# ARCHAEOLOGICAL INVENTORY AND ASSESSMENT OF CHIDLIAK CLAIM BLOCK, HALL PENINSULA, BAFFIN ISLAND, NU

Prepared for Peregrine Diamonds, Ltd.

Thomson Heritage Consultants
Pictou Landing, NS
Permit No, 09-004A

**FINAL REPORT TO**

**PEREGRINE DIAMONDS LTD.,**
**Suite 201, 1250 Homer Street**
**Vancouver, BC V6B 1C5**

# ARCHAEOLOGICAL INVENTORY AND ASSESSMENT OF CHIDLIAK CLAIM BLOCK, HALL PENINSULA, BAFFIN ISLAND, NU

**PROJECT No. THC2009-5**
**Nunavut Archaeologist Permit No. 09-004A**

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## EXECUTIVE SUMMARY

In 2009, at the request of Peregrine Diamonds Ltd. (Peregrine), a preliminary archaeological assessment was undertaken in the Chidliak Claim Block on the Hall Peninsula, southeast Baffin Island, Nunavut by Callum Thomson, Thomson Heritage Consultants. The results of a site data agreement between Peregrine's Shirley Standafer-Pfister and the Archaeology Division, Nunavut Department of Culture, Language, Elders and Youth revealed only one recorded archaeological site in the study area. However, the claim block's size (almost 10,000 km²), the presence of several marine fiord arms on the north and northeast sides of the claim block and a major river and lake system running through the centre, knowledge of two traditional travel routes through the claim block and the fact that no previous archaeological surveys had been conducted in most of the area indicated that additional sites would be found during a programme of surveys in the exploration area. Peregrine requested that Thomson Heritage Consultants conduct a survey to identify any sites that may be affected by their current exploration activities, without appropriate mitigation, to develop means of safeguarding such sites and/or the information they contain and to obtain a preliminary indication of archaeological potential within the claim block.

Fieldwork on the Chidliak claim block was undertaken with helicopter support from the Sunrise camp from August 1-3, 2009. The camp is located in the east-central area of the claim block. The field team was flown to intended targets, attempting to cover a representative sample of the exploration area around the camps, known kimberlites, drill sites and areas judged to be of high archaeological potential. Due to the intensity of exploration activities, planned helicopter time for archaeological surveys was limited to a total of four hours on the first two days and six hours on the third day. The field team also spent some time on a foot survey around the Sunrise camp.

Seventeen new archaeological sites were found during the team's three partial days of survey and the formerly recorded site was revisited. After we left, another site was reported by Dave Snyder, a geologist with the Geological Survey of Canada. Most sites contained only stone structures such as habitation structures and caches; no precontact lithic (stone) materials were encountered, suggesting primary occupation by Inuit and their Thule ancestors of the areas surveyed. Site locations indicated a focus on sea mammals on the coast, and caribou and arctic char in the interior. Other than the Snyder site near the Discovery camp, no sites were found to lie directly within any of the target areas around the two camps, kimberlites or drill sites. The other seventeen new sites and one formerly reported site, recorded on two of the northern fiords and on the interior river/lake system, especially around the large lake known as Qamanialuk, are distant from the above activity areas so do not appear to be at risk from present project activities. No sites were found that exhibited any evidence of disturbance from exploration or other human activities.

In general, there are not many areas of overlap between current exploration activities on the Peregrine claim block and areas where sites are known to be present or likely to be present. Drilling in summer 2009 was focussed around the two main kimberlites that

have been found so far, in the east-centre of the claim block in an area characterized by glacial rubble and small shallow lakes and streams. However, as the Snyder site was found near the Discovery camp in this type of environment, it seems that at least occasional travel or hunting trips occurred in this area in the past. We predict that more sites will most likely be found on the northern fiord arms where they intersect with the claim block and in association with the larger interior lakes and rivers, as well as on the traditional travel routes. However, the unpredictable nature of past human resource exploitation and our past experience on similar surveys indicates that other sites will be found in areas traditionally considered by archaeologists to be of lower potential. Because of the absence of evidence for site disturbance during this stage of mineral exploration by Peregrine, the observed lack of overlap between the current and proposed areas of intensive work and the location of recorded archaeological sites and areas of highest archaeological potential, and the application of sound environmental practices by Peregrine personnel, we concluded that the present exploration programme as known in August 2009 at Chidliak has little risk of conflict with heritage resources. Because of the identification of numerous sites on the northern fiord arms and on the interior lake/river system, we recommend that additional, more intensive surveys be undertaken in these areas and a selection of areas considered of high, medium and low archaeological potential and the programme of discussions with Inuit in local communities be intensified to assist in ensuring in practice Peregrine's policy of non-disturbance of heritage resources.

***Project Participants***

| | |
|---|---|
| Permit Holder: | Callum Thomson, Pictou Landing, NS |
| Project Archaeologist: | Callum Thomson |
| Field Assistant: | Nigel Qaumariaq, Iqaluit, NU |
| Additional Site Reporter: | Dave Snyder, Geological Survey of Canada |
| Principal Report Author: | Callum Thomson |
| Researcher: | Jane Sproull Thomson, Pictou Landing, NS |
| Report Compiler and Graphics Production: | Sandra Ratch, Wetaskiwin, AB |
| Peregrine Diamonds Ltd.: | Shirley Standafer-Pfister, Vancouver and Victoria, BC |

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# 1 INTRODUCTION

At the request of Peregrine Diamonds Ltd. (Peregrine), a Vancouver-based mineral exploration company, a preliminary archaeological inventory and assessment was conducted of the Chidliak claim block on the Hall Peninsula, southeast Baffin Island, Nunavut (Figure 1-1). This work was preceded by a heritage resources overview that indicated the area contained archaeological potential and there was some risk of conflict between heritage resources and exploration project activities.

## 1.1 Proponent's Activities

Peregrine has been conducting an exploration programme since 2008 on a block of prospecting permits totalling 980,000 ha on south Baffin Island. In 2008 three diamondiferous kimberlite pipes were discovered and in 2009 Peregrine began to evaluate the known pipes and to test-drill in order to discover additional kimberlites; 13 new kimberlites were discovered in 2009. This activity required, in part, construction of a second field camp in addition to continued use of the first camp and airstrip, a mini-bulk sample (carried out by means of shovels and a rock-breaker hammer/hand drill) to extract 50t of sample for shipment offsite, overland winter transportation by Bombardier of a Cat Multi-Loader (one trip), prospecting and till and geochemical sampling. The Peregrine camps (Discovery and Sunrise) are accessed in summer by small aircraft landing on a natural gravel airstrip, and by helicopter shuttles from the airstrip. In winter, aircraft are able to land on the frozen lake at the Sunrise camp.

## 1.2 Archaeological Project Activities

The Chidliak archaeological project was aimed at initiating the development of an inventory of archaeological and other heritage sites within the Chidliak project area, with particular focus on areas of intensive activity such as drill sites, the exploration camps and other areas of potential disturbance (Figure 1-2). Added areas of interest included the vicinity of the single site previously recorded within the claim block, on Ptarmigan Fiord, local travel routes through the Chidliak project area from Iqaluit to Cumberland Sound, and the McKeand River system (Figure 1-3). Any sites found could then be assessed for potential negative effects from the present stage of mineral exploration, and early thought could be given to mitigation requirements during any future expansion of activity. It was intended that the results of this preliminary assessment would be provided to regulators and other interested parties to help inform their review of continuing exploration work, and would provide Peregrine with a set of baseline data from which to refine, if necessary, the company's existing heritage conservation measures and policies. An interim report was provided to Peregrine immediately following completion of the field activities in August 2009 (Thomson 2009).

Throughout the course of the 2009 surveys, the primary objective was to support Peregrine's policy of avoidance of conflict between heritage resources and project activities. Where sites were found, therefore, they were evaluated for their significance, for the potential for project disturbance and need for mitigation measures and for their potential to contribute to a prediction of the distribution of archaeological and other heritage resources elsewhere in the project area.

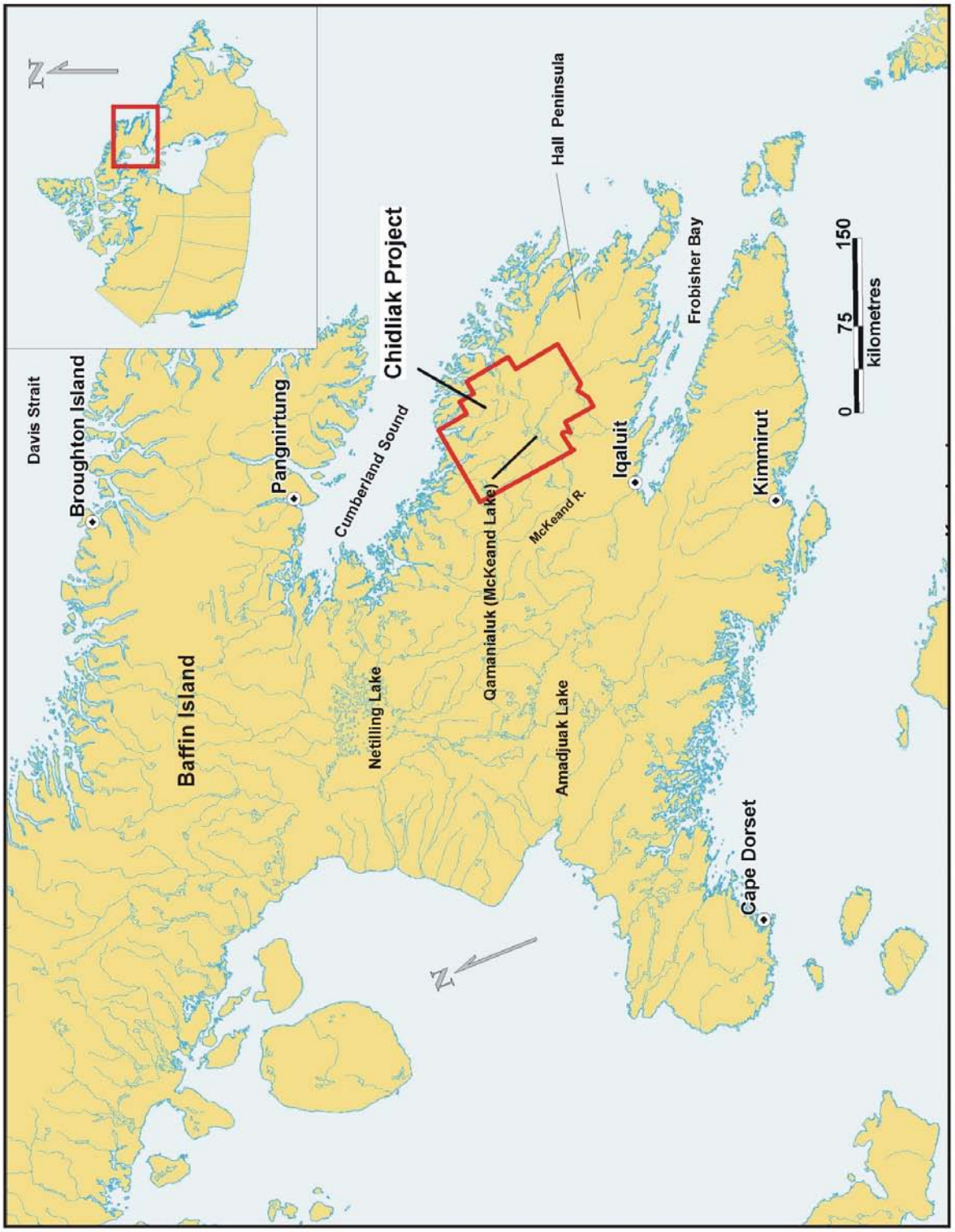


***Figure 1-1. Chidliak Project Area and Project Setting.***

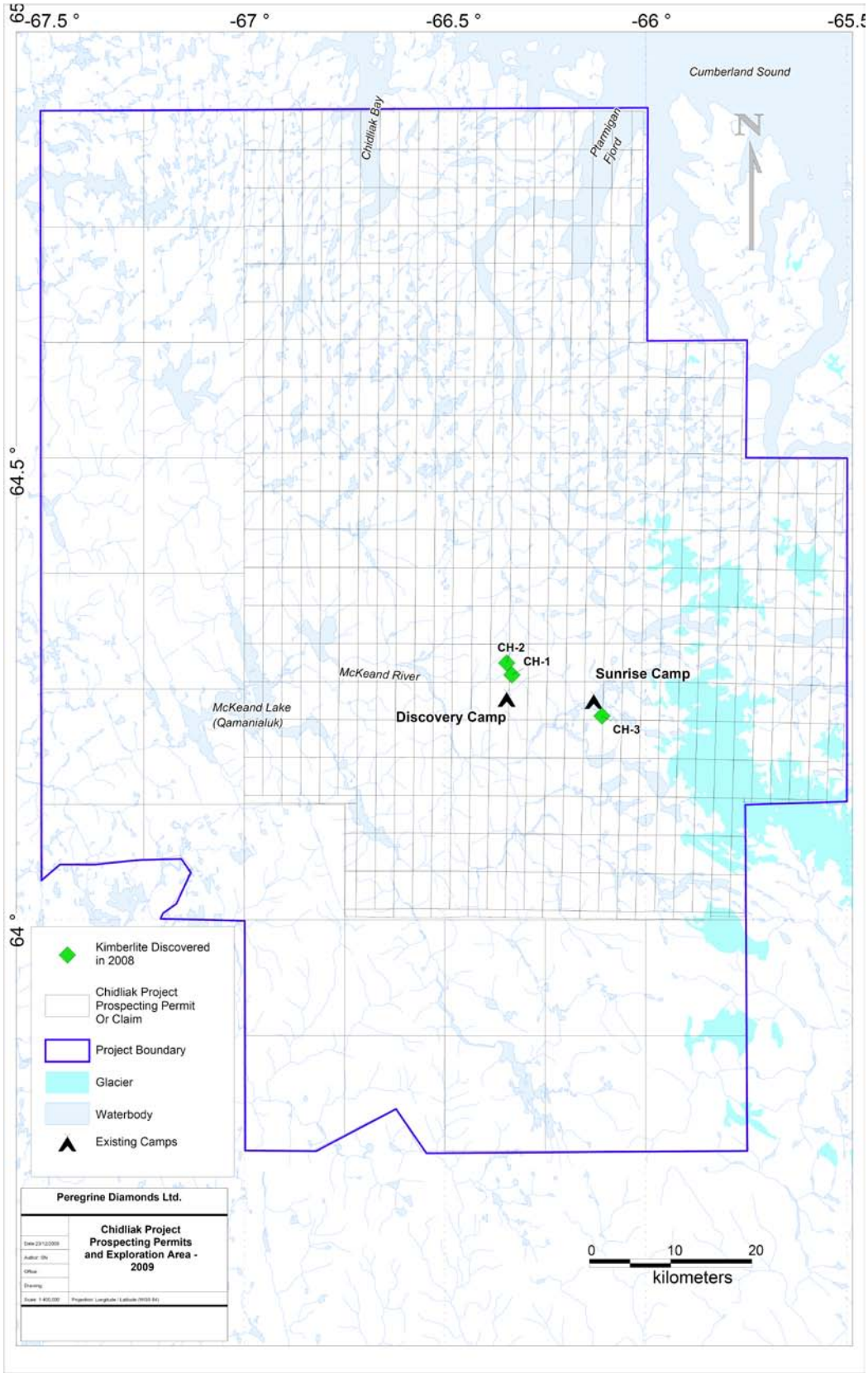


***Figure 1-2. Peregrine Diamonds Ltd. 2009 Exploration Activity Areas, Hall Peninsula, NU***

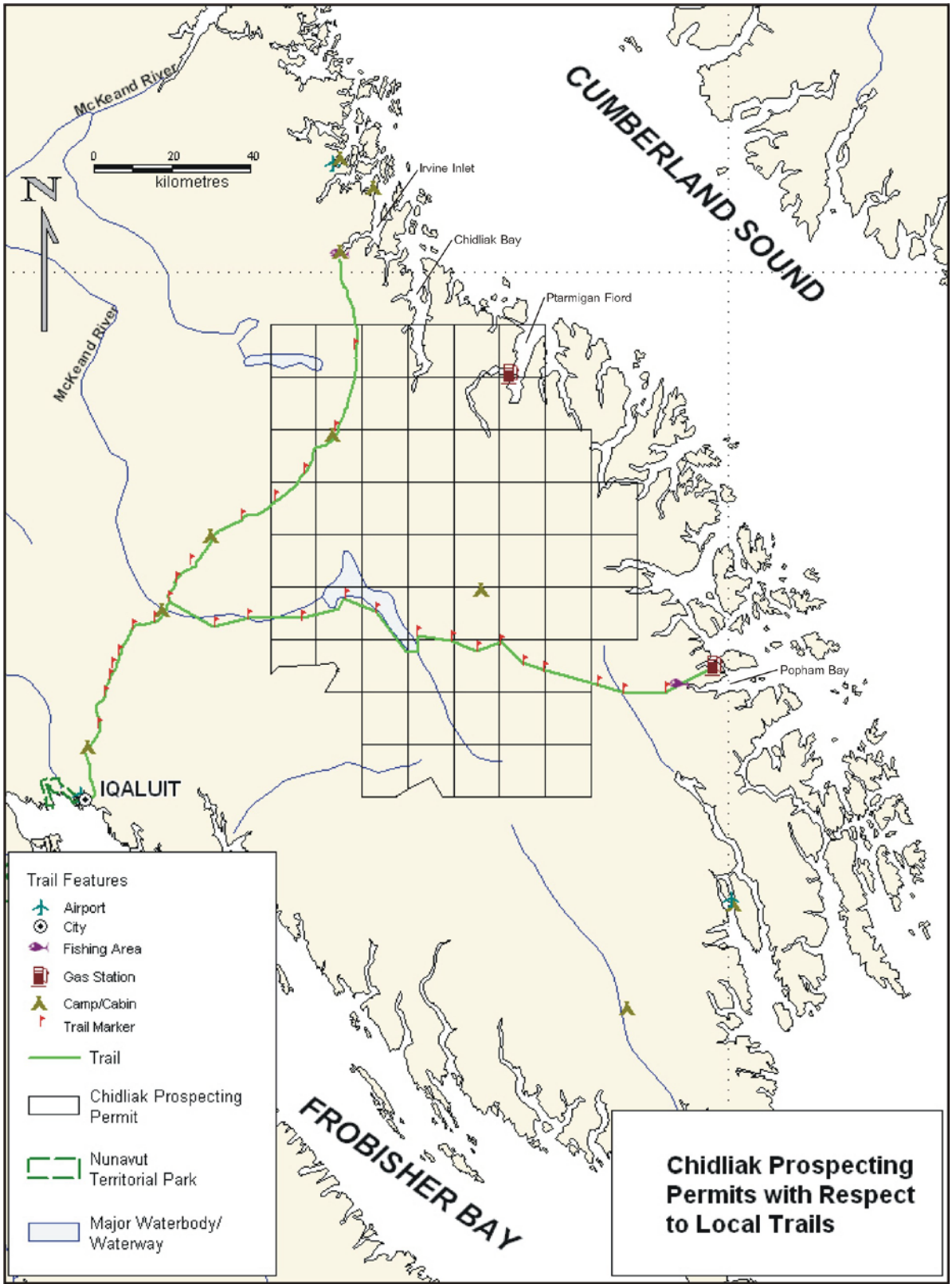


***Figure 1-3. Local Winter Trail Routes through the Chidliak Project Area***

### 1.3 Project Personnel

The background research, fieldwork direction, analysis and preparation of report contents were undertaken by Callum Thomson. Jane Sproull Thomson provided additional research and report review. Preparation of report graphics and report compilation were undertaken by Sandra Ratch. Assistance in the field was provided by Nigel Qaumariaq, a resident of Iqaluit with some familiarity with the study area from previous winter fishing expeditions to the large lake known locally as Qamanialuk on the McKeand River. Project management and logistical support were provided by Shirley Standafer-Pfister, Peregrine's Manager of Regulatory and Environmental Affairs, who also provided detailed information on project activities. Kenn Borek Airlines flew us to and from the study area by Twin Otter, and helicopter support was provided by Héli-Inter Helicopters, Jonathon Hebert and Pascal Vivier, pilots.

### 1.4 Report Organization

Section 2 of this report presents a brief description of the study area. Section 3 summarizes the methodology used to obtain the project results, which are presented in Section 4. Sections 5 and 6 offer conclusions and recommendations, respectively, and Section 7 lists sources consulted and concludes with a Glossary of terms used. Appendix 1 includes site entry forms submitted to the Archaeological Survey of Canada as well as site and feature sketches. The Nunavut 09-04A archaeologist permit is included in Appendix 2. Appendix 3 contains a catalogue of photos and a CD containing project photos.

## 2 STUDY AREA

### 2.1 Environmental Setting

The environment within the claim block, which is located between Cumberland Sound and Frobisher Bay on the Hall Peninsula in southeast Baffin Island, is primarily characterized by gently rolling bedrock and glacial terrain at an average elevation of 700 m above sea level, interspersed with many small lakes and ponds and, in the east, melting snow fields and ice sheets. Vegetation in the interior is generally sparse, with small patches of moss, lichen and sedge-like grass where finer sediments predominate. White and rose quartz is plentiful in the glacial till and in bedrock veins, but no evidence was found of any prehistoric use of this resource for tool-making. On the coastal margins, the vegetation increases markedly in abundance and variety, access is available to a seasonal range of marine and terrestrial resources, and suitable habitation sites are plentiful on raised beach terraces and ridges. The McKeand River, arising in the ice sheets in the southeast corner of the claim block, cuts through the south and southwest part of the claim block then runs north to drain into Cumberland Sound at Irvine Inlet. The river broadens into an area known locally as Qamanialuk (S. Standafer-Pfister pers comm November 2009), an extensive multi-armed lake near the west side of the claim block.

Banfield (1974) lists many species of terrestrial and sea mammals present in and around the study area, including adjacent Frobisher Bay and Cumberland Sound, that would have been and continue to be exploited by people in the region for food and other resources. These include brown and collared lemming, arctic hare, wolf, arctic fox, red fox, polar bear, ermine, wolverine,

possibly lynx (extra-limital record nearby), caribou, northern bottle-nosed whale, white whale, narwhal, white beaked dolphin, killer whale, Atlantic pilot whale, harbour porpoise, minke whale, bowhead whale, walrus, bearded seal, harbour seal, ringed seal, harp seal and hooded seal. In addition, ptarmigan, waterfowl, gulls, birds' eggs, arctic char, cod, clams, berries and other resources used for food and other needs are plentiful in the region. However, the central area of the claim block where most of the project activities are currently focussed seems relatively less populated by wildlife, with occasional polar bear (S. Standafer-Pfister pers. comm., 2009), wolf, arctic fox, caribou and Canada geese being sighted. Arctic char are present in the lake at Sunrise camp and in Qamanialuk and the McKeand River (N. Qaumariaq pers. comm., 2009).

Riewe presents additional information on the Chidliak study area in the Cumberland Sound section of the Nunavut Atlas (Riewe 1992). Harbour seal are reported to be present at Qamanialuk, the large lake near the headwaters of the McKeand River. This same area is a summering and possibly post-calving caribou ground, where the small sub-population of Hall Peninsula caribou feed on the rich vegetation after giving birth in the coastal highlands to the east. Arctic char are present in the McKean River system. Along the coast, where the Chidliak claim block meets Cumberland Sound, game animals and birds of interest to Inuit hunters include bowhead, walrus, beluga, narwhal, seals, polar bear, waterfowl and nesting seabirds; these are augmented in the interior by wolf and fox as well as caribou. The entire Chidliak claim block is within a zone of high intensity Inuit land use; many recent camp sites are documented and most of the claim block falls within an Area of Archaeological Interest. Travel routes including Iqaluit-Qamanialuk-Ptarmigan Fiord, Iqaluit-McKeand River-Popham Bay, and Iqaluit-Cumberland Sound-Pangnirtung are still in use by Inuit on skidoo from late fall to spring, and probably were originally followed by dog teams (Riewe 1002: 72-73, 181-183).

## 2.2 Past Land Use

Prior to this project, known archaeological sites in the region clustered around the marine coast where attributes such as access to marine resources, caribou summer grazing areas, char streams, elevated lookout points, fresh water, well-drained locations suitable for campsites, and travel routes by sea and sea ice coalesce. Sites include the remains of sod houses, tent rings, caches, graves, foxtraps and scatters of lithic and historic period material. Human populations never permanently settled in this area; most occupants travelled across the landscape with the seasons, harvesting resources as they became available - sea mammals, caribou, nesting seabirds, moulting waterfowl, eggs, fish, furbearers and berries – and including or falling back on cached meat as planned or required. Many habitation sites are small and ephemeral and may be located in a wide variety of situations according to the needs of the time: *e.g.*, overnight shelter, animal butchering, meat storage, burial, access to a quartz vein, exposure to a breeze, proximity to driftwood and other sources of wood for fuel and tool manufacture. Occasionally, where resources such as migrating caribou or arctic char are seasonally concentrated, larger aggregates of people may live temporarily in bigger camps and social activities may occur in a communal meeting house or *qaggiq*.

Following meetings with Hunters and Trappers Association members and others in Iqaluit and Pangnirtung, additional information was provided on land use in the interior of the claim block.

The large lake unofficially referred to during the field study as McKeand Lake, where eight archaeological sites were found, is known locally as Qamanialuk, meaning "the place where Inuit go to kill caribou for caribou parkas". This information has been incorporated in our interpretation of site function and seasonality in the interior.

## 2.3 Historical Notes

Baffin Island, named after the early 17th century English explorer William Baffin, has been occupied by aboriginal people for more than 4,000 years, including Pre-Dorset Palaeo-Eskimos (4000-2500 BP), Dorset Palaeo-Eskimos (2500-500 BP), Thule Neo-Eskimos (1000 BP-contact), and Inuit, the historic descendants of the Thule. Baffin Island was also one of the first parts of North America encountered by European explorers seeking a Northwest Passage to the Orient. Martin Frobisher sailed into the bay that now bears his name in 1576, at first seeking a route to the Orient but subsequently focusing on mining a rich deposit of what turned out to be iron pyrites on Kodlunarn Island, not the gold he had told his backers. The first Church of England service on North American soil was held in Frobisher's bay in 1578. The community of Iqaluit, known until 1987 as Frobisher Bay, was founded in 1942 as an American airbase and is now the capital of the 10-year old territory of Nunavut. Previously, the vicinity of the town site had been visited seasonally by Inuit fishing for arctic char, hence the Inuktitut name Iqaluit, meaning "many fish". The arrival of the Hudson's Bay Company in 1949 and a radar and communication station in the late 1950s propelled Iqaluit into the modern era.

Cumberland Sound, occupied for several thousand years by Inuit and their predecessors, and was explored and mapped in 1585 and 1587 by John Davis, an English navigator although Norse travelling between Greenland and Vinland undoubtedly visited as well. From 1840 onwards, European and later American whalers began 80 years of operations in Cumberland Sound, radically changing the traditional settlement and subsistence patterns and health of the Inuit. In 1894, Reverend Edmund James Peck opened a mission station on Blacklead Island and introduced the use of a syllabic writing system to the Inuit of Cumberland Sound, from where the system spread rapidly. When whaling declined, the Inuit returned to life in camps scattered around Cumberland Sound. A Hudson's Bay Company post opened in Pangnirtung on the north coast of Cumberland Sound in 1921 and within 10 years the Royal Canadian Mounted Police opened a detachment and a hospital was built. In 1962, a devastating distemper epidemic killed most of the sled dogs in Cumberland Sound prompting many families to move off the land and into Pangnirtung, meaning "the place of the bull caribou", after decades of seasonal hunting and trading visits.

## 2.4 Previous Investigations

According to the site records provided by the Department of Culture, Language, Elders and Youth (CLEY), the single previously known site within the claim block, LeDg-1, is a substantial site on Ptarmigan Fiord described as containing winter sod houses, *qammaq* or fall houses, summer tent rings and whale bone, considered by the reporting archaeologist (Gardner 1976, 1979) to be the remains of a Thule Inuit site and a later occupation by European whalers (Figure 2-1)

A total of 31 sites had previously been recorded on three of the five 1: 250,000 map sheets in the region within which the Chidliak project area falls, exclusively in coastal and island situations on Cumberland Sound and Frobisher Bay. Sites range through most of the prehistoric and historic periods, with Pre-Dorset (4000-2500 BP [before present]), Dorset (2500-500 BP) and Thule (1000 BP-contact), Inuit (contact period to present), European (500 BP to present) and Euro-Canadian (19th century to present) cultures represented. Features include sod houses, *qammat*, tent rings, shelters, hearths, caches, graves, stone foxtraps, kayak stands, *inuksuit*, blinds, caribou fences, children's play areas, cairns, ceremonial houses (*qaggiit*), trading posts, churches, mines, whaling paraphernalia, shipwrecks and artifact scatters.

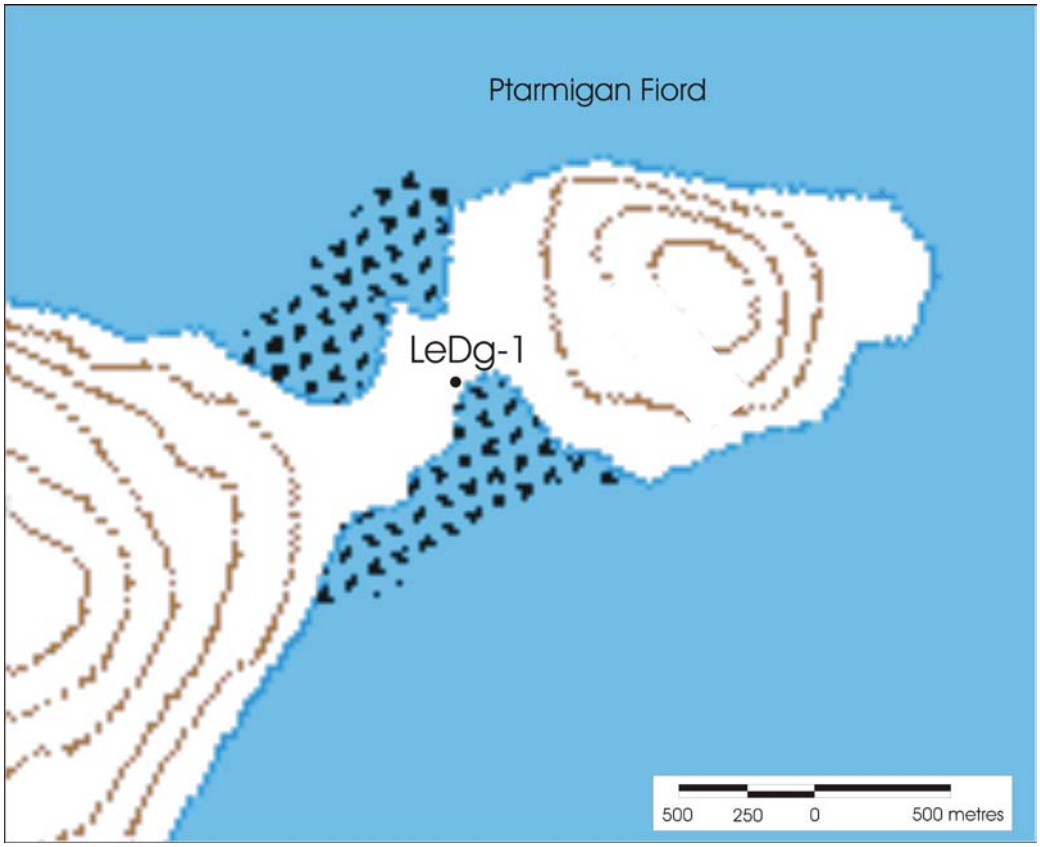


***Figure 2-1. Previously Recorded Archaeological Site in Chidliak Claim Block: LeDg-1***
*See Figure 4-1, p.11 – site located in the NE of map*

Most sites identified in the region have been found as a result of surveys sponsored by universities, museums and government agencies and thus have been recorded in areas where the researchers have hypothesized past land use patterns and have tested their hypotheses, rather than the less presumptive result of archaeological inspection of planned development areas such as the Chidliak claim block. Primary researchers who have recorded and investigated 31 sites on three (25O, 26A, 26B) of the five 1:250,000 map sheets in the region on which the Chidliak claim occurs include (no sites occur on 25 P and 26G) are identified in Table 2-1:

| **Table 2-1 Previous Site Investigations, by Permit Number, in Vicinity of Peregrine's Chidliak Claim Block (2009 data from Nunavut Department of Culture, Language, Elders and Youth)** |
|---|
| 76-396 D. Gardner Thule Archaeology Conservation Project (Gardner 1976, 1979) |
| 76-398 W.G. Ross (Ross 1976) |
| 84-559 M. Stevenson Archaeological Survey and Mapping of Blacklead Island (Stevenson 1984) |
| 88-637 D. Stenton 1988 Ward Inlet Survey (Stenton 1988) |
| 89-673 K. Lunn (Lunn 1989) |
| 90-689 W. Fitzhugh Archaeology of Frobisher Expedition (Fitzhugh 1990) |
| 91-710 W. Fitzhugh Meta Incognita Project (Fitzhugh 1991) |
| 92-728 W. Fitzhugh Meta Incognita Project (Fitzhugh 1992) |
| 93-764 W. Fitzhugh Meta Incognita Project (Fitzhugh 1993) |

# 3 METHODOLOGY

The field survey was preceded by preliminary stages of a historic resources overview of the study area, with data on previous investigations provided to Shirley Standafer-Pfister by the Nunavut Department of Culture, Language, Elders and Youth, and review of available relevant literature (Gardner 1979; Maxwell 1985; Bennett and Rowley 2004). The field team flew from Iqaluit to the Chidliak claim block, landing at the Peregrine Discovery camp. The team consisted of Callum Thomson and Nigel Qaumariaq, a resident of Iqaluit. Shirley Standafer-Pfister, Peregrine's Manager of Regulatory and Environmental Affairs, and Hugo Grenon, Chidliak Project Manager, were also on site and provided logistical support and project information. The survey was intended to include up to 24 hours of helicopter time for aerial surveys and transportation to and from selected areas of pedestrian survey; however, due to heavy demand on the two helicopters on site for geological exploration activities, this was reduced to 10 hours. In addition, the archaeological team undertook eight hours of pedestrian survey in the vicinity of known kimberlites, drill sites and camps. In this manner, a wide variety of environments were inspected at close hand.

Surface indications of archaeological sites were recorded, *e.g*., stone houses or *qammat*, tent rings, caches, kayak stands, foxtraps, *inuksuit*, blinds, hide-drying rings and a several *qaggiit* or festival houses. No archaeological materials were collected and no subsurface testing was undertaken, so as to minimize disturbance to intact sites. Where time permitted, site and individual feature locations were recorded by GPS (Garmin eTrex); on some occasions, due to time constraints or low fuel, GPS co-ordinates were obtained from the air. Approximate locations and routes traversed were marked on topographic maps. Each site and its surrounding area were photographed and notes were taken on site details such as size, contents and relationships to environmental features. Site forms were completed for each site and sent to the Sites Office, Archaeological Survey of Canada for assignment of a Borden number under the national archaeological site classification system (Appendix 1).

A preliminary assessment was made of each site's significance and potential for project-related disturbance. Broad mitigation measures were determined for each site in case the project description changes in the future. Site significance, in the absence of any territorial or federal standards, is a subjective result of determining how important an individual site is, which then assists in evaluating mitigation requirements. For this study, a rating of *Low* was assigned to any

site with fewer than five structures, of which none is diagnostic or highly informative from a research viewpoint; *High* was assigned to any site with more than ten individual structures or one or more extremely significant structures or features; and *Medium* was assigned to sites that fell between these parameters, *i.e.,* five to ten structures, none of which appears to be highly significant. No pre-contact tools or lithic flake scatters were encountered so artifact counts were not considered in assigning significance

An interim report prepared in the field during the hours before and after each day's surveys and while waiting for helicopter transportation was e-mailed to Shirley Standafer-Pfister immediately following departure from the field. All of the project objectives and methods were designed to contribute to the understanding of the culture history of the region, as well as the study area, to ensure that known sites are not affected by project-related activities and to assist in site recognition and appropriate site reporting by exploration field crew members.

# 4 RESULTS

## 4.1 Field Narrative

The following narrative is adapted from the Interim Report (Thomson 2009). The archaeological team (Nigel Qaumariaq and Callum Thomson) met in Iqaluit on August 1 and were flown to the Discovery camp by Kenn Borek Twin Otter, arriving at 0830. Following a safety and orientation briefing by Shirley Standafer-Pfister and discussions on the proposed work plan with Shirley and Hugo Grenon, Geological Project Manager, we were transported to the Sunrise camp, where we spent some time walking around the camp and along the shore of the adjacent lake, but found no evidence of previous human occupation. At 1430 we were given access to a brief amount of helicopter time sufficient only to be flown to a specific location, deposited and then collected for transportation back to camp. We decided to fly to an isthmus in Ptarmigan Fiord, 60 km north of the Sunrise camp, thus gaining an aerial perspective of the central and northern part of the claim block as well as gaining access to a location where we could efficiently spend the time available surveying around the single known site on the claim block until the helicopter, busy elsewhere, could return for us (see Figure 4-1). We identified the known site found in 1976, LeDg-1 (Gardner 1976, 1979), and considered that it had remained intact since first being recorded, with the possible exception of some chainsaw removal of whalebone (presumably to supply the Inuit art industry). We then proceeded to survey the rest of the isthmus, where the fiord divides into two branches. We recorded six new sites (Table 4-1).

**Table 4-1 Archaeological Sites Recorded August 1, Ptarmigan Fiord**

| Borden No. | Field No. | Description |
|---|---|---|
| LeDg-1 | THC2009-5: 2 | Recorded in 1976, with several Thule and Inuit habitation structures, cut whalebone and some materials possibly derived from a European whaling site elsewhere in Cumberland Sound |
| LeDg-2 | THC2009-5: 1 | Three tent rings, most likely from the Thule period |
| LeDg-3 | THC2009-5: 3 | Two large festival houses, one tent ring and an *inuksuk*, most likely Thule |
| LeDg-4 | THC2009-5: 4 | Three hide drying rings, Thule or Inuit |
| LeDg-5 | THC2009-5: 5 | Four tent rings, two kayak stands, one hide drying ring, most likely Thule |
| LeDg-6 | THC2009-5: 6 | Cache, most likely Thule |
| LeDg-7 | THC2009-5: 7 | One tent ring, one hearth, most likely Thule |

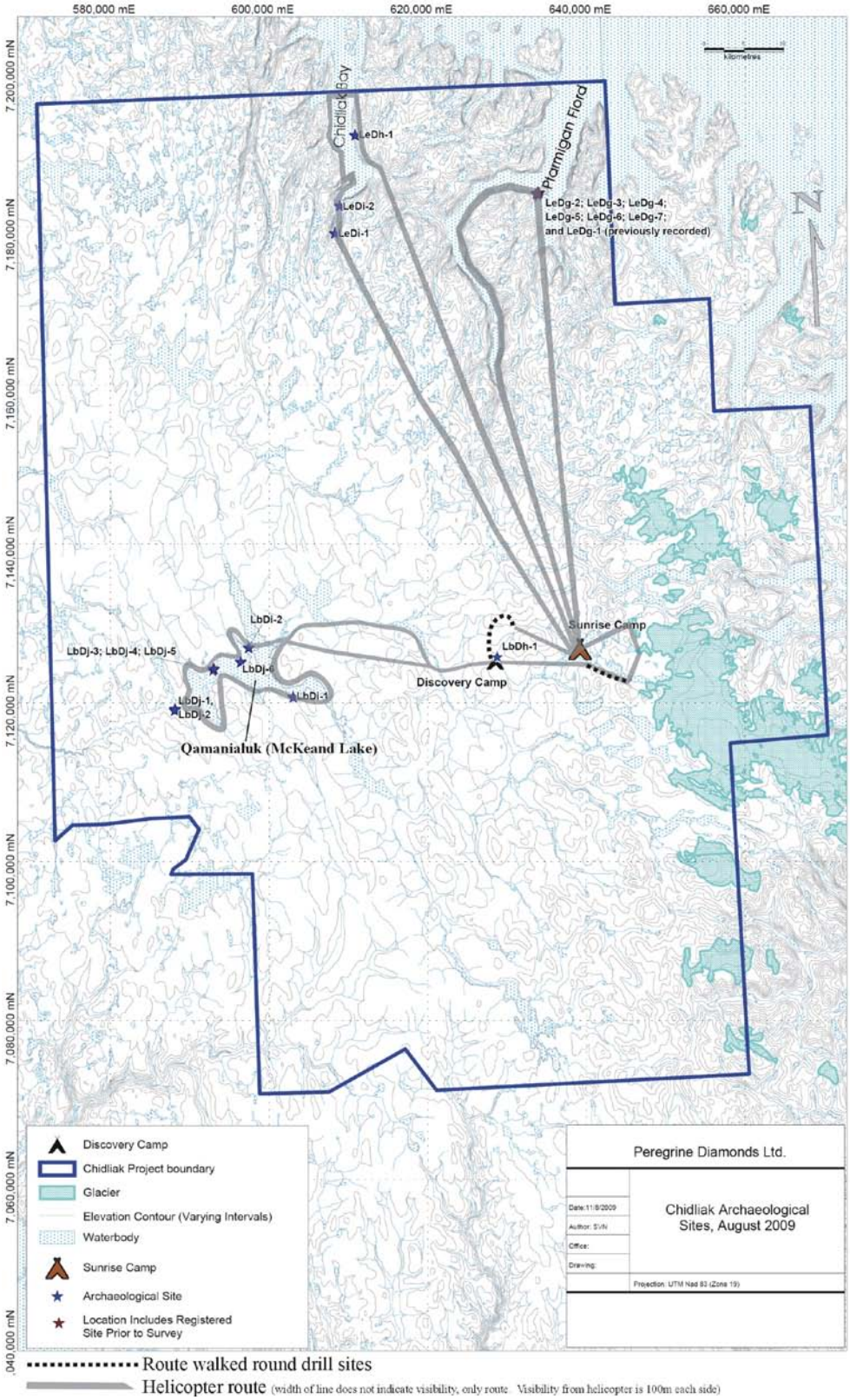


***Figure 4-1. Archaeological Sites and Survey Traverses in Project Area, 2009.***

We arrived back at camp at 1730 and spent the evening after dinner downloading and cataloguing photos, preparing site forms for the six new sites and a site re-visit form for LeDg-1, and adding to the report. Weather through the day was ideal – warm and sunny with a light breeze. No wildlife was observed other than a family of ducks (unidentified) at Ptarmigan Fiord and an arctic fox at camp.

August 2 (Sunday) was another perfect day weatherwise but a complete bust in terms of wildlife and archaeology. We were informed that the two helicopters would be tied up all day with a drill move, fuel hauling and sampling, but were given brief access at 0800 to CH1, one of the kimberlites, from where we walked about 10 km in a circuit through CH2 and then drillholes 9 (CHI-076), 10 (CHI-087) and 12 (CHI-101) and continued walking to Discovery camp, approaching from the south (Figure 1-2). After a quick meal, we were again given a few more minutes access to a helicopter so decided to check a third kimberlite (CH3) and two additional drillholes: 20 (CHI-143) and 24 (CHI-157) between Sunrise and the ice sheet to the east of camp, walking the 5.2 km straight line distance, which probably totalled 10 km with all the ups and downs and detours around lake shores. After a wait of an hour we were picked up and flown back to Sunrise at 1700 via drillholes 16 and 21 (CHI-131 and CHI-146), which we viewed from the air. No archaeological sites were found and no wildlife was seen other than snow buntings. The landscape over which we had walked all day did not seem likely to produce either sites or wildlife. As yesterday, notes were transcribed into reports and photos downloaded and catalogued. Hugo indicated that we might have access to four unbroken hours of helicopter time tomorrow.

August 3 continued sunny and warm, but with no helicopter available until late morning we worked on the report and planned the day's survey routes. After a lack of success in finding archaeological sites on foot in the interior around the two camps, kimberlites and drill sites, the planned programme for today was to fly north, northeast and east to where the claim block meets inlets on Cumberland Sound and, if time permitted, to fly the McKeand River and a large lake (unofficially called McKeand Lake during our field visit but subsequently known to be called Qamanialuk) on the river, west of camp. One branch of the McKeand River rises in the ice sheets east of the Peregrine camps, flows through the Sunrise camp lake and joins with a southern branch at Qamanialuk, 40 km west of the Discovery camp. The river exits the west side of Qamanialuk and continues to flow westward through a broad valley and occasional lake expansions before turning north to exit in Irvine Inlet on Cumberland Sound. The objectives were to identify new archaeological sites in these areas of apparently higher potential to better understand the pattern of land use in the claim block, and to produce a variety of site types that the geologists and other field teams could study and then be able to identify and report when encountered elsewhere in the field. After discussion of the planned programme with pilot Jonathon Hebert, we modified the plan and at 1030 we took off from the Sunrise camp in the A-Star and headed west along the McKeand River to assess archaeological potential in a riverine environment, planning to return to camp afterwards to refuel and continue north to the coast. We flew the south (left) bank of the river towards the large lake, noting locations on elevated knolls and occasional level terraces that appeared to have potential, but for much of the route the terrain sloped steeply down to the river. Terraces and knolls further back from the river were not checked but should be during future work. We then followed the south shore of Qamanialuk and

found a relatively recent site on a sandy terrace. This was followed by the discovery of two more sites at a set of several rapids at the western outflow of the lake, one on either side of the river. We continued down the river for another 5 km before turning back. On the way back towards camp at the end of our available four hours of flying time (and fuel) we flew most of the north shore of the lake and spotted a cluster of five sites on peninsulas, recording two during brief landings and the other three from the air. We did not fly the long north arm of the lake or the north (right) bank of the river but returned directly to Sunrise.

| **Table 4-2 Archaeological Sites Recorded August 2, McKeand River and Qamanialuk** | | |
|---|---|---|
| **Borden No.** | **Field No.** | **Description** |
| LbDi-1 | THC2009-5: 8 | Southeast arm of Qamanialuk: 3 tent rings with modern debris and four miniature (children's) tent rings |
| LbDj-1 | THC2009-5: 9 | North (right) bank of McKeand River below first cluster of rapids: Three Thule tent rings |
| LbDj-2 | THC2009-5: 10 | South (left) bank of McKeand River below first cluster of rapids, opposite Site 9: three Thule tent rings (note, no caches at either of these two sites – possibly these are at the rapids where the fish would have been intercepted) |
| LbDj-3 | THC2009-5: 11 | North shore of lake on peninsula at narrows: a large Thule site containing 8 stone houses, 1 shelter wall, 1 *inuksuk*, 3 caches and 3 sets of skin drying rings (6 in all). Many other caches, some blinds, some hide drying rings and possibly some additional houses were not recorded |
| LbDj-4 | THC2009-5: 12 | Adjacent to and 100+ m northeast of Site 11, another Thule site: 8 stone houses, 5 tent rings, 1 meeting/festival house, 1 tower foxtrap and 2 caches (many other caches and other features not recorded due to lack of time) |
| LbDj-5 | THC2009-5: 13 | Two hundred metres plus northeast of Site 12 on another peninsula at the narrows. No time to set down so obtained coordinates and site details from the air: two tent rings |
| LbDj-6 | THC2009-5: 14 | On southern tip of peninsula on the north side of the centre of the lake, west of a long low island. No time to set down so obtained coordinates and site details from the air: three tent rings |
| LbDi-2 | THC2009-5: 15 | On southern tip of peninsula near east end of north side of lake. No time to set down so obtained coordinates and site details from the air: four tent rings. |

After dinner we attended a safety meeting conducted by Max Babin Lavoie, Sunrise camp manager, and then prepared for another survey, taking advantage of the availability of a helicopter and cooperative weather, which however was definitely changing as the temperature had dropped considerably, the breeze had strengthened and clouds and fog were moving in from the east. At 1930 we left with pilot Pascal Vivier in the A-Star and decided to head north to Chidliak Bay, 60-75 km northwest of Sunrise, instead of the planned east coast of the block as the fog was rolling in quickly from the east. We had a little over an hour available and recorded three sites and noted several additional areas of potential on both sides of Chidliak Bay within the claim block which we did not visit, including two places where tents and cabins were present but currently not occupied.

| **Table 4-3 Archaeological Sites Recorded August 2, Continued, Chidliak Bay** | | |
|---|---|---|
| **Borden No.** | **Field No.** | **Description** |
| LeDi-1 | THC2009-5: 16 | On a terrace above the extreme southwest corner of Chidliak Bay. Three |

| | | |
|---|---|---|
| | | large tent rings with sleeping platform dividers and a child's play tent. All of the structures adjoined their neighbours. |
| LeDi-2 | THC2009-5: 17 | On a series of terraces on the west side of the bottom end of the bay. Eight tent rings with sleeping platforms. Some older, some relatively recent. |
| LeDh-1 | THC2009-5: 18 | On a terrace above a small bay on the east side of Chidliak Bay: older site containing a kayak stand and three tent rings well buried in the sod. |

We arrived back at Sunrise at 2130 and discussed the programme for tomorrow with Hugo and Shirley. The weather forecast was not good, nor was Hugo's prediction for flight availability. Hugo suggested that another hour of helicopter time might be available the next day and we proposed that this be used to inspect some more drill sites in the vicinity of camp; however, Hugo instead stated that he was keen to re-visit some of the sites on the McKeand system as a valuable site recognition tool for his field crews.

August 4 began at 0400 with thick fog down to the lake and visibility of less than 50 m. We continued with report preparation and downloading as we waited for word on flights. At 0830, Hugo informed us that there was a Twin Otter on the ground at Discovery. In view of the marginal weather both here and, we heard, in Iqaluit, we decided to take the opportunity to leave camp rather than be stuck on the ground and in camp. We left at 0930 and approached Iqaluit a few feet above the ground, just under the fog. On our arrival in Iqaluit, I finished the report and sent it by email to Shirley Standafer-Pfister, with a review copy to Nigel Qaumariaq, as a preliminary account of our activities and findings and with some tentative conclusions and recommendations. An appended table provided coordinates for all 18 sites recorded during the 10 hours of helicopter-assisted surveys and 8 hours of ground surveys around the kimberlites (which produced no sites) that we were able to undertake with a suggestion that these sites should be plotted on Peregrine mapping for the information of field crews working in those areas. A draft copy of the 18 archaeological site forms was also appended, providing more information on the sites and their contents. Peregrine was reminded that these forms are confidential and should not be made publicly available.

## 4.2 Archaeological Sites Recorded in Chidliak Exploration Area

One previously recorded site was re-visited and eighteen new archaeological sites were found during the preliminary archaeological inventory and assessment in the Chidliak exploration area, seven on Ptarmigan Fiord and three on Chidliak Bay on Cumberland Sound, eight on the McKeand River and at Qamanialuk, and one in the vicinity of the Discovery camp found and reported after the archaeological field visit by a member of the Geological Survey of Canada (Figure 4-1). The nineteen sites are described below, with a brief discussion of the site location and contents, an analysis of its significance and recommendations for further mitigation, where necessary. Each of the nineteen site records is contained in Appendix 1, including a site and/or feature sketch or photo and a location map. Digital photographs of each site and in most cases each site feature are contained in a CD attached to the back cover of this report; a photograph catalogue is contained in Appendix 3.

**LeDg-1 (Site Re-visit), Ptarmigan Fiord**

*Description*

LeDg-1 is a fairly substantial site located on a peninsula in Ptarmigan Fiord where the main arm of the fiord splits into two narrow arms. The site is thus in an advantageous position for shelter and an abundance of building materials, close to marine resources and travel routes on Cumberland Sound and with access to the interior. LeDg-1 is described by Gardner (1976) as containing two "unimpressive shallow semi-subterranean Thule houses with little associated whalebone", four *qammat* or fall houses, two tent rings and "a quantity of heavy wrought iron hooks, large sheet that point to whaler use with square nails, old zink and iron debris" and was considered by the reporting archaeologist to be the remains of a prehistoric Thule campsite and a European whaling station (Gardner 1976). No mention is made in Gardner's site form of the presence of whalebone other than "little associated whalebone" in the Thule sod houses. Scheitlin *et al.* (1979), listing the Thule site inventory recorded during the First Report on the 1976 Thule Archaeology Conservation Project, summarize in the resultant report "Archaeological Whale Bone: a Northern Resource" (McCartney 1979) the site contents as including "associated whalebone" (Scheitlin *et al.* 1979: 423). During our brief inspection we were unable to find any evidence of sod houses, but we did record three tent rings with their rocks well buried in sod, one more recent tent ring with rocks on the surface, a cache, an arrangement of rocks on a bedrock outcrop identified as a hide-drying ring and some whalebone, some of it saw-cut.

| **LeDg-1, Ptarmigan Fiord** | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 19WFM** | **Photo** |
| 1 | Tent ring, recent, rocks on surface | 2.5 x 2.5 | | August 1: 003 site overview view N from hill<br>August 1: 004 view N from F-1 |
| 2 | Cache | 1 x 1 | | |
| 3 | Tent ring, rocks buried in sod, whalebone, iron, wood, faunal material | 3 x 3 | | |
| 4 | Tent ring, rocks buried in sod, wood, seal bone, stove door, Tilley lamp top | | | |
| 5 | Skin-drying ring of rocks on flat bedrock | | | |
| 6 | Tent ring on higher terrace, rocks buried in sod | 4 x 3 | | |

*Analysis*

The discrepancy between our count of six structures and Gardner's eight may reflect the brief amount of time that we spent on site: Thule winter sod houses are generally hard to miss so it may be that the site extends in a direction that we did not survey or we interpreted his "shallow…Thule houses" as a different type of structure. The difference in interpretation continued through our recording of the other structures: the older tent rings noted by us may be structures previously interpreted by Gardner as *qammat* or fall houses, and our recent tent ring and hide-drying ring may be Gardner's two tent rings, leaving our cache and three tent rings buried in sod as Gardner's four *qammat*. We did not notice any substantial amounts of historic material that would be accounted for by the presence of European whalers, as suggested by

Gardner; instead, such objects as a stove door, a Tilley lamp top and whalebone could either have been transported here by Inuit from Blacklead Island, 25 km north between Ptarmigan Fiord and Chidliak Bay, or another European whaling station in Cumberland Sound. Because of the number of structures greater than five, this site is considered to be of medium significance.

*Recommendation*
LeDg-1 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Interpretation of the site's contents and function would benefit from another visit to clarify the discrepancies noted above.

**LbDh-1, Discovery Camp**
*Description*
Dave Snyder, a geologist with the Geological Survey of Canada, following the departure of the archaeological field team from the project area, reported LbDh-1 to Shirley Standafer-Pfister. The site consists of a single tent ring located on a small sandy ridge about 500 m east of Peregrine's Discovery Camp. The tent ring rocks are partially buried in the soil matrix and have some lichen cover on one side, suggesting some antiquity.

| **LbDh-1, Discovery Camp** | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Tent ring | 3 x 2 estimated | | Snyder Photo 1 |

*Analysis*
The tent ring is approximately 3 x 2 m in size, situated on a sand and gravel terrace overlooking a river and with a broad view in all directions into valleys and lower terrain. No artifacts or other cultural materials were noted in or around the feature. It is likely that this site represents a temporary camp occupied during a hunting trip through the interior. Caribou and predators such as polar bear, wolf and fox have been noted in this general area. The site is approximately 15 km north of one of the two winter trails that transect the Chidliak claim block, so may also be a temporary trapping or travel camp. This site is rated as being of low significance. However, the finding of this site in an area considered during the brief field visit to be of low archaeological potential has helped to reinforce the opinion held by Thomson Heritage Consultants that sites may be located in a wide range of environments, not just those traditionally held to be of high potential.

*Recommendation*
LbDh-1 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. The site would benefit from another visit to verify the information provided and to evaluate the potential for gathering additional information as well as to be able to incorporate in a predictive model the location and style of such sites in similar environments.

**LbDi-1, Qamanialuk south shore**

*Description*

LbDi-1 is one of eight sites found clustered on Qamanialuk and adjacent to the outlet of the lake on the McKeand River. LbDi-1 is located on the south shore of the southeast arm of the lake on a sandy terrace. The site consists of three tent rings and four features interpreted as miniature or play tent rings all within an area of about 1000 m². Each of the large tent rings has a sleeping platform divider across the centre, parallel to the lake shore. Some broken glass and rusted tin cans are scattered around the site. This site is on or immediately adjacent to the southern winter trail that cuts across the Chidliak claim block, originating in Iqaluit, turning east off the route to Irvine Inlet on Cumberland Sound, skirting the south side of McKeand River and Qamanialuk and ending at the south end of Popham Bay opposite Okalik Island (Figure 1-3).

| **LbDi-1, Qamanialuk** | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Tent ring | 4 x 5 | | August 3: 001 view N |
| 2 | Miniature tent ring | 1 x 1 | | August 3: 002 view N |
| 3 | Miniature tent ring | 1 x 1.5 | | August 3: 002 view N |
| 4 | Tent ring | 3 x 3 | | August 3: 003 view N |
| 5 | Tent ring | 3.5 x 3.5 | | August 3: 004 view N |
| 6 | Miniature tent ring | 1 x 1 | | August 3: 005 view N |
| 7 | Miniature tent ring | 1 x 1.5 | | August 3: 005 view N |

*Analysis*

The location near the winter trail suggests that the site may have been occupied during winter, possibly when the terrace was blown free of snow so that suitable hold down rocks could be located and used. The small tent rings could have been occupied by individuals hunting or ice-fishing or by children using them as play tents. Alternatively, the site could have been occupied during summer or fall, with the occupants travelling overland and/or by boat to reach the lake. The local name for the lake is Qamanialuk, the place where Inuit go to kill caribou for their caribou parkas. This suggests occupation of sites around the lake during the fall, when caribou are fat after a summer of grazing and the hides are at their best for making clothing. Although apparently occupied at least during the recent Inuit period, though perhaps also during the pre-contact period, the size of this site (more than five structures) and its potential to contribute to an understanding of interior land use and adaptations indicates a medium significance rating is appropriate.

*Recommendations*

LbDi-1 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. The east arm of the lake and the winter travel route would benefit from additional survey to locate other sites related to winter use of the interior of the study area; additional informant interviews should also be conducted among residents of Iqaluit and Pangnirtung to find out whether the lake and river were ever used during open water seasons as well as in winter and, if so, how they were accessed.

**LbDi-2, Qamanialuk north shore**

*Description*

LbDi-2 was the last site recorded on Qamanialuk during the overflight; due to a shortage of fuel and time, the helicopter did not land and instead the site was recorded from the air. As a consequence, only a tentative count of site features was obtained. The site is located on the southern tip of a peninsula on the west side of the northeast arm of the lake. It is separated from an island to the south by a narrow channel and looks east towards the entrance into the lake of the north branch of the McKeand River. Four tent rings were counted; no artifacts or faunal materials were obvious on the surface.

| **LbDi-2, Qamanialuk** | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Tent ring | N/a | | August 3: 067-070 from air |
| 2 | Tent ring | | | |
| 3 | Tent ring | | | |
| 4 | Tent ring | | | |

*Analysis*

Like the other seven sites around the lake, this site was possibly related to fishing in the lake, in winter through the ice or in other seasons, or more likely for hunting caribou in fall or trapping. Six of the eight sites around the lake and at the exit of the river are on the north shore, facing south for maximum sunlight and for shelter from winds from the north. This site is tentatively rated at low significance because of the number of structures (four).

*Recommendations*

LbDi-2 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. The site should be re-visited to obtain co-ordinates for each of the structures and to record any other features that may be present. The shores of the lake, adjacent stretches of the McKeand River and the winter travel route would benefit from additional survey to locate other sites related to use of the interior and especially the major waterways within the study area; additional informant interviews should also be conducted among residents of Iqaluit and Pangnirtung to find out whether the lake and river were ever used during open water seasons as well as in winter.

**LbDj-1, McKeand River north (right) bank**

*Description*

LbDj-1 is one of two sites recorded near the exit of the lake into the McKeand River, one on each bank, opposite each other. The site is situated on a vegetated level terrace partially covered with boulders on the north or right bank several metres above the height of the river, and consists of three small tent rings. The winter trail to Qamanialuk and the coast at Popham Bay passes by the south (left) bank of the river (Figure 1-3), probably less than 100 m from this site.

| LbDj-1, McKeand River | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Tent ring | 2 x 2 | 0588149 7119331 | August 3: 009 view east to rapids |
| 2 | Tent ring | 3 x 2.5 | 0588154 7119328 | August 3: 010 view southeast |
| 3 | Tent ring | 3 x 3 | 0588157 7119340 | August 3: 011 view east to rapids |

*Analysis*

The location of the site immediately downstream from several sets of rapids suggests that the camp was situated for access to arctic char migrating upstream in fall to spawn in the lake or branches of the river, or in spring when anadromous char, having spawned and spent the winter in fresh water, are returning to the sea to feed. No caches were present at this site and no stone weirs are present, indicating that interception and storage of the fish took place upstream where the rapids flow through narrows in the river or over shallow ledges. The site could also have been used as a fall caribou hunting camp to intercept animals as they cross the river downstream from the lake and rapids. This site is rated at low significance because of the number of structures (three).

*Recommendations*

LbDj-1 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional survey should be conducted upstream from the site to identify the stone weirs and caches that are likely present if this site was a fishing camp and/or to locate caribou trails that might lead to a nearby crossing point on the river. The shores of the lake, adjacent stretches of the McKeand River and the winter travel route would benefit from additional survey to locate other sites related to use of the interior and especially the major waterways within the study area; additional informant interviews should also be conducted among residents of Iqaluit and Pangnirtung to find out whether the lake and river were ever used for fishing during open water seasons as well as in winter, as seems possible from one tentative interpretation of the location of LbDj-1 as a fishing camp.

**LbDj-2, McKeand River south (left) bank**

*Description*

LbDj-2 is the second of two sites recorded near the exit of the lake into the McKeand River, one on each bank, opposite each other. The site is situated on a vegetated level terrace partially covered with boulders on the south or left bank several metres above the height of the river and, like LbDj-1, consists of three small tent rings. The winter trail to Qamanialuk and the coast at Popham Bay (Figure 1-3) passes by this bank of the river, probably less than 100 m from the site.

| LbDj-2, McKeand River | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Tent ring and external hearth | 2.5 x 2 | | August 3: 015 overhead view east to rapids |

| | | | | |
|---|---|---|---|---|
| | | | | August 3: 016 view north |
| 2 | Tent ring with internal partition, lamp stand and hearth | 2 x 3 | 0588107 7119180 | August 3: 017 view northwest |
| 3 | Tent ring | 3 x 3 | 0588095 7119133 | August 3: 017 view northwest |

*Analysis*

Like LbDj-1, the location of the site immediately downstream from several sets of rapids suggests that the camp was situated for access to arctic char migrating upstream in fall to spawn in the lake or branches of the river, or in spring when anadromous char, having spawned and spent the winter in fresh water are returning to the sea to feed. No caches were present at this site and no stone weirs are present, indicating that interception and storage of fish took place upstream where the rapids flow through narrows in the river or over shallow ledges. The two sites, one on either side of the river, may have been used simultaneously, with the families camped on both sides responsible for maintenance and operation of the weirs adjacent to their own bank and use of caches on their respective banks, assuming these features are present at the rapids. Alternatively, this may be a fall caribou hunting camp. This site is rated at low significance because of the number of structures (three).

*Recommendations*

LbDj-2 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional survey should be conducted upstream from the site to identify the stone weirs and caches that are likely present if this site was a fishing camp and/or to locate caribou trails that might lead to a nearby crossing point on the river. The shores of the lake, adjacent stretches of the McKeand River and the winter travel route would benefit from additional survey to locate other sites related to use of the interior and especially the major waterways within the study area; additional informant interviews should also be conducted among Iqaluit and Pangnirtung residents to find out whether the lake and river were ever used for fishing during open water seasons as well as in winter, as seems possible from the location of LbDj-2.

**LbDj-3, Qamanialuk north shore**

*Description*

LbDj-3 is the westernmost of five sites recorded on the north side of Qamanialuk. Three of the sites (LbDj-3, 4 and 5) are situated adjacent to each other at the narrows separating the central part of the lake from the west arm. LbDj-3 is situated on the tip of a vegetated boulder covered peninsula facing south over the narrows. The site consists of a relatively large number of stone features, not all of which were recorded due to time constraints, including high-walled houses or *qammat* most likely occupied in fall, a shelter or blind, *inuksuit*, caches and hide drying rings.

| **LbDj-3, Qamanialuk** | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Stone house or *qammaq* | 4 x 2.5 | | August 3: 025 view north<br>August 3: 026 view south |
| 2 | Shelter wall or blind | 1.5 x 1 | | August 3: 027 view south |

| | | | | |
|---|---|---|---|---|
| 3 | *Inuksuk* | 1 m high | | August 3: 028 view northeast |
| 4 | Cache | | | August 3: 029 view south |
| 5 | Stone house or *qammaq* | 2.5 x 2.5 | | August 3: 030 view south |
| 6 | Skin drying rings (2) | | | |
| 7 | Stone house or *qammaq*, paved | 2 x 2.5 | | |
| 8 | Stone house or *qammaq* and 2 skin drying rings | 3 x 2.5 (house) | | |
| 9 | Cache | 2 x 2 | | August 3: 031 overhead view west |
| 10 | Cache | | | August 3: 032 |
| 11 | Stone house or *qammaq* | 3.5 x 3 | | August 3: 033 view south |
| 12 | Skin drying rings (2) | 1.5 x 2<br>1 x 2 | | August 3: 034 view south<br>August 3: 035 overhead view of lichen and moss growth |
| 13 | Stone house or *qammaq* | 3.5 x 3 | | August 3: 036, 037 view south |
| 14 | Stone house or *qammaq* | 3 x 3 | | August 3: 038 view south |
| 15 | Stone house or *qammaq* | 3 x 3 | | August 3: 039 view south |

*Analysis*

LbDj-3 is well situated for ice fishing on the lake or use of char nets across the lake narrows, or for interception of caribou as they travel around the lake or across the narrows. The substantial nature of the *qammat* and the presence of many features interpreted as hide-drying rings suggest occupation in fall, when caribou would be migrating inland from the coast and arctic char would be coming upstream from the sea to spawn in the freshwater lakes and streams and to overwinter. Caches could have been used to store either caribou meat or char, for winter use. The hide-drying rings, incorporating boulders placed on flat bedrock outcrops, would be a substitute for the use of more common wooden stakes to stretch caribou hides during the cleaning, drying and tanning processes. There is little or no level vegetated terrain in the vicinity where hides could have been staked. The use of boulder rings for this purpose has also been noted around Great Slave Lake (Thomson 2005a, Thomson and Ratch 2006a). Deep caribou trails were noted from the air as we circumnavigated most of Qamanialuk and as we flew along the river. Caribou may have been intercepted at LbDj-3 by the use of a stone caribou fence to keep the migrating caribou close to the lake shore or by use of a stone drive lane to herd them into the water where the lake narrows, where they could be speared in the water. Blinds may have been built and used to conceal hunters from the approaching caribou, although there are plenty of boulders and bedrock outcrops that could be used for this purpose. No modern refuse or precontact stone or organic artifacts were noted during the cursory survey, but the nature of the features indicates an occupation during the precontact Thule period. Because of the size of the site and its potential to contribute greatly to knowledge of interior adaptations, this site is classified at high significance.

*Recommendations*

LbDj-3 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional survey should be conducted at this site to record other features present and to better analyse the site's function and seasonality, and inland from

the site to locate any associated caribou fence or drive lane elements that may be present. Surveys should also focus on the south side of the lake opposite the site to locate any net anchors that may be related to fishing from this site. Additional informant interviews should also be conducted among Iqaluit and Pangnirtung residents to find out whether caribou hunters ever camped at the lake in fall and whether netting of char at the narrows was a traditional activity, as seems possible from the location of LbDj-3.

**LbDj-4, Qamanialuk north shore**

*Description*

LbDj-4 is 100-200 m northeast of LbDj-3 along the same part of the north shore of Qamanialuk at the narrows between the central part of the lake and the west arm. LbDj-4 contains nine stone houses or *qammat*, suggesting a fall occupation, four tent rings, at least one of which is paved, a kayak stand, a corbelled stone tower foxtrap or wolftrap, and a large ring of boulders interpreted as a meeting or festival house, or *qaggiq*.

| **LbDj-4, Qamanialuk** | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Stone house or *qammaq* | 5.5 x 3 | | August 3: 042 view north |
| 2 | Tent ring adjoining F-1 | 3 x 3 | | August 3: 043 view southwest |
| 3 | Tent ring, paved | 2.5 x 2 | | August 3: 044 view north<br>August 3: 045 overhead view southwest |
| 4 | Meeting house or *qaggiq* | 4.5 x 5.5 | | August 3: 046 view north |
| 5 | Tower foxtrap, corbelled | 2 x 2 x 1.5 | | August 3: 047 view north<br>August 3: 048 overhead view<br>August 3: 049 overhead view |
| 6 | Stone house or *qammaq* | 3 x 3 | | August 3: 050 view north |
| 7 | Stone house or *qammaq* | 3 x 3 | | August 3: 051 view north |
| 8 | Stone house or *qammaq* | 4 x 4 | | August 3: 052 view north |
| 9 | Stone house or *qammaq* and kayak stand | 3 x 2 | | August 3: 053 view north<br>August 3: 054 view west |
| 10 | Stone house or *qammaq* | 3 x 2.5 | | August 3: 055 view north |
| 11 | Stone house or *qammaq* | 3 x 3 | | August 3: 056 view north<br>August 3: 057 view east |
| 12 | Stone house or *qammaq* | 2 x 3 | | August 3: 058, 059 view north |
| 13 | Stone house or *qammaq* | 3.5 x 4 | | August 3: 060 view north |
| 14 | Tent ring | 3 x 3 | | August 3: 061 view north |
| 15 | Tent ring | 2 x 3 | | August 3: 062 view north |

*Analysis*

The proximity and similarity of LbDj-3 and LbDj-4 suggest that they may have been used as part of the same hunting and/or fishing complex, and that the apparent gap between the sites may be a function of terrain, including a bedrock outcrop separating the relatively level terraces on which the two clusters of features are located. The predominance of *qammat* suggests an occupation during fall, when the weather is colder, snow has started to accumulate and winds may be

stronger, thus making summer tents too cold or light for habitation. The multi-course stone walls would be higher than noted, with some boulders having fallen from the top, and may have been capped with layers of sod. A skin cover, perhaps an old tent or tents, would be stretched across the roof, possibly supported by one or more poles or wooden beams. The *qaggiq* or festival house would most likely be used by occupants of both sites to celebrate a successful caribou hunt or char fishery or for some other ritual or ceremonial purpose. Snow-block *qaggiit* were used in winter as places where all people in the winter community could gather to feast, dance, celebrate, meet, work communally and participate in games and drum dances, and were often a focal point during extended periods of poor weather (Bennett and Rowley 2004). These structures were high, with a complete snow block roof and one entrance. Large stone rings often five or more metres across with high walls, no roof and sometimes interior stone benches lining the walls have been interpreted in many parts of the Canadian Arctic and in Labrador as *qaggiit* occupied during warmer weather seasons for similar functions (Bennett and Rowley 2004; Kaplan 1983, 1985; Pootogook pers. comm., 2005; Thomson 2006b). The tower foxtrap or wolftrap is built using corbelling technology, with each successive layer of slabs in the beehive-shaped structure protruding further inside, making it impossible for a fox, wolf or other predator lured inside by bait to extract itself (Hallendy 2003; Pootogook pers. comm., 2005; Thomson 2005b). Because of the size of the site and its potential to contribute greatly to knowledge of interior adaptations, this site is classified as of high significance.

*Recommendations*

LbDj-4 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional survey should be conducted at this site to record other features present and to better analyse the site's function and seasonality and relationship to LbDj-3. Surveys should also extend inland from the site to locate any caribou fence or drive lane elements that may be present. Additional surveys should be undertaken on the south side of the lake opposite the site to locate any net anchors that may relate to fishing at this site. Additional informant interviews should be conducted among residents of Iqaluit and Pangnirtung to find out whether caribou hunters ever camped at the lake in fall and whether netting of char at the narrows was a traditional activity, as seems possible from the location of LbDj-4.

**LbDj-5, Qamanialuk north shore**

*Description*

LbDj-5 is located on a vegetated boulder terrace on a peninsula at the east end of the narrows on the north side of McKeand Lake between the centre of the lake and the west arm. The site is situated adjacent to the lake, 100-200 m northeast of LbDj-4, and consists of at least two tent rings.

| **LbDj-5, Qamanialuk** | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Tent ring | N/a | | August 3: 064, 065 from air |
| 2 | Tent ring | | | |

*Analysis*
This site was recorded from the air as we returned to camp due to low fuel and other commitments for the pilot. There may be additional features at this site; no information is available on the function or seasonality, but it is likely that this campsite was used for caribou hunting or fishing. LbDj-5 is tentatively rated at low significance.

*Recommendations*
LbDj-5 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional survey should be conducted at this site to record other features present and to better analyse the site's function and seasonality and relationship to LbDj-4, and inland from the site to locate any caribou fence or drive lane elements that may be present. The south side of the lake should also be surveyed to locate any net anchors that may be related to fishing from this site. Additional informant interviews should also be conducted among residents of Iqaluit and Pangnirtung to find out whether caribou hunters ever camped at the lake in fall and whether netting of char at the narrows was a traditional activity, as seems possible from the location of LbDj-5.

**LbDj-6, Qamanialuk north shore**
*Description*
LbDj-6 is located on the southern tip of a peninsula at the centre of the lake, west of an island, on a vegetated boulder terrace adjacent to the lake. The site was overflown by helicopter en route back to camp to re-fuel; at least three tent rings were noted from the air
.

| **LbDj-6, Qamanialuk** | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Tent ring | N/a | | August 3: 066 from air |
| 2 | Tent ring | | | |
| 3 | Tent ring | | | |

*Analysis*
This site was recorded from the air so additional features may be present; no information is available on the function or seasonality, but it is likely that this camp site was used for caribou hunting or fishing. Pending a more thorough survey this site is rated at low significance.

*Recommendations*
LbDj-6 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional survey should be conducted at this site to record other features present and to better analyse the site's function and seasonality. Additional informant interviews should also be conducted among residents of Iqaluit and Pangnirtung to find out whether caribou hunters ever camped at the lake in fall.

**LeDg-2, Ptarmigan Fiord**

*Description*

Six new sites were found during a brief survey on the same peninsula as LeDg-1, a camp recorded in 1976 (Gardner 1976, 1979; Scheitlin *et al.* 1979) as a Thule campsite and European whaling station. Gardner's research focus was mainly on Thule winter sod house sites where he would be able to collect information on Thule whaling and use of whalebone, although other Thule and historic period sites were usually also recorded when encountered. No other sites were recorded during his boat survey into both arms of Ptarmigan Fiord (Gardner 1979). LeDg-2 is located on the north side of the isthmus connecting the mainland to a peninsula that protrudes into Ptarmigan Fiord and divides the fiord to one branch heading west and south and the other south. The isthmus is relatively low and well vegetated, and has beach access on the north and south sides. LeDg-2 is located on a sloping partially vegetated bedrock terrace about 3-5 m above sea level. The site consists of three tent rings, one of which is deeply buried in crowberry and other vegetation, adjacent to a narrow inlet.

| **LeDg-2, Ptarmigan Fiord** | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Tent ring, rocks deeply covered by crowberry | 2.5 x 2.5 | | August 1: 002 view N from F-1 |
| 2 | Tent ring | 3 x 3 | | August 1: 001 site overview from F-2, F-3 view N |
| 3 | Tent ring | 3 x 3 | | |

*Analysis*

It is likely that the well-vegetated tent ring is older than the other two, the rocks of which are on the surface. This site has apparently been occupied during both the Thule period and more recent Inuit period. A caribou scapula is present on one of the tent rings, suggesting use of the camp for summer caribou hunting as well as access to marine resources in the fiord. LeDg-2 is rated at low significance.

*Recommendations*

LeDg-2 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional survey should be conducted on the peninsula and around the shore and near interior of Ptarmigan Fiord, all of which falls within the claim block, to better understand seasonal use of this area. Additional informant interviews should also be conducted among residents of Pangnirtung and Iqaluit for the same purpose.

**LeDg-3, Ptarmigan Fiord**

*Description*

LeDg-3 is located on the north side of the isthmus connecting the mainland to a peninsula that protrudes into Ptarmigan Fiord. The site occupies a level terrace facing west towards the north side of the long western arm of Ptarmigan Fiord and consists of two festival houses or *qaggiit* and a tent ring on the vegetated terrace and a collapsed *inuksuk* on a bedrock knoll overlooking the site.

| LeDg-3, Ptarmigan Fiord | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Festival house or *qaggiq* | 4.5 x 6 | | August 1: 005 view N<br>August 1: 006 view W |
| 2 | Tent ring | 3 x 3 | | August 1: 007 view W |
| 3 | Festival house or *qaggiq* | 6 x 4 | | August 1: 008 view W |
| 4 | *Inuksuk* | Collapsed | | August 1: 009 view N |

*Analysis*

The largest structure is oval shaped, measuring 4.5 x 6 m, with the structural rocks deeply buried in the sod. This is much larger than the standard tent ring, which measures on average about 3 x 3 m, so may have been used as a *qaggiq* (festival or meeting house) as described above in LbDj-4 on Qamanialuk, serving seasonal gatherings of Inuit or their Thule predecessors in Ptarmigan Fiord and the adjacent area. Two large boulders have been incorporated into the structure, perhaps offering a means of roofing over the *qaggiq* during periods of inclement weather, although the size of such structures and often a relatively low wall usually indicates use as an unroofed open air facility (Pootoogook pers. comm. 2005; Thomson 2006b). F-2 is a circular tent ring measuring 3 x 3 m with a row of rocks across the centre providing a separation between the sleeping area and the work area; this structure is also well buried in the sod. F-3 is a second large oval feature measuring 6 x 4 m, with the visible wall rocks also well seated in the encroaching sod layer. This may be a second *qaggiq*, perhaps built and occupied at a different time than F-1. The collapsed *inuksuk* is situated on a bedrock hilltop 50-100 m from the rest of the site, providing a good view around the fiord to the west, north and south and readily visible from those directions, so may have been erected on the peninsula to mark the location of the *qaggiit* for people approaching this prominent feature in the fiord arm. Although this site contains only four structures, it is rated at high significance due to the interpretive value of the *qaggiit.*

*Recommendations*

LeDg-3 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional survey should be conducted on the peninsula and around the shore and near interior of Ptarmigan Fiord, all of which falls within the claim block, to better understand seasonal use of this area. Additional informant interviews should also be conducted among residents of Pangnirtung and Iqaluit for the same purpose.

**LeDg-4, Ptarmigan Fiord**

*Description*

LeDg-4 is located on the north side of the isthmus connecting the mainland to a peninsula that protrudes into Ptarmigan Fiord and divides the fiord to one branch heading west and south and the other south. The site consists of several piles and scatters of small rocks on a high bedrock outcrop.

| LeDg-4, Ptarmigan Fiord | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1-3 | Skin drying rings | N/a | | August 1: 010 view E |

*Analysis*
The location on a relatively flat bedrock outcrop close to the sea and the arrangement into three discrete areas suggests that this site may have functioned as a place where seal skins or caribou skins were laid out to dry during the processing of these hides for clothing, boat covers or tent covers (see also LbDj-4 on Qamanialuk for further discussion). The site is rated at low significance.

*Recommendations*
LeDg-4 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional survey should be conducted on the peninsula and around the shore and near interior of Ptarmigan Fiord, all of which falls within the claim block, to better understand seasonal use of this area. Additional informant interviews should also be conducted among residents of Pangnirtung and Iqaluit for the same purpose and to verify use of stone rings for hide drying among local Inuit.

**LeDg-5, Ptarmigan Fiord**
*Description*
LeDg-5 was recorded just as the helicopter was due to pick us up. The site is on the south side of the isthmus connecting the mainland to a peninsula that protrudes into Ptarmigan Fiord and divides the fiord to one branch heading west and south and the other south. The site record is incomplete, as we knew the pilot would be in a hurry to drop us back at camp so he could collect another field party. The survey of this site was rushed and some data are missing. Features noted included at least four tent rings, two kayak stands and a hide-drying ring.

| LeDg-5, Ptarmigan Fiord | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1-4 | Tent rings | N/a | | August 1: 011 view E |
| 5-6 | Kayak stands | | | August 1: 012 view NW |
| 7 | Skin drying ring | | | |

*Analysis*
The location on the southwest end of the isthmus suggests a requirement for shelter from the swells coming into these northern fiords from Cumberland Sound, noted by Gardner during his boat survey (Gardner 1979: 369). The presence of two kayak stands indicates a need for boat repair or replacement of skin covers, using the vertical rocks to elevate the craft to a suitable working height above the ground, or possibly a place where kayaks were stored off the wet ground when not in use. The site is rated at medium significance pending a more thorough survey to locate additional structures and information.

*Recommendations*
LeDg-5 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional survey should be conducted at this site to record any other features that may be present, as well as elsewhere on the peninsula and around the shore and near interior of Ptarmigan Fiord, all of which falls within the claim block, to better understand seasonal use of this area. Additional informant interviews should also be conducted among residents of Pangnirtung and Iqaluit for the same purpose.

**LeDg-6, Ptarmigan Fiord**
*Description*
LeDg-6 was also recorded in a hurry as the helicopter was due and we wanted to quickly complete our inspection of the isthmus before its arrival. The site consists of a single small cache located near the north shore of the isthmus.

| **LeDg-6 Ptarmigan Fiord** | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Cache | 1 x 1 | | August 1: 013 overhead<br>August 1: 014 view west |

*Analysis*
Caches were not heavily represented in the seven sites recorded on the isthmus, suggesting that hunting and habitation in the area was designed to meet immediate needs rather than future requirements. The site is rated at low significance pending a more thorough survey to locate additional structures and information.

*Recommendations*
LeDg-6 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional survey should be conducted at this site to record any other features that may be present, as well as elsewhere on the peninsula and around the shore and near interior of Ptarmigan Fiord, all of which falls within the claim block, to better understand seasonal use of this area. Additional informant interviews should also be conducted among residents of Pangnirtung and Iqaluit for the same purpose.

**LeDg-7, Ptarmigan Fiord**
*Description*
LeDg-7 was the last site recorded on the isthmus as the helicopter was approaching and consists of a single tent ring and adjacent external hearth 30 m from the shore of the north side of the peninsula.

| **LeDg-7 Ptarmigan Fiord** | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Tent ring, deeply buried in crowberry vegetation, and hearth | 4 x 3.5 | | August 1: 015 overhead view N<br>August 1: 016 view W |

*Analysis*
The relatively large tent ring is deeply buried under encroaching crowberry and other vegetation, suggesting some antiquity. The hearth located on the south side of the tent ring was probably situated to take advantage of shelter from a wind off the bay and consists of two side boulders and a vertical reflecting slab at the back. The site is rated at low significance pending a more thorough survey to locate additional structures and information.

*Recommendations*
LeDg-7 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional survey should be conducted at this site to record any other features that may be present, as well as elsewhere on the peninsula and around the shore and near interior of Ptarmigan Fiord, all of which falls within the claim block, to better understand seasonal use of this area. Additional informant interviews should also be conducted among residents of Pangnirtung and Iqaluit for the same purpose.

**LeDh-1, Chidliak Bay east side**
*Description*
Three sites were recorded in Chidliak Bay during a late evening survey of this fiord near the northwest corner of the Chidliak claim block. The mouth of the fiord had been surveyed previously in 1976 by Don Gardner, who recorded a large Thule semi-subterranean sod house site and two additional surface sites (Gardner 1979: 368); the survey had not extended into the southern end of the fiord within the Chidliak claim block. Several other areas of archaeological potential were identified but not inspected, including the vicinity of a location on the west side of the fiord where two unoccupied tents were situated and two cabins on the east side, also unoccupied. LeDh-1 was the last site recorded during this survey, 70 km north of camp, just as darkness fell, and consists of three tent rings and a kayak stand.

| **LeDh-1 Chidliak Bay** | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Tent ring | 4.5 x 4.5 | | August 3: 090 view southwest |
| 2 | Tent ring | 3 x 3 | | August 3: 091 view southwest |
| 3 | Kayak stand | 1 m high, approximately 3 m long | | August 3: 092 view west<br>August 3: 094 view east |
| 4 | Tent ring | 2.5 x 2 | | August 3: 093 view southwest |

*Analysis*
F-1, a relatively large rectangular tent ring measuring 4.5 x 4.5 m is deeply buried under encroaching vegetation, suggesting some antiquity. Two large vertical rocks mark the entrance and a sleeping platform is present to the right of the entrance. F-2 and F-4, smaller tent rings measuring 3 x 3 m and 2.5 x 2 m, are also vegetated; F-2 also has a sleeping platform divider.

F-3 is a prominent kayak stand with two vertical stacks of rocks 3 m apart. Although only four structures were identified, the site is rated at medium significance, pending a more thorough survey to locate additional structures and information, because of the depth of vegetation cover that may conceal preserved cultural material and the complexity of the large tent ring.

*Recommendations*
Although survey stakes were noted around Chidliak Bay, LeDh-1 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional survey should be conducted at this site to better understand the function of the features recorded and to record any other features that may be present, as well as elsewhere around the shore and near interior of the south end of Chidliak Bay to better understand seasonal use of this area. Additional informant interviews should also be conducted among residents of Pangnirtung and Iqaluit for the same purpose.

**LeDi-1, Chidliak Bay west side**
*Description*
LeDi-1 is located at the extreme south end of Chidliak Bay on a high gravel terrace about 20 m above sea level at the west side of the bay. The site consists of three large tent rings situated in a line, very close to each other, measuring approximately 4 x 4 m in diameter, with no ring of outer guy rocks. The interiors all have a sleeping platform divider running across the structure parallel to the shore and a clear entranceway on the shore side. In addition, F-1 has a lamp stand on the sleeping platform and an internal hearth near the entrance. F-4 is a miniature tent ring adjoining the southeast side of F-3, possibly a play tent used by children.

| **LeDi-1, Chidliak Bay** | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Tent ring with sleeping platform and hearth | 4 x 4.5 | | August 3: 074 view south |
| 2 | Tent ring with sleeping platform | 4 x 5 | | August 3: 075 view south |
| 3 | Tent ring with sleeping platform | 4 x 4 | | August 3: 076 view south |
| 4 | Tent ring, miniature | 1 x 1 | | August 3: 077 view southeast |

*Analysis*
No historic period debris, pre-contact lithics, faunal remains or other cultural material was noted on the site, but the style of the tent rings suggests an occupation early in the historic period or late in the Thule period. It is not clear why the site is located at the bottom of this deep fiord arm, other than possibly as a potential start or terminus for travel into or from the interior. Riewe (1992) notes that caribou were hunted in the highlands south of Ptarmigan Fiord, so this site may have been associate with this activity. This site is backed by a high steep cliff and the gradient in the stream valley running south from the east side of the bay is very steep making interior access difficult. The site is rated at low significance.

*Recommendations*
LeDi-1 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional research should be conducted to determine the function of this site, more than 30 km from Cumberland Sound and with no easy access to the interior, as well as elsewhere around the shore and near interior of the south end of Chidliak Bay to better understand seasonal use of this area. Additional informant interviews should also be conducted among residents of Pangnirtung and Iqaluit for the same purpose.

**LeDi-2, Chidliak Bay west side**
*Description*
LeDi-2 is located on the west side of the bottom of Chidliak Bay, on a peninsula sheltered from the north by a large promontory extending eastward into the bay 3 km north of the site. Eight circular or rectangular tent rings, all measuring approximately 4 m in diameter, are located on a series of gravel and vegetated terraces around the peninsula. Several of the tent rings have interior paving and some have sleeping platform dividers. No cultural material was noted other than a 2 x 4 timber at the entrance to F-6. Half of the tent rings are deeply buried in sod or gravel and the others are set on the surface.

| **LeDi-2, Chidliak Bay** | | | | |
|---|---|---|---|---|
| **Feature** | **Type** | **Size (m)** | **Coordinates (NAD 83) 12W** | **Photo** |
| 1 | Tent ring with sleeping platform divider | 4 x 4 | | August 3: 081 view south |
| 2 | Tent ring | 4 x 4 | | August 3: 082 view south |
| 3 | Tent ring with sleeping platform divider | 4 x 4 | | August 3: 083 view south |
| 4 | Tent ring, paved | 4 x 4 | | August 3: 084 view south |
| 5 | Tent ring, paved, with sleeping platform divider | 4 x 4 | | August 3: 085 view south August 3: 086 view southwest to F-4 and F-5 |
| 6 | Tent ring, with raised sleeping platform | 4 x 4 | | August 3: 087 view south to helicopter |
| 7 | Tent ring | 3 x 3 | | August 3: 088 view south |
| 8 | Tent ring with sleeping platform divider | 4 x 3 | | August 3: 089 view south |

*Analysis*
The deeply buried nature of some of the tent rings suggests an occupation early in the historic period or late in the Thule period, while others are clearly quite recent. It is not clear why the site is located near the bottom of this deep fiord arm, other than possibly as a potential start or terminus for travel into or from the interior. The site is rated at medium significance.

*Recommendations*
LeDi-2 does not appear to be at any risk from current exploration activities so requires no immediate mitigation other than Peregrine's standard avoidance and prohibition of any artifact collection or other disturbance. Additional research should be conducted to determine the function of this site, more than 30 km from Cumberland Sound and with no easy access to the

interior, as well as elsewhere around the shore and near interior of the south end of Chidliak Bay to better understand seasonal use of this area. Additional informant interviews should also be conducted among residents of Pangnirtung and Iqaluit for the same purpose.

# 5 CONCLUSIONS

Mineral exploration has been ongoing on this property since 2008, so under normal circumstances it could be expected that some archaeological sites may already have been identified by field crews or disturbed by sampling and construction of infrastructure. However, much of the activity has been in an area 25-70 km or more from the areas of highest archaeological potential on the coast and along the McKeand River valley; few sites are anticipated to be present in the current area of maximum activity around the camps other than an occasional site resulting from a travel stop or opportunistic kill. Exploration is likely to continue for at least the next several years, during which areas of interest will be clearly defined and evaluated, and the overall project area reduced in size.

Archaeological sites in the region have most often been found in association with the seacoast and on offshore islands. The study area includes several marine inlets on the north, northeast and east margins but exploration currently is not heavily focused in this area (Figure 1-2). A contemporary travel route cuts across the northwest corner of the property towards the coast and another bisects the property south of the McKeand River (Figure 1-3). Families from Pangnirtung still frequent campsites on the western arm of Ptarmigan Fiord, particularly in summer, and two locations were noted in Chidliak Fiord where tents and cabins are present, although not currently occupied. Nigel Qaumariaq reported that people still travel from Iqaluit to Qamanialuk to fish through the lake ice in spring and winter. Informants in Pangnirtung and Iqaluit, when told about the concentration of sites around what we unofficially called McKeand Lake on the McKeand River, indicated that the lake was known as Qamanialuk, or “place where Inuit go to kill caribou for caribou parkas”. Our finding of eight sites, mostly from the prehistoric period, around the lake and adjacent river rapids indicates that this may be a longstanding pattern; the nature of some of the houses and tent rings suggests occupancy in fall for caribou hunting and most likely in fall, winter and spring for char fishing. The personal account by Nigel Qaumariaq of winter ice fishing at Qamanialuk (Nigel Qaumariaq pers. comm. 2009) and information on caribou hunting at Qamanialuk have benefited greatly the options available for interpretation of site function and seasonality; additional traditional knowledge, if provided by community members in Iqaluit or Pangnirtung, would increase our understanding of contemporary and traditional land use in the claim block.

The property has high potential for the presence of archaeological resources. Areas of particular interest include the vicinity of coastal inlets, and associated char streams and lakes; large interior lakes and rivers containing populations of anadromous and land-locked char and where caribou trails indicate migration or other travel; traditional travel routes across the property where temporary camps, *inuksuit* or other travel markers and storage caches may be present; eskers and well-drained sand or gravel terraces, especially any associated with large water bodies; and bedrock outcrops where vein quartz might be found and exploited.

Archaeological potential in the central part of the claim block around the two camps and kimberlites is considered low in view of the paucity of observed wildlife or signs of wildlife such as caribou trails in the area of most current exploration activity in the interior of the claim block and the relative lack of the type of terrain usually associated with travel, habitation and resource use in much of that part of the study area. In contrast to this, the presence of deep caribou trails in the McKeand River valley and on the north coast, the anecdotal evidence of seasonal fishing in Qamanialuk, the presence of cabins and tents in Chidliak Bay and the abundance of archaeological sites found during this project on the north coast and the McKeand River valley indicate that these areas, at least, are of high archaeological potential. It should be stated, however, that the few hours of helicopter time available to the project team did not allow for a thorough, widespread or systematic survey of the study area and these tentative conclusions may not be accurate or complete. For example, the finding by Dave Snyder of a tent ring on a small, elevated sandy terrace near the Discovery camp indicates that generalizations on archaeological potential produced prior to adequate survey and access to traditional knowledge may prove not to be watertight. Any planned expansion of exploration activities closer to the coast or in the vicinity of the McKeand River and associated lakes should certainly be preceded by more thorough archaeological reconnaissance with a dedicated helicopter and, ideally, a structured helicopter survey of the entire claim block should be undertaken of all parts of the claim block, as well as more intensive acquisition of traditional knowledge.

Pending more intensive archaeological investigations and additional results of local land use studies, the recommended strategy for identification and preservation of archaeological resources includes the following actions, some of which have been at least initiated during preparation of this report:

- If the client wishes, participation by archaeological team members in meetings with local Inuit to help elicit any relevant information about land use in the study area and region, using the information acquired during the present survey as a prompt. Elders and other hunters, trappers and fishers who have exploited resources in the study area or travelled though it may wish to provide information that would help in protecting resulting sites from disturbance and would assist in development of a more informed land use pattern;
- Access to and review of reports of archaeological surveys in similar parts of interior and coastal Baffin Island;
- Review of the reports associated with the available site records from the study area and environs, and other relevant literature, not previously available but accessible at the Canadian Museum of Civilization, Hull, PQ;
- Detailed analysis of local NTS 1: 50,000 maps and aerial photographs to identify areas of archaeological potential;
- Annual analysis of client's project description to identify areas of proposed future disturbance;
- Following all or some of the previous strategies, annual updating of a written and photographic description of the types of known archaeological sites in the claim block, providing means of identification and suggestions for recording and reporting by Peregrine field crews;
- Development of a research strategy and permit application for additional field investigations as required.

## 5.1 Data Gaps

Ideally, baseline surveys should focus on a wide variety of landforms and environmental zones to understand past site location preferences and needs. The present survey, though limited in extent and duration, has resulted in sites being found in a variety of environments: on a small sandy knoll at some distance from large water bodies; on bedrock outcrops and on vegetated or boulder terraces in riverine and lacustrine environments; and on beach ridges and terraces adjacent to the marine coast. Other precontact and historic period sites are most likely situated in similar and different locations elsewhere in the study area; a more systematic survey of the claim block should be undertaken to more fully understand past patterns of land use and occupancy. More intensive discussions with Inuit familiar with the study area would also result in more knowledge of seasonality, travel routes and hunting, fishing and trapping patterns that can be applied to interpretation of known sites and the finding and protection of additional sites.

One area that is coming under intense scrutiny by archaeologists in other jurisdictions is the study of wasting snow and ice patches resulting from both seasonal/annual changes and warming of the Arctic climate. There are many such features in the eastern part of the claim block, where snow that accumulated through many winters and remained in place through the summer is now melting at an increasing rate and ice patches isolated from the leading edges of glaciers. Such snow- and ice-patches are sought out by caribou for their cooling effects and as a defence against flying insects. Aboriginal people were aware of this tendency and hunted caribou on snow and ice patches. Hunting weapons, discarded clothing and other materials are being revealed by the melting of snow and ice patches; investigations by archaeologists and other specialists are contributing new information on technology, aboriginal health and diet, and land use patterns (Beattie *et al.* 2000; Andrews pers. comm. 2009; Andrews *et al.* 2009). Peregrine exploration personnel working in such areas of the Chidliak claim block should remain vigilant for any remains related to past hunting during similar climatic warming episodes, and report any sites as directed by Peregrine's archaeological protocol.

In some cases, site documentation during this survey was not as complete as it should have been, due in part to other exploration tasks requiring priority use of the helicopter. Because of the time constraints, no subsurface testing was undertaken to investigate the possibility that buried cultural deposits may occur at some of the sites. Test-pitting is standard procedure for archaeologists who, following test-pitting, prefer to leave the rest of a site intact for later, more controlled investigation in the event that mitigation is necessary or a site is perceived as sufficiently significant to warrant full scale research. None of the quartz veins and boulders found, particularly around the active drill zone adjacent to Discovery camp were recorded as archaeological sites as no definitive evidence was found of precontact human exploitation (for the most part, use of lithic materials was curtailed when metal trade goods became accessible during the historic period. Modern geologists and contractors hammer or blast chunks out of veins of quartz favoured by past land-users in connection with exploration or operational needs, but this recent use is usually identifiable). More intensive examination of veins and other occurrences in the study area might result in their re-interpretation as archaeological sites. Time was not available to fly the traditional travel routes that cross the Chidliak claim block;

undoubtedly, these contain associated camps, caches and other features that will contribute to knowledge of recent and past land use.

## 5.2 Site Prediction

Based on the findings of the present survey and previous surveys in the region, it is evident that archaeological and recent land use sites may be present in a wide variety of environments. The results of the preliminary survey, inventory and assessment of the Chidliak exploration area combined with those of earlier surveys on the adjacent coast of Cumberland Sound, primarily by Gardner (1979), who located the only known site in the claim block prior to the present assessment, suggests that there is likely to be a high density of archaeological and recent land use sites in areas of highest potential along the marine coastal margin and on major inland waterways; a moderate density of archaeological sites in other parts of the claim block on traditional travel routes, areas of traditional trapping and hunting, and on smaller rivers and lakes where ice fishing and interception of annual char and caribou migrations may have taken place; and a low density of sites in other parts of the claim block. This prediction is supported by the high density of sites found around Cumberland Sound, particularly by Schledermann (1975), Gardner (1979) and Sabo (1979) and on a large interior lake west of Cumberland Sound, Nettilling Lake by Stenton (1987), where many pre-contact and historic period sites were found:

> Doug Stenton also conducted a survey and excavations at Nettilling Lake, a major interior lake in southeastern Baffin Island between Cumberland Sound and Foxe Basin (Stenton 1987). While outside of the Monopros study area, it is informative in terms of identifying the types of sites, which might be present at other interior lakes connected to the coast by navigable rivers or valleys accessible by foot or by sled. Features found include commercial fishing huts from the 1970s; tent rings of various sizes, shapes and ages, some paved; boulder and crevice caches; kayak stands; hearths, often associated with habitation features; *inuksuit*; a single stone digit cairn; burials; miniature tent rings; DEW Line- and D.N.D.-associated structures; a stone record cairn; blinds and windbreaks; heavier habitation sites with high exterior wall, sleeping platform and entrance passage; lithic material indicating Pre-Dorset and Late Dorset occupations; Thule material; other material identified only as Palaeo-Eskimo and Dorset; twentieth century material; cairns; stone box fox traps; stone tower fox traps; steel fox traps; and Thule semi-subterranean houses with entry passages and sleeping platforms. The sites provide evidence of a wide range of activities at all seasons, with caribou, fish, geese and other waterfowl the principal subsistence foci. Sites were commonly found on glacial features such as moraines, and at or near the confluence of rivers with the lake (Thomson 2000).

It is particularly instructive to compare this inventory of different features with those recorded during the present project around Qamanialuk. The location by Dave Snyder of a small tent ring on a sandy terrace on a hilltop near the Discovery camp illustrates the unpredictability of past human adaptations, movements and preferences. The density of sites on the north coast fiord arms was predictable.

## 5.3 Heritage Resources Values

All archaeological sites are unique and provide some information on human use and occupation of the environment of which they are a part. Archaeological sites are protected under Government of Nunavut and Federal legislation, and sites and their contents must not be disturbed except under the terms and provisions of a permit issued by the Department of Culture, Language, Elders and Youth in Igloolik following a period of review of the permit application by local communities and agencies.

The precontact sites found during the 2009 survey are informative and have the potential to provide more information should a decision be made to adopt any of the following recommendations (Section 6). The relatively large density of sites is a finding that could influence decisions on the necessity for archaeological inventories and assessments in similar environments and potential development situations in this region and elsewhere.

The Chidliak claim block is intermediate between Frobisher Bay and Cumberland Sound, both populated by Inuit during the historic period and before that by Thule and Palaeo-Eskimos. Pre-contact travel routes overland between the two marine inlets as well as into the hinterland for caribou hunting and fishing most likely existed. It is likely that sites associated with travel, fishing, trapping and hunting throughout the historic period also occur in and around the study area; the presence of two traditional travel routes and nine archaeological sites along the McKeand River valley and in the headwaters area of the north branch of the river certainly indicates that the study area was used prior to as well as since contact.

Of the 19 sites recorded on the Peregrine Chidliak claim block, including LeDg-1 previously recorded by Gardner (1979), 11 were judged on the basis of cursory examination to be of low significance, five of medium significance and three of high significance. However, each site is significant in that it contributes either individually or in combination with other nearby or similar sites to an increase in knowledge of land use in the study area and the broader region (Table 5-1). Additional research at some of the sites where no landings were possible or where a visit was rushed because of helicopter priorities elsewhere may result in a change of some of the ratings.

**Table 5-1 Site Significance, Chidliak Claim Block, Hall Peninsula, Baffin Island**

| Borden No. | Field No., Location | Significance | | |
|---|---|---|---|---|
| | | High | Medium | Low |
| LeDg-2 | THC2009-5: 1 Ptarmigan Fiord | | | √ |
| LeDg-1 (Re-visit) | THC2009-5: 2 Ptarmigan Fiord | | √ | |
| LeDg-3 | THC2009-5: 3 Ptarmigan Fiord | √ | | |
| LeDg-4 | THC2009-5: 4 Ptarmigan Fiord | | | √ |
| LeDg-5 | THC2009-5: 5 Ptarmigan Fiord | | √ | |
| LeDg-6 | THC2009-5: 6 Ptarmigan Fiord | | | √ |
| LeDg-7 | THC2009-5: 7 Ptarmigan Fiord | | | √ |
| LbDi-1 | THC2009-5: 8 Qamanialuk | | √ | |
| LbDj-1 | THC2009-5: 9 McKeand River | | | √ |
| LbDj-2 | THC2009-5: 10 McKeand River | | | √ |
| LbDj-3 | THC2009-5: 11 Qamanialuk | √ | | |
| LbDj-4 | THC2009-5: 12 Qamanialuk | √ | | |

| | | | | |
|---|---|---|---|---|
| LbDj-5 | THC2009-5: 13 Qamanialuk | | | √ |
| LbDj-6 | THC2009-5: 14 Qamanialuk | | | √ |
| LbDi-2 | THC2009-5: 15 Qamanialuk | | | √ |
| LeDi-1 | THC2009-5: 16 Chidliak Bay | | | √ |
| LeDi-2 | THC2009-5: 17 Chidliak Bay | | √ | |
| LeDh-1 | THC2009-5: 18 Chidliak Bay | | √ | |
| LbDh-1 | THC2009-5: 19 Discovery Camp | | | √ |
| **Totals** | | **3** | **5** | **11** |

## 5.4 Potential Project Effects

Archaeological sites in the region occur primarily on the surface, in immediate subsurface soil deposits or below vegetation cover. In the event that sites are present on and in the near vicinity of exploration camps, airstrips and helipads, winter access routes, equipment storage areas, fuel caches, drill sites, overland access routes to drill sites, sump areas where the products of drilling activities are deposited and other areas of intensive exploration-related activities they could be affected by:

- clearing for levelling of an exploration camp, airstrip and helipad and construction of related docks and storage areas;
- the weight of vehicles and compression beneath packed snow and ice on the overland sections of a winter access route, heavy-equipment movement of boulders on the route or in a camp area, disturbance of the ground surface where insufficient snow cover is present, attempts to gain traction on a steep slope from a lake or river shore, and excavation of borrow materials used to improve traction;
- drilling, till sampling and trenching and use of overland access routes to such sites;
- movement of boulders from an archaeological feature to support line stakes; and
- other related activities.

The effects of known project activities on archaeological resources are normally predictable, given accurate project description details and adequate time and resources for an archaeological assessment of the project areas. Most project effects from camp, exploration and access route activities can be mitigated by collaboration between the camp manager, engineers, project geologist, environmental staff and the project archaeologist at the planning stage, but ideally require a thorough survey and assessment of the affected areas to determine the need for and the most suitable options for mitigation. The commitment by Peregrine Diamonds Ltd. to conduct preliminary inventories and assessments at an early stage of exploration is exemplary and conforms with legislation requiring prohibition of project activities which may alter or disturb an archaeological site (which may not be recognised until an archaeological survey has been undertaken). Land use regulations also stipulate that no permittee may conduct a land use operation within 30 m of a known or suspected archaeological site or burial ground; however, an archaeological survey or the services of keen-eyed exploration personnel is normally required in order to find and protect sites from such operations.

Following the results of this preliminary survey, it appears likely that none of the exploration activities as described for the Chidliak claim block are likely to have had or are likely to have

any effect on known archaeological resources. The potential for additional sites in the vicinity of the present camp, kimberlites, adjacent drill locations and airstrip is low, though not absent. The potential for additional sites to be present on and in the vicinity of the McKeand River and Qamanialuk and on the marine coast of Cumberland Sound within the claim block is high. The potential for sites elsewhere within the 10,000 km² claim block varies. In the event that a winter access route to Iqaluit or Pangnirtung is planned in the future, it should be noted that some of the activities normally undertaken by winter road contractors do have potential for disturbance of archaeological sites both on and off the alignment, so any planning of these activities should be preceded by a complete and thorough archaeological assessment and implementation of mitigation measures.

### 5.5 Mitigation

Impact management options are available which will minimize risk to known heritage resources. These include, in the present stage of the Peregrine project, avoidance of known archaeological sites and a 30 m buffer zone around them; archaeological assessment of any new activity areas and access routes; and regular monitoring of known archaeological sites in the vicinity of activity areas. To minimize potential for impacts on currently unknown archaeological site locations procedures could include involvement of an archaeologist in the planning of any new access routes or other infrastructure locations, and education of exploration personnel in techniques of site recognition and procedures to follow in the event of finding a suspected site.

No mitigation is currently required for the 19 known sites from present exploration activities other than avoidance and the prohibition against disturbing any archaeological remains, including faunal material, or disturbance of site features. Should the situation change due to more widespread concentration of drilling and bulk sampling or development of a new exploration camp and related infrastructure, known sites might be potentially at risk from a new or revised activity or location; in this case, mitigation requirements should involve a more detailed study and assessment of the site and its surroundings; accurate mapping of the location and extent of any archaeological sites associated with this activity; determination of the potential for avoidance of disturbance and maintenance of a buffer zone of at least 30 m around each archaeological site. If this is not possible, mitigation – with approval from the regulator - could alternatively involve complete documentation and archaeological excavation of any site at risk.

## 6 SUMMARY AND RECOMMENDATIONS

Based on the limited amount of helicopter support, our preliminary conclusion is that archaeological potential, in tandem with observed and inferred wildlife patterns, in the vicinity of the kimberlites and drill sites around the present camps, is low but not absent, as shown by the finding of the tent ring site near the Discovery camp by Dave Snyder; further archaeological investigation is required in this area. Archaeological potential along the coast and near interior at Cumberland Sound and on the McKeand River and lake system and any other large lakes is high. In the event that exploration activities intensify towards the coast of Cumberland Sound or in the vicinity of the McKeand River valley, additional site inventory and assessment focussing on areas of past and proposed disturbance as well as identification and survey of areas of high, moderate and low archaeological potential is recommended. As the project proceeds, a more

extensive and structured archaeological inventory should continue so that a baseline is gradually compiled in preparation for any required environmental assessment, should the project proceed to the development stage.

Seventeen new archaeological sites were found during three partial days of survey, one additional site was reported two weeks after departure from the study area and one previously recorded site was re-visited. We found nine new sites on two of the fiord arms on Cumberland Sound and inferred from their locations and contents that they were situated for access to marine resources such as sea mammals, polar bears, foxes, fish and birds. Some sites may also have been associated with travel into the interior, or shelter. One site contained two *qaggiit*, suggesting periodic gatherings of several families. Sites on the fiord arms were primarily found on low terraces close to the shore where boat or *qamutiik* (sled) access from the sea or ice is possible. Some or all of the following attributes, among others, were present:

- a relatively level gravel or vegetated boulder terrace, sometimes with a large expanse of flat bedrock;
- a view of the surrounding water;
- shelter from prevailing or storm winds;
- presence of materials for building habitation structures, caches, kayak rests, hearths and other features, *e.g.*, boulders, slabs and sod;
- accessibility to a breeze in summer; and
- proximity to fresh water.

We inferred from the presence of eight sites at Qamanialuk and on the McKeand River system that the primary reason for their location was for access to caribou migrating across the lake in late summer/fall, where they could be speared in the water from canoes, and for access to arctic char through the lake ice, at stone fish weirs, or with nets. Other sites are most likely present along this system. For those sites on or adjacent to Qamanialuk and the McKeand River, attributes present at some or all of the sites included:

- relatively level, well-drained and vegetated gravel or boulder terrace;
- proximity to water for consumption, fishing and for travel (including on ice);
- proximity to caribou travel routes parallel to and crossing the lake or river;
- elevation or adjacent to open water for access to breeze; and
- presence of materials for building habitation structures, caches, kayak rests, foxtraps, hearths, *inuksuit*, and other features, *e.g.*, boulders, slabs and sod

The discovery by geologist Dave Snyder of one site close to the Discovery camp, in the heart of the interior of the claim block, also indicated that people exploited resources and/or travelled through inland areas remote from the marine coast or large waterways. For such sites, attributes present might include:

- relatively level, well-drained, possibly vegetated gravel or sandy terrace;
- proximity to fresh water;

- proximity to caribou travel routes and hence trapping access to predators such as fox and wolf;
- elevation for a view of surrounding terrain and/or access to breeze; and
- presence of materials for building habitation structures, caches, foxtraps, hearths, *inuksuit*, and other features, *e.g.*, boulders and slabs.

The finding, albeit by a geologist and not by an archaeologist, of a site in an area without many obvious major attributes around the Peregrine camp supports the findings of other surveys by Thomson Heritage Consultants that humans are unpredictable, that remains of their presence are not always found in the obvious hotspots such as on shores of large lakes and rivers, on the marine coastline, on eskers, or at caribou crossings (although admittedly sites are most often highly concentrated in such areas and tend to be extensive), and that the inclusion of survey areas considered to be of low archaeological potential can sometimes bear fruit (Thomson and Ratch 2006c). While we made every effort to check obvious areas that may contain some archaeological remains within time and equipment constraints, some locations within the primary zone of disturbance around the kimberlites, camps and drill sites were not completely surveyed. Also, due to time constraints, some of the sites recorded on the coast and in the McKeand River valley were not fully recorded and some areas of obvious potential were not even overflown. In addition, during helicopter traverses to areas of planned ground survey, we usually were flying too fast for effective aerial survey. As a result, it can be expected that potential exists for other sites to be present within areas already surveyed and in similar and dissimilar environments within the claim block.

The presence of many sites at Qamanialuk, where Nigel Qaumariaq said he used to go ice-fishing in winter, suggested that fishing and most likely caribou hunting and trapping or furbearers took place in seasons other than winter. This suggests that the traditional travel route that parallels the McKeand River for much of its length to Popham Bay from the north-south route between the head of Frobisher Bay and Irvine Inlet on Cumberland Sound may also have been used during the precontact period by people heading into the interior to hunt, fish and trap, on foot, with *qamutiit* pulled by dog teams, or in part by kayak.

## 6.1 Assessment

No sites were found to lie directly within any of the present areas of disturbance from exploration activities. The 18 new sites and one previously recorded site are relatively distant from these activity areas and do not appear to be at risk from the present project activities. No sites were found which exhibited any evidence of disturbance from exploration activities. In general, there are not many areas of overlap between current exploration activities on the Peregrine claim block and areas where sites are known to be present or highly likely to be present. Construction and use of camps and local trails can present some risk, but at this stage of exploration, there are two established camps and no plans were provided by Peregrine at the time of the survey suggesting construction of new facilities.

## 6.2 Recommendations

Because of the absence of evidence for site disturbance during this stage of mineral exploration by Peregrine and because of the observed lack of overlap between the current and proposed areas of intensive work and the location of recorded archaeological sites and areas of highest archaeological potential, it is recommended that Peregrine's proposed exploration programme on the Chidliak claim block be approved from a historic resources perspective.

Measures to help Peregrine employees continue to support the company's heritage conservation policy (as exhibited by the excellent support provided by the Vancouver office and field personnel during this project and the evident respect for the environment) and abide fully by applicable heritage legislation include:

- use of a desktop or field archaeological evaluation of any new areas of intensive land use around the Chidliak claim block, such as new camps that have not previously been surveyed, new bulk sampling locations, areas of intensive drilling activity, and new access roads;
- provision of an education programme for summer field personnel on how to recognize and report archaeological features and avoid disturbance;
- annual review of exploration and construction (*e.g.*, camps) plans to assess the need for additional field surveys;
- continuing access to archaeological advice in the event of encountering a feature that requires interpretation (*i.e.,* remote identification and recording as an archaeological site, such as was done with the Snyder site); and
- consideration of an extended and more extensive programme of field survey in this claim block in collaboration with Inuit familiar with land use in the area to identify additional sites, inspect a broader range of environment types where sites may be present, and continue to build a picture of land use and occupancy that may be of interest to other land users and to regulators, as well as to Peregrine.

Table 6-1 presents a summary of mitigation recommendations for the known sites. In the event of any potential future conflict between heritage resources and project activities, the avoidance option can be re-considered in consultation with the Department of Culture, Language, Elders and Youth by evaluation of the site's significance, the significance of loss of all or part of the site and the availability of other mitigations options. These might include temporary protection during the project activity or detailed investigation and site recording prior to disturbance.

**Table 6-1 Recommended Mitigation and Detailed Investigation Procedures**

| Borden No. | Field No. | Recommended Mitigation | Recommended Detailed Investigation if Impact Unavoidable |
|---|---|---|---|
| LeDg-2 | THC2009-5: 1 | Unlikely to be affected by project; avoidance; 30 m buffer zone | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LeDg-1 (Re-visit) | THC2009-5: 2 | Unlikely to be affected by project; avoidance; 30 m buffer zone | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LeDg-3 | THC2009-5: 3 | Unlikely to be affected by project; avoidance; 30 m | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or |

| | | | |
|---|---|---|---|
| | | buffer zone | excavation |
| LeDg-4 | THC2009-5: 4 | Unlikely to be affected by project; avoidance; 30 m buffer zone | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LeDg-5 | THC2009-5: 5 | Unlikely to be affected by project; avoidance; 30 m buffer zone; periodic monitoring | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LeDg-6 | THC2009-5: 6 | Unlikely to be affected by project; avoidance; 30 m buffer zone | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LeDg-7 | THC2009-5: 7 | Unlikely to be affected by project; avoidance; 30 m buffer zone; periodic monitoring | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LbDi-1 | THC2009-5: 8 | 30 m buffer zone; avoidance by aggregate extraction operations; periodic monitoring | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LbDj-1 | THC2009-5: 9 | Unlikely to be affected by project; avoidance; 30 m buffer zone; periodic monitoring | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LbDj-2 | THC2009-5: 10 | Unlikely to be affected by project; avoidance; 30 m buffer zone | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LbDj-3 | THC2009-5: 11 | Unlikely to be affected by project; avoidance; 30 m buffer zone | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LbDj-4 | THC2009-5: 12 | Unlikely to be affected by project; avoidance; 30 m buffer zone | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LbDj-5 | THC2009-5: 13 | Unlikely to be affected by project; avoidance; 30 m buffer zone | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LbDj-6 | THC2009-5: 14 | Unlikely to be affected by project; avoidance; 30 m buffer zone; periodic monitoring | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LbDi-2 | THC2009-5: 15 | Unlikely to be affected by project; avoidance; 30 m buffer zone | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LeDi-1 | THC2009-5: 16 | Unlikely to be affected by project; avoidance; 30 m buffer zone; periodic monitoring | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LeDi-2 | THC2009-5: 17 | 30 m buffer zone; avoidance by aggregate extraction operations; periodic monitoring | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |
| LeDh-1 | THC2009-5: 18 | Unlikely to be affected by project; avoidance; 30 m buffer zone; periodic monitoring | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |

| | | | |
|---|---|---|---|
| LbDh-1 | THC2009-5: 19 | Unlikely to be affected by project; avoidance; 30 m buffer zone; periodic monitoring | More complete survey of vicinity; detailed site plan; surface collection; sub-surface testing or excavation |

In general, it is strongly recommended that an archaeological assessment be conducted at an earlier stage of mineral exploration in this region, *i.e.*, prior to the development of camps and land-based airstrips or construction and use of winter access roads. While no disturbance was noted at any of the sites recorded during this project, the potential is present for conflict between archaeological sites and such activities both here and in most or all mineral exploration areas in the Nunavut and the Northwest Territories.

### 6.3 Closure

It is our professional opinion that the likelihood of disturbance of archaeological and more recent heritage sites and features by Peregrine's continuing mineral exploration programme as known in August 2009 in the areas examined is minimal, given the above mitigation recommendation (avoidance and 30 m buffer zone), and that approval should be given, from a cultural heritage perspective, to the project as proposed in 2009. Should exploration activities expand away from the core area around the kimberlite zone and Discovery/Sunrise camp area in the future, and in order to better understand and document regional land use, additional archaeological surveys and assessment should be conducted and the programme of informant interviews intensified.

## 7 REFERENCES CITED

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## 7.3 Glossary

**Anadromous.** Fish that migrate between freshwater and the sea. Some Arctic char feed in the sea in summer and return to their river of birth in fall to spawn in gravel shoals in lakes or in river pools. They overwinter in freshwater and return to the sea the following spring.
**a.s.l.** Above sea level, elevation expressed in metres.
**Archaeology.** The branch of anthropology devoted to studying the materials remains of past human events.
**Artifact.** An object of human manufacture or use.
**B.P.** Before present, with "present being defined as A.D. 1950.
**Borden System.** An alpha-numeric classification system used in Canada to identify the location of **archaeological sites**, based on the 1: 50,000 topographic map system.
**Cache.** A structure used to store meat, blubber and fish for use, usually, in winter or to store tools, utensils for use in a future season; may be built above ground out of boulders and slabs or dug partly into a cobble or boulder beach ridge.
**Caribou**. Herd animal essential in northern cultures for food and materials such as hide, antler and sinew. Commonly obtained in large numbers by hunters at water crossings. Sometimes driven in desired direction by use of **inuksuit** or fences of aligned spaced boulders; often hunted on trails used by caribou as travel routes.
**Dorset.** A **prehistoric Palaeo-Eskimo** culture present in the Canadian Arctic and Labrador from approximately 2500 **B.P.** to 500 B.P. Descended from **Pre-Dorset.**
**Faunal.** Pertaining to animals, as in **faunal** remains. Animal (and bird, fish etc.) bone provides information on the season(s) in which a **site** was occupied and which animals were exploited.
**Feature.** A term used to include evidence such as a stone structure, **hearth**, buried layer of food bone, charcoal or **flaking** debris, a discoloured soil layer, or some other collection of cultural material assembled within a usually small, restricted area.
**Flake.** A thin flat fragment of stone removed by pressure- or percussion-**flaking** during the process of stone tool manufacture or repair. **Flakes**, removed from **preforms**, are often the desired end product and are formed into tools.
**Foxtrap.** A stone structure used to trap small fur-bearing mammals such as foxes and wolves. May be built around a narrow rectangular chamber in which the animal is trapped by a falling drop rock or a beehive-shaped hollow chamber out of which the animal cannot climb due to the corbelled construction. After European contact and access to trade goods, steel leghold traps generally replaced the stone versions.
**Hearth.** Fireplace.
**Hide-drying ring.** An amorphous arrangement of boulders placed on a bedrock outcrop to hold down the edges of hides drying during processing for clothing, tent covers, kayak covers and other purposes. Used in the absence of vegetated or gravel terraces into which staking pegs can be set.
**Inuit.** The preferred term for the aboriginal occupants of the Arctic descended from people of the **Thule** tradition, whose origins are in the Alaska/Bering Strait area.
**Inuksuk, pl. Inuksuit.** A cairn or carefully-built stack of rocks and slabs resembling a person (**inuk**, pl. **Inuit**).
**Inuktitut.** The traditional **Inuit** language.

**Kayak rest** or **kayak stand.** A structure consisting of two spaced boulders or stacks of boulders on which a **kayak** is placed either for repair or replacement of the skin cover or to keep it off the wet ground when not in use. Larger version built for ***umiaq.***

**Kimberlite.** A subsurface geological feature resembling an inverted cone often containing diamonds.

**Lamp stand**. Flat stone on which ***qulliq*** *(*soapstone or limestone oil lamp) was placed inside tent, sod house or ***qammaq***. Often stained black from burning oil.

**Lithic.** Of stone.

**Locus**, pl. **Loci**. A discrete location within a larger **site.**

**Mitigation.** The process whereby negative impacts on an archaeological site can be eliminated, reduced or controlled.

**Neo-Eskimo.** An **archaeological** term used to define the **prehistoric Thule** culture and early historic ancestors of today's **Inuit.**

**Palaeo-Eskimo.** The original and subsequent occupants of the Arctic, who spread west from Alaska approximately 4500-5000 years ago across the Canadian Arctic to Greenland, Labrador and Newfoundland. Divided into **Pre-Dorset** and **Dorset**.

**Pre-Dorset.** The original occupants of much of Arctic Canada, 4500-2500 **B.P.** Noted for manufacture of tiny finely-made stone tools.

**Preform.** A partially-made stone tool.

**Prehistory.** The period prior to the invention or adoption of writing; in the Arctic, prior to the arrival of Europeans and Euro-Canadians and the development of syllabics and, later, written **Inuktitut**.

**Qaggiq, pl. Qaggiit.** A large snow house or stone circle used for ceremonies, feasting, dancing and communal work.

**Qammaq, pl. Qammat.** A stone house built up with multiple courses and covered with skin, used in fall before snow houses can be built.

**Qamutiik, pl. Qamutiit.** Toboggan.

**Qulliq, pl. *qulliit***. Lamp made of soapstone or where soapstone not available, limestone or sandstone, in which oil rendered from seal blubber or oil blubber is burned for light, heat and cooking.

**Semi-subterranean.** House dug partially into the ground for additional shelter and stability, or into a sloping bank as a labour-saving method, then walled up with stone and sod and roofed with bone or wood, skin and sod. Commonly used in late fall to early spring by **Dorset Palaeo-Eskimo**, **Thule** and **Inuit.**

**Site.** Location **of archaeological** remains.

**Subsistence.** The means of providing food and other essentials of life.

**Tent ring.** The outline formed by rocks formerly used to hold down the walls and guy ropes of a tent-like structure made of skin or canvas.

**Thule.** The ancestors of today's **Inuit** who arrived in the western arctic around 1000 B.P. and spread rapidly across the Arctic to Nunavut, Greenland and Labrador over the next few centuries.

***Umiaq, pl. umiat.*** Large open boat made of sealskin or split walrus hide stretched over frame of wood and/or bone used for camp moves and whaling.

**Weir.** Stone wall built across river to intercept fish.

**Appendix 1: Site Forms**
**In following order as per Borden numbers:**
**Site Re-visit**
**LeDg-1**
**New Sites**
**LbDh-1**
**LbDi-1**
**LbDi-2**
**LbDj-1**
**LbDj-2**
**LbDj-3**
**LbDj-4**
**LbDj-5**
**LbDj-6**
**LeDg-2**
**LeDg-3**
**LeDg-4**
**LeDg-5**
**LeDg-6**
**LeDg-7**
**LeDh-1**
**LeDi-1**
**LeDi-2**

**(Site forms provided to Government of Nunavut Department of Culture, Language, Elders and Youth).**

# Appendix 2
# Nunavut Archaeologist Permit 09-04A

# NUNAVUT ARCHAEOLOGIST PERMIT

| Permit Number | Permit Year | Permit Class |
|---|---|---|
| 09-004A | 2009 | Class 2 |

Under the authority of the *Nunavut Act* and the *Nunavut Archaeological and Palaeontological Sites Regulations*, authorization is granted to:

**Permit Holder:** Callum Thomson

**Affiliation:** Thomson Heritage Consultants

**Name of Project:** *Chidliak Project area, South Baffin*

**For the purpose of:** Archaeological reconnaissance and assessment of Peregrine Diamonds Ltd.'s Chidliak Property, Hall Peninsula, South Baffin Island, prioritizing areas of past and present development. The collection of artifacts or archaeological specimens is authorized under this permit.

**Permit Period:** This Permit is valid from June 12, 2009 to December 31, 2009.

***Conditions:***

1. *The Permittee shall abide by the Nunavut Archaeological and Palaeontological Sites Regulations*
2. *The Permittee shall abide by the Guidelines for Nunavut Archaeological and Palaeontological Sites*
3. *The Permittee shall comply with all conditions attached to this permit.*
4. *The Permittee shall distribute materials and documentation to the agencies identified below according to this schedule:*

| | Government of Nunavut<br>Department of Culture and Heritage<br>Box 310<br>Igloolik, NU X0A 0L0 | Canadian Museum of Civilization<br>Box 3100, Station 'B'<br>Hull, PQ J8X 4H2 | Prince of Wales<br>Northern Heritage Centre<br>Box 1320<br>Yellowknife, NT X1A 2L9 | Inuit Heritage Trust<br>Box 2080<br>Iqaluit, NU X0A 0H0 |
|---|---|---|---|---|
| ***Required by September 30:*** | | | | |
| *One-page non-technical summary and two (2) colour photographs* | X | | | |
| ***Required 60 days after return from field:*** | | | | |
| *Site Forms and Maps* | X | X | | |
| ***Required by March 31:*** | | | | |
| *1. Report* | X | | | X |
| *2. Field Notes* | X | | | |
| *4. (1) Artifacts, (2) Catalogue and (3) Loan Arrangements* | (2) | | (1), (2), (3) | |

*Approved by:*

Minister
Department of Culture, Language, Elders and Youth
Government of Nunavut

Issued at: Iqaluit, Nunavut

Date of Issue: June 12, 2009

# Appendix 3
# Project Photographs

| | | | |
|---|---|---|---|
| 1-Aug-09 | 1 | LeDg-5 | Tent rings view N |
| 1-Aug-09 | 2 | LeDg-5 | Tent ring 1 view N |
| 1-Aug-09 | 3 | LeDg-1 | View N |
| 1-Aug-09 | 4 | LeDg-1 | View N to tent ring 1 |
| 1-Aug-09 | 5 | LeDg-3 | F-1 festival house view N |
| 1-Aug-09 | 6 | LeDg-3 | F-1 festival house view W |
| 1-Aug-09 | 7 | LeDg-3 | F-2 tent ring view W |
| 1-Aug-09 | 8 | LeDg-3 | Festival house view W |
| 1-Aug-09 | 9 | LeDg-3 | F-4 inuksuk view N |
| 1-Aug-09 | 10 | LeDg-4 | F-1 skin drying rings view E |
| 1-Aug-09 | 11 | LeDg-5 | Tent ring view E |
| 1-Aug-09 | 12 | LeDg-5 | Kayak stands view NW |
| 1-Aug-09 | 13 | LeDg-6 | Cache view overhead |
| 1-Aug-09 | 14 | LeDg-6 | Cache view W |
| 1-Aug-09 | 15 | LeDg-7 | Tent ring view North overhead |
| 1-Aug-09 | 16 | LeDg-7 | Tent ring view W |
| 2-Aug-09 | 1 | | Quartz boulders near CH1 |
| 2-Aug-09 | 2 | | Quartz boulders and view east to CH1 |
| 2-Aug-09 | 3 | | Quartz boulders near CH1, view W |
| 2-Aug-09 | 4 | | View northwest to CH1 in snow bowl |
| 2-Aug-09 | 5 | | View NE over CH2 general location |
| 2-Aug-09 | 6 | | View E over CH2 general location |
| 2-Aug-09 | 7 | | View SE towards Drillhole 9 area |
| 2-Aug-09 | 8 | | View N towards Drillhole 9 area |
| 2-Aug-09 | 9 | | View SW towards Drillhole 10 area |
| 2-Aug-09 | 10 | | View SE towards Drillhole 12 area and Disco (1) |
| 2-Aug-09 | 11 | | View N over CH3 and Drillhole 20 and 24 |
| 2-Aug-09 | 12 | | Nigel Qaumariaq and boulder between Drillhole (1) |
| 2-Aug-09 | 13 | | General view NW between Drillholes 20 and 24 |
| 2-Aug-09 | 14 | | View NW from Drillhole 24 |
| 2-Aug-09 | 15 | | General view around Drillhole 16 and 21 |
| 2-Aug-09 | 16 | | General view around Drillhole 16 and 21 |
| 2-Aug-09 | 17 | | General view around Drillhole 16 and 21 |
| 2-Aug-09 | 18 | | General view around Drillhole 16 and 21 |
| 2-Aug-09 | 19 | | General view around Drillhole 16 and 21 |
| 2-Aug-09 | 20 | | General view SE around Drillhole 16 and 21 (1) |
| 2-Aug-09 | 21 | | General view SE around Drillhole 16 and 21 (1) |
| 3-Aug-09 | 1 | LbDi-1 | Tent ring F-1 view N |
| 3-Aug-09 | 2 | LbDi-1 | Miniature tent rings F-2 and 3 view N |
| 3-Aug-09 | 3 | LbDi-1 | F-4 tent ring view N |
| 3-Aug-09 | 4 | LbDi-1 | F-5 tent ring view N |
| 3-Aug-09 | 5 | LbDi-1 | F-6 and F-7 miniature tent rings view N |
| 3-Aug-09 | 6 | LbDi-1 | Aerial view NW |
| 3-Aug-09 | 7 | LbDi-1 | Aerial view NW |
| 3-Aug-09 | 8 | LbDi-1 | Aerial view NW |

| | | | |
|---|---|---|---|
| 3-Aug-09 | 9 | LbDj-1 | Tent ring 1 view E |
| 3-Aug-09 | 10 | LbDj-1 | Tent ring 2 view SE to pilot Jonathan |
| 3-Aug-09 | 11 | LbDj-1 | Tent ring 3 view E |
| 3-Aug-09 | 12 | LbDj-1 | Aerial view of the site from West, tent ring |
| 3-Aug-09 | 13 | LbDj-1 | Aerial view of the site from West, tent ring |
| 3-Aug-09 | 14 | LbDj-1 | Aerial view of McKeand River rapids east |
| 3-Aug-09 | 15 | LbDj-2 | Aerial view of site from west, tent ring |
| 3-Aug-09 | 16 | LbDj-2 | Tent ring 1 view N to Jonathan |
| 3-Aug-09 | 17 | LbDj-2 | Tent ring 2 view NW to Nigel at TR3 |
| 3-Aug-09 | 18 | LbDj-2 | Cotton Grass |
| 3-Aug-09 | 19 | LbDj-2 | Cotton Grass |
| 3-Aug-09 | 20 | | Aerial view east of McKeand River rapids |
| 3-Aug-09 | 21 | | Aerial view east of McKeand River rapids |
| 3-Aug-09 | 22 | | Aerial view east of McKeand River rapids |
| 3-Aug-09 | 23 | | Aerial view east of McKeand River rapids |
| 3-Aug-09 | 24 | LbDj-3 | Areal view NW |
| 3-Aug-09 | 25 | LbDj-3 | F-1 qammaq view N |
| 3-Aug-09 | 26 | LbDj-3 | F-1 qammaq view S |
| 3-Aug-09 | 27 | LbDj-3 | F-2 shelter wall or blind view S |
| 3-Aug-09 | 28 | LbDj-3 | F-3 inuksuk view NE |
| 3-Aug-09 | 29 | LbDj-3 | F-4 cache view S |
| 3-Aug-09 | 30 | LbDj-3 | F-5 paved qammaq view S |
| 3-Aug-09 | 31 | LbDj-3 | F-9 cache overhead view N |
| 3-Aug-09 | 32 | LbDj-3 | F-10 cache view S |
| 3-Aug-09 | 33 | LbDj-3 | F-11 qammaq view S to Jonathan |
| 3-Aug-09 | 34 | LbDj-3 | F-12 hide drying rings view S |
| 3-Aug-09 | 35 | LbDj-3 | F-12 overhead view of old lichen and moss |
| 3-Aug-09 | 36 | LbDj-3 | F-13 qammaq view S |
| 3-Aug-09 | 37 | LbDj-3 | F-13 qammaq view S |
| 3-Aug-09 | 38 | LbDj-3 | F-14 qammaq view S |
| 3-Aug-09 | 39 | LbDj-3 | F-15 qammaq view S |
| 3-Aug-09 | 40 | | Aerial view NE over LbDj-3,4, and 5 |
| 3-Aug-09 | 41 | | Aerial view NE over LbDj-3,4, and 5 |
| 3-Aug-09 | 42 | LbDj-4 | F-2 Tent ring and F-1 qammaq view N |
| 3-Aug-09 | 43 | LbDj-4 | F-1 alcove and qammaq view SW |
| 3-Aug-09 | 44 | LbDj-4 | F-3 paved qammaq view N |
| 3-Aug-09 | 45 | LbDj-4 | F-3 paved qammaq view Sw |
| 3-Aug-09 | 46 | LbDj-4 | F-4 large qammaq or meeting house view N |
| 3-Aug-09 | 47 | LbDj-4 | F-5 tower foxtrap and Nigel view N |
| 3-Aug-09 | 48 | LbDj-4 | F-5 tower foxtrap overhead |
| 3-Aug-09 | 49 | LbDj-4 | F-5 overhead view of tower foxtrap |
| 3-Aug-09 | 50 | LbDj-4 | F-6 qammaq view N |
| 3-Aug-09 | 51 | LbDj-4 | F-7 cache or qammaq view N |
| 3-Aug-09 | 52 | LbDj-4 | F-8 cache or qammaq view N |
| 3-Aug-09 | 53 | LbDj-4 | F-7 qammaq and kayak stand view N |
| 3-Aug-09 | 54 | LbDj-4 | F-9 qammaq and kayak stand to left view |

| | | | |
|---|---|---|---|
| 3-Aug-09 | 55 | LbDj-4 | F-10 qammaq view N |
| 3-Aug-09 | 56 | LbDj-4 | F-11 qammaq view N |
| 3-Aug-09 | 57 | LbDj-4 | F-11 qammaq view E |
| 3-Aug-09 | 58 | LbDj-4 | F-12 qammaq view N to helicopter and Nigel |
| 3-Aug-09 | 59 | LbDj-4 | F-12 qammaq view N |
| 3-Aug-09 | 60 | LbDj-4 | F-13 qammaq and cache or alcove to left |
| 3-Aug-09 | 61 | LbDj-4 | F-14 tent ring view N to helicopter |
| 3-Aug-09 | 62 | LbDj-4 | F-15 qammaq with sleeping platform divider |
| 3-Aug-09 | 63 | LbDj-4 | Aerial view E |
| 3-Aug-09 | 64 | LbDj-5 | Overhead view |
| 3-Aug-09 | 65 | LbDj-5 | Overhead view |
| 3-Aug-09 | 66 | LbDj-5 | Qammaq overhead view |
| 3-Aug-09 | 67 | LbDj-5 | Overhead view |
| 3-Aug-09 | 68 | LbDj-5 | Overhead view |
| 3-Aug-09 | 69 | LbDj-5 | Overhead view |
| 3-Aug-09 | 70 | LbDj-5 | Qammaq overhead view |
| 3-Aug-09 | 71 | | McKeand River valley view East |
| 3-Aug-09 | 73 | | Bottom of Chidliak Bay LeDi-1 at right side |
| 3-Aug-09 | 74 | LeDi-1 | Tent ring 1 view S |
| 3-Aug-09 | 75 | LeDi-1 | Tent ring 2 view S |
| 3-Aug-09 | 76 | LeDi-1 | Tent ring 3 view S |
| 3-Aug-09 | 77 | LeDi-1 | Tent ring 3 and child's play area |
| 3-Aug-09 | 78 | LeDi-1 | View NW over site |
| 3-Aug-09 | 79 | LeDi-1 | Aerial view SW |
| 3-Aug-09 | 80 | LeDi-1 | Aerial view SW |
| 3-Aug-09 | 81 | LeDi-2 | Tent ring 1 view S |
| 3-Aug-09 | 82 | LeDi-2 | Tent ring 2 view S |
| 3-Aug-09 | 83 | LeDi-2 | Tent ring 3 and Nigel view S |
| 3-Aug-09 | 84 | LeDi-2 | Tent ring 4 view S over big paving slabs |
| 3-Aug-09 | 85 | LeDi-2 | Tent ring 5 view S over big paving slabs |
| 3-Aug-09 | 86 | LeDi-2 | Tent ring 5 view SW to TR4 |
| 3-Aug-09 | 87 | LeDi-2 | Tent ring 6 view S to helicopter |
| 3-Aug-09 | 88 | LeDi-2 | Tent ring 7 view S |
| 3-Aug-09 | 89 | LeDi-2 | Tent ring 8 view S |
| 3-Aug-09 | 90 | LeDh-1 | F-1 tent ring view SW |
| 3-Aug-09 | 91 | LeDh-1 | F-2 tent ring |
| 3-Aug-09 | 92 | LeDh-1 | View west to F-3 kayak stand and Nigel |
| 3-Aug-09 | 93 | LeDh-1 | F-4 tent ring |
| 3-Aug-09 | 94 | LeDh-1 | F-3 kayak stand view E |
| | | LbDh-1 | Snyder Photo 1 |