

ARCHAEOLOGICAL SURVEY OF  
PROPOSED SOLID WASTE DISPOSAL  
SITES IN THE MUNICIPALITIES OF  
KUUJUARAPIK AND QUAQTAQ,  
NORTHERN QUEBEC

PRESENTED TO:

THE KATIVIK REGIONAL GOVERNMENT

BY:

THE AVATAQ CULTURAL INSTITUTE INC.

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## SUMMARY

An archaeological survey of proposed solid waste disposal sites in the municipalities of Kuujjuarapik and Quaqtaq was carried out by the Avataq Cultural Institute during 1986. These surveys, sponsored by the Kativik Regional Government, resulted in the discovery of the GhGk-63 site, a Pre-Dorset habitation site located in the Municipality of Kuujjuarapik. Excluding this site, no other archaeological resources were recorded in either of the study areas.

The general lack of archaeological data in the Kuujjuarapik study area is presumed to relate to the predominance of sand dunes in this area. At Quaqtaq, however, almost all of the gravel deposits originally contained in the study area have been extensively exploited as borrow pits. Consideration of the physical contexts of the numerous archaeological sites registered in the vicinity of Quaqtaq strongly suggests that archaeological resources may have been destroyed by the exploitation of these deposits. Similar construction activities at Kuujjuarapik have also resulted in the partial destruction of the GhGk-63 site.

Recommendations forwarded include measures suggested for the protection of the GhGk-63 site. It is further recommended that all future construction projects in territories pertaining to the Northern Quebec Inuit be preceded by an archaeological impact study.



## RESUME

Des reconnaissances archéologiques des sites d'enfouissement des déchets solides proposés dans les municipalités de Kuujjuarapik et de Quaqaq ont été réalisées par l'Institut Culturel Avataq en 1986. Ces reconnaissances, commanditées par l'Administration Régionale Kativik, ont permis de repérer le site GhGk-63. Il s'agit d'un site d'établissement prédorsétien localisé dans la municipalité de Kuujjuarapik. A l'exception de ce site, aucun autre indice archéologique ne fut observé dans ni l'une ni l'autre des aires d'étude.

Le manque général de données archéologiques dans l'aire d'étude de Kuujjuarapik est présumément lié à la prédominance des dunes de sable dans cette aire. A Quaqaq, cependant, les zones de potentiel archéologique comprises dans l'aire d'étude ont fait l'objet d'exploitation intensive comme bancs d'emprunt. Une revue des contextes physiques des nombreux sites archéologiques déjà enregistrés dans les environs du village permet de suggérer que des ressources archéologiques pourraient avoir été détruites par ces travaux d'exploitation. Une partie du site GhGk-63 a aussi été utilisée comme banc d'emprunt.

Des recommandations émises incluent des mesures proposées pour la protection du site GhGk-63. De plus, il est recommandé que tous les projets d'aménagement futurs situés dans les territoires des Inuit du Nouveau-Québec soient précédés par une étude des impacts de tels aménagements sur d'éventuelles ressources archéologiques.

## ACKNOWLEDGMENTS

Meetings with the municipal councils were chaired, respectively, by Mr. Myva Niviaxie, Mayor of Kuujjuarapik, and by Mr. Etua Puttayuk, Mayor of Quaqtaq. Mr. David Okpik, Manager of the Municipality of Quaqtaq, acted as interpreter during meetings in this village.

Accommodations for field personnel were graciously provided, in Kuujjuarapik, by Mrs. Caroline Weetaltuk Sr. and, in Quaqtaq, by Mrs. Maggie Okpik and Mrs. Susie Aloupa.

The contribution of each of these individuals to the present archaeological research is gratefully acknowledged.

## 1.0 INTRODUCTION

The present report concerns the archaeological survey of proposed solid waste disposal sites in the municipalities of Kuujjuarapik and Quaqtaq, Northern Quebec. This research, sponsored by the Kativik Regional Government, was oriented towards the identification and assessment of the importance of any archaeological resources located in the study areas. The ultimate objective of the survey was to propose measures for the mitigation of construction impacts on any such resources occurring in these areas.

Field activities were carried out in Kuujjuarapik between June 20 and 23 and, in Quaqtaq, during June 28 and 29. These activities were conducted by the resident archaeologist of Avataq and 2 Inuit archaeological assistants. The field crews were assisted in both cases by Mr. Henry Stewart, Professor of Archaeology at Mejiro Gakuen Women's College, Tokyo, Japan. Mr. Stewart had been invited to participate in the Avataq 1986 field programme in order to familiarize himself with the current context of Northern Quebec Inuit archaeology and to discuss Japanese collaboration in a long-term archaeological research project.

The respective municipal councils and Mr. Yves Dubuc, Environmental Engineer of the Kativik Regional Government, were informed of research results immediately following the completion of the surveys in each municipality. These results included the discovery of a single archaeological site, located near the new access road planned at Kuujjuarapik. Excluding measures suggested for the

protection of this site, no additional archaeological research or mitigation activities are recommended for either of the study areas concerned.

## 2.0 DESCRIPTION OF THE STUDY AREAS

The municipalities of Kuujjuarapik and Quaqtaq are located in Ungava County, Northern Quebec (Figure 1). The first of these villages is situated at the mouth of the Great Whale River, on the southeastern coast of Hudson Bay, at  $55^{\circ}17'N$ ,  $77^{\circ}45'W$ . The Municipality of Quaqtaq is located on the northwestern extremity of Ungava Bay, at  $61^{\circ}04'N$ ,  $69^{\circ}38'W$ .

The study areas concerned encompass the proposed solid waste disposal sites and immediately adjacent zones in these municipalities. These projected facilities, comprising domestic and metallic waste disposal sites as well as access roads, are summarized as follows.

### 2.1 Kuujjuarapik

The solid waste disposal site planned for the Municipality of Kuujjuarapik is located approximately 1.2 km north of the village (Figure 2). The area concerned is composed predominantly of sand dunes bordered, to the southwest, by a low bedrock hill. In the proposed domestic waste disposal site, these dunes form an extensive "amphitheatre", the rim of which rises in places to a height of roughly 12 m. The metallic scrap yard is situated about 90 m west of the southern extremity of this formation, on the northern periphery of the bedrock hill. A small stream meanders generally westward through the zone intervening between the sites.

The greater part of the domestic waste site and the entirety of the metallic waste site have been levelled by heavy machinery. In

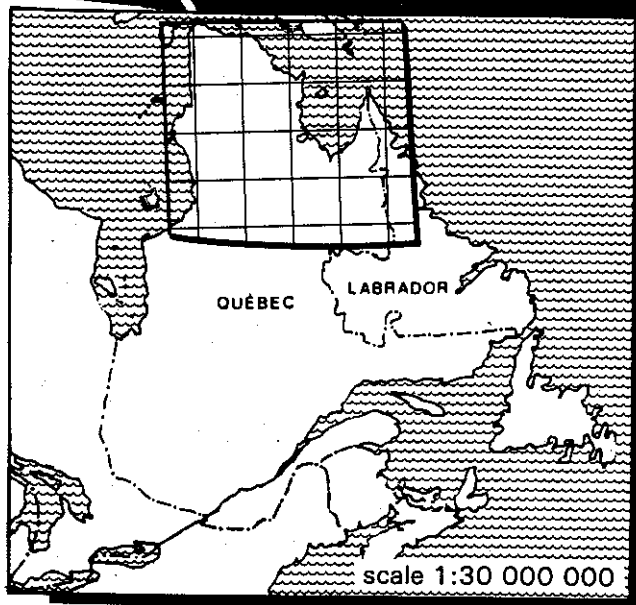
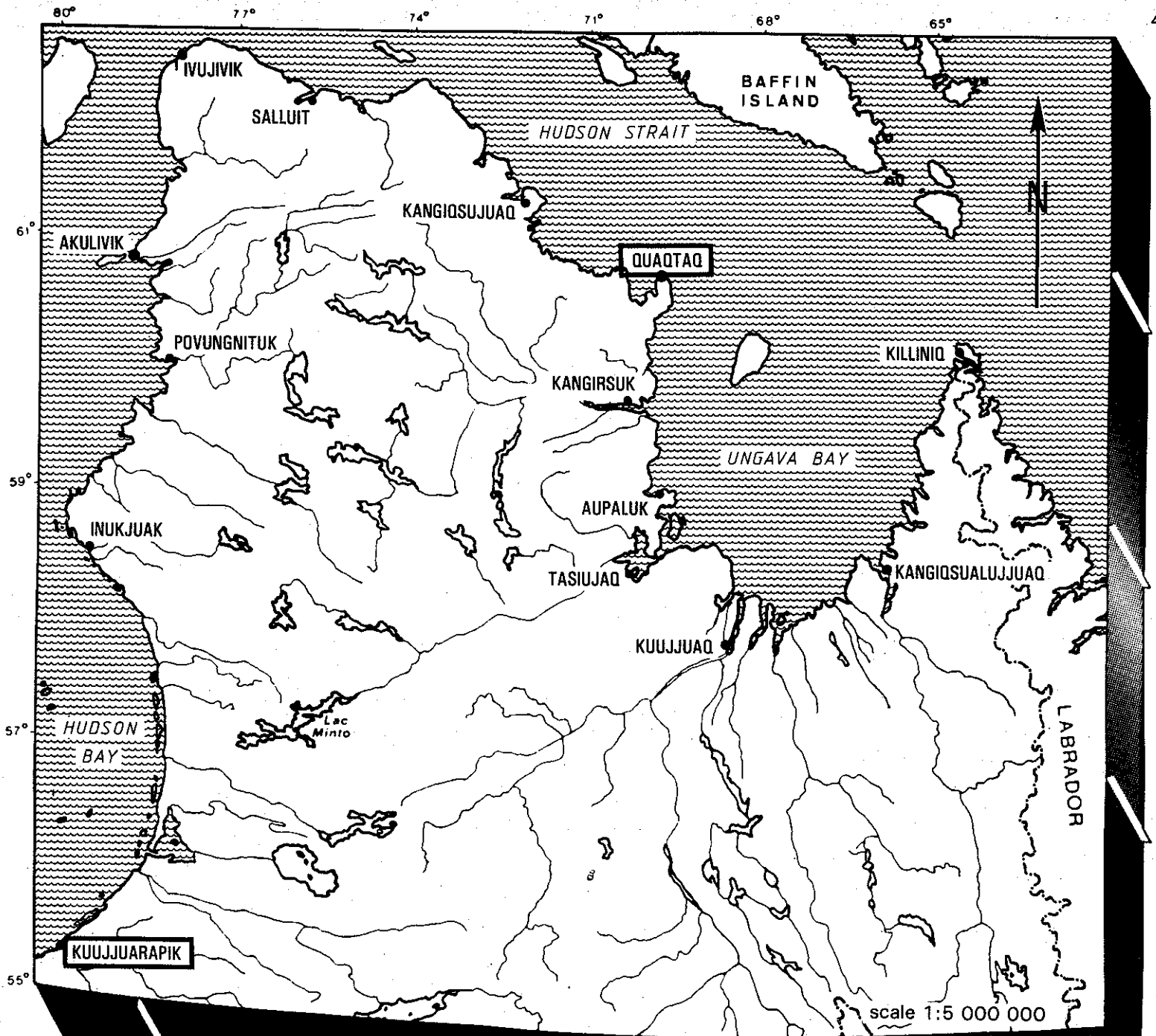


FIGURE 1

**Location of the  
Municipalities  
of Kuujuarapik and  
Quaqtaq, Northern  
Quebec**



Table 1. Dimensions and Surface Areas of Proposed Solid Waste Disposal Sites in the Municipalities of Kuujjuarapik and Quaqtaq.

	<u>KUJJUARAPIK</u>		<u>QUAQTAQ</u>	
	<u>DIMENSIONS (m)</u>	<u>SURFACE AREA (m<sup>2</sup>)</u>	<u>DIMENSIONS (m)</u>	<u>SURFACE AREA (m<sup>2</sup>)</u>
DOMESTIC WASTE DISPOSAL SITE	540 x 300	102,400	100 x 100	10,000
METALLIC WASTE DISPOSAL SITE	130 x 130	16,900	50 x 50	2,500
ACCESS ROADS	1,740 x 10	<u>17,400</u>	180 x 10	<u>1,800</u>
TOTAL		136,700		14,300

\*measurements calculated from available construction plans forwarded by the Kativik Regional Government.



the latter case, this work involved the construction of a now abandoned scientific research station. This site has also been recently used as a borrow pit.

The domestic and metallic waste sites measure, respectively, 540 x 300 m and 130 x 130 m in overall dimensions (table 1). These sites, combined with planned access roads, are calculated to cover a surface area of 136,700m<sup>2</sup>. The new roads, approximately 1,740 m in total length, extend mostly along existing roadbeds. In other instances, new roadbeds will be constructed.

Zones immediately adjacent to the proposed solid waste disposal site were also included in the study area. In some cases, survey activities extended to a maximum distance of roughly 100 m from the construction sites. Most of the peripheral zones surveyed are physically intact. Others have been disturbed to varying degrees.

## 2.2. Quaqtaq

The new solid waste disposal solid planned for the Municipality of Quaqtaq is located approximately 0.55 km northeast of the village (Figure 3). It is situated about 150 m northeast of the existing airstrip, immediately west of the municipal oxidation pond. The domestic waste site measures 100 x 100 m and the metallic scrap yard, 50 x 50 m. A total surface area of 14,300m<sup>2</sup> is calculated for the construction sites, including the projected access road. This road, roughly 180 m in length, follows an existing vehicle trail.

The domestic and metallic waste sites were originally composed of marine gravel deposits bounded by low bedrock



outcrops Both of these sites, however, were used as borrow pits by the Société des Habitations du Québec for the construction in 1984 of house foundations in the village. These borrow pits, now completely exhausted, are approximately 160 x 120 m and 100 x 80 m in overall dimensions; each varies between 2 and 3 m in depth.

Survey activities in Quaqtq were basically limited, then, to zones peripheral to the construction sites. In this case, these activities extended to a distance of roughly 50 m from the edges of the borrow pits. The zones surveyed are composed principally of bedrock outcrops interrupted by several, relatively small gravel deposits.

### 3.0 Research Procedures

#### 3.1 Community Consultation

Meetings with representatives of the municipal councils of Kuujjuarapik and Quaqtq were held both prior to initiating and immediately following completion of the surveys in each municipality. The study areas, research objectives, and field techniques were described during the first meetings. Permission to conduct the surveys and information concerning archaeological sites known to council members were also requested on these occasions. The second meetings were held in order to present survey results and recommendations.

The meetings in Kuujjuarapik, held on June 20 and 23, were attended, respectively, by Mr. Myva Niviixie, Mayor, and Mrs.

Heather Joly, then Secretary-Treasurer of the municipality, and by Mayor Niviaxie and Mr. Saba Fleming, Municipal Councillor. The second meeting included a visit to the archaeological site discovered in this municipality during the survey.

The meetings in Quaqtq, held on June 28 and 29, were attended by Mr. Etua Puttayuk, Mayor of the village, and Mr. David Okpik, Municipal Manager. Mr. Okpik also acted as interpreter during both of these meetings.

### 3.2 Field Methods

Field methods included extensive and intensive visual inspections as well as test-pitting of selected localities. The visual inspections focused on the identification of archaeological materials and features frequently visible on the surface (i.e., habitation structures, caches, lithic concentrations, etc.). In zones visually assessed as being of particular archaeological potential, these inspections were accompanied by intensive surface-collecting activities. These zones, usually of limited extent, were defined on the basis of the presence of physical attributes commonly associated with archaeological sites previously recorded in the environs of Kuujjuarapik and Quaqtq. Intensive surface-collecting was also carried out at the archaeological site discovered during the survey of the Kuujjuarapik study area.

A combined total of 38 test pits was excavated in the study areas. Of these test pits, 28 were excavated at Kuujjuarapik, including 7 in the archaeological site discovered in this study area. Each test pit

measured 50 x 50 cm and extended, in depth, into soil horizons presumed to be culturally sterile.

As in the case of the visual inspections, test-pitting was concentrated in undisturbed zones adjacent to the construction sites. Several disturbed zones, particularly at Kuujjuarapik, were also sampled. All tests pits excavated were negative.

### 3.3. Registration Techniques

Techniques organized for the registration of cultural data were applied exclusively to the GhGk-63 site, the only archaeological site inventoried in either of the study areas. In this case, lithic specimens recovered on the surface were collectively registered. The overall distribution of these specimens was also registered.

Soil profiles in the north walls of 3 of the test pits excavated in the site were recorded at a scale of 1:10. Additionally, a detailed plan of the site was prepared at a scale of 1:200 using a 60-metre survey chain and pocket transit. This plan illustrates the principal physical characteristics of the site and the location of all identified cultural features, the lithic scatter, and all excavated test pits. The general context of the site, several habitation structures, and the lithic collection area were photographed in colour and in black and white.

## 4.0 SURVEY RESULTS

### 4.1 General Results

As already noted, the surveys carried out resulted in the discovery of the GhGk-63 site at Kuujjuarapik. Excluding this site, no other archaeological data were observed in either of the study areas. This general lack is related, in part, to the nature of the surface deposits predominating in these areas and, in part, to landscape disturbance in the proposed construction sites. For example, a review of the pertinent literature indicates that sand dunes such as those comprising the Kuujjuarapik study area were favoured neither prehistorically nor historically for settlement purposes. Although some sites have been recorded in association with dunes in the region, these formations are generally of little archaeological potential. In fact, the GhGk-63 site occupies one of the few localities in the study area which, in terms of sedimentary composition, is definable as a zone of high archaeological potential.

On the other hand, the extent of construction work in the Quaqtq study area precludes the possibility of locating "in situ" archaeological materials in either the domestic or metallic waste sites proposed in this municipality. Both of these sites, however, are situated in zones previously determined as being of high and moderate archaeological potential (c.f., Aménatech, 1984a, annexe B). Moreover, of the 41 archaeological sites inventoried in the immediate environs of the village during 1986, 36 occur in zones of such potential (Avataq, in preparation). This high ratio of correspondence

strongly suggests that archaeological resources may have been destroyed by borrow pit exploitation activities in the study area. The extensive landscape alteration caused by these activities and the complete exhaustion of these borrow pits prevent confirmation of this possibility.

## 4.2 The GhGk-63 site

### 4.2.1 Location

Geographic Co-ordinates:

U.T.M.:

Map: 33N/5E (1: 50,000)

Altitude: 30 m.a.s.l.

Distance/Shoreline: 800 m

### 4.2.2 General Description

#### Site Context

The GhGk-63 site is located on the southeastern flank of a low bedrock hill, approximately 940 m north of the village of Kuujjuarapik (Figure 2). It occupies a boulder field formation on a raised marine terrace situated roughly 60 m west of the existing access road, or about 40 m west of the projected road (Figure 4). The boulder field is bordered to the north and northwest by the bedrock

hill and, to the south and southwest, by coarse gravel deposits. The eastern limit of the site is defined by the edge of the terrace.

A gravel pit located on the terrace edge extends into the southeastern portion of the boulder field. This extension is roughly 38 m in width by 20 m in maximum length. The western section of the boulder field has also been disturbed by bulldozing. Including this disturbed section, a total surface area of approximately 1, 500m<sup>2</sup> is calculated for the site.

Vegetation in the boulder field is composed predominantly of lichens with scattered alders and several small conifers occurring sporadically. The gravel deposits south of the boulder field and on the southeastern slope of the terrace are occupied by thick mosses (sphagnum included) mixed with grasses and patches of shrubs. A dense stand of black spruce with heavy alder and willow admixture occurs along the northeastern edge of the terrace.

### Sampling and Stratigraphy

Intensive surface collecting in the site was followed by the excavation of 7 test pits. Two of these test pits were excavated in the mid-passage of a habitation structure located near the southwestern corner of the gravel pit and a third, in gravel deposits approximately 5 m south of this structure. The 4 others are distributed along the southern edge of the gravel pit, in the lithic collection area. All test pits were negative.

Stratigraphies recorded in the terrace deposits consist of a coarse gravel horizon underlying a dark brown sandy humus. The



humus is overlain by a lighter brown sod layer. Both the sod and humus layers average about 12 cm in thickness. Stratigraphic profiles in the habitation structure are composed of a thin layer of vegetation directly overlying the cobbles forming the mid-passage. Small pockets of humus approximately 3 cm in maximum thickness occur between the rocks in the feature. The feature is underlain by sandy gravel.

### Habitation Structures

Identified habitation structures are represented by 3 semi-subterranean dwellings and 2 tent rings (Table 2). The semi-subterranean dwellings, defined by depressions varying from 30 to 50 cm in depth, are clustered in the boulder field north of the gravel pit. One of the tent rings is located about 3 m west of the edge of the gravel pit. The other is situated on the periphery of the boulder field, roughly 14 m farther to the west.

The tent rings measure 2.80 x 2.60 m and 2.50 x 2.10 m in interior dimensions; the larger is oval in configuration and the smaller, rectangular in form. The semi-subterranean dwellings vary from 2.70 to 2.80 m in length and from 2.20 to 2.30 in width; all 3 are rectangular in form.

The cobble mid-passage in the oval tent ring is the only internal feature identified in the structures. This mid-passage is 60 cm in width by 2.60 m in overall length. A small concentration of boulders in Structure 5, a semi-subterranean dwelling, may also

Table 2. Summary of Habitation Structures Identified at the GhGk-63 Site, Kuujjuarapik.

STRUCTURE	TYPE	FORM	DIMENSIONS (m)	REMARKS
1	Tent ring	Oval	2.80 x 2.60	- mid-passage <u>ca.</u> 60 cm in maximum width
2	Tent ring	Rectangular	2.50 x 2.10	
3	Semi-subterranean	Rectangular	2.80 x 2.20	- <u>ca.</u> 30 cm in depth
4	Semi-subterranean	Rectangular	2.70 x 2.20	- <u>ca.</u> 30 cm in depth
5	Semi-subterranean	Rectangular	2.70 x 2.30	- <u>ca.</u> 50 cm in depth - presence of a possible central hearth

represent an internal feature. This concentration, possibly a hearth, is roughly 60 cm in diameter.

### Exterior Features

A partially dismantled stone cache represents the only exterior feature registered at the site. This cache, about 65 cm in height, measures 2.00 x 1.20 m at its base.

### Lithic Specimens

A total of 40 lithic specimens were surface-collected along the southern edge of the gravel pit (Appendix 2). These specimens, scattered over a distance of 7 m, comprise 31 waste flakes and 9 fragmentary tools. The tools include a laterally-incomplete burin, a biface fragment, the mesial section of a blade, the proximal extremity of a microblade, a retouched flake, and a used flake. Three flake core fragments (one retouched) were also collected.

The burin and the biface fragment are in black quartzite and one of the core fragments, in green quartzite. The other 37 specimens are in chert.

### 4.2.3 Preliminary Interpretations

The recovery of the burin, a technological diagnostic of Early Palaeoeskimo cultures, suggests a Pre-Dorset cultural affiliation for the GhGk-63 site. This suggestion is supported by the semi-

subterranean dwellings and by the context of the site. For example, all 6 of the Pre-Dorset sites previously registered in the vicinity of Kuujjuarapik are generally characterized by semi-subterranean dwellings comparable, in most cases, to those identified at the GhGk-63 site (c.f., Aménatech, 1984b). In addition, with one exception, all of these sites occur in boulder fields.

The Pre-Dorset culture in the Kuujjuarapik region has been radiocarbon-dated to 1350 B.C. (Plumet, 1976:146). However, a somewhat later date is speculated for the occupation of GhGk-63. This speculation is based, firstly, on the relatively low altitude of the locality and, secondly, on the presence of a rectangular tent ring in the site. For instance, all other Pre-Dorset sites currently known in the region are situated above 50 m.a.s.l. Too, tent rings of rectangular form are most frequently associated, in Northern Quebec, with sites of the succeeding Dorset culture. A terminal phase Pre-Dorset occupation and, possibly, a Dorset re-occupation of the site may be indicated.

The fragmentary nature of the data recorded prohibits any socio-economic interpretation of site occupation. However, the occurrence of both tent rings and semi-subterranean dwellings suggests that the site was occupied on a multi-seasonal basis. The dimensions and distribution of the remaining habitation structures further suggest that these occupations involved either one or, at most, several nuclear families.

#### 4.2.4 Assessment of Importance

As non-renewable cultural heritage resources, all archaeological sites are of intrinsic value. Regardless, the appropriate management of archaeological sites in any given area nevertheless requires the evaluation of the theoretical importance of each, individual site. Such evaluations involve the assessment of site significance on several levels.

On the regional level, the GhGk-63 site is assessed as being of potential importance to a better understanding of Early (and, possibly, Late) Palaeoeskimo occupations in southeastern Hudson Bay. This importance resides, essentially, on:

- the presumed lateness of the Pre-Dorset occupation;
- the suggested multi-seasonality of occupation;
- the presence of the rectangular tent ring and;
- the possibility of Dorset re-occupation.

These aspects also apply to the evaluation of the site as being of importance to the clarification of local Palaeoeskimo occupations. For example, the comparatively low altitude of the site may indicate an unanticipated late persistence of the Pre-Dorset culture or, possibly, the presence of Early Dorset groups in the area. The early phase of the latter culture is presently undocumented in the environs of Kuujuarapik. Also, as concerns lithic technology, the use of quartzite for the manufacture of the burin and the biface is of interest. Lithic collections from Pre-Dorset sites in southeastern Hudson Bay are composed almost exclusively of cherts, a black, fine-grained variety apparently predominating. The fabrication of tools in

quartzite may, then, reflect local adaptations resulting from changes in inter-group contact situations, in the availability of raw materials, or in other cultural systems.

Finally, as currently understood, the GhGk-63 site is of direct importance to the community of Kuujjuarapik. As expressed by representatives of the municipal council, the site enhances local awareness of archaeological resources in the municipality of heritage interest to the community in general and to the resident Inuit population in particular. It represents, in essence, a physical manifestation of past lifeways ancestral to the traditional adaptations of this population in the region.

## 5.0 RECOMMENDATIONS

Survey results tend to indicate that no archaeological resources are directly threatened by the development of the proposed solid waste disposal sites in the municipalities of Kuujjuarapik and Quaqtaq. Consequently, no further archaeological research is recommended in the construction sites as currently planned in either of the study areas. However, the proximity of the GhGk-63 site to the projected access road in Kuujjuarapik and borrow pit exploitation in the Quaqtaq study area prior to the initiation of the survey are of concern.

It is therefore recommended:

.that measures be implemented in order to assure the full protection of the GhGk-63 site;

As noted earlier, the GhGk-63 site is located approximately 40 m west of the projected access road. This situation suggests that the site may be further disturbed by certain activities related to the construction of the new road. These activities include the removal of the spruce stand bordering the northeastern limit of the site, attendant landscaping of the terrace slope and of drainage ditches, and extraction of construction materials from the gravel pit and/or the boulder field.

In order to avoid any possibility of additional site disturbance, it is suggested that the section of the new access road adjacent to the

site be built on the existing roadbed some 20 m further to the east. This alternate location has been proposed by the representatives of the Municipal Council of Kuujjuarapik who visited the site. These individuals have also consented:

- to prohibit any further borrow pit exploitation in the site locality;
- to restrict all heavy machinery and other vehicle circulation on the site;
- to inform the community of Kuujjuarapik of the location of the site and of its assessed importance.

.that an archaeological surveillance of the GhGk-63 site be undertaken during construction of the new access road;

The recommended surveillance would assure the full protection of the site from any possible construction impacts. It would also allow monitoring of eroding cultural deposits in disturbed areas of the site, particularly along the edge of the gravel pit. This work should be carried out by an archaeologist familiar with prehistoric Inuit cultures in Northern Quebec or, more appropriately, by an Inuk archeological student trained in basic field techniques. The duration of the surveillance would correspond to that of road construction activities immediately adjacent to the site.



.that all future construction projects in Northern Quebec Inuit territories, regardless of scope, be preceded by an archaeological impact study;

As already emphasized, the use of gravel deposits in the Quaqtaq study area as borrow pits may have resulted in the destruction of archaeological resources. Similar work in the Kuujjuarapik study area has partially destroyed the GhGk-63 site. In both instances, the adverse effects of these construction activities could have been avoided.

The recommended studies are forwarded in the interest of mitigating construction impacts on both known and possible archaeological sites. These studies would involve a preliminary phase focused on the evaluation of the archaeological potential of the planned construction localities and, results depending, field survey of the localities. The potential study comprises, basically, research of available documents, including relevant archaeological records, topographic maps, and airphotos. This phase is essential in order to determine not only the presence of known and possible sites but also the necessity of undertaking survey in the area concerned. Certain zones already subjected to extensive construction activities such as previously developed housing lots in the villages generally need not be surveyed. Conversely all zones of high and moderate archaeological potential determined from the preliminary study should be surveyed.

In order to be of any use, the recommended studies need be carried out at least one year prior to the beginning of construction

work. Such scheduling is necessary for the development and, more importantly, the implementation of measures for the mitigation of construction impacts on archeological resources.

.that the communities in particular and the regional population in general be fully informed of the results of all future archaeological projects carried out in Northern Quebec Inuit territories;

Archaeologists working in Northern Quebec have often neglected to inform local residences of research results. For example, of the more than 60 archaeological sites recorded in the vicinity of Kuujjuarapik during the past 25 years, only the GhGk-63 site has been directly reported to the community. Also, the residents of Quaqtac have yet to be informed of the results of extensive archaeological research carried out in the area over the last 15 years or so. A similar situation obtains in most other Northern Quebec Inuit communities.

These circumstances tend to stress the need for developing policies concerning the conduct of archaeological research in Northern Quebec Inuit territories. The development of such policies pending, it is nevertheless recommended that the supervisors of all future archaeological field projects in these territories meet and advise representatives of the relevant community (or communities) of research results immediately following the completion of field activities. Moreover, detailed project summaries including

photographic prints and archaeological site distribution maps should be provided by the projects to the communities concerned.

The diffusion of research results to the communities will enhance awareness of local archaeological sites. This enhanced awareness will contribute to the conservation of these sites through the more appropriate planning of construction activities in the villages. More importantly, it will allow the communities to be more directly and actively involved in the management of cultural heritage resources for educational purposes.

## 6.0 PERSONNEL

Survey activities were carried out under the supervision of Mr. Ian Badgley, Resident Archaeologist of Avataq. Field personnel included Mr. Lucassie Tooktoo of Kuujjuarapik and, at Quaqtaq, Miss Annie Ningsiuk, resident of Inukjuak. Mr. Henry Stewart, of Mejiro Gakuen Women's College, Tokyo, Japan, assisted in the survey of both study areas.

The text of the present report has been written by Mr. Badgley. Miss. Ghyslaine Labelle, Master's student in the département d'Anthropologie of the Université de Montréal, has verified the French summary and the "fiches techniques". The map figures and the site plan have been prepared by Mr. Rick Rock, of Rock Design. This report has been typed by Miss. Barbara Halawnicki, Secretary of the Avataq Archaeology Department.

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1984b Prehistoric Inuit Archaeology in Quebec and Adjacent Regions: A Review and Assessment of Research Perspectives, presented by the Avataq Cultural Institute, 4 volumes.

Avataq Cultural Institute

In preparation.

Inventaire archéologique de l'aire d'étude du village de Quaqtac, Nouveau-Québec. Réfection des infrastructures aéroportuaires to be presented to the Service de l'environnement, ministère des Transports du Québec.

Plumet, Patrick

1976 "Archéologie du Nouveau-Québec: Habitats Paléo-esquimaux à Poste-de-la-Baleine" Collection Paléo-Québec No. 7, edited by the Centre d'Etudes Nordiques de l'Université Laval, Québec, 227 pp.

PHOTOGRAPHS

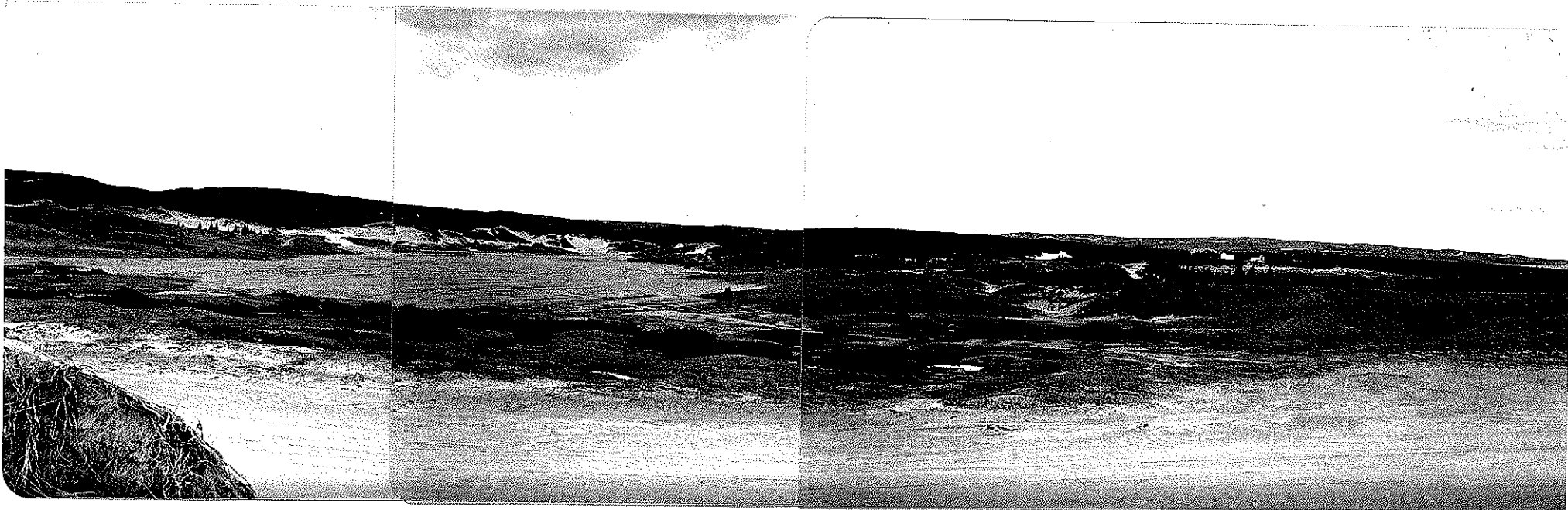


Photo 1. Proposed domestic waste disposal site, Kuujjuaraapik, towards the south. The clearing in the right background represents the proposed metallic waste site.



Photo 2. Proposed domestic waste disposal site, Kuujjuaraapik, towards the north.



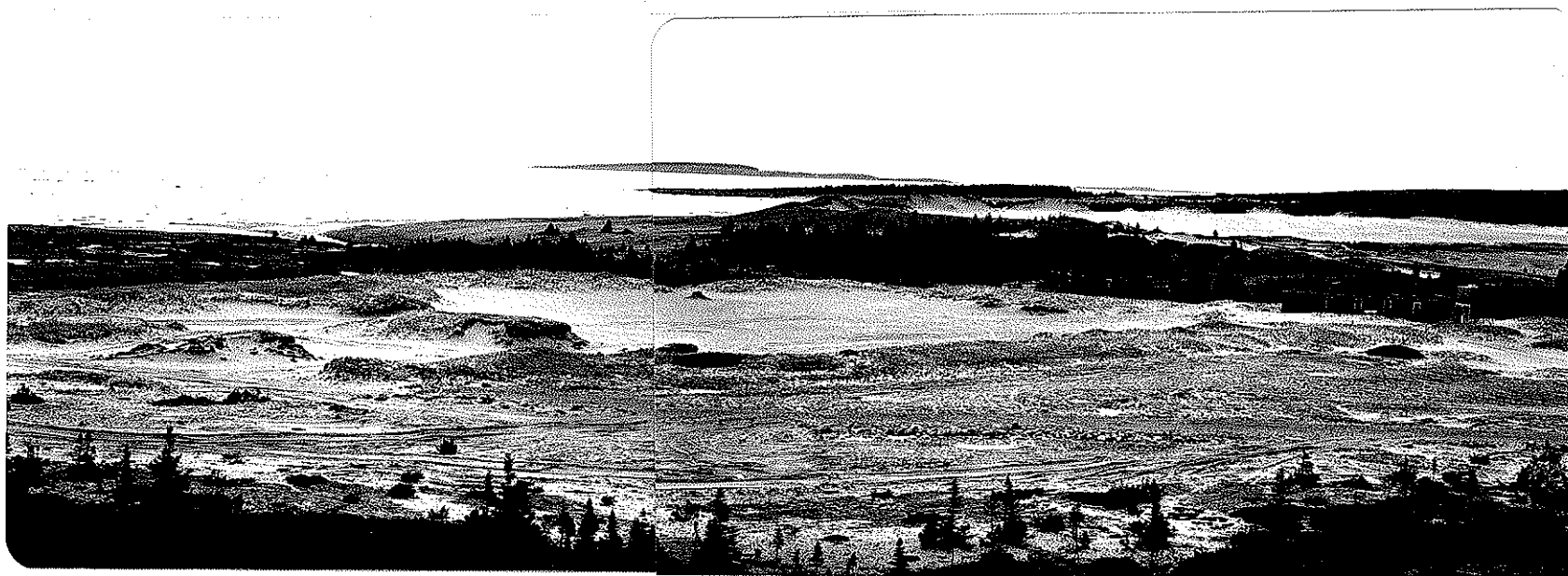


Photo 3. Proposed metallic waste disposal site, Kuujjuaraapik, towards the north. The proposed domestic waste site is visible in the right background.



Photo 4. Proposed domestic waste disposal site, Quaqtq, towards the northwest. The borrow pit extends from the ridge on the left to the snow banks and bedrock outcrop on the right. The farther snow bank marks the western edge of the borrow pit.



Photo 5. Proposed domestic waste disposal site, Quaqtq, towards the west.

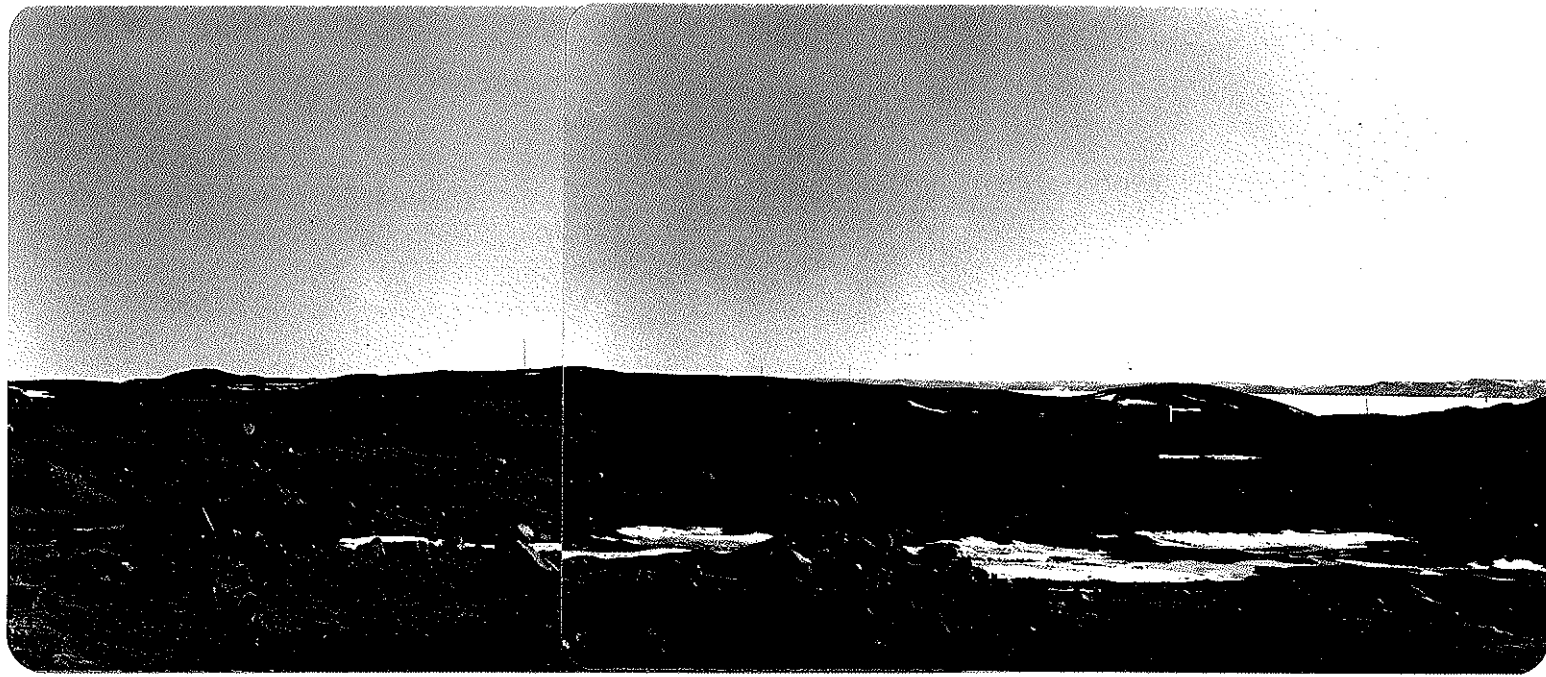


Photo 6. Proposed metallic waste disposal site, Quaqtaq, towards the southwest.

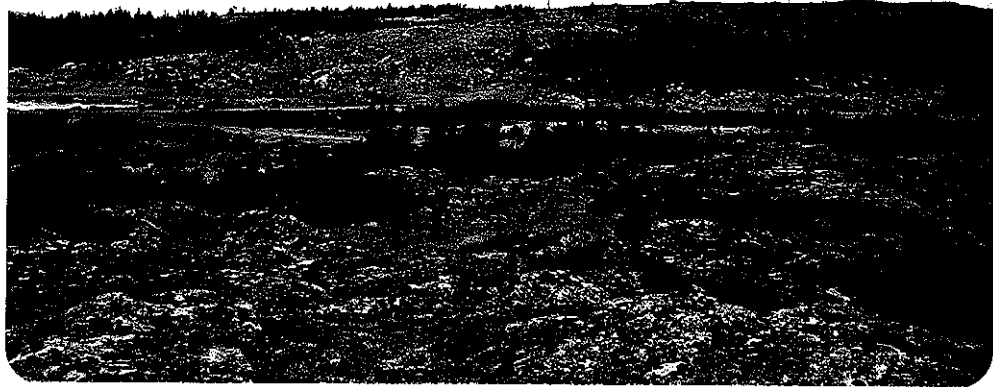


Photo 7. General view of the GhGk-63 site, Kuujjuaraapik, towards the west. The boulder field is visible immediately right of the upper section of the borrow pit. The terrace edge is indicated by the darker shrub vegetation and spruce stand left and right of the borrow pit.



Photo 8. Structure 1, GhGk-63, towards the east. The scale is located at the eastern end of the mid-passage, indicated by the cobble concentration in the centre of the photo.

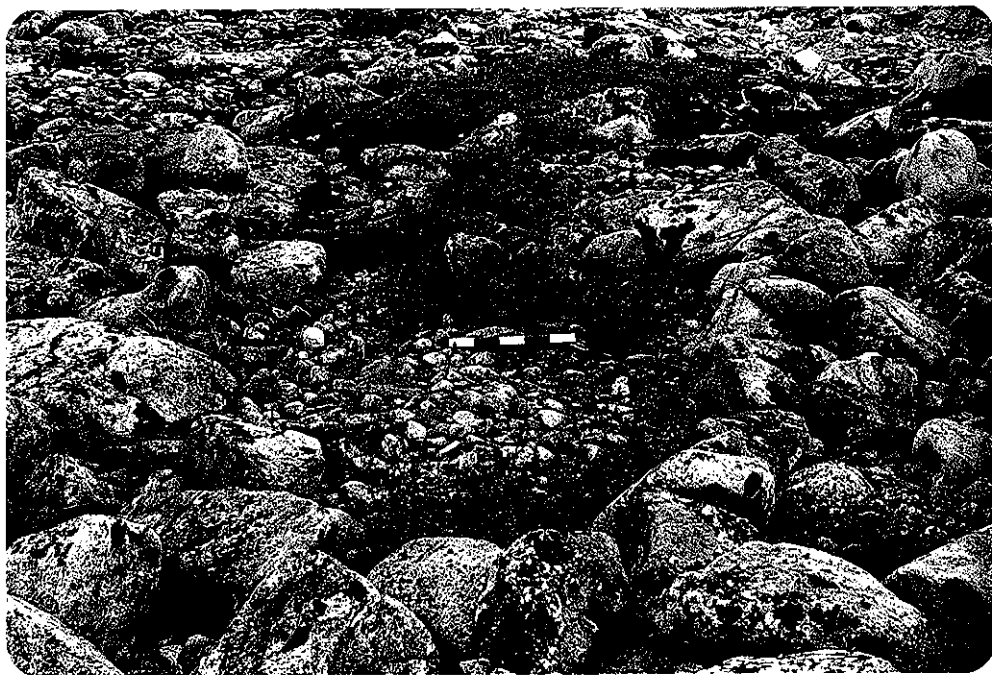


Photo 9. Structure 3, GhGk-63, towards the southeast.



Photo 10. Structure 5, GhGk-63, towards the southeast.



Photo 11. Lithic collection area, GhGk-63, south edge of the borrow pit, towards the southeast.



Photo 12. Lithic collection area, GhGk-63, south edge of the borrow pit, towards the south.

APPENDIX 1  
LIST OF PHOTOGRAPHS

APPENDIX 1  
LIST OF PHOTOGRAPHS

a) Kuujjuaraapik

ROLL	NEGATIVE	SUBJECT	ORIENTATION	DATE
C8602-1	2	Proposed domestic waste disposal site	SE	20-06-86
	3	Proposed domestic waste disposal site	SSE	20-06-86
	4	Proposed domestic waste disposal site	S	20-06-86
	5	Proposed domestic waste disposal site	SSW	20-06-86
	6	Proposed domestic waste disposal site	SW	20-06-86
	7	Proposed domestic waste disposal site	WSW	20-06-86
	8	Proposed domestic waste disposal site	W	20-06-86
	9	Proposed domestic waste disposal site	WNW	20-06-86
	10	Environment, north of proposed domestic waste disposal site	NNW	20-06-86
	11	Environment, north of proposed domestic waste disposal site	N	20-06-86
	12	Environment, north of proposed domestic waste disposal site	NNE	20-06-86
	13	Proposed domestic waste disposal site	ENE	20-06-86
	14	Proposed domestic waste disposal site	E	20-06-86
	15	Proposed domestic waste disposal site	SE	20-06-86
	16	Proposed domestic waste disposal site	SSE	20-06-86
	17	Proposed domestic waste disposal site	S	20-06-86
	18	Proposed domestic waste disposal site	N	20-06-86
	19	Proposed domestic waste disposal site	NE	20-06-86
	20	Proposed domestic waste disposal site	E	20-06-86
	21	Proposed metallic disposal site	N	20-06-86
	22	Proposed metallic disposal site	NE	20-06-86
	23	Structure 1, GhGk-63	E	22-06-86
	24	Structure 1, GhGk-63	E	22-06-86
	25	Structure 3, GhGk-63	SE	22-06-86
	26	Structure 3, GhGk-63	SE	22-06-86
	27	Structure 5, GhGk-63	ESE	22-06-86
	28	Lithic collection area, GhGk-63, south edge of borrow pit	SE	22-06-86



APPENDIX 1  
LIST OF PHOTOGRAPHS

a) Kuujjuaraapik

ROLL	NEGATIVE	SUBJECT	ORIENTATION	DATE
C8602-1	29	Lithic collection area, GhGk-63, south edge of borrow pit	S	22-06-86
	30	Lithic collection area, GhGk-63, south edge of borrow pit	SE	22-06-86
	31	Southern extremity of proposed domestic waste disposal site	NE	22-06-86
	32	General view of the GhGk-63 site	WSW	22-06-86
	33	General view of the GhGk-63 site	WSW	22-06-86
BW8602-1	0A	Proposed domestic waste disposal site	SE	20-06-86
	1A	Proposed domestic waste disposal site	SSE	20-06-86
	2A	Proposed domestic waste disposal site	S	20-06-86
	3A	Proposed domestic waste disposal site	SSW	20-06-86
	4A	Proposed domestic waste disposal site	WSW	20-06-86
	5A	Proposed domestic waste disposal site	W	20-06-86
	6A	Proposed domestic waste disposal site	WNW	20-06-86
	7A	Environment, north of proposed domestic waste disposal site	NNW	20-06-86
	8A	Environment, north of proposed domestic waste disposal site	N	20-06-86
	9A	Environment, north of proposed domestic waste disposal site	NNE	20-06-86
	10A	Proposed domestic waste disposal site	N	20-06-86
	11A	Proposed domestic waste disposal site	NE	20-06-86
	12A	Proposed domestic waste disposal site	E	20-06-86
	13A	Proposed metallic disposal site	N	20-06-86
	14A	Proposed metallic disposal site	NE	20-06-86
	15A	Structure 1, GhGk-63	E	22-06-86
16A	Structure 1, GhGk-63	E	22-06-85	

APPENDIX 1  
LIST OF PHOTOGRAPHS

a) Kuujjuaraapik

ROLL	NEGATIVE	SUBJECT	ORIENTATION	DATE
BW8602-1	17A	Structure 3, GhGk-63	SE	22-06-86
	18A	Structure 3, GhGk-63	SE	22-06-86
	19A	Structure 5, GhGk-63	ESE	22-06-86
	20A	Structure 5, GhGk-63	ESE	22-06-86
	21A	Lithic collection area, GhGk-63, south edge of borrow pit	S	22-06-86
	22A	Lithic collection area, GhGk-63, south edge of borrow pit	SE	22-06-86
	23A	Southern extremity of proposed domestic waste disposal site	NE	22-06-86
	24A	General view of the GhGk-63 site	WSW	22-06-86

APPENDIX 1  
LIST OF PHOTOGRAPHS

b) Quaqtac

ROLL	NEGATIVE	SUBJECT	ORIENTATION	DATE
C8602-2	1	Proposed domestic waste disposal site	NW	28-06-86
	2	Proposed domestic waste disposal site	W	28-06-86
	3	Proposed metallic waste disposal site	WSW	28-06-86
	4	Proposed metallic waste disposal site	SW	28-06-86
	5	Projected access road area	N	28-06-86
	6	Oxidation pond	N	28-06-86
	7	Oxidation pond	SE	28-06-86
	8	Oxidation pond	W	28-06-86
	9	Oxidation pond	S	28-06-86

APPENDIX 2

Catalogue of Lithic Specimens  
Collected at the GhGk-63 site,  
Kuujjuarapik

APPENDIX 2. CATALOGUE OF LITHIC SPECIMENS COLLECTED AT THE GhGk-63 SITE, KUUJJUARAPIK

a) Tools

CATALOGUE NUMBER	CLASS	DESCRIPTION	RAW MATERIAL
1	microblade	proximal fragment	grey chert
2	retouched blade	mesial fragment	grey chert
3	biface fragment		black quartzite
4	burin	laterally incomplete	black quartzite
5	retouched flake		black chert
6	flake core fragment		black chert
7	used flake		banded grey chert
8	flake core fragment		green quartzite
9	flake core fragment		black chert

b) Debitage

CATALOGUE NUMBER	CLASS	RAW MATERIAL	NUMBER OF OBJECTS
10	waste flakes	grey chert	10
11	waste flakes	black chert	19
12	waste flakes	green chert	2

All specimens were surface-collected along the disturbed, southern edge of the gravel pit extending into the site.

APPENDIX 3

Fiches techniques

## FICHE DESCRIPTIVE DE L'ENVIRONNEMENT

## LOCALISATION DU SITE

COORDONNEES GEOG. : \_\_\_\_\_

PLAN D'EAU: mer d'HudsonCOORDONNEES U.T.M. 1DISTANCE/RIVE 800 mCARTE: 33N/5E ECH. : 1:1000ALTITUDE/PLAND'EAU: 30 mPHOTO AERIENNE: Q72837-55 ECH. 1:4 000ALTITUDE/MER Idem mLOCALISATION INFORMELLE: environ 940 m au nord du village de Kuujjuaraapik

## MORPHO-SEDIMENTOLOGIE

DEPOTS DE SURFACE: champs de blocs, dépôts de sable et gravierMORPHOLOGIE: terrasse marineRELIEF: sub-horizontaleDRAINAGE: bon

## COUVERT VEGETAL

ESPECES DOMINANTES: mousses et lichensESPECES SECONDAIRES: sphaignes, aulnes, saules, épinettes noires

ETENDUE: \_\_\_\_\_

## NATURE DE L'INTERVENTION

Reconnaissance du site d'enfouissement des déchets solides proposé dans la municipalité de Kuujjuaraapik

## REMARQUES

aucuneREFERENCES Carnet de notesPHOTOS DU MILIEU C8602-1:32,33; BW8602-1:24A

RECENSEUR(S)

DATE 22-06-86Ian BadgleyLucassie TooktooHenry Stewart

Institut Culturel Avataq

## FICHE DESCRIPTIVE DU SITE

TOPONYME INUIT -

## DONNEES D'OCCUPATION

APPARTENANCE CULTURELLE: PrédorsétienneCHRONOLOGIE ESTIMEE: 1 000 ans av. J-C.DIMENSIONS MAX. (m): 60,0 x 55,0SUPERFICIE TOTALE (m<sup>2</sup>): 1 500REPARTITION DE L'ESPACE SITE: aucune

## TRACES ET VESTIGES D'OCCUPATION OBSERVES

STRUCTURES D'HABITATION: 3 structures d'habitation semi-souterraines et  
2 cercles de tenteAUTRES AMENAGEMENTS: 1 cache en pierresVESTIGES LITHIQUES: 1 microlame, 1 lame, 2 nucléus à éclats, 2 éclats re-  
touchés, 1 éclat utilisé, tous en chert, 1 fragment de couteau et 1AUTRES VESTIGES: aucun burin en quartzite, 31 éclats  
bruts en chert, 1 éclat brut en  
quartzite

## ECHANTILLONNAGE

TECHNIQUES: collecte de surface et 7 puits de sondageVESTIGES RECUEILLIS: 41 vestiges lithiques recueillis sur la surfacePRELEVEMENTS: aucun

## ETAT DU SITE

INTEGRITE: 35% du site est détruitNATURE DE LA PERTURBATION: exploitation comme banc d'empruntREMARQUES possibilité d'une réoccupation du site par des groupes  
dorsétiensRECOMMANDATIONS déplacement du chemin d'accès projeté vers l'est  
et surveillance du site lors de la construction du cheminPHOTOS C8602-1:32,33; BW8602-1:24A

NO. DU PLAN -





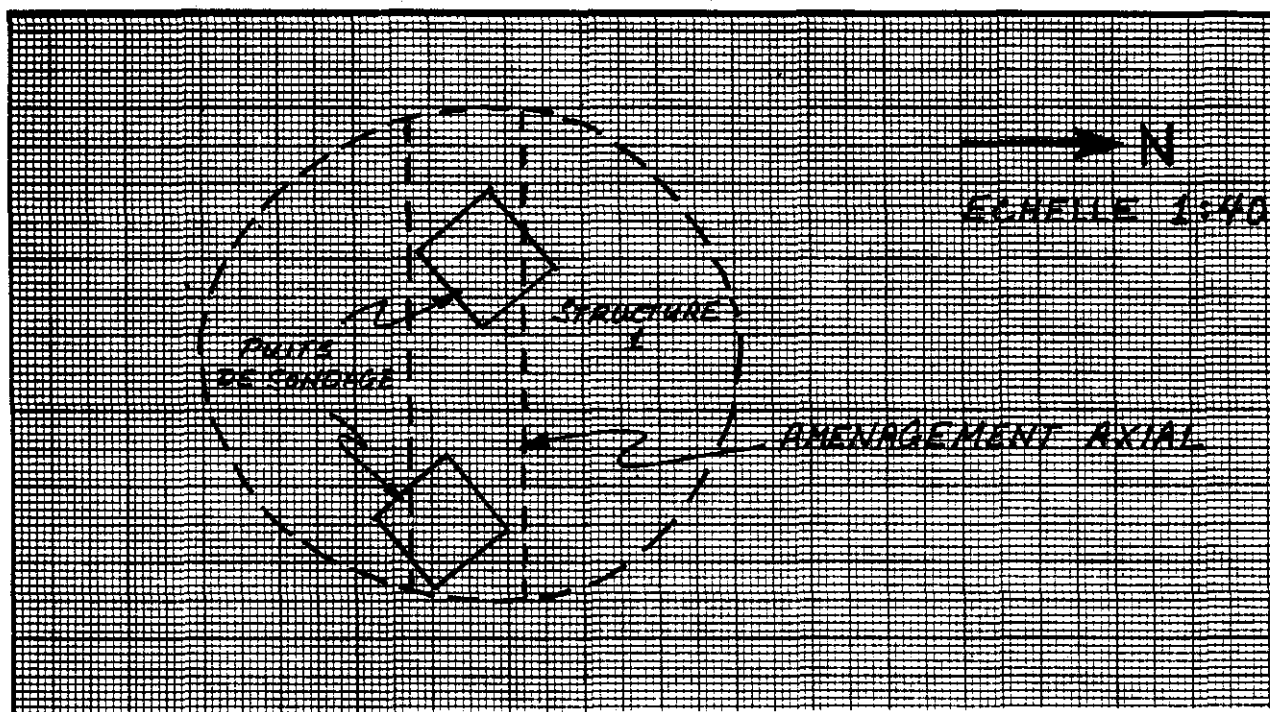
# FICHE DESCRIPTIVE DES STRUCTURES D'HABITATION

NO. DE LA STRUCTURE: 1 APPARTENANCE CULTURELLE: Prédorsétienne  
 TYPE: cercle de tente DIMENSIONS INTERNES (m): 2,60 x 2,80  
 FORME: ovale ORIENTATION: N-S ETAT: intacte  
 DESCRIPTION: contour défini par un alignement de pierres

LOCALISATION: à 3 m. de la limite ouest du banc d'emprunt

## AMENAGEMENTS INTERNES

TYPE	DIMENSIONS (m)	ORIENTATION
<u>aménagement axial</u>	<u>2,60 x 0,60</u>	<u>O-E</u>



VESTIGES RECUEILLIS: aucun

PRELEVEMENTS: aucun

REMARQUES: aménagement axial construit en galets

PHOTOS: C8602-1:23,24; BW8602-1:15A,16A



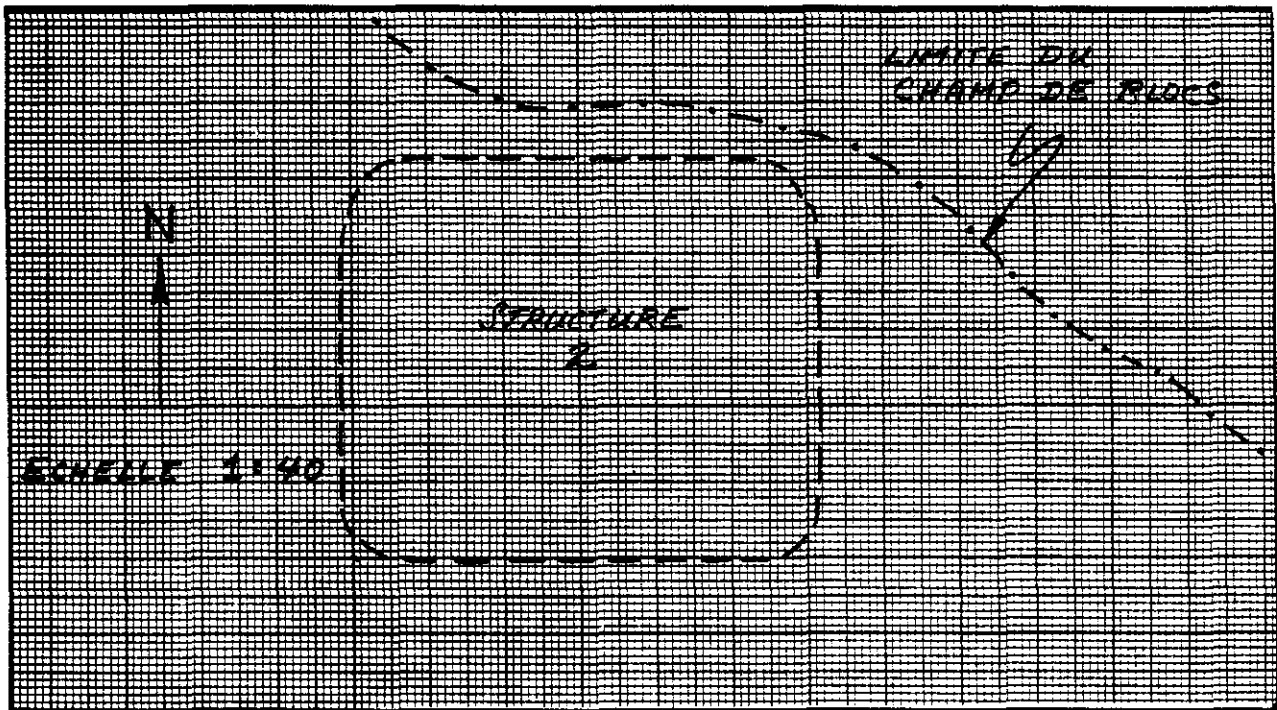
# FICHE DESCRIPTIVE DES STRUCTURES D'HABITATION

NO. DE LA STRUCTURE: 2 APPARTENANCE CULTURELLE: Paléoesquimaude indéterminée  
 TYPE: cercle de tente DIMENSIONS INTERNES (m): 2,10 x 2,50  
 FORME: rectangulaire ORIENTATION: E-O ETAT: intacte  
 DESCRIPTION: structure à fort empierrement

LOCALISATION: périphérie sud du champ de blocs

## AMENAGEMENTS INTERNES

TYPE	DIMENSIONS (m)	ORIENTATION



VESTIGES RECUEILLIS: aucun

PRELEVEMENTS: aucun

REMARQUES: possible structure dorsétienne suggérée par la forme rectangulaire du contour de celle-ci

PHOTOS: -



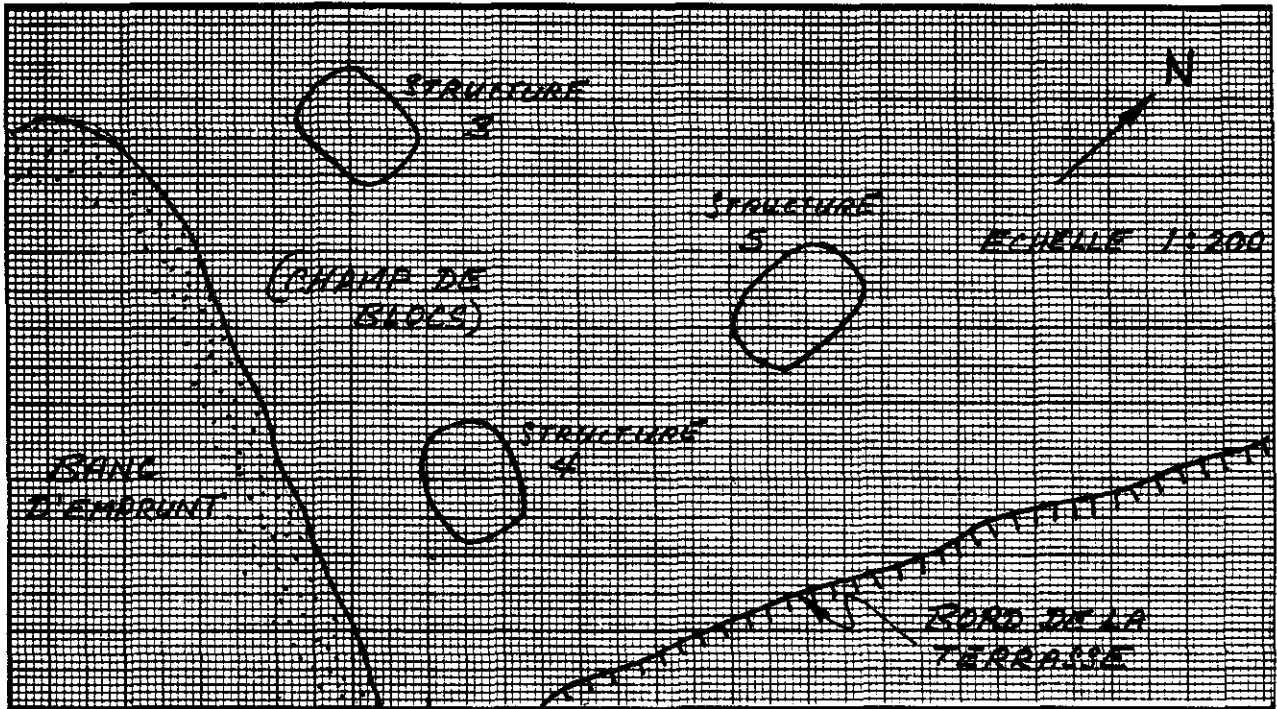
# FICHE DESCRIPTIVE DES STRUCTURES D'HABITATION

NO. DE LA STRUCTURE: 3 APPARTENANCE CULTURELLE: Prédorsétienne  
 TYPE: semi-souterraine DIMENSIONS INTERNES (m): 2,20 x 2,80  
 FORME: rectangulaire ORIENTATION: E-O ETAT: intacte  
 DESCRIPTION: définie par une légère dépression d'environ 30 cm. de  
profondeur  
 LOCALISATION: champ de blocs situé au nord du banc d'emprunt

## AMENAGEMENTS INTERNES

TYPE	DIMENSIONS (m)	ORIENTATION
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

(voir fiche de la structure 3)



VESTIGES RECUEILLIS: aucun

PRELEVEMENTS: aucun

REMARQUES: aucune

PHOTOS: C8602-1:25,26; BW8602-1:17A,18A



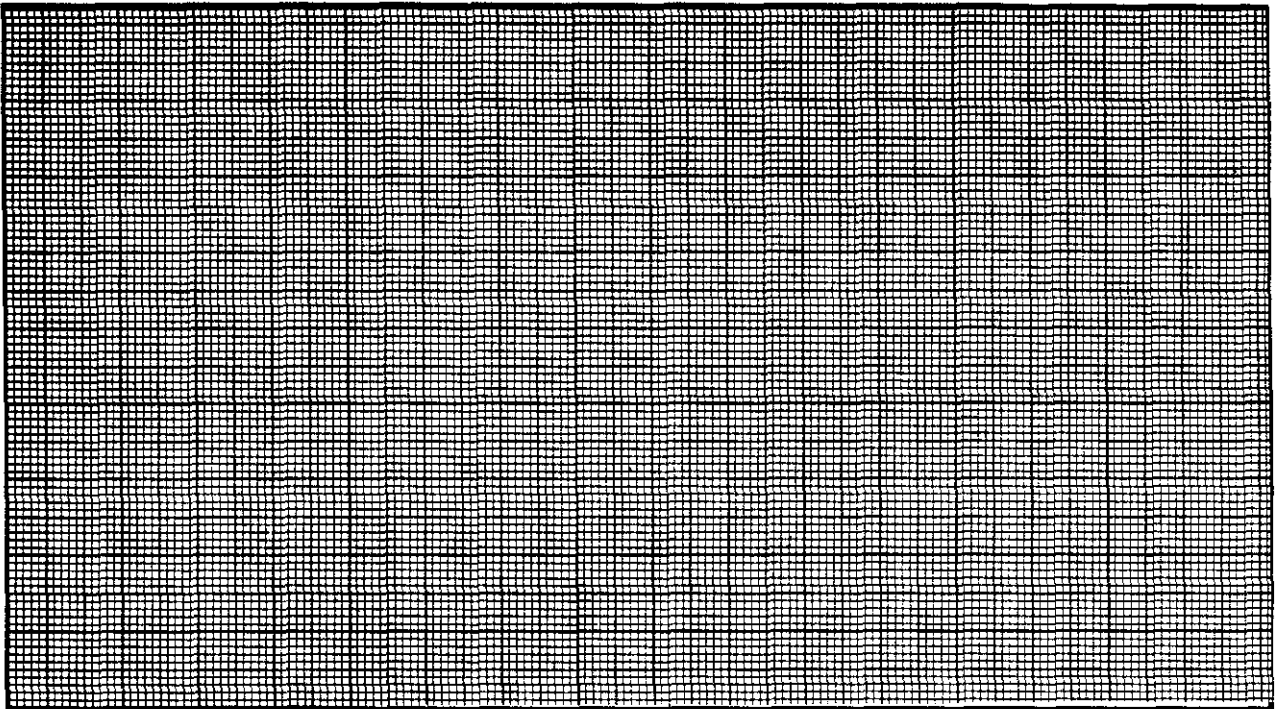
**FICHE DESCRIPTIVE DES STRUCTURES D'HABITATION**

NO. DE LA STRUCTURE: 4 APPARTENANCE CULTURELLE: Prédorsétienne  
 TYPE: semi-souterraine DIMENSIONS INTERNES (m): 2,20 x 2,70  
 FORME: rectangulaire ORIENTATION: ESE-ONO ETAT: intacte  
 DESCRIPTION: définie par une légère dépression d'environ 30 cm. de  
profondeur  
 LOCALISATION: champ de blocs situé au nord du banc d'emprunt

**AMENAGEMENTS INTERNES**

TYPE	DIMENSIONS (m)	ORIENTATION
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

(voir fiche de la structure 3)

VESTIGES RECUEILLIS: aucunPRELEVEMENTS: aucunREMARQUES: aucunePHOTOS: -

## FICHE DESCRIPTIVE DES STRUCTURES D'HABITATION

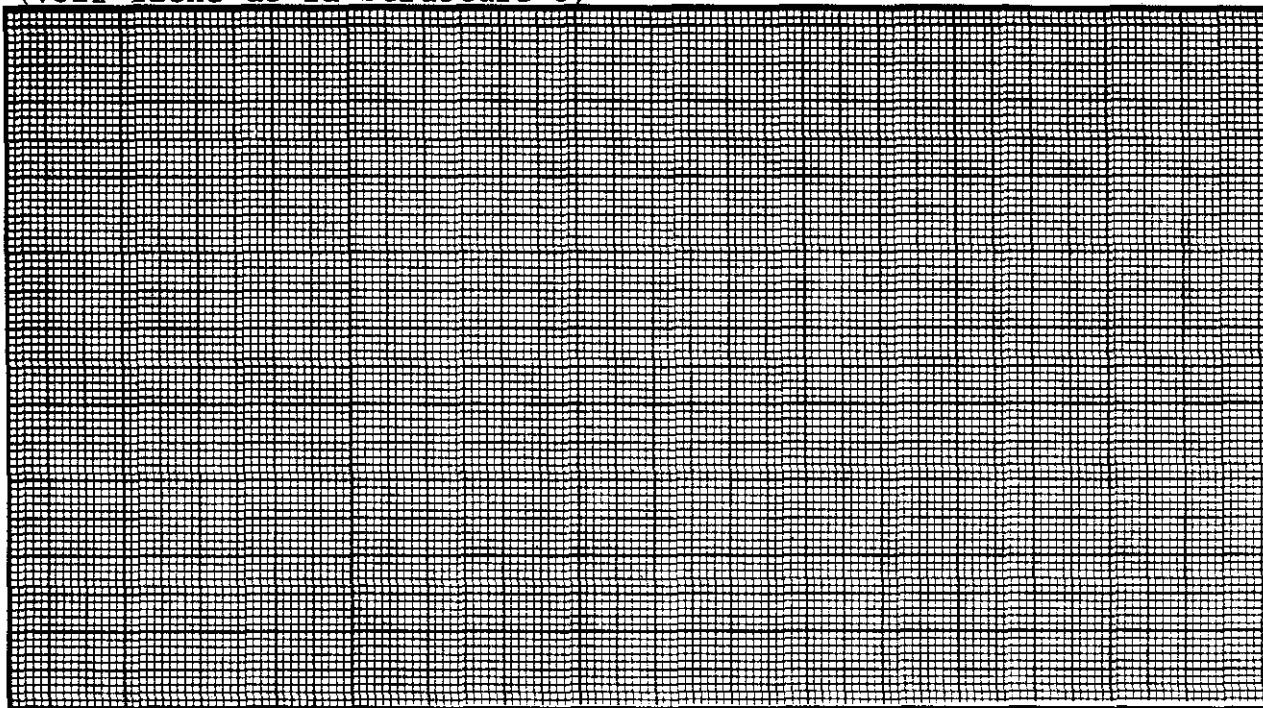
NO. DE LA STRUCTURE: 5 APPARTENANCE CULTURELLE: Prédorsétienne  
 TYPE: semi-souterraine DIMENSIONS INTERNES (m): 2,30 x 2,70  
 FORME: rectangulaire ORIENTATION: NNO-SSE ETAT: intacte  
 DESCRIPTION: définie par une dépression d'environ 50 cm. de profondeur

LOCALISATION: \_\_\_\_\_

## AMENAGEMENTS INTERNES

TYPE	DIMENSIONS (m)	ORIENTATION
<u>possible foyer central</u>	<u>60 cm. diamètre</u>	<u>-</u>
_____	_____	_____
_____	_____	_____

(voir fiche de la structure 3)

VESTIGES RECUEILLIS: aucunPRELEVEMENTS: aucunREMARQUES: aucunePHOTOS: C8602-1:27; BW8602-1:19A, 20A

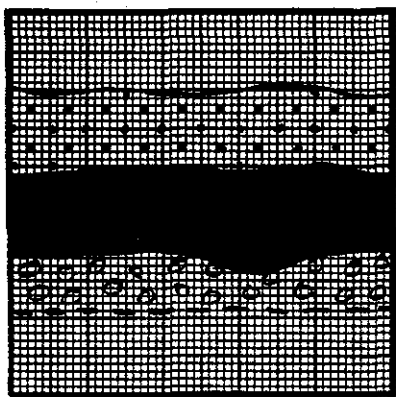
## FICHE SONDAGE

NO. DU SONDAGE: 1 DIMENSIONS: 50 x 50 cm PROFONDEUR: 30 cmLOCALISATION: bord sud du banc d'empruntVESTIGES RECUEILLIS: aucunTRACES D'OCCUPATION: aucunePRELEVEMENTS: aucun

## STRATIGRAPHIE

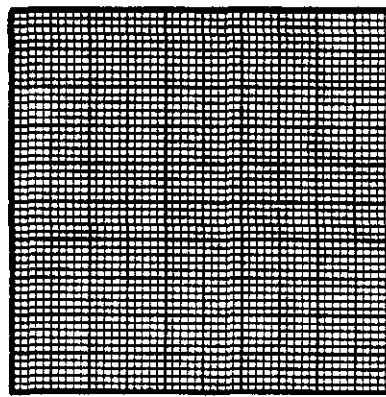
COUCHE	DESCRIPTION	EPAISSEUR (X)
I	tourbe	12 cm.
II	humus sableux	12 cm.
III	sable et gravier	-

## PROFIL DE SOL

MUR: Nord ECH.: 1:10

## LOCALISATION DES VESTIGES

COUCHE: \_\_\_\_\_ ECH.: \_\_\_\_\_



## LEGENDE:

	couche I
	couche II
	couche III
	limite de la fouille

## LEGENDE:


REMARQUES: aucunePHOTOS: -

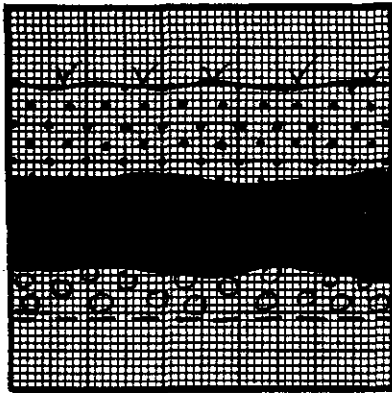
## FICHE SONDAGE

NO. DU SONDAGE: 2 DIMENSIONS: 50 x 50 cm PROFONDEUR: 30 cmLOCALISATION: bord sud du banc d'empruntVESTIGES RECUEILLIS: aucunTRACES D'OCCUPATION: aucunePRELEVEMENTS: aucun

## STRATIGRAPHIE

COUCHE	DESCRIPTION	EPAISSEUR (X)
I	tourbe	12 cm.
II	humus sableux	12 cm.
III	sable et gravier	-

## PROFIL DE SOL

MUR: Nord ECH.: 1:10

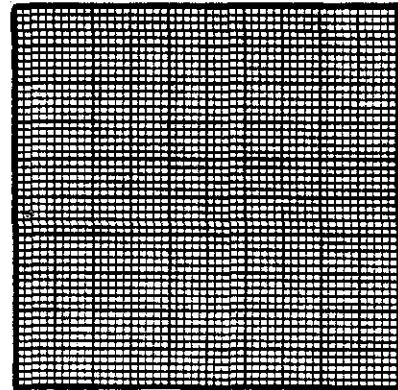
## LEGENDE:

	couche I
	couche II
	couche III
	limite de la fouille

REMARQUES: aucune

## LOCALISATION DES VESTIGES

COUCHE: \_\_\_\_\_ ECH.: \_\_\_\_\_

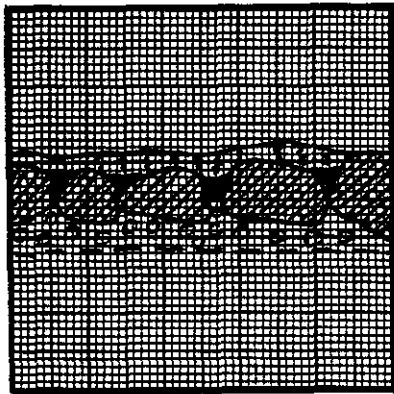


## LEGENDE:

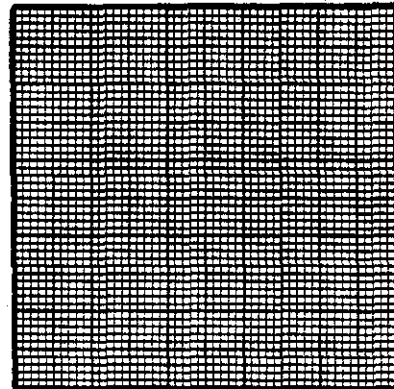

PHOTOS: -






**FICHE SONDAGE**NO. DU SONDAGE: 3 DIMENSIONS: 50 x 50 cm PROFONDEUR: 18 cmLOCALISATION: dans l'aménagement axial de la structure 1VESTIGES RECUEILLIS: aucunTRACES D'OCCUPATION: aucunePRELEVEMENTS: aucun**STRATIGRAPHIE**

COUCHE	DESCRIPTION	EPAISSEUR (X)
I	végétation de surface	3 cm.
II	humus sableux	3 cm.
III	sable et gravier	-

**PROFIL DE SOL**MUR: Nord ECH.: 1:10**LOCALISATION DES VESTIGES**

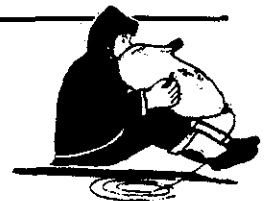
COUCHE: \_\_\_\_\_ ECH.: \_\_\_\_\_

**LEGENDE:**

-  galet
-  couche I
-  couche II
-  couche III
-  limite de la fouille

**LEGENDE:**

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

REMARQUES: aucunePHOTOS: -



SITE GhGk-63

**FICHE DESCRIPTIVE DES AMENAGEMENTS PARTICULIERS**

<u>NO.</u>	<u>TYPE</u>	<u>DIMENSIONS (m)</u>	<u>LIAISONS PHYSIQUES</u>	<u>PHOTOS</u>
I	cache	2,0 x 1,2 x 0,65 (hauteur)	-	



Institut Culturel Avataq