelv 2 | 24_006 | Cairn, unknown age (protection lifted) | 60.880391 / -45.836385 |
| Lakseelv 3 | 24_007 | Cairn, unknown age (not impacted) | 60.886597 / -45.821047 |
| Kringlerne 1 | 24_008 | Cairn, recent (not protected) | 60.874136 / -45.837012 |

NKAH 857: Protected heritage site – Inuit summer camp – with 3-5 features shown and summarized in the appendix. The more recent fox traps 24_001 and 24_002 are part of the site.

Protection status: The site remains protected and cannot be disturbed without further investigation.

However, the proposed atv track does not conflict with the ruins as they all lie more than 20 m from the track. If activities are planned for the headland with NKAH 857, a small archaeological excavation must be carried out in advance.



Figure 4. Tent ring 24_003 seen towards the NE (photo: E.B. Petersen 2024).

24_003: A tent ring visible as a circle of dispersed smallish stones, apparently of very recent of date as the stones lie directly on the surface.

Protection status: Not protected.



Figure 5 Cairn 24_005 seen towards the SW (photo: E.B. Petersen 2024).

24_004: Similar description as 24_003.

Protection status: Not protected.

24_005: Composite cairn consisting of 5-6 rather small and loosely stacked stones that lie close to Lakseelv. Probably a recent cairn (route marker?).

Protection status: Not impacted.

24_006: Possible single stone cairn placed on naturally placed stone. If not a natural formation, it could have been a route marker (?).

Protection status: Protection lifted.

24_007: Composite cairn consisting of 5 stones, one larger and angular, 4 flat, stacked on top of each other and resting against the larger stone. Probably also a fairly recent cairn, most likely a route marker. Note that the position is only roughly accurate.

Protection status: Not impacted.

24_008: The probable remains of a larger, now completely collapsed cairn, most likely a very recent geologist's cairn.

Protection status: Protection lifted.



Figure 6 Cairn 24_006 (photo: M. Nielsen 2024).



Figure 7 Cairn 24_007 seen towards the SW (photo: E.B. Petersen 2024).



Figure 8 Cairn 24_008 seen towards the ENE (photo: C.K. Madsen 2024).

3.2. Identified sites and features in license area MEL 2010-24

A total of 12 features were recorded in exploration license area MEL 2010-24, as summarized in Table 2. Figures 10 and the appendix provide overviews map with indication of all these features.

| Site name | No. | Feature type | LAT/LON (WGS84) |
|----------------|----------|----------------------------------------------------|------------------------|
| Tupersiatsiaat | NKAH 853 | Thule Inuit summer camp w. 3-5 protected features. | 60.923987 / -45.830138 |
| Inussuerunneq | 24_009 | Cairn, recent (not protected) | 60.917369 / -45.900707 |
| Inussuerunneq | 24_010 | Fox trap, dead fall (not protected) | 60.917024 / -45.899842 |
| Inussuerunneq | 24_011 | Fox trap, chamber (protection lifted) | 60.916643 / -45.901431 |
| Inussuerunneq | 24_012 | Fox trap, dead fall (not protected) | 60.916705 / -45,901596 |
| Inussuerunneq | 24_013 | Fox trap, dead fall (not protected) | 60.916374 / -45.901477 |
| Inussuerunneq | 24_014 | Fox trap, dead fall (not protected) | 60.916175 / -45.901552 |
| Inussuerunneq | 24_015 | Fox trap, dead fall (not protected) | 60.915885 / -45.901666 |
| Inussuerunneq | 24_016 | Fox trap, chamber (protection lifted) | 60.915633 / -45.899772 |
| Inussuerunneq | 24_017 | Cairn / fox trap? (protection lifted) | 60.916026 / -45.898790 |
| Inussuerunneq | 24_018 | Cairn, composite (protection lifted) | 60.915925 / -45.898620 |
| Inussuerunneq | 24_019 | Fox trap, chamber (protection lifted) | 60.915751 / -45.897993 |

NKAH 853: Protected heritage site – Inuit summer camp – with 3-5 features, most shown and summarized in the appendix. The sites was identified and registered by M. Petersen in 1988, where she described a poorly preserved Thule tent feature close to the erosion front by the fjord and a fish smoker. The latter is still in use and has greatly disturbed the site, including the digging in of a “smoke pipe”.

We could not find anything matching her description, but point 2 in the map in the appendix was an unusual collection of stones and an old trash pit, possibly the remains of the tent feature described by Petersen. She also found a black glass bead, which suggests the tent features here are rather late (18-19th centuries).

Protection status: The site remains protected and cannot be disturbed without further investigation.

24_009: Recent cairn, approximately 1 m high and with a rectangular base of ca. 1.5 x 1.0 m.

Protection status: Not protected.



Figure 9 Cairn 24_009 seen towards the WSW (photo: C.K. Madsen 2024).

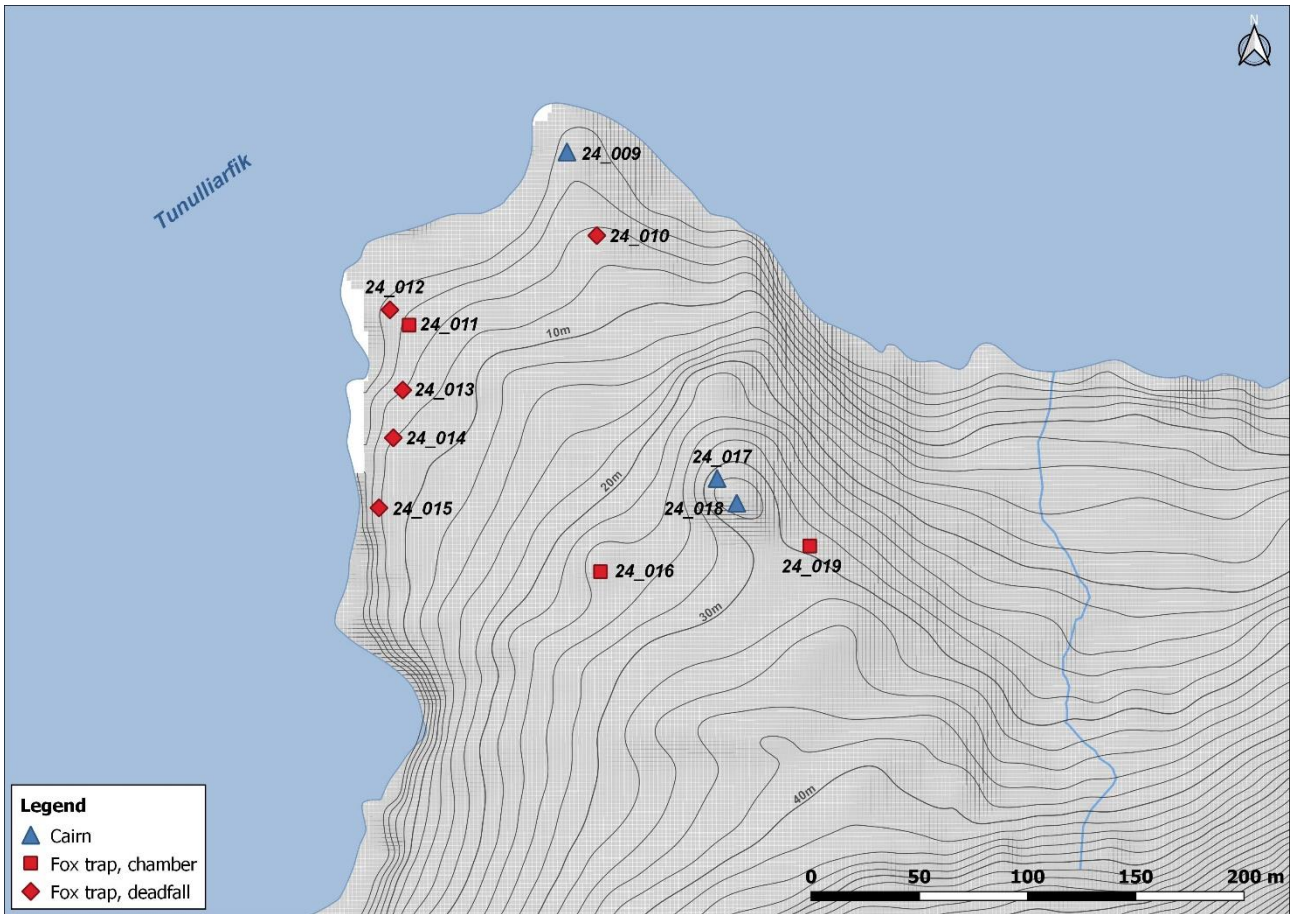
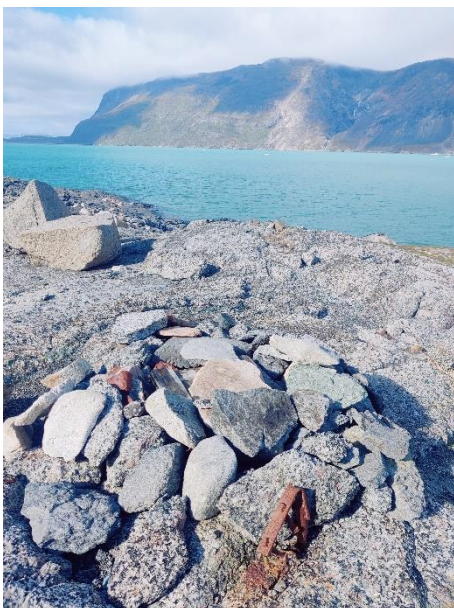


Figure 10 Map of the Inussuerunneq headland and the sites identified, divided on three types (map: C.K. Madsen 2024).

24_010: Fox trap, deadfall, of recent origin and measuring ca. 130 x 110 cm. Wooden frame still visible. Disturbed by more recent activities.

Protection status: Not protected.



24_011: Fox trap, chamber, partially collapsed and measuring ca. 140x 120 x 40 cm. Opening towards the coast.

Protection status: Protection lifted.

Figure 11 Fox trap 24_010 seen towards the WSW (photo: C.K. Madsen 2024)



Figure 12 fox trap 24_011 seen towards the SW (photo: C.K. Madsen 2024).

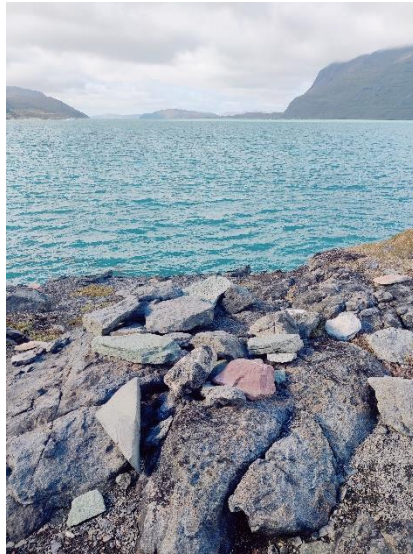


Figure 13 fox trap 24_013 seen towards the SW (photo: C.K. Madsen 2024).



Figure 14 fox trap 24_014 seen towards the SW (photo: C.K. Madsen 2024).

24_012: : Fox trap, deadfall, of recent origin and measuring ca. 110 x 120 cm.

Protection status: Not protected.

24_013: : Fox trap, deadfall, of recent origin and measuring ca. 100 x 90 cm.

Protection status: Not protected.

24_014: : Fox trap, deadfall, of recent origin and measuring ca. 100 x 90 cm.

Protection status: Not protected.

24_015: : Cluster of flat stones on the bedrock, probable remains of a demolished deadfall fox trap of recent origin.

Protection status: Not protected.



Figure 15 fox trap 24_015 seen towards the SW (photo: C.K. Madsen 2024).



Figure 16 fox trap 24_016 seen towards the SW (photo: C.K. Madsen 2024).



Figure 17 cairn / fox trap (?) 24_017 seen towards the SSW (photo: C.K. Madsen 2024).



Figure 18 cairn 24_018 seen towards the NE (photo: C.K. Madsen 2024).

24_016: Fox trap, chamber, opened and very collapsed, measuring ca. 160 x 90 cm, and situated a little up the hill.

Protection status: Protection lifted.

24_017: Completely collapsed cairn or chamber fox trap, measuring ca. 100 x 80 cm, and situated a little up the hill.

Protection status: Protection lifted.

24_018: Cairn, apparently of some age, with rounded base ca. 60 cm a diameter and built of medium-sized stones to a height of ca. 55 cm.

Protection status: Protection lifted.

24_019: Older fox trap with chamber, partially collapsed with opening towards the W and measuring ca. 110 x 80 cm.

Protection status: Protection lifted.



Figure 19 Fox trap 24_019 seen towards the N (photo: C.K. Madsen 2024).

4. Conclusions and Recommendations

In mineral exploration license area MEL 2010-24, the archaeological survey aimed to map already registered Thule Inuit site NKAH 853, Tupersiatsiaat, as well as to assess the potential and need for further surveys along the northern coast and valleys of the license area. All in all, 12 (11 new and 1 already registered features (fox traps, cairns, and a Thule culture tent foundation) on the Inussuerunneq headland and by Tupersiatsiaat were identified, recorded and mapped. Only 6 of these features are protected by the Greenlandic Heritage Act, while the rest post-date AD 1900 and are more recent features.

Thus, the features on the Inussuerunneq headland reflect mainly fox trapping activities from the later 1800s well up in the 1900's, must likely by hunters from the nearby town of Narsaq. Fox trapping was lucrative side business of many Inuit hunter's in this period, first through the sale of fox skins to the Danish trade, later as paid vermin control through sale of fox tails (as proof of the kill) to Greenlandic authorities. Occasionally, foxes were eaten as well.

The already registered NKAH 853 is a small Inuit summer camp with one or possibly two features, probably dating to a rather late point in time, i.e. 18th-19th centuries, based on the shape and built of the feature, as well as the find of a glass bead by M. Petersen in 1988.

NKA recommendations for exploration license area MEL 2010-24: The Thule Inuit tent foundation at NKAH 853, Tupersiatsiaat, must be investigated archaeologically prior to any disturbing activity, whereas the 5 heritage features on the Inussuerunneq headland may now be considered registered and can be removed if required by mining activities (although we recommend they be left untouched if possible). The remaining 6 features on the Inussuerunneq headland post-date 1900 and are not protected by the Greenlandic Heritage Act. Further, based on the 2024 survey, the NKA requires that the northern coast of the license area be archaeologically surveyed prior to any disturbing activity.

In mineral exploitation license area MIN 2020-54, the aim of the archaeological survey was to check a planned ATV-track from the Kangerluarsuk to the top of Kringlerne for any potential heritage conflicts. In total 11 to 13 features (1-3 tent foundations, 1 meat cache, 2 tent rings, 2 fox traps, 1 shooting blind, and 2 cairns) were recorded during the survey. Of these, 6 features post-date 1900 and are not protected by Greenlandic Heritage Act.

The already registered NKAH 857 is a small Inuit summer (fishing?) camp with one or possibly two tent features, with associated meat cache (and fox trap?), likely dating to between the 17th-19th centuries, based on the shape and built of the features. The remaining identified features are either very recent or cairns (route markers) not impacted by the planned road.

NKA recommendations on license area MIN 2020-54: NKAH 857 may not be disturbed by activities without further archaeological investigation, but lies more than 20 m from, and thus not threatened by, the planned track. Of the 6 other features recorded (tent rings and cairns), only 1 is protected and in conflict with the planned track, while the rest either not protected or not impacted. With the 2024 survey, the latter feature has been recorded, no further investigations is needed, and it may be removed if required.

In summary, NKA has no objections and concerns regarding the establishment of the planned ATV-track/ gravel road in license area MIN 2020-54.