

# **SLOGGING, HUMPING AND MUCKING THROUGH THE NPR-A An Archeological Interlude**

by

**Craig W. Davis, Dana C. Linck,  
Kenneth M. Schoenberg, Harvey M. Shields**



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## **VOLUME 2**

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### **Site Reports**

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**Anthropology and Historic Preservation  
Cooperative Park Studies Unit  
University of Alaska  
Fairbanks, Alaska**



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HAR

Harrison Bay

HAR-003

Location: Sec. 31, T.15N., R.4W., Umiat Meridian  
UTM 5/500380/7833370

Class: I

#### Location and Setting

HAR-003 consists of a CCS tool, and two worked, wooden pieces located along the shore of Teshekpuk Lake at its eastern end. The lithic piece was approximately 1 m from the water's edge on the sandy beach surface. The denuded beach slopes very gradually to the east for about 10 m until it meets low-lying tundra meadow consisting of a dense mat of sedge, very small willows and other assorted plants. The difference in elevation between water level and the meadow is only 2 m to 3 m or less. The wood pieces were on top of the levy or margin between the beach and the open tundra. A few sporadic plants cover the upper beach margins.

#### Site Information

The tool, composed of black CCS, is roughly triangular in outline with a hinge fracture at its distal end. The piece (UA78-220-1; Pl. 39 20) is slightly water-worn and exhibits random flake scars along its dorsal surface. The platform appears to have been reworked to form a triangular-shaped tip. The specimen exhibits heavy stepping, crushing and rounding along the left and right lateral margins. A small concavity is located along the right lateral margin near the proximal end. This concavity exhibits the same type of wear. The wear is bifacial. Heavy rounding along all margins appears to be the result of water and sand abrasion, although the natural wear does not obscure intentional retouch. The piece may have been used as a scraper on relatively hard materials. The tip could have been used as a graver. The wood pieces were lying on the surface at the top of the slope. One piece is a pole measuring approximately 90 cm in length, with an estimated diameter of 6 cm. The other piece is approximately 36 cm in length and has a maximum diameter of roughly 2.5 cm. This piece tapers to a point and appears to have been shaped by carving. It is most likely a tent stake or peg.

#### Discussion

The site has been classified as an Eskimo camp of the late prehistoric or early historic period. This is based primarily on the survival of the wood and the presence of the lithic piece. Of course, the two may not be related, and it is possible that two periods of use are represented. The wood did not appear to be secondarily deposited and it is also not felt that the flake was ice-rafted onto the beach. The prevailing northeasterly winds would free this end of the lake of ice in early spring, and no evidence of ice disturbance was noted along this shore. The site is an excellent place for a camp as it is flat and well-drained. It does not command a good view of surrounding terrain because the elevation is so low. However, it is possible to observe game moving across the terrain, especially when mirage phenomena are active. The dissipation of heat or differential

heating of the open tundra appears to have the effect of distorting distant features by making them appear quite a bit larger or "elevated" than they actually are. Thus it was possible to see the Dew Line radar station at Camp Lonely--an installation located over 25 km from our observation point on Teshekpuk Lake. Normally we would not be able to see this feature. Caribou appeared to be walking in the middle of Teshekpuk Lake due to the same effect. We assumed they were somewhere on the shore opposite, assuming a straight line from our position on the lake to the mirage, as in the case of the Dew Line station and other observed features. This issue is raised simply to point out that hunters may be able to use this phenomena to their advantage when seeking game, particularly on the relatively flat coastal plain. Another example of mirage phenomenon and caribou spotting is mentioned by Brower (1980:43), while an excellent technical discussion of the Arctic mirage can be found in Neil Davis' popular newspaper article entitled "Diggings" (1979). Higher ground is available within several kilometers of the site, but the view from these locations is also not extensive. The site does not appear to be a seasonally visited area. The proposed camp seems more likely to be a short-term activity area used by hunters or travelers moving through this section of Teshekpuk Lake, perhaps by boat. No other materials were located and the site area was not tested.

<u>Catalog #</u>	<u>Description</u>
UA78-220-1	Possible Graver



IKR-003

Location: Sec. 3, T.3S., R.11W., Umat Meridian  
UTM 5/439850/7679200

Class: II

#### Location and Setting

Site IKR-003 is a lithic scatter in the center of a tabled hilltop approximately 2 km east of September Creek. The hill has an elevation of 259 m at this location. The view from the site proper is limited in all directions, although Knifeblade Ridge, Angoyakvik Pass, and Howard Hill are clearly visible. September Creek can also be seen to the west, and an unnamed drainage basin to the east, but only if one is stationed near the eastern and western margins of the hilltop. The site locale consists primarily of a bed of well-drained pea gravel, interspersed with patches of alpine vegetation running perpendicular to the hill's north-south axis. This area measures approximately 100 m in length and 20 m in width. Tussock growth, the characteristic hilltop vegetation, surrounds the graveled area. Some water-filled depressions were found approximately 100 m north.

#### Site Information

The cultural material consists of 18 flakes of CCS distributed over an area measuring approximately 13 m north-south by 3 m east-west. The material was mainly an opaque grey CCS although one fragment of black CCS and three flakes of cream colored CCS were also present. Two utilized flakes, one a blade-like fragment apparently used as a scraper and several unutilized cortical flakes were observed. A test pit dug toward the center of the flake concentration revealed no cultural material below the surface. However, it is quite possible that other materials lie concealed under the vegetative mat.

#### Discussion

The location, distribution, and paucity of material tends to indicate a short term, single component activity area. The presence of cortex flakes suggests the possibility that some material reduction took place at the site, and the utilized flakes indicate some type of light work on perhaps leather or soft wood. The site does not appear to be advantageously placed for observation and pursuit of game, although it could be a temporary hunting camp. Game can be observed in the September Creek area from a lookout position on the hilltop's western side. Willow and alder thickets bordering the creek offer some cover for the ambush of game. Other cover is available in the thickets located along intermittent drainages bisecting the west side of the hill.

It is conceivable that the site represents a temporary stopover along a travel route. The season and period of occupation could not be determined.

<u>Catalog #</u>	<u>Description</u>
UA77-335-1	Retouched Flake
UA77-335-2	Blade-like Flake

IKR-004

Location: Sec. 3, T.3S., R.11W., Umiat Meridian  
UTM 5/439500/7678600

Class: I

#### Location and Setting

Site IKR-004 consists of three worked-wood fragments in an area of alpine vegetation on a hill a few kilometers east of September Creek. The site is at the base of a slight slope marking the change in elevation between two tabled hilltops separated by approximately .5 km. The site was on the southwest edge of the northernmost hill. The slight saddle between the two areas of higher ground is characterized by tussock vegetation or what might best be termed moist tundra. The Ikpikpuk River Valley, Knifeblade Ridge, and Brooks Range are visible from this location, as are the upper reaches of September Creek. The natural and man-made formations of IKR-005 are also discernable. The site is approximately .75 km southwest of IKR-003 and .5 km north of IKR-005.

#### Site Information

The cultural material consisted of three worked-wood pieces (UA77-218-1, 2, 3; Pl. 63 1, 4, 5; v.4:254, 255) lying exposed on the surface. Two broken fragments of what was once a single piece lie 14 m west of another wood specimen. The two fragments to the west, when combined, form a piece measuring approximately 59.00 cm by 3.20 cm by 1.70 cm. This piece has five pairs of holes set along the medial line. The piece had broken in two through one of the holes in the middle set. Just to the side of the break is the impression of a structural member to which the fragment had been lashed. The holes had all been drilled or gouged from one side. The side opposite that from which drilling commenced is slightly concave. The ends of the piece show evidence of breakage. The specimen to the east of the fragments, noted above is UA77-218-1. It had been cut (sawn ?) at both ends. Each cut was made through the center of a hole drilled in the middle of the top of the piece at each end. All of the holes had been drilled from the same direction. The holes are slightly angled and irregular in shape, suggesting they were drilled with a stone tool.

#### Discussion

The two broken fragments appear to be segments of a dog sled rail. The holes presumably facilitated lashing to sled stanchions. The fragment 14 m east appears to be a sled stanchion or brace. IKR-004 is thought to be

the location of a sledding mishap or perhaps a sled repair operation. The sled could have overturned and broken up. An alternative explanation is that the materials were lost, misplaced, or discarded. The sled repair scenario seems more believable. The presence of sled parts on top of this hill system, midway between Kakvuiyat Bend on the Colville River and the upper reaches of the Ikpihpuk River, suggests the area was used as a travel route. Burch (1976) provides ethnographic data supporting this contention, and identifies this area as part of a major travel route in northern Alaska.

The preservation of the wood suggests that this locus of human activity is no older than one or two hundred years, and likely dates to around the turn of the century. The site is probably associated with Eskimo use of the foothill area.

<u>Catalog #</u>	<u>Description</u>
UA77-218-1	Possible Sled Part
UA77-218-2	Possible Sled Part
UA77-218-3	Possible Sled Part

IKR-005

Location: Sec. 3, T.3S., R.11W., Umiat Meridian  
UTM 5/439600/7678000

Class: III

#### Location and Setting

The site, consisting of several stone structures and assorted lithics, is located on the southern portion of a hilltop approximately 1.5 km east of September Creek and 4 km northwest of Kakvuiyat Bend on the Colville River. This is one of the highest points within roughly 64 square km, the highest point occurring near IKR-003, just 1.5 km north. The site is situated on a large area of bare ground, (roughly 200 m square), characterized by eroding sandstone and weathered conglomerate with intermittent patches of alpine tundra vegetation. Large slabs and boulders of conglomerates are scattered around the point of the hill. The hill surface is covered primarily with pea gravel. The nearest water is a seasonal pool located approximately 100 m north. September Creek is approximately 1.5 km west. This location offers an exceptional view of the head of September Creek and the gently rolling hills to the west, including the northerly trending spurs of Knifeblade Ridge. Howard Hill is visible to the north and Angoyakvik Pass is visible to the southeast. The Brooks Range is observable on a clear day. The site area has been subjected to considerable wind erosion.

#### Site Information

IKR-005 consists of four stone features: a rock pile, a small cairn or structure, a rock marker, and a braced upright stone slab (Features 2, 1,



4 and 3 respectively); two identifiable waste flake concentrations (Features 5 and 6); and assorted, widely scattered lithic tools and debris (a total of 57 lithic pieces) were observed (Fig. 1). These features and materials occupy an area measuring roughly 200 m north-south by 100 m east-west. Materials observed include a wedge-shaped core (UA77-219-4; Pl. 24 1; v.4:142), two end scrapers (UA77-219-2, 6; Pl. 19 2, 18 9; v.4:105, 102), a core platform, an end scraper (UA77-219-10; Pl. 19 6; v.4:106), and possible gravers, along with assorted flakes. An end struck, blade-like flake of black CCS was also present (UA77-219-8; Pl. 36 6; v.4:206).

### Discussion

This site appears to be a multicomponent hunting lookout where a number of manufacturing operations may have taken place. The scrapers show heavy wear indicating the possible working of hard substances such as bone or antler. Two waste flake concentrations indicate the manufacture or reworking of tools. The presence of a microblade core and a large core tablet suggests the possibility of reduction processes. A test pit did not reveal any cultural materials below the surface, and it is possible, if surface indications accurately reflect the lithic inventory, that site activities were rather limited. The rock pile may mark a grave (Fig. 2). A grave has been listed on the Traditional Land Use Inventory for the area east of September Creek (North Slope Borough 1976). The braced, upright slab may also function as a grave marker, but more likely it is a travel marker or part of an Inuksuk (Fig. 2). Feature 4, the rock piled on top of a boulder, may also be a marker. The upright slab (Feature 3) is visible from several km north, especially when the sun is in a position to cast a long shadow. This feature could conceivably act as an orientation point for travel from the Ikpiupuk River to Angoyakvik Pass. An interesting point is that the upturned rock found upon a boulder (Feature 4; Fig. 2) lines up quite conveniently with the upright slab (Feature 3); the upright slab lines up with the head of the Ikpiupuk River when one stands between the two features; while the upturned rock lines up with Angoyakvik Pass when one turns 180 degrees from the upright slab. It is possible that the relationship is fortuitous, but it does point out the need for further study of the functions and relationships of stone features. A small stone structure shaped somewhat like a bench may be a cache (Feature 1). It may also be a trap to catch animals. The feature needs to be tested. The wedge-shaped core is similar to elements characteristic of the American Paleo-Arctic tradition (Anderson 1970a: Pl. 3-5; 1970b), while the discoidal scraper, although not bifacial, is suggestive of elements of the Arctic Small Tool tradition (Giddings 1964: Pl. 56). Microblades were also observed. The obsidian end scraper (UA77-219-2) may be indicative of the Northern Archaic tradition, although this is highly speculative. Obsidian end scrapers occur in many traditions, but seem to abound in Northern Archaic levels at Onion Portage. Very similar scrapers, although smaller, were observed in the Portage complex (Band 5, level 2) at that site.

IKR 005

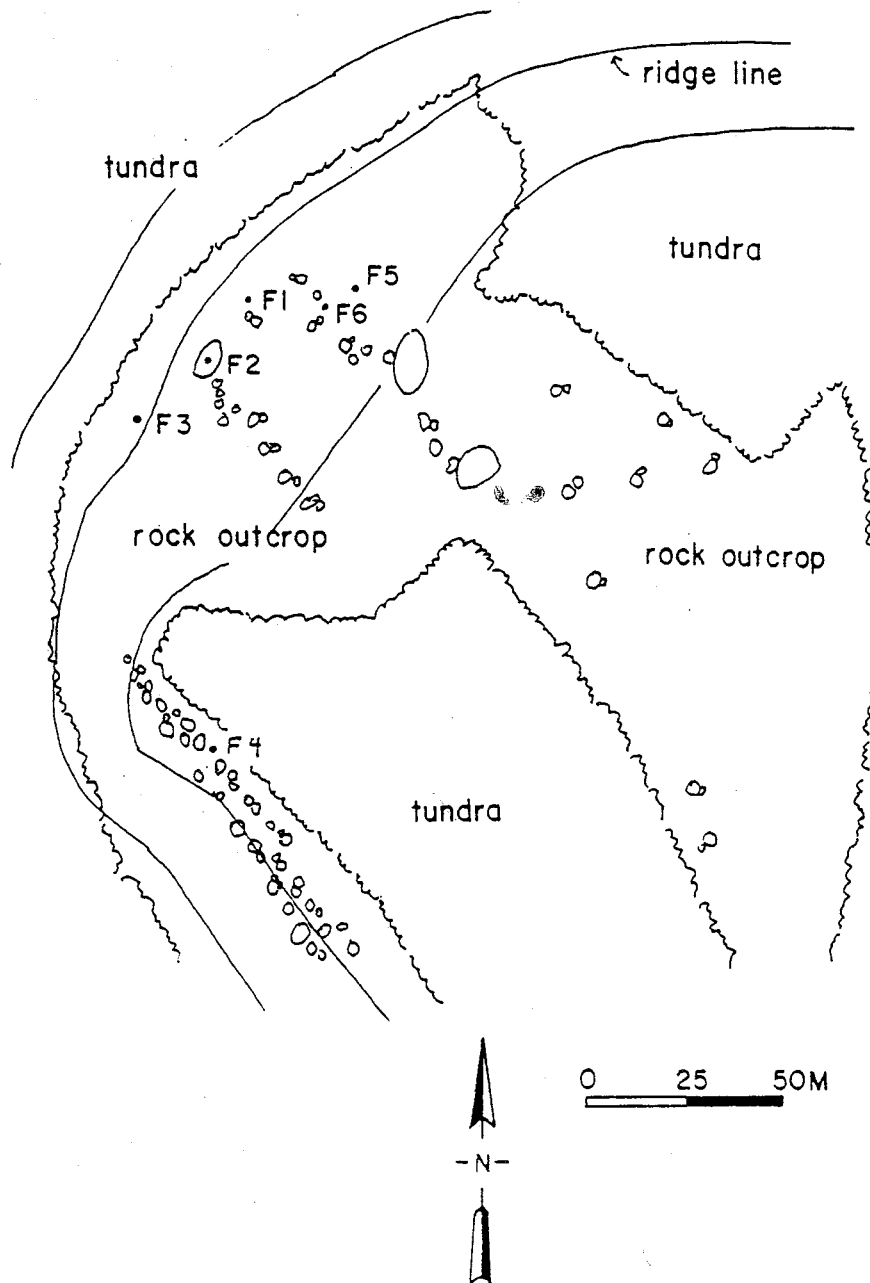
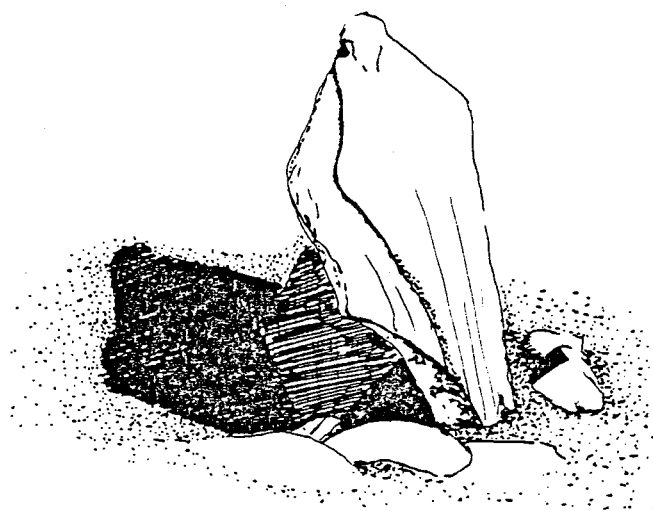
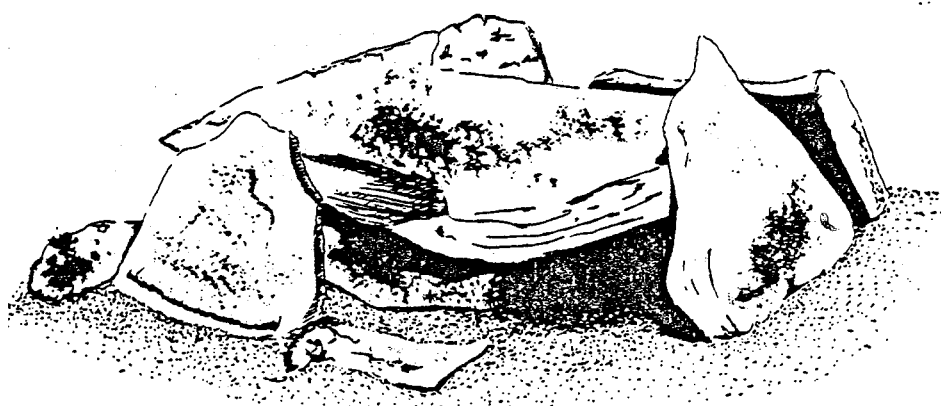


Figure 1

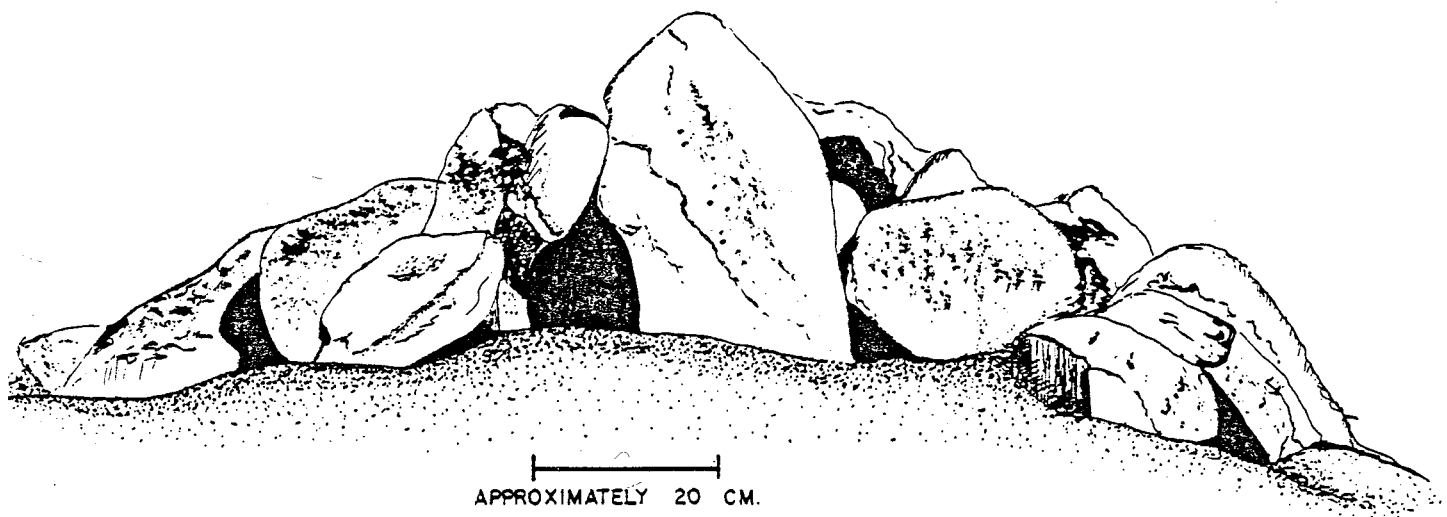
IKR 005



APPROXIMATELY 20 CM.



APPROXIMATELY 20 CM.



APPROXIMATELY 20 CM.

Figure 2



<u>Catalog #</u>	<u>Description</u>
UA77-219-1	Biface Thinning Flake
UA77-219-2	End Scraper
UA77-219-3	Retouched Flake
UA77-219-4	Microblade Core
UA77-219-5	Graver
UA77-219-6	End Scraper
UA77-219-7	Utilized Flake/Possible Graver
UA77-219-8	Blade-like Flake
UA77-219-9	Knife End Blade
UA77-219-10	End Scraper

IKR-006

Location: Sec. 23, T.3S., R.11W., Umat Meridian  
UTM 5/441900/7673800

Class: II

#### Location and Setting

Two possible cache pits are on a ridge margin overlooking September Creek as it flows westerly from its head. The creek is approximately 1 km south. The ridge margin is characterized by bare areas of ground and eroding sandstone outcrops. The vegetation is predominantly alpine, although tussocks do occur. The slope and ridgetop are covered with dense tussock meadow. Knifeblade Ridge is visible to the west, and Angoyakvik Pass lies approximately 20 km southeast.

#### Site Information

The site consists of two possible cache pits, each approximately 1 m in diameter, constructed of sandstone slabs. These features are unique along the ridge margin in that they are each marked by a distinct depression surrounded by a mound of sandstone slabs and fragments. The two features are approximately 25 m apart and lie on the level part of the margin. Two sandstone outcrops are a few meters south, near the margin edge. A game trail runs along the ridge margin in the vicinity of the features. A test pit was sunk in the easternmost depression revealing a nearly vertical wall of sandstone bedding with a sculpted appearance. No faunal remains or cultural materials were noted.

#### Discussion

The roughly circular depressions surrounded by mounded earth and sandstone slabs give one the impression that the features are man-made. This is an open question, especially since the test was inconclusive. A number of these features occur in the area, and it is not unlikely that the phenomena could have been caused by bears or other carnivores attempting to root out game. There are indications of ground squirrel tunnels in both features. Further excavation needs to be carried out to address the

issue. It should be noted that bear paw prints and scat were observed along the game trails. If the features are in fact cache pits for game storage, they were probably used during the late fall months when the permafrost level was much higher along the ridge. The test pit was taken down to approximately 80 cm and no permafrost was observed (July 7).

IKR-007

Location: Sec. 19, T.3S., R.10W., Umat Meridian  
UTM 5/444200/7673200

Class: II

#### Location and Setting

IKR-007 is a lithic scatter along the slope of an E-W trending hill approximately 1 km NE of the upper reaches of September Creek. A tundra thaw pool is located on the hilltop roughly 200 m north. The slope in the site vicinity is eroded, exposing the underlying soils and sandstone. The vegetation consists of intermittent patches of alpine tundra with small stands of alder nearby. IKR-007 is approximately 100 m west of IKR-008, and 500 m west of IKR-011.

#### Site Information

The site is composed of seven lithics distributed over an area measuring roughly 38 m E-W and 24 m N-S. The material observed consisted of several flakes of CCS, two bifaces, a flake knife, and a flake scraper. The two bifacially retouched specimens (UA77-220-1, 2; Pl. 11 3, 2; v.4:76) are roughly quadrilateral in shape, although a section of each had been snapped off resulting in triangular-shaped pieces. The lateral edges of each piece exhibit crushing and step flaking. The unifacially retouched piece is made on a flake of olive colored CCS with a section of cortex visible on the distal end (UA77-220-3; Pl. 17 14; v.4:97). The retouched area exhibits use-retouch, as does the opposite lateral edge.

#### Discussion

Site IKR-007 appears to be a hunting station where a hard material such as bone or antler could have been worked, although this observation is, at best, tenuous. The bifacial specimens are very much like side blades in form and could show affinities with Post-Denbigh materials from the Iyatayet site on Norton Sound (Giddings 1964:Pl. 46 26, 27). The pieces are very similar to "four-sided scrapers" identified as Ipiutak by Larsen and Rainey (1948:Pl. 20 23) at Point Hope. They could also be knife side blades and belong to either the Norton or Ipiutak phases of the Arctic Small Tool tradition. The unifacial flake knife also appears to be a late Arctic Small Tool tradition element. IKR-007 is the westernmost locus of activity along the hill. A heavily used animal trail runs along the hill, and it is possible that the site represents a game intercept point, particularly in light of the alder stands which could offer some hunting cover. The upper September Creek area could have been the focus of hunting

activity. It is recognized, especially regarding vegetative cover, that present conditions may not be the same as those in the past.

<u>Catalog #</u>	<u>Description</u>
UA77-220-1	Bifacial Side Scraper
UA77-220-2	Bifacial Side Scraper
UA77-220-3	Flake Knife

IKR-008

Location: Sec. 19, T.3S., R.10W., Umat Meridian  
UTM 5/444350/7673200

Class: II

#### Location and Setting

This site, a lithic scatter, is situated on a knob located along the southern margin of an uplifted ridge. It is approximately 130 m east of IKR-007 and 150 m west of IKR-009. The site overlooks the head of September Creek. The knob decreases in elevation on both the east and west forming two distinct breaks in the ridge line. The east break is more of a well-drained swale. IKR-008 is situated on one of the highest points along this section of the ridge. A number of relatively large sandstone outcrops are located on the knob. The immediate area is generally denuded of vegetation, although sparse patches of alpine tundra do occur with dense tussock just a few meters to either side of the ridge line. Angoyakvik Pass is situated a few kilometers south.

#### Site Information

IKR-008 is comprised of approximately 12 lithic pieces, including a utilized brown obsidian cortical flake (UA77-221-3; Pl. 39 5), an end scraper of translucent black obsidian (UA77-221-2; Pl. 19 7; v.4:107), and scrapers of black and grey CCS. The other debitage consists of black and grey CCS. There also is a questionable cache pit, and a small concentration of approximately 20 grey siltstone flakes (?). The cultural materials occupy an area measuring roughly 44 m E-W by 37 m N-S.

#### Discussion

The cultural affiliation of the site is questionable. The obsidian end scraper is very suggestive of Northern Archaic tradition elements (as is the brownish red obsidian piece). The problem is that the small obsidian thumbnail scraper occurs in many periods. The argument for affiliation is tenuously based upon the frequency of occurrence of similar items in Northern Archaic levels at Onion Portage. Final judgement is best reserved until other data is collected from the site. It may be that sites IKR-007 through IKR-011, when taken as a group, may provide important perspectives from which questions concerning site IKR-008 can be resolved.



<u>Catalog #</u>	<u>Description</u>
UA77-221-1	Nonutilized Flake
UA77-221-2	End scraper
UA77-221-3	Retouched Flake

IKR-009

Location: Sec. 19, T.3S., R.10W., Umiat Meridian  
UTM 5/444500/7673200

Class: II

#### Location and Setting

IKR-009 is approximately 150 m downhill and east of site IKR-008 and roughly 50 m west of IKR-010. The site is a scatter of lithic materials on the western rim of a small swale, which marks the lowest area between the two highest points along the ridge line. IKR-008 is on the high ground to the west, and IKR-011 is on the higher knob to the east. IKR-010 occupies the low ground of the swale. The area is characterized by alpine tundra vegetation, eroding sandstone, and large patches of bare ground. A large sandstone outcrop measuring a couple meters square lies north of the site. The view from the site is not as extensive as that afforded from higher ground to the east, west, and north. Angoyakvik Pass and the upper September Creek area can be observed to the south. September Creek is approximately 1.5 km southwest. The nearest water was a thaw pool located north of the site on the ridge top. The pool measured roughly 5 m by 1.5 m and had a depth of 1 m.



#### Site Information

Cultural material consists of eight flakes of black CCS, two flakes of reddish grey CCS (including one pressure flake), and a triangular biface of black CCS (UA77-222-2; Pl. 1 8; v.4:6). One of the pieces of black CCS was a cortical flake. The reddish grey specimen (other than the pressure flake) appears to have been utilized. The triangular biface was found approximately 52 m northwest of the main concentration, in the center of a frost boil, in an area of frost boil activity and tussock vegetation. The area in question is on the flat of the ridge. The piece exhibits slight nibbling at the tip and along the straight base. The tip may have suffered a slight impact fracture, while the base has had a flake of material removed across the edge, apparently originating from the center of the base. This may have resulted from a hafting mishap, or perhaps from the impact of the piece on a harder substance. One side of the piece evidences parallel oblique flaking.

#### Discussion

The site is tentatively identified as a hunting lookout, as are other sites in the vicinity. There is some evidence for the reduction of lithic material and for the processing of organics if the use-retouch on one piece can be

attributed to this kind of activity. The triangular biface, although not on the site proper, suggests another activity area. The find, of course, may only represent a lost projectile. The piece has been identified as an Arctic Small Tool tradition end blade with Denbigh affinities (Giddings, 1964:Pl. 71-a 4; Pl. 72 9; Giddings and Anderson n.d.: Pl. 161 34, 163 5, 165, 167 37), but similar elements also can be found in Norton assemblages (Giddings and Anderson n.d.: Pl. 15 4, 27 13). Cultural materials may be concealed under the vegetative mat of the ridge slope and top.

<u>Catalog #</u>	<u>Description</u>
UA77-222-1	Utilized Flake
UA77-222-2	Projectile Point

IKR-010

Location: Sec. 19, T.3S., R.10W., Umat Meridian  
UTM 5/444600/7673200

Class: III

#### Location and Setting

IKR-010 is a large flake scatter distributed in a swale or low-lying area between sites IKR-009 and IKR-011. IKR-009 occupies the rim of the swale approximately 50 m west, and IKR-011 occupies the high ground near the point of the ridge approximately 50 m east. The site is characterized by extensive erosional activity and sparse patches of alpine tundra vegetation. There are large bare areas with miniature erosional gullies and alluvial fans which develop when water occasionally drains from the ridge margin on the north. Lithic debris was concentrated along the erosion features. The site commands a view of the upper September Creek area. The view to the north is blocked by the ridge. September Creek lies 1.5 km SW.

#### Site Information

IKR-010 consists of approximately 95 lithic specimens distributed over the ground surface in an area measuring about 75 m in diameter, or roughly the area occupied by the swale. The majority of material observed consisted of 53 black CCS flakes. There were also flakes of light green, brown, grey, dark green, and reddish brown CCS, with grey and green flakes predominating. There were a number of blade-like flakes present, along with flake core remnants (e.g., UA77-223-5; Pl. 26 6; v.4:193) and assorted pressure flakes. Two locales were characterized by flakes of metamorphosed siltstone, although it is not known whether these are naturally occurring or were man-made. The material in question was also observed to be layered between slabs of eroding sandstone. These specimens exhibited fractures similar to the material observed on the site. This may preclude their production and use by man. Other materials observed included two black CCS end scrapers, a basalt or coarse grained quartzite biface fragment (UA77-223-4; Pl. 10 5; v.4:68), and a wedge-shaped core (UA77-223-3; Pl. 25 8; v.4:158). The flake core fragment noted above

evidences use-retouch along the right lateral edge. The biface fragment shows heavy crushing and step flaking, particularly along the right edge, suggesting its use transversely on hard material.

### Discussion

This site is one of the largest lithic scatters in the upper Ikpikpuk River survey area. The range of material indicates that core reduction and tool preparation occurred here, as well as certain processing activities. It is probably significant that the area of activity occupies the low cut along the ridge margin, unless the material has eroded out from further up the slope. The location of the site would allow activities to take place out of sight of game. The area is also flat, well-drained, and free of tussocks and would have made an excellent temporary camp if past conditions were anything like the present.

The wedge-shaped core is the basis for assigning at least one element of the site to the American Paleo-Arctic tradition. The core exhibits lateral platform preparation with rejuvenation of the platform occurring from the faceted end of the piece. The core has a pronounced keel, and shows evidence of the removal of several microblades from the face. The edge-angle is approximately 50°, a trait very suggestive of the Denbigh Phase of the Arctic Small Tool tradition. Nevertheless, the core is not a so-called "pyramidal" or "blocky" type, and it is placed within the American Paleo-Arctic tradition (Anderson 1970a: p.30-32; 1970b). Other components may be represented at the site, but no definitive statements can be made at this time. It is believed that a considerable amount of material exists under the vegetative mat along the ridge slope and perhaps on the ridge top. An unfortunate consequence of erosion has been the secondary deposition of material.

<u>Catalog #</u>	<u>Description</u>
UA77-223-1	Nonutilized Flake
UA77-223-2	Nonutilized Cortical Flakes
UA77-223-3	Microblade Core
UA77-223-4	Miscellaneous Knife
UA77-223-5	Flake Core Fragment

IKR-011

Location: Sec. 19, T.3S., R.10W., Umiat Meridian  
UTM 5/444750/7673200

Class: III

### Location and Setting

IKR-011 is on the easternmost point of an E-W trending ridge a few kilometers north of Angoyakvik Pass. It overlooks the headwaters of September Creek, approximately 1.5 km southwest, and the basin of an unnamed drainage a few kilometers east. Knifeblade Ridge is visible to the west

and IKR-010 is located in a slight swale approximately 50 m west. IKR-011 is located on the north side of a pronounced knob about 25 m from the point of the ridge, in an area characterized by patches of bare ground and eroding sandstone. Sparse alpine tundra vegetation occurs around the knob, with frost boils and stands of alder on the downslope to the north, east and west. The site area is relatively flat and well-drained.

#### Site Information

The lithic concentration covers an area measuring roughly 30 m E-W by 25 m N-S, and consists of three wedge-shaped microcores, (UA77-224-1, 4,6; Pl. 25 5, 24 14, 25 1; v.4:155, 152, 155), two microcore tablets, (UA77-224-5,7; Pl. 23 20, 19; v.4:166, 165), microblades, (c.f. UA77-224-3; Pl. 33 32; v.4:197), a blade-like obsidian flake, (UA77-224-8; Pl. 37 14; v.4:206) and assorted flakes of grey, black and brown CCS, with grey colors predominating. A large, utilized, unifacially retouched, grey flake of CCS (UA77-224-9; Pl. 19 16; v.4:109), and a bifacially-worked, snapped fragment, possibly a tool or projectile point base (UA77-224-10; Pl. 3 19), were found approximately 125 m east of the main scatter. The core tablets were removed by a blow directed at the faceted end of their cores. Specimen UA77-224-5 is a core tablet evidencing the removal of a platform preparation flake from the left side. The flake hinged traumatically. The tablet exhibits extensive step flaking and crushing along the left proximal margin, presumably to prepare the platform for microblade removal. The platform has apparently been truncated on the right side. Specimen UA77-224-7 is a core tablet showing evidence on its top surface for the removal of another platform rejuvenation flake or tablet. The earlier tablet had been removed in the same manner as specimen 224-7, that is, by a blow struck from the faceted end of the core, transverse to the chord. The tablet shows that microblades had been removed from the end and both faces of the original core. The tablet exhibits intentional retouch of the platform along the upper right lateral edge. Microcore UA77-224-1 has suffered two breaks along natural fracture planes, one of which has resulted in the truncation of the top of the piece. The base shows numerous microblade scars, resulting in blades of fine quality. Specimen UA77-224-4 is a complete microcore, though the rear keel has been removed. The platform of the core had been prepared by the removal of a flake struck from the faceted end which removed the entire top of the piece. Specimen UA77-224-6 is an end-faceted core, the platform of which has been destroyed by a lateral blow struck from the left proximal margin, removing approximately one-third of the faceted face. The flake apparently was removed in an attempt to rejuvenate the platform. The core is interesting in that it has been produced on a tablet prepared by the removal of several large flakes which had been struck almost parallel to the platform, along both lateral faces from the rear of the core. The keel exhibits continuous nibbling suggesting transverse utilization. Specimens UA77-224-1 and UA77-224-4 also evidence some step flaking and rounding of the keel.

The obsidian flake is translucent black in color and exhibits microscopic retouch along its left side. There are two flake scars on the dorsal surface, and the right side has some cortex evident. The piece appears to be the distal end of a relatively thick microblade, or a "burin" struck in

the preparation of an obsidian microcore. The piece has been snapped 0.8 cm from the distal end, perhaps to obtain a medial section from the original flake.

#### Discussion

IKR-011 represents a game lookout of the American Paleo-Arctic tradition, as evidenced by the "campus type" wedge-shaped cores and core tablets (Anderson 1970a:31-32, Pl. 3-4, 1970b). It appears to be a short-term activity area with exceptional integrity. The area commands an excellent view to the west and east, allowing for the direct observation of the north side of Angoyakvik Pass. Game moving north and south can be easily monitored. The lay of the land presents many opportunities for their interception. It is not known exactly what critters were being hunted or what strategies might have been used, but the low-lying land between the ridges may have been important foraging or bedding locales for some species. It is hypothesized that this site was used by a hunter or hunters awaiting game and planning hunting strategy, probably while preparing microblade insets for weapons, and/or engaging in tool and weapon manufacture.

<u>Catalog #</u>	<u>Description</u>
UA77-224-1	Microcore
UA77-224-2	Nonutilized Cortical Flake
UA77-224-3	Microblade
UA77-224-4	Microcore
UA77-224-5	Microblade Core Tablet
UA77-224-6	Microblade Core
UA77-224-7	Microblade Core Tablet
UA77-224-8	Blade-like Flake
UA77-224-9	Side Scraper
UA77-224-10	Projectile Point Base

IKR-012

Location: Sec. 3, T.3S., R.11W., Umiat Meridian  
UTM 5/440200/7677600

Class: I

#### Location and Setting

IKR-012 is a small flake scatter on a large area of exposed sand and gravel approximately 2 km east of September Creek. The gravel area is bordered to the south by a sandstone bluff approximately 3 m to 4 m high. This bluff gives way to a talus slope and then to a slight terrace covered with tussock meadow. Intermittent stands of alder occur along the down-slope further southeast. The graveled area is roughly 150 m by 50 m with the longitudinal axis oriented to the northwest. The gravels are broken by a swath of alpine tundra vegetation approximately 30 m from the bluff face and extends about 40 m northwest. The sandstone bluff affords an

excellent view of the unnamed drainage system to the southeast and east, and Angoyakvik Pass to the south. September Creek is not visible.

#### Site Information

Cultural material consists of two flakes and a large biface of a very dark grey CCS. The items were located on the graveled surface. The two flakes and the biface were found approximately 25 m apart near the south-eastern bluff edge. The biface (UA77-225-2; Pl. 5 1; v.4:45) is made on a large end-struck flake. The platform is still present. The piece has been bifacially retouched along the left edge. The other edge is bifacially flaked although it has not received the same attention as the left edge. Both margins exhibit step flaking, crushing, and rounding of the edge. The biface appears to have been used longitudinally and transversely on hard material. The piece is broken at the distal end on the right side. The break is the result of a burin blow struck from the distal end, with the force of the blow directed toward the right lateral margin. A portion of the negative scar has been retouched, and utilization is evident (i.e., crushing and rounding of the dorsal edge).

#### Discussion

The biface has been classified a knife side blade of a post-Denbigh phase of the Arctic Small Tool tradition. The burination of the bifacial piece is indicative of the Choris phase of this tradition although the general form of the piece is similar to a knife side blade illustrated by Giddings (1964: Pl. 46 24) for the Norton site of Iyatayet (Giddings and Anderson n.d.: 641). The flakes may be related to the biface, and this may indicate that reworking or sharpening took place on the site, and that some processing activity occurred. Because no other materials were observed, it is thought that the site served as a very short-term activity area.

The site is excellently placed for monitoring game, and this portion of the hill is the primary point of access to higher elevations a few kilometers northwest. This would be consistent with the view that the hills and ridges immediately east of September Creek were used as hunting lookouts and avenues for point to point travel between the Colville and Ikpihpuk rivers.

<u>Catalog #</u>	<u>Description</u>
UA77-225-2	Knife Side Blade

IKR-013

Location: Sec. 3, T.3S., R.11W., Umiat Meridian  
UTM 5/440200/7677680

Class: I

#### Location and Setting

IKR-013 consists of an isolated, worked-wood piece that was found on a tussocked hill terrace approximately 153 m northwest of IKR-012. The

piece was roughly 50 m from the talus slope which forms the northwestern boundary of an eroded area of sand and gravels. The southeastern face of this formation is a sandstone bluff approximately 3 m to 4 m high. The slope near IKR-013 is approximately 2 m in height. September Creek lies approximately 2 km to the east, and 5 km to the south.

#### Site Information

The worked-wood fragment (UA77-225-1; Pl. 63 3; v.4:253) is roughly symmetric. The piece is badly weathered and cracked along the longitudinal axis on one side. This crack may actually be an intentional incision, but this is difficult to determine. The one identifiable hole may have been gouged or carved rather than drilled.

#### Discussion

The wood fragment is likely a piece of a dog sled, perhaps a sled stanchion (Nelson 1971:Pl. LXXVI 16). Use of the ridges and hills immediately east of September Creek for winter travel has been hypothesized by Davis (1977). This contention is supported by the presence of the specimen at IKR-013, and other worked-wood pieces, tentatively identified as dog sled parts, located at site IKR-004. Burch (1976) identifies the general area as a major travel route used by Eskimo groups between the Colville and Ikpik-puk Rivers. It is doubtful that this isolate is associated with site IKR-012.

<u>Catalog #</u>	<u>Description</u>
UA77-225-1	Drilled Wood

IKR-014

Location: Sec. 32, T.3S., R.10W., Umiat Meridian  
UTM 5/445900/7671000

Class: II

#### Location and Setting

IKR-014, a lithic scatter and possible cache pit, is located on a small knoll on the east side of Angoyakvik Pass. Angoyakvik Pass is the name given to two breaks in elevation occurring in the east-west trending ridge system several kilometers north of Kakvuiyat Bend on the Colville River. The knoll is on the north side of the ridge and marked by areas of eroding sand and sandstone, although it is primarily covered with alpine tundra vegetation. The knob is only several meters in diameter and about 1 m high. It slopes gently to a terrace measuring roughly 65 m west to east and 57 m north to south. A partial terrace exists 20 m from the first on the knoll's south side. The terraces are covered with tussocks, grasses, and assorted flowers. The headwaters of September Creek are located 3 km to the northwest. Two intermittent or seasonal drainage cuts trend north toward an unnamed easterly flowing drainage basin from points just



east and west of the knoll. The nearest water is found in two depressions approximately 50 m southwest. South of the site the view is blocked by the ridge, but the site commands an extensive view of the upper September Creek area. Knifeblade Ridge can be seen to the west, Howard Hill to the north, and the unnamed drainage to the east. The site areas for IKR-005 through IKR-012 can be seen from this location (IKR-011 is approximately 2.5 km to the north). IKR-015 is located approximately 263 m west.

#### Site Information

The site consists of 15 lithics and a possible cache pit (Fig. 3). The lithics are scattered around the knob, with a flake concentration about 35 m southeast of the point of the knoll. The cultural materials occupy an area measuring roughly 45 m by 10 m oriented from northwest to southeast. The lithics include a microblade of brown CCS, two microblades of grey CCS, a black CCS flake, and assorted flakes of grey CCS, including a utilized flake. A differentially weathered pebble, unusual for the area, was observed and is believed to be a "manuport". Microblade specimen UA77-226-2 (Pl. 33 34; v.4:197) appears to be a proximal section which has been snapped at the distal end. The platform is not well defined. The piece is pockmarked as if it had been heat treated or affected by severe cold. The piece has two arrises and exhibits utilization on the right proximal point. Specimen UA77-226-3 (Pl. 33 35; v.4:197) is the proximal section of an unutilized microblade made of grey CCS. The platform and bulb are clearly evident. The piece is trapezoidal in outline and quite thick. Specimen UA77-226-5 (Pl. 37 13; v.4:206) of grey CCS, is a blade-like flake that is feathered or hinged at its distal end. The proximal end exhibits a traumatic hinge fracture, presumably the result of snapping. The piece is irregular in form, but it does suggest a microblade. It has been burinated at the left proximal corner and evidences slight damage on the distal end, although it is questionable whether any utilization is indicated. Specimen UA77-226-8 (Pl. 37 15; v.4:206) is a blade-like flake of dark grey brown CCS hinged at its distal end. The bulb and platform are clearly visible at the proximal end. Cortex occurs at the right proximal corner. The piece has not been utilized. The possible cache pit measures approximately 2 m in diameter and is on the west end of the knob. The pit depression is surrounded by large sandstone slabs and boulders. A test in the center of the depression yielded no evidence of cultural material.

#### Discussion

IKR-014 is advantageously placed for observation and pursuit of game, and is therefore classified as a hunting station. It was probably used for game storage as evidenced by the depression and sandstone slabs. The depression, drawing from ethnographic analogy, would have been filled with portions of game, covered with the sandstone blocks to keep animals from the cache, and then the game would be picked up at a later time. An important consideration in caching food was the refrigerative qualities of such a structure, as ground frost lies so near the surface. The presence of microblades suggests the use of the site by people of either the American Paleo-Arctic tradition or the Denbigh phase of the Arctic Small

# IKR 014

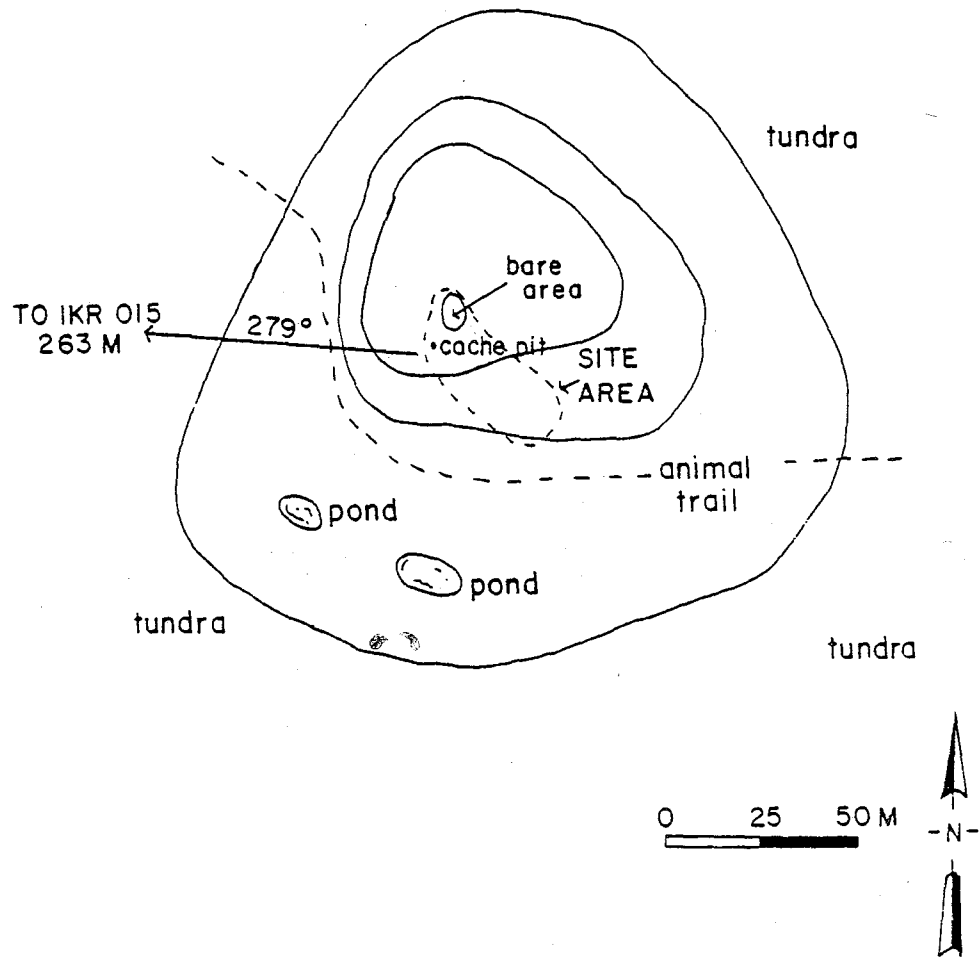


Figure 3

Tool tradition. The burination of the blade-like flake suggests a Denbigh phase element (Giddings 1964:209; Irving 1953:62). The proximal microblade section is similar in material and form to specimens from IKR-011, 2 km north, a Paleo-Arctic site. The site is therefore tentatively classified as a multicomponent hunting lookout used by members of the American Paleo-Arctic tradition and/or Denbigh phase of the Arctic Small Tool tradition. No identifiable elements were noted for the Northern Archaic tradition. It is quite possible that some material reduction and tool production took place while hunters awaited the arrival of game.

<u>Catalog #</u>	<u>Description</u>
UA77-226-1	Utilized Flake
UA77-226-2	Microblade
UA77-226-3	Microblade
UA77-226-4	Manuport
UA77-226-5	Blade-like Flake
UA77-226-6	Two Rocks
UA77-226-7	Nonutilized Cortical Flakes
UA77-226-8	Blade-like Flake

IKR-015

Location: Sec. 32, T.3S., R.10W., Umiat Meridian  
UTM 5/445650/7671100

Class: I

#### Location and Setting

IKR-015 is a small lithic scatter approximately 263 m west of IKR-014 along a small terrace or bench characterized by tussock vegetation and grasses. There are a number of small exposed areas of sand at the site locale. The lithics were found in these bare areas. The terrace forms the eastern boundary of an intermittent drainage slough or swale channeling excess water in a northerly direction from the ridge toward an unnamed easterly flowing drainage. September Creek is located approximately 3 km northwest. The vegetation is predominately moist tundra, including tussocks. The view is limited to the high ground bordering the upper September Creek area. The creek bottomland cannot be seen from this location. The locations of sites IKR-005 through IKR-012 can be seen to the north. The southeast view includes the east side of Angoyakvik Pass and the knoll where IKR-014 is located. Views east and west are effectively blocked by the slopes of the ridge. An animal trail runs along the top and bottom of the terrace slope. The distance between top and bottom of the slope is approximately 30 m.

#### Site Information

The site consists of two flakes of black CCS and one flake of dark grey CCS. The material was distributed over an area measuring roughly 6 m by 2 m. The test pit produced a small, questionable flake of brownish red

material in the 0 cm to 5 cm level. It is possible that other material exists under the vegetative mat.

#### Discussion

Nothing can be said concerning the cultural affiliation and age of the material at this site, nor can anything be mentioned about activities that took place. It is possible that site IKR-015 is related in some way to site IKR-014, although this remains to be demonstrated. The paucity of remains indicates a short term activity area.

<u>Catalog #</u>	<u>Description</u>
UA77-227-1	Utilized Cortical Flake

#### IKR-016

Location: Sec. 35, T.3S., R.11W., Umat Meridian  
UTM 5/441300/7670000

Class: I

#### Location and Setting

IKR-016 is a small flake scatter and possible cache pit found on a prominent knoll on the west side of Angoyakvik Pass. The knoll, consisting of a large, partially vegetated sandstone outcrop, is located on the north side of the ridge. It is covered with willows, mosses, lichens, and other assorted plants. The southwest side of the outcrop presents a rock face about 4 m high. The main part of the knoll slopes gently toward the north. A seasonal drainage channel is approximately .25 km west. The drainage runs north from the ridge toward September Creek, which is about 3 km from the site. The seasonal drainage was rock filled and no water was flowing. Chunks of shale, coal and petrified wood were observed near the drainage. Travel was quite easy along the drainage bed as compared with walking over the dense tussock meadows to the east and west. A heavily used animal trail runs from south to north through the site. The scat of Caribou, bear and fox was noted along this trail. The view from the site is limited to the hills and ridges north of September Creek, the hills at the east end of Knifeblade Ridge, and the north slope of Angoyakvik Pass. The top of the pass is only 2 km south of the site.

#### Site Information

The site consists of three small flakes and a wedge-shaped piece of black CCS. A possible cache pit was located nearby. The feature and lithics were found on top of the knoll in an area measuring approximately 45 m north-south by 30 m east-west. The smaller flakes appear to be thinning flakes. Specimen UA77-228-1 (Pl. 20 10; v.4:112) is trapezoidal in outline with a triangular cross section. The distal end is characterized by a small concavity that exhibits some use-retouch. The left lateral margin had been broken and flakes removed from the surface. The proximal end

shows evidence that the top of the piece had been removed by a sharp blow, and that the piece was much larger at one time. The dorsal surface had been flaked primarily from the right lateral margin, and the edge exhibits continuous unifacial use-retouch and medium step flaking. The piece has apparently been utilized as a scraper on relatively hard material. The possible cache pit measures approximately 1 m in diameter, and has a number of large rock slabs and boulders around its perimeter and in the depression. The large rock slabs and boulders seem to be concentrated in this area. The cache pit was not tested for cultural materials. The feature could also represent a caved-in ground squirrel burrow, or an area where a predator was trying to dig out rodents, although this is not thought to be likely in this case. A test on the knoll top and at the bottom of the sandstone ledge did not reveal any cultural materials. The ledge does afford considerable shelter from the prevailing northeasterly winds.

### Discussion

The site has been classified as a hunting lookout and a place to cache game taken in the hunt. The sandstone bluff provides considerable shelter and the sandstone is a valuable resource in its own right for covering game in a cache pit. It should be mentioned that only a few sites north of Angoyakvik Pass have sandstone outcrops available, and most of these have possible depressions for cache pits nearby.

The thinning flakes suggest that tool preparation or sharpening took place, and it is conjectured that some game processing for storage was also an important activity. The working of bone or antler can also be hypothesized. The probable cache pit could be related to recent use of the area.

<u>Catalog #</u>	<u>Description</u>
UA77-228-1	Scraper Fragment
UA77-228-2	Nonutilized Flake

IKR-017

Location: Sec. 34, T.3S., R.11W., Umiat Meridian  
UTM 5/438900/7670200

Class: I

### Location and Setting

IKR-017 consists of a cairn on the northern edge of the eastern end of Knifeblade Ridge. The feature is at the southwestern end of a long outcrop of mudstone or sandstone that trends northeasterly along the side of the ridge. The vegetation surrounding the site is primarily tussock meadow. One can get a view to the east and the west of the upper September Creek area, but views to the south are blocked by the ridge. September Creek is approximately 3.5 km north.

### Site Information

The site consists of a pile of approximately 53 stone boulders and slabs measuring 1.70 m by 1.10 m by 0.55 m. A number of the rocks are lichen covered. The cairn was approximately 50 m downhill from the upper surface of the ridge. A U.S. Navy amphibious vehicle ("weasel") was found approximately 900 m west of the cairn. Material located near the vehicle includes canvas and cordage (presumably from a parachute), rusted cans, old boot polish bottles and mess kits.

### Discussion

The age and affiliation of the feature cannot be ascertained at this time. However, the cairn is believed to represent a cache or marker of some kind. It was not tested. The lichens covering the stones could be a significant indication of the feature's age. The feature could be related to seismic train activities on the North Slope, although no tractor trail was noted in the immediate area. It is thought that the cairn is unrelated to U.S. Navy activities in the mid-1900's. The Navy vehicle may have crash landed by parachute and subsequently abandoned by Navy personnel upon examination of damage. This scenario assumes that parachutes for large pieces of equipment would be made of canvas and not silk. This could be investigated further by historians interested in the exploration and development of the North Slope during the 1940's and 1950's.

IKR-018

Location: Sec. 26, T.3S., R.12W., Umiat Meridian  
UTM 5/431400/7671900

Class: I

### Location and Setting

IKR-018 is a cairn or rock pile located at the eastern end of Knifeblade Ridge. It is situated on the upper surface of the ridge in an area primarily composed of eroding sandstone slabs interspersed with alpine tundra vegetation. The site commands an exceptional view to the north, east and south, offering observation of the Colville River, Howard Hill, and the upper September Creek area. The site is approximately 6 km east of the highest ridge point.

### Site Information

The cairn consists of sandstone slabs piled flat, one on top of another. Thirty stones were noted. The pile measured approximately 1 m east-west by 90 cm north-south and stands 43 cm high.

### Discussion

This feature could be a travel marker or perhaps a cache. Cantwell (1899:85) discusses monuments of stones constructed on hilltops to serve

as beacons during periods when snow cover obliterated familiar landmarks. It is difficult to place the cairn temporally. A tractor trail for seismic activities is located nearby, and the cairn could be a guide for such travel, particularly if the rock pile stands out on the windblown ridge surface during winter months. The cairn, however, may not be related to recent survey or exploration.

IKR-019

Location: Sec. 31, T.3S., R.11W., Umat Meridian  
UTM 5/434600/7671200

Class: I

#### Location and Setting

This site consists of an isolated CCS flake discovered on a prominent knoll approximately 2 km east of the Knifeblade test wells. The knoll is on the ridge's north side, and is near the upper reaches of an intermittent drainage flowing northeasterly into September Creek. September Creek, in turn, lies 5 km to 6 km distant. The flat top of the knoll is characterized by bare areas of eroding sandstone with small patches of alpine tundra. The knoll is surrounded by dense tussock meadow. The site commands an excellent view of the hills and ridge spurs north of Knifeblade Ridge, including the upper September Creek area. The hills east of September Creek are plainly visible as is Howard Hill and the Ikpihpuk River basin. Howard Hill and the Ikpihpuk River are located approximately 20 km north.

#### Site Information

Site IKR-019 consists of an isolated blade-like flake (UA77-229-1:Pl. 37 16; v.4:206) of light grey CCS found on the eroded top of the knoll, a few meters east of its highest point. The piece was discovered when setting a tent peg. A more intensive surface survey and a test pit in the area of the find did not bring to light other cultural materials. The flake had been snapped at both ends and has one arris. It does not appear to have been utilized. It could be the medial section of a blade.

#### Discussion

It is very possible that other material exists at this locale. The blade-like fragment suggests that material reduction of some nature may have taken place here, for example the production of blades or blade-like flakes. The cultural affiliation of the specimen is difficult if not impossible to ascertain.

<u>Catalog #</u>	<u>Description</u>
UA77-229-1	Blade-like Flake

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IKR-020

Location: Sec. 30, T.3S., R.11W., Umat Meridian  
UTM 5/434200/7671400

Class: I

#### Location and Setting

IKR-020 is a possible cairn or cache pit located on the north slope of Knifeblade Ridge in an area of localized eroding sandstone and frost boil activity. The area is ringed by small stands of alder. Dwarf willows, glacial avens and fireweed, along with other small plants, fill the interstices between the frost boils. The site, .5 km west of IKR-019, is near the head of an intermittent drainage feeding into September Creek, approximately 20 km northeast. The site commands a view of this intermittent drainage and also of the hills just east of September Creek. Howard Hill is visible to the north. The north trending spurs of Knifeblade Ridge block any extensive views to the east, west and south.

#### Site Information

The site consists of a rock anomaly that may mark a cairn or cache pit. The feature is characterized by a small sandstone slab on top of one or two slabs buried vertically in the ground. Approximately 20 small sandstone pieces sit on top of the horizontal slab. A hole allowing access to the area under the slab exists on the east side of the formation. This hole was straight sided and nearly vertical. It was difficult to discern if the hole was formed by rodent activity.

#### Discussion

This site needs further investigation before anything positive can be said. It is indeed an unusual feature in the survey area, and for this reason it deserves attention. However, it is possible that the rock formation is the result of some of the soil mechanics well known in the arctic, and that its assigned cultural value is spurious. It is also possible that the stones on top of the horizontal slab were ice rafted from the slight slope west of the feature.

IKR-021

Location: Sec. 30, T.3S., R.11W., Umat Meridian  
UTM 5/434100/7672500

Class: II

#### Location and Setting

Site IKR-021 is a cache pit located in an area of eroding sandstone on the north side of Knifeblade Ridge. The sandstone outcrop forms two distinct, small knolls approximately 50 m apart. The cache pit is associated with

the easternmost knoll. The area is located approximately 1 km north of IKR-020, and 1 km west of an intermittent drainage flowing northeasterly into September Creek. The site commands a view of the intermittent drainage, Howard Hill, and the hills immediately east of September Creek. The spur ridges of Knifeblade Ridge restrict views to the east and west. Low-bush cranberry, birch, skeleton leaf willow, bearberry, sedge, avens, and other small plants were observed on the knolls, and small patches of tussocks occur in the low-lying areas. The outcrop is surrounded by dense tussock meadows. Shrub birch was standing in the cache pit depression.

#### Site Information

The cache pit measures 2.20 m east-west by 1.50 m north-south and approximately .50 m in depth. The feature is marked by large sandstone slabs in and around the depression. A small test pit in the center of the depression revealed two pieces of caribou antler lying across one another. The antler was lying under 2 cm to 3 cm of moss and sedge, which lined the bottom of the depression. The pit was not excavated further. No lithics were located in the depression or surrounding area. Other cultural materials are suspected to exist at this location.

#### Discussion

This feature is unquestionably a cache pit. The presence of antler in the bottom of a marked depression surrounded by large sandstone slabs, some of which have slumped into the hole, is very convincing. The cultural affiliation of the feature is tentatively assigned to proto-historic or historic inland Eskimo on the basis of the antler condition. The site will have to be investigated further before anything definitive can be said.

IKR-022

Location: Sec. 24, T.3S., R.12W., Umat Meridian  
UTM 5/433600/7673400

Class: I

#### Location and Setting

IKR-022 is a small lithic scatter found near a group of large sandstone outcrops marking the highest point of a northeast trending spur of Knifeblade Ridge. The ridge spur originates at the east end of Knifeblade Ridge just north of the Knifeblade test wells. Tussock vegetation predominates in the area and frost boil activity is extensive. The view to the south, east and west is blocked by the slope and spurs of Knifeblade Ridge. The view to the north covers the gently rolling hills and tussock meadows west of September Creek. Howard Hill can also be seen to the north.

#### Site Information

The site consists of three flakes of black CCS. One flake was located on the surface in an area of frost boil activity, and the other two were found

at depths of 1 cm and 4 cm in the southwest corner of a test pit dug near the surface find. No other materials were noted. The pieces are small, thinning flakes, no more than 1 cm in length. Two of the pieces (the one near the surface and the flake at 1 cm below surface) have slight hinge fractures at their distal ends. The remaining flake is a distal end fragment that has been snapped from a larger piece.

#### Discussion

Nothing significant about this site can be said concerning its cultural affiliation or period of use. It is well situated for use as a hunting lookout for game approaching Knifeblade Ridge along the drainage basins and northern hills. The relatively large sandstone outcrops could provide some limited shelter from the elements. Someone, at some time, used this location to at least modify lithic material. It is felt that the vegetative cover masks other lithic materials. The material recovered below surface could indicate that soil mechanics in the site area have caused some movement and redeposition of cultural materials. Further work is needed to clarify the situation.

<u>Catalog #</u>	<u>Description</u>
UA77-230-1	Nonutilized Flake
UA77-230-2	Nonutilized Flake
UA77-230-3	Retouched Flake

IKR-023

Location: Sec. 28, T.3S., R.12W., Umat Meridian  
UTM 5/428300/7672400

Class: II

#### Location and Setting

IKR-023 is a lithic scatter located on a large knoll just south of Knifeblade Ridge and 3 km east of VABM "Knife". The knoll is topped by an eroding sandstone formation and a large area of exposed ground, with intermittent patches of alpine tundra vegetation including lupines, glacial and white mountain avens, four-angled cassiope, kinnikinnik, and net-veined willow. The rest of the knoll and the surrounding area is covered with dense tussock meadow. Another knoll with a bare sandstone top is located several hundred meters east. These knolls have been formed by erosion of the south slope of Knifeblade Ridge. A pronounced cut or ravine of an intermittent drainage, which flowing southeast toward the Colville River, lies just west of the knoll at the bottom of the slope. The western knoll slope is quite steep (approximately 40°). The knoll is terraced to the south and the slope is less severe. The site commands a view of the drainage and the southeast trending spurs of Knifeblade Ridge to either side of this drainage. The hills to the south of the Colville River, including the Brooks Range and Smith Mountain, can also be seen from the site.

### Site Information

The site consists of 26 lithics distributed over an area measuring approximately 3.10 m east-west by 2.70 m north-south. The material consists primarily of grey and black CCS, with black predominating. None of the flakes are very large, all being under 3 cm in their longest dimension. Three microblade fragments and several utilized flakes were noted. One microblade fragment (UA77-231-1:Pl. 33 36; v.4:197) is an unutilized proximal section. The piece has been snapped, presumably to remove the medial portion of the blade. The fragment has a trapezoidal transverse outline. A small thinning flake evidences intentional retouch along the proximal dorsal margin. Use-retouch along the same edge consists of step flaking and crushing, resulting in edge rounding. The wear is unifacial and continuous. Some unifacial nibbling is present along the right lateral margin. Specimen UA77-231-2 exhibits unifacial use-retouch along its left lateral margin. The piece evidences an oblique snap at its distal end resulting in a point. The point has not been utilized. One cortical flake was observed.

### Discussion

The site is classified as a hunting lookout at which weapon or tool manufacture or repair was an important activity. There are enough waste flakes to indicate some material reduction or tool manufacture. The small utilized flakes evidence wear, suggesting their use on bone or antler and perhaps wood. The microblades were apparently snapped to remove sections for use as weapon insets, although they could also have been used for other purposes. The size and treatment of the microblades are the basis for placing the site in the American Paleo-Arctic tradition (Anderson 1970b). Granted, this classification is very tenuous, but they are very similar to materials found at other Paleo-Arctic sites in the immediate area. The site is well placed for observing the movement of game between Knifeblade Ridge and the Colville River. Knifeblade Ridge provides an excellent route of travel by which to intercept game skirting the ridge to the east and west. The drainage cut west of IKR-023 would be an excellent place to ambush game moving north or south over the ridge. It would appear to be quite easy to channel or drive game into this slight ravine.

<u>Catalog #</u>	<u>Description</u>
UA77-231-1	Microblade
UA77-231-2	Retouched Flake
UA77-231-3	Thinning Flake

IKR-024

Location: Sec. 26, T.3S., R.12W., Umat Meridian  
UTM 5/430800/7672100

Class: I

## Location and Setting

IKR-024 consists of two rock cairns and the azimuth mark "Knife". These features are located just downslope, south of the west end of the Knifeblade Ridge landing area, in an area of eroding sandstone and alpine tundra vegetation. Tussock meadow predominates further downslope. The landing area is a graded sandstone surface with a line of 55-gallon oil drums marking the west end. The site is approximately 1 km northeast of IKR-023 and commands an extensive view of terrain south of Knifeblade Ridge. The Colville River, Brooks Range, and Pingaluligit Mountain can also be seen. The view to the north is blocked by the ridge, but sections of the Knifeblade Ridge are visible to the east and west. The hills east of September Creek, where sites IKR-005 through IKR-011 are located, can also be seen.

## Site Information

The site consists of two rock cairns approximately 12 m apart. The cairns are constructed of sandstone rocks and slabs set somewhat arbitrarily to form a pile. The cairns appear to have been higher at one time. Azimuth marker "Knife" is located approximately 4 m northwest of the easternmost cairn and almost on line between the two cairns. The marker is a circular bronze plate attached to a pipe set vertically in the ground. The marker reads: "Azimuth Mark U.S. Coast And Geodetic Survey; For Information Write To The Director, Washington, D.C.; \$250 Fine Or Imprisonment For Disturbing This Marker; Knife (arrow pointing toward the west), 1955."

## Discussion

The cairns may be markers to protect the azimuth mark from damage by vehicles operating on the ridge, or to aid in identifying the marker's location. This contention is supported by the marker's position between the two cairns. However, the cairns may also mark graves or a cache of some kind, perhaps of the late prehistoric or early historic period. It is not known which feature(s) preceded the others or whether they were constructed at the same time. Caution should be exercised in dealing with any stone formations, particularly if burial locales are involved. U.S. Department of Commerce, Coast and Geodetic Survey records (1970, Alaska: 69154, page 4) state that the azimuth mark is about 41 feet (12.4 m) south of the landing strip and 8 feet (2.4 m) west of a rock cairn which projects 3 feet (.9 m). It was also noted that the mark is 6 inches (15.2 cm) west of 2" by 4" board which has a small cloth target on top of it. The 2" by 4" projects 6 feet (1.8 m) above the surface. However, no wooden remains were noted by the archeological survey team. Since only one cairn was noted by the Coast and Geodetic party survey team, it is suspected that the other cairn was built after their work in the area, perhaps to more fully protect the azimuth mark; or, the survey team did not recognize the other rocks as the remains of a man-made structure. The latter alternative supports the contention that the feature furthest from the azimuth mark was made by the inland Eskimo. Caution should also be exercised in relation to the other cairn. It is conceivable that the Coast and Geodetic team utilized stones from a pre-existing feature to construct their cairn or the cairn noted in the report.

IKR-025

Location: Sec. 26, T.3S., R.12W., Umat Meridian  
UTM 5/430900/7672100

Class: I

### Location and Setting

IKR-025 consists of a small lithic scatter located on the upper surface of Knifeblade Ridge approximately .5 km east of the landing strip. An old vehicle trail runs down the middle of the ridge top. This trail was once graded, leaving a path approximately 6 m wide with pronounced shoulders on either side measuring 0.25 m in height. The path of sandstone cobbles is largely devoid of vegetation except for a few grasses. Alpine tundra vegetation borders the path, giving way further downslope to tussocks on either side. The site affords an extensive view of the terrain north and south of Knifeblade Ridge. IKR-026 is approximately 88 m east of IKR-025.

### Site Information

The site is composed of a flake and biface fragment approximately 17 m apart. The flake is of black CCS with cortex present. The biface fragment (UA77-232-1; Pl. 9 2; v.4:63) is crudely flaked and has a snap or hinge fracture on its proximal end. The distal end forms a distinct point. The piece is a dark grey CCS and patinated on one side. The margins exhibit crushing and step flaking differentially distributed along both edges. Wear appears to result more from the bifacial retouch of the specimen than from use. The complete piece could have functioned briefly as a knife before breaking, but it is more probable that it represents a preform that broke during flaking.

### Discussion

This site may be related to IKR-026 approximately 88 m east. Little can be said about the site at this time, except that material reduction and tool manufacturing operations seem to have taken place on this part of the ridge. There is no concrete evidence of tool use. The site can be classified as a hunting lookout because of the view commanded from the ridge top. It is doubtful that game was taken at this location. But at this point, no alternative can be ruled out. The material may be redeposited, since the pieces are lying in an area that has been machine graded. The patinated side of the biface was found lying faceup, indicating it may have survived any disturbance. This is entirely possible if a plow had been pushing only snow. The debris forming the banks on either side of the path would represent material intermittently collected and pushed during the plowing process. Thus, specimens lying in the center of the path may not have been relocated. The cultural affiliation of the site is unknown.

Catalog #Description

UA77-232-1

Miscellaneous Knife

IKR-026

Location: Sec. 26, T.3S., R.12W., Umat Meridian  
UTM 5/431000/7672100

Class: II

Location and Setting

Site IKR-026 is a small flake scatter on the upper surface of Knifeblade Ridge, approximately .5 km east of the landing strip. An old graded trail runs down the center of the ridge top. The trail or path consists of exposed sandstone with assorted grasses comprising the only vegetation. Alpine tundra vegetation borders the path on either side, giving way to tussocks farther downslope. The site is approximately 88 m east of site IKR-025 and 55 m west of IKR-027. The site commands an excellent view of the terrain north and south of Knifeblade Ridge.

Site Information

The site consists of 12 flakes of grey and black CCS, and three possible flakes of basalt (?), distributed over an area measuring approximately 33 m north-south by 16 m east-west. The pieces range in size from small pressure and thinning flakes to larger flakes struck from flake cores. One cortical flake was noted. The left lateral margin of flake UA77-233-1 (Pl. 32 6; v.4:193) shows some use-retouch. It also has a concavity on its right lateral margin, formed by the transverse removal of a flake. The concavity shows heavy step flaking and rounding such as might occur if used as a "spokeshave" on bone or antler. The piece is also interesting as it exhibits the sequence of prior flake removal when this specimen was part of a larger core. Another specimen (UA77-233-2; Pl. 20 15; v.4:114) was found 2 cm below the surface in a test pit. This piece is triangular in cross section and quadrilateral in outline, and had been snapped at its proximal end. It evidences occasional multifacial retouch with continuous use-retouch along its three lateral margins. The dorsal surface of the distal end had been intentionally retouched, and the distal end and left distal point exhibit medium step flaking and crushing. The piece appears to have been utilized as a graver.

Discussion

IKR-026, due to its location on Knifeblade Ridge, is likely a hunting lookout station although it is quite apparent though that material reduction and tool manufacture took place here at some time. The wear evident on specimens UA77-233-1 and 2 suggests their use on relatively hard materials such as bone, antler or ivory. Piece UA77-233-2 appears to be a graver/scrapper. A speculation that weapon tips or shafts were being manufactured seems reasonable. The cultural affiliation of the site is unknown.

<u>Catalog #</u>	<u>Description</u>
UA77-233-1	Flake Core Fragment
UA77-233-2	Graver

IKR-027

Location: Sec. 26, T.3S., R.12W., Umat Meridian  
UTM 5/430950/7672100

Class: I

#### Location and Setting

IKR-027 is a cairn on top of Knifeblade Ridge in much the same situation as IKR-025 and IKR-026. The area is heavily vegetated with alpine tundra, and there are quite a few rocks and slabs of sandstone in the vicinity. IKR-026 is approximately 55 m west.

#### Site Information

The cairn consists of a pile of 20 or more large sandstone boulders occupying an area measuring roughly 2 m by 1 m and oriented east to west. The stones are not piled over two high.

#### Discussion

This feature is of questionable origin, but the concentration of rocks at this location suggests a man-made feature, perhaps a marker, cache, or burial. The rock pile is close to a tractor trail and the possibility exists that the two are related. An argument could also be made that the cairn is the result of frost activities and ground heaving. Further testing is needed.

IKR-028

Location: Sec. 29, T.3S., R.12W., Umat Meridian  
UTM 5/425400/7673100

Class: IV

#### Location and Setting

IKR-028 consists of two lithic scatters and several cairns located just east of the Husky Oil Company radio relay station building and west of VABM "Knife", at the 1557-foot (474 m) elevation on Knifeblade Ridge. This part of the ridge is largely devoid of vegetation, being characterized by sandstone slabs and fragments. Exceptionally large boulders of sandstone exist on the southern and northern slopes and to the west of the Husky Oil radio building. The area consists of assorted gravels and small sand-



stone slabs. Vegetation, when it occurs, consists of small patches of alpine tundra. The site is located on the highest ridge point and is the highest point north of the Colville River for hundreds of square km. The site commands an excellent view to the north, south, and east. The view to the west is blocked by the ridge as it trends in that direction. All significant landforms in the area can be seen on a clear day including the Kakvuiyat Bend on the Colville River, Smith Mountain, Howard Hill, the Kigalik River, Maybe Creek, the Ikpikpuk River, September Creek, and the Brooks Range. Cloud banks, when present along the Arctic ocean, can also be seen. Water is not present in the immediate site area, the nearest water existing in pools along intermittent seasonal drainages north and south of the ridge. At times the top of the ridge is subjected to strong winds. Cover is available to the lee of the ridge, particularly when winds are out of the north and northeast.

#### Site Information

IKR-028 consists of two lithic concentrations and five cairns, three of which are associated with United States Coast and Geodetic Survey marker (Fig. 4). To the west is a radio relay station for the Husky Oil Company (Husky Oil, TRN2). All features occur in an area measuring roughly 100 m east-west by 25 m north-south. The cairns are in a cluster approximately 60 m east of the lithic scatters. Three cairns have USCGS brass markers welded on top of iron pipes set vertically in the ground beside them. One is VABM "Knife", marking the 1557-foot (474 m) elevation on Knifeblade Ridge, and the other two are azimuth markers for the VABM. The cairn built near VABM "Knife" (Feature 5) consists of five sandstone slabs piled one on top of another. The cairn, 11 m southeast of the VABM (Feature 7), consists of approximately 30 small sandstone slabs, while the cairn near the azimuth mark, 15 m west of the VABM, (Feature 3), consists of 27 sandstone slabs. Eight meters south of the latter cairn is a stone pile of four sandstone slabs (Feature 4). A large cairn, consisting of approximately 50 large sandstone slabs and boulders, lies 5 m east of VABM "Knife" (Feature 6). The rocks form a disjointed pile and are not piled on top of one another in a column as are the stones for the other cairns. The cairn measures about 1.5 m in diameter. Three pieces of rebar are driven into the ground in a triangular pattern west of the cairns. They were perhaps used to anchor a tent, guy wires, or a survey marker to the ridge top. A large wooden tripod is just north of the large cairn.

The flake scatter, approximately 15 m east of the Husky Oil radio station (Feature 1), consists of 66 observable pieces of lithic material in a tight cluster measuring about 6 m in diameter. These lithics are of grey, black, and brown CCS, with grey predominating. The majority of flakes were smaller than 3 cm in their longest dimension, with only six pieces exceeding this size. Material includes a utilized thinning flake, utilized microblade fragment, burinated microblade fragment, two wedge-shaped microblade cores and one core fragment, core tablets, approximately 25 microblades and microblade fragments, and miscellaneous debitage. The burinated microblade fragment (UA77-234-1; Pl. 33 37; v.4:197) is a proximal fragment with two arrises. A burin spall had been detached from the right proximal point. No utilization is evident. The blow did not result

# IKR 028, 030, 031

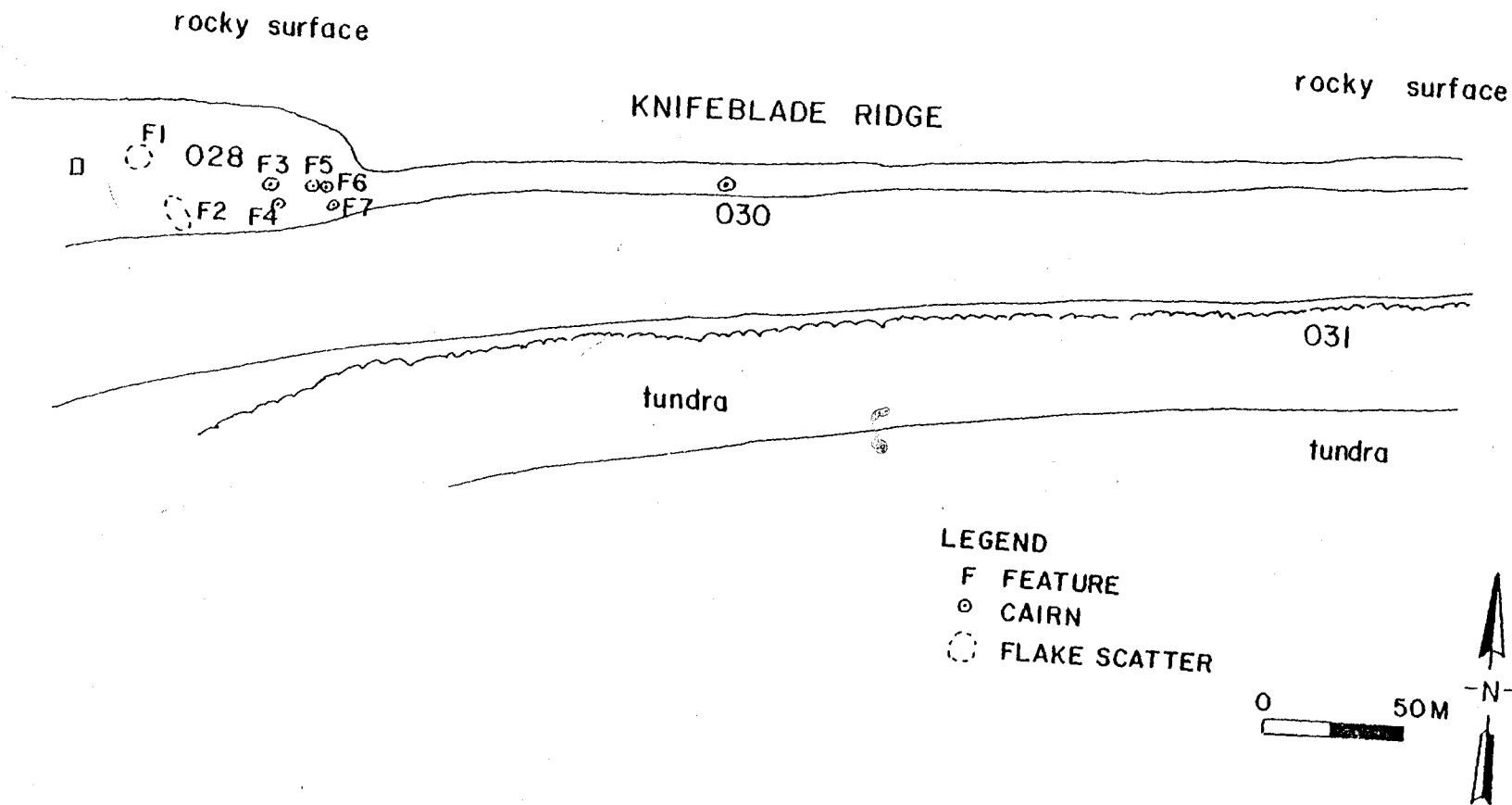


Figure 4

in an edge being produced along the proximal margin in the platform area. The utilized microblade fragment is a proximal segment. It exhibits nibbling along the right dorsal edge and along the left distal point (UA77-234-4; Pl. 33 38; v.4:197). The wedge-shaped microcore (UA77-234-2; Pl. 25 6; v.4:151) is of the "campus" type with a distinct keel, end faceting, and a platform rejuvenation flake removed transverse to the chord of the core. The core is of grey CCS. The keel shows heavy step flaking and rounding. The platform is subparallel ovate in shape.

Another lithic scatter lies approximately 20 m southeast of the materials noted above. This lithic material occupies an area measuring roughly 10 m in diameter and consists of grey and black CCS. It included cortical flakes, a sidescraper (not collected), a fragment of a wedge-shaped (?) microcore, and a bevelled flake (UA77-234-6; Pl. 18 11; v.4:103) looking suspiciously like a core tablet, but in actuality is a scraper. The latter piece was removed from a flake core, with flakes then removed from the thick end of the flake by using the ventral surface as a platform. This margin was then utilized as a scraper as evidenced by slight nibbling, step flaking and rounding of the edge. The piece appears to have been used in a transverse motion on soft material. It could originally have been struck as a platform preparation flake for a core. Specimen UA77-234-5 (Pl. 24 13; v.4:151) is an end-faceted fragment of a microcore. The platform was prepared by a blow transverse to the chord of the core, a technique suggestive of wedge-shaped "campus" core preparation. The piece had broken along a natural fracture plane originating on the platform or proximal surface approximately 1 cm from the face. It intersected the face at the distal end, approximately 2 cm down the proximal margin. The damage may have been produced by flaking trauma or excessive temperature.

### Discussion

The majority of cairns at this location, particularly the columns of stacked sandstone slabs, appear to be constructed to protect VABM Knife and its azimuth indicators. An extensively used tractor trail for seismic activities runs along the ridge very close to the markers, and the cairns were likely built to protect these markers from damage. During the winter the cairns would stand out on the wind-blown ridge top to signal the location of the bench marks. The large cairn is different from the others. It is east of the VABM and consists of approximately 50 stone boulders and slabs which do not appear to have been piled in columns. It may mark a late prehistoric or early historic burial or cache. The practice of covering graves with stones is recorded by Alexander (1969) for historic period burials. He notes that several burials were found inside large piles of boulders. He adds that "boulders small enough to carry yet large enough to be of use are found in the talus slopes of mountains, on lake shores, and along the banks of some streams" (1969:16-17). Murdoch (1892) notes that the convention of covering burials with stones was also practiced in the area east of the Mackenzie River. The question then is whether the practice was more widespread than documented. The time span of the practice is not known, but the ethnographic evidence seems to indicate that it is primarily restricted to the proto-historic or historic periods. No evidence exists, to my knowledge, indicating this burial method was practiced any earlier. A burial is listed on the Traditional Land Use Inventory for

Knifeblade Ridge, which is in the Nuiqsut/Tasikpak land use area (North Slope Borough 1976). The burial is shown to exist in an area encompassing that portion of Knifeblade Ridge in question. A problem exists, however, since the grave is listed as being near September Creek (refer to the report for IKR-005); nevertheless, the cairn may mark a burial at this location. The USCGS survey of the area (U.S. Department of Commerce, 1970) noted a 3-foot (.9 m) high rock cairn 21 feet (5.4 m) west of VABM "Knife". The cairn does not now stand that high. This rock pile appears to be the cairn in question, although there is a slight discrepancy in the distance from the VABM to the cairn, as reported by the USGS team, and that recorded by the NPS archeological team. The two cairns near the reference marks are also mentioned in the description. At one time they also stood over 3 feet (.9 m) in height. They are listed in the report as being only a few feet from the cairns, and this was their position when they were found by the NPS survey party. The interesting point is that the large cairn was 21 ft (6.4 m) away from the VABM, while another cairn was built several meters from it. One gets the impression that the cairn in question was present on the ridge before the VABM was established, particularly since another cairn was specially constructed next to the VABM. This cairn near the VABM is a stone column similar to those near the reference marks, and they are very much unlike the larger cairn in construction. It is recommended, based upon the evidence cited above, that the cairn approximately 6 m east of VABM Knife not be disturbed in any manner. It should be treated as if it were a grave. The danger exists that it will be thought to be no more than one of the cairns protecting the survey markers. Field parties working in the area should be advised to avoid the cairn in question.

The lithic scatter 15 m east of the radio station is classified as a hunting lookout and manufacturing station of the American Paleo-Arctic tradition. The numerous microblades and wedge-shaped cores are cited in support of this contention (Anderson 1970a; 1970b). The site is interesting because of the presence of a burin on a microblade. This suggests that at this site microblades may have been used for other than possible weapon insets. A burin on a microblade may suggest Denbigh affinities, but the nature of the assemblage and the context of the find does not support this speculation. It is also difficult to make generalizations based upon limited collections of materials from a single site. Of course, it could be very tenuously suggested that the site is transitional. The site presents some interesting research possibilities. The limited area in which the scatter is located (6 m diameter) suggests a single activity area. Perhaps a tent was once set up at this locale (the concentration has a roughly circular distribution). A tent would have been useful during a period of cold temperatures and high winds. Game could be watched for outside while weapons and tools were manufactured inside the shelter. The structure is only hypothetical, and it is realized that such a feature is not necessary to explain the density and concentration of the lithics. The scatter could easily have been produced in the open. It should be noted that lithic materials were found to exist in large quantities beneath sandstone slabs in the area of the scatter, suggesting that more materials may exist below the surface. A test pit just outside the perimeter of the scatter produced no cultural material below the surface. The area toward the center of the distribution was not tested.

The second flake scatter, approximately 20 m southeast of the first, contained no observable microblades but did contain a microcore fragment. The debitage consisted of flakes larger than 3 cm in their longest dimension. This activity area is also assigned to the American Paleo-Arctic tradition, although it is not known whether it is associated with the activity area to the northwest. It is conceivable that the locale represents a different activity, such as the production of large flakes from cobbles. There were a number of cortical flakes present. The two locales may just as easily represent two different periods of use.

To summarize, IKR-028 consists of two activity areas related to the American Paleo-Arctic tradition. A cairn, perhaps marking a burial, has tentatively been assigned to the later prehistoric or early historic period. Historic period cairns, markers, and other debris associated with oil exploration, government surveys, or perhaps United States Navy activity are also present.

<u>Catalog #</u>	<u>Description</u>
UA77-234-1	Microblade
UA77-234-2	Microblade Core
UA77-234-3	Thinning Flake
UA77-234-4	Retouched Microblade
UA77-234-5	Microcore
UA77-234-6	End Scraper

IKR-029

Location: Sec. 24, T.3S., R.13W., Umiat Meridian  
UTM 4/424200/7673200

Class: I

#### Location and Setting

The site is composed of an isolated core located on the upper surface of Knifeblade Ridge approximately 1 km west of VABM "Knife". The area consists primarily of eroding sandstone and sparse patches of alpine tundra vegetation. The site is toward the south side of the ridge top and at the bottom of the slope leading up to the Husky Oil radio station and VABM "Knife". VABM "Knife" is approximately 1.5 km east of here. The site commands a view of areas north and south of the ridge. Howard Hill and the Kigalik River basin can be seen to the north but not the closer hills closer in this direction. Smith Mountain, Pingaluligit Mountain, the Brooks Range, and the Colville River can be seen to the south. The site overlooks an intermittent drainage near the ridge flowing south toward the Colville River. The west end of Knifeblade Ridge can be seen. The view to the east is blocked by the point of the ridge.

### Site Information

IKR-029 consists of an isolated wedge-shaped core (UA77-235-1; Pl. 24 12; v.4:150). A test pit near the core and an intensive search of the area did not produce any other cultural material. The core is quite small. Bi-facial flaking is restricted to the keel. The keel exhibits heavy step flaking, crushing and rounding with the right lateral edge showing more wear than the left. Preparation of the core platform consisted of multiple blows directed from the left margin. The striking platform has been prepared by a blow directed at the faceted end.

### Discussion

The core is classified as an element of the American Paleo-Arctic tradition (Anderson 1970a, 1970b). It is possible that the piece was lost by hunters pursuing game from other Paleo-Arctic lookout sites along the ridge; but it is also possible that the locale was used as a hunting lookout and weapon or tool manufacturing station. Only an intensive subsurface examination of the immediate site area can help resolve this issue.

<u>Catalog #</u>	<u>Description</u>
UA77-235-1	Microcore

IKR-030

Location: Sec. 29, T.3S., R.12W., Umiat Meridian  
UTM 5/426400/7673000

Class: I

### Location and Setting

IKR-030, a small flake scatter, is located on the upper slope of Knifeblade Ridge approximately 300 m east of IKR-028 and VABM "Knife". The site is on the southern slope of the ridge, near the ridge margin, in an area of eroding sandstone and alpine tundra vegetation. The slope grades gently south, forming a terrace of the ridge. The site commands an extensive view of terrain to the north, south and east. A tractor trail, presumably the result of seismic exploration, runs within 1 m of the site. The ridge is narrow at this point, making this area the best avenue for tractor trains running along the ridge.

### Site Information

The site consists of two small thinning flakes of black CCS (Fig. 4). They were unutilized. The material was not collected. A pile of rocks (cairn ?) lies 66 m west of the flake scatter, next to the tractor trail.

## Discussion

Nothing substantive can be said about this site. The stone pile is suspect. The stones may have been pushed up by the weight of a vehicle operating on the trail. The flakes suggest that someone was at least working lithic material at this location. The site is a good spot for monitoring game movements. It could also represent a casual stop for an individual or individuals traversing the ridge. It is possible that other cultural material exists in the site area as one flake was discovered in the area of tractor disturbance.

IKR-031

Location: Sec. 29, T.3S., R.12W., Umiat Meridian  
UTM 5/426550/7673000

Class: I

## Location and Setting

IKR-031, an isolate biface, was 163 m east of site IKR-030, on the south slope of Knifeblade Ridge (Fig. 4). The piece was found in an area of exposed sandstone vegetated primarily with lupines, lichens and mosses. The site is about 20 m downslope from the ridge crest. The slope levels off onto a large bench of the ridge characterized by alpine tundra vegetation. The ridge blocks the view to the north, but terrain east and south of the ridge can be seen, including the Colville River, the hills east of September Creek and the Knifeblade Ridge landing area.

## Site Information

An intensive search of the area did not bring to light other cultural material. No test pit was attempted. The isolate biface (UA77-236-1; Pl. 7 4; v.4:54) is slightly plano-convex and lanceolate in shape. The piece has some parallel flaking on one side, although the majority of both faces exhibit random flaking originating along the lateral margins. The biface has been thinned medially on approximately one-third of one face. The piece exhibits some step flaking and rounding of both margins on the thinned end of the piece, suggesting use as a knife. The evidence for use is slight. The piece may have been hafted at the thicker end.

## Discussion

It is thought that the isolate was lost and not intentionally discarded. It is conceivable that the piece was not yet finished, but this is doubtful. The biface is classified as a knife and assigned to the late Arctic Small Tool tradition (Norton or Ipiutak phases). The piece is similar to specimens illustrated in Larsen and Rainey (1948:Pl. 12 2-4; Pl. 14 1-6; Pl. 85 1-7) from Ipiutak houses and Point Hope middens. Giddings (1964:Pl. 52 9-11) illustrates some bifacial knife blades in his Norton assemblage from Iyatayet. These are similar in shape, but much cruder in workmanship. This is probably a function of using basalt instead of CCS.

<u>Catalog #</u>	<u>Description</u>
UA77-236-1	Knife End Blade

IKR-032

Location: Sec. 20, T.3S., R.12W., Umat Meridian  
UTM 5/427300/7673200

Class: II

#### Location and Setting

IKR-032 is a small flake scatter located on the upper surface of Knifeblade Ridge approximately 1.8 km east of VABM "Knife", and 1 km northwest of IKR-023. The site is near the northern margin of the ridge in an area of exposed sandstone and extensive frost boil activity. Alpine tundra vegetation fills the interstices between the frost boils. The area of frost boils gives way on the north to a small terrace characterized by dense alpine tundra vegetation. Approximately 20 m south of the site area is a ridge margin. The site is on a narrow portion of the ridge as it trends east from the summit. The Knifeblade Ridge tractor trail runs very close to the site. To the southeast, the knoll can be seen on which IKR-023 is located. The intermittent drainage west of IKR-023 can also be seen as it trends southeasterly to the Colville River. The September Creek drainage, and hills east of the creek can be seen to the northeast. Howard Hill can be seen to the north. The site also overlooks the intermittent drainage and hills just to the north of Knifeblade Ridge.

#### Site Information

The site consists of five flakes of black CCS and one flake of grey CCS distributed over an area measuring approximately 2 m by 4 m (oriented north to south). Most of the flakes are smaller than 2 cm to 3 cm in their longest dimension, although one approaches 6 cm in length. One piece is a thinning flake.

#### Discussion

It is likely that lithic material was being reduced at the site. The site is advantageously placed to observe game approaching Knifeblade Ridge via the intermittent drainage channel and the hills south and north of the ridge. No determination can be made concerning the site's age or cultural affinity.

<u>Catalog #</u>	<u>Description</u>
UA77-237-1	Utilized Flake



IKR-033

Location: Sec. 28, T.3S., R.12W., Umat Meridian  
UTM 5/427900/7673100

Class: I

#### Location and Setting

This site consists of an isolated flake of grey CCS located on the southern slope of Knifeblade Ridge, approximately 2 km east of VABM "Knife", and .5 km northwest of IKR-023. The slope is steep and covered with sandstone rocks and alpine tundra vegetation. The flake was found near the bottom of the slope where the terrain levels off and grades into a field of tussocks. The view from the site is limited to the basin of the intermittent drainage flowing west of the knoll where IKR-023 is located. This drainage flows to the Colville River. The ridge slope blocks the view north, and the view west is limited to the ridge slopes east of VABM "Knife". The Knifeblade Ridge landing area is a few kilometers east of IKR-033, although it cannot be seen from the slope where the site is located.

#### Site Information

The flake was not collected.

#### Discussion

This site may be related to sites IKR-023, IKR-033, and IKR-034. It is conceivable that it is a game lookout where lithic material was worked. The game would have approached Knifeblade Ridge via the intermittent drainage and adjoining hills to the south. The position of the flake on the ridge slope leads one to wonder whether other material has sloughed down the bank. No identification can be made as to the material's cultural affiliation.

IKR-034

Location: Sec. 28, T.3S., R.12W., Umat Meridian  
UTM 5/428500/7673050

Class: I

#### Location and Setting

IKR-034 consists of an isolated scraper located on the upper surface of Knifeblade Ridge approximately 1 km due north of IKR-023, and 3 km east of VABM "Knife". The piece was discovered in an area of eroding sandstone and sparse alpine tundra vegetation. The site is near the north margin of the ridge. The principal view is of the northeast trending spurs of Knifeblade Ridge and the headwaters of the first drainage feeding September Creek from the west. The flake lies between the tracks of a tractor trail.

### Site Information

The isolate (UA77-238-1; Pl. 19 12; v.4:108) is quadrilateral in outline and made of black CCS. The piece had been broken at the distal end. A distinct platform is evident at the left proximal point of the specimen. It is intentionally, unifacially retouched along the left margin, with flake scars extending 5 mm to 8 mm onto the dorsal face. The margin also exhibits continuous use-retouch on the dorsal edge consisting of step flaking with some crushing evident. The projections are rounded. The right lateral surface exhibits slight nibbling on the ventral surface near the proximal end. The arrises on the dorsal surface are worn and the ventral surface appears to exhibit differential smoothing and polishing. The proximal margin also shows some step flaking and rounding. The piece has apparently been used in a transverse action on soft or quasi-hard material.

### Discussion

The specimen appears to be a unifacial scraper made on a flake, although the designation "flake knife" may equally apply. This particular type of tool, particularly with intentional, unifacial retouch of one margin, is characteristic of Arctic Small Tool tradition assemblages.

<u>Catalog #</u>	<u>Description</u>
UA77-238-1	Side Scraper

IKR-035

Location: Sec. 6, T.3S., R.12W., Umiat Meridian  
UTM 5/424800/7678900

Class: II

### Location and Setting

IKR-035 is a lithic scatter on the southern end of a northeast trending hill approximately 6 km NNW of VABM "Knife" on Knifeblade Ridge. The site is about 2 km northeast of the 284 m elevation (930 ft) in Sec. 3, T.3S., R.12W. The site area is on the eroding upper slope of the hill, and is characterized by a band of exposed sandstone and alpine tundra vegetation, approximately 20 m wide, following the margin of the hill. Tussock meadow exists to either side of this area. The nearest water is found in a seasonal drainage approximately 1 km downslope from, and southeast of, the site. A well-worn animal trail runs north from the drainage bed, connecting with the hill slope about 40 m east of the site and continuing along the hill to the northeast. The site commands a view of the hills and ridge spurs north of Knifeblade Ridge, and the head of the drainage and adjacent hills to the southeast. The Kigalik River area can be seen to the northwest.

### Site Information

The site consists of 19 flakes of a semilustrous black CCS, including a biface fragment and large flake which appears to be a preform. The material occupies a small area measuring 2 m north-south by 60 cm east-west. A lone flake was found approximately 12 m east of the main distribution. The biface retains its proximal end and the striking platform is still evident. No material was collected. A test pit contributed no other cultural material.

### Discussion

The site is classified as a hunting lookout station. The area is well-drained, providing an excellent spot from which to watch for game. The survey crew observed several hundred caribou moving up the drainage southeast of the site. Tools, apparently bifacial knives, had been produced at this location. No suggestions can be advanced concerning the cultural affiliation of this site.

IKR-036

Location: Sec. 22, T.3S., R.13W., Umiat Meridian  
UTM 5/420200/7673800

Class: III

### Location and Setting

IKR-036, consisting of a lithic scatter, a cairn and historic material, is on the upper, northern margin of Knifeblade Ridge, approximately 5.5 km west of VABM "Knife". The site is characterized by an extensive area of eroding sandstone interspersed with sparse patches of alpine tundra vegetation. It commands a good view of the Kigalik River area and terrain to the north, including the drainage of an intermittent stream flowing northerly toward the Kigalik River. The intermittent drainages and hills south of the Colville River are also visible. The view to the east and west is limited to the upper areas of Knifeblade Ridge.

### Site Information

The site consists of 16 flakes and two cores of grey CCS distributed over an area measuring approximately 12 m north-south by 9 m east-west. A stone cairn and a glass jar containing a note were approximately 150 m southeast of the lithic concentration. Eleven flakes of CCS were concentrated in an area measuring approximately 65 cm north-south by 1 m east-west. The concentration was close to the ridge margin. A flake and wedge-shaped "campus" core were approximately 7.5 m east of the main concentration and a tabular microcore or burin was 5 m southwest. Several other flakes were scattered about the area. The wedge-shaped core (UA77-239-1; Pl. 24 11; v.4:150) had been prepared by a blow struck on the faceted face of the core, which "cleaned" roughly two-thirds of the core top. The rejuvenation flake terminated in a hinge fracture. Initial

platform flaking originated from the right proximal margin. The sides of the core have been flaked from the back margin or keel. The flake scars on the right face run parallel to the platform. The keel exhibits continuous use-retouch and step flaking from the rear proximal point to halfway down the margin. Flaking originated from the right margin. The lower portion of the keel margin has been stepped back from the left margin. The face exhibits at least seven microblade facets. Specimen UA77-239-2 (Pl. 25 16; v.4:162) is a tabular microblade core, subrectangular in shape, and made from a thick flake. The dorsal face evidences five to six facets for microblades struck from the proximal end. The platform at this end has been prepared by removing flakes from the dorsal edge. The right lateral margin evidences light crushing and medium rounding of the dorsal edge. The piece was rotated 180° and a burin blow struck on the left distal point resulting in a deep hinge fracture. The left proximal margin was then utilized as a platform to remove two microblades (or "burin spalls"). The detaching blows were directed from left to right across the distal margin. A cairn, consisting of approximately 25 sandstone slabs piled one on top of another, lies 150 m southeast of the lithic scatter next to a small strip of eroding sandstone in an area of alpine tundra vegetation. About 25 m south of the cairn is a glass jar with a note inside reading "U.S.G.S., Sept 1, 1947 Labor Day".

#### Discussion

This site is classified as a hunting lookout and flint knapping station of the American Paleo-Arctic tradition (Anderson 1970a; 1970b). The homogeneity of the lithics and their limited distribution suggest the site is a single use activity area. Apparently hunters were preparing microblades (or burins ?) and perhaps weapons while awaiting game. The tabular microcore might be interpreted as an artifact type of the Northern Archaic tradition, thus indicating the presence of two components at the site. However, the piece is viewed as being consistent with elements of the American Paleo-Arctic tradition and is therefore tentatively placed with the other items in the assemblage. All material at the site is made of the same grey CCS, a point which supports this contention.

The cairn is believed to be associated with USGS survey efforts (or seismic activity) in the Knifeblade Ridge area, particularly since the glass jar and note were located close by. The cairn is similar in construction to other cairns found near seismic trails and azimuth markers on Knifeblade Ridge. Caution is still advised relative to the cairn because its exact affiliation is not yet known. It may also be a travel marker, burial marker, or cairn of the later prehistoric or historic period.

<u>Catalog #</u>	<u>Description</u>
UA77-239-1	Microcore
UA77-239-2	Tabular Microcore

IKR-037

Location: Sec. 13, T.1S., R.12W., Umiat Meridian  
UTM 5/433650/7694700

Class: I

#### Location and Setting

IKR-037 consists of historic period debris located in the upper Ikpikpuk River valley floodplain, just west of Howard Hill and approximately 2 km south of the confluence of Kay Creek and the Ikpikpuk River. The site is situated on the south side of a large knoll or pingo composed of alluvial sands and silts. The knoll is covered primarily with willows and tussocks and is bordered on the west by an old meander of the Ikpikpuk River, and on the east by tussocks and low willow shrubs. A small pond can be seen just to the east of the site. The active channel of the Ikpikpuk River is about .5 km northeast. From the top of the knoll, one can observe most of the terrain of the upper Ikpikpuk River valley and adjacent hills. Knifeblade Ridge can be seen to the south. Two strand lines composed of flotsam and wood debris exist south of the knoll. The materials were deposited during a period when the meander channel overflowed its banks, presumably during the spring. The survey crew observed six herds of caribou, each numbering several hundred head, ranging north and south along the Ikpikpuk River channel and along an intermittent drainage bisecting the low hills to the west.

#### Site Information

The site contained a rusted iron bucket, a section of sawn antler, a broken caribou long bone, and a splined wood board containing five nails. The antler fragment had been sawn from the cranium. The other end had been broken and showed evidence of having been chewed. The bone and antler fragments were found near the base of the knoll. The bucket (UA77-240-3; v.4:276) was made of rolled sheet metal and did not have a bottom. The rim of the item was formed by bending and crimping the top edge. A narrow band had been stamped a few centimeters from the upper and lower margins of the bucket, paralleling the margins. The seam is split down the side and several holes had been punched at the corners near the seam. A hole was punched in each of the bottom corners and also in the right proximal corner. The holes appear to be later modifications of the original piece. The worked wood piece (UA77-240-2; Pl. 64 4; v.4:261) is broken at each end and also tapers in thickness at each end. Five nails are placed in an "X" pattern in the center of one of the wide sides of the fragment. The nail in the center was of cut iron, while the other four nails are of some type of nonrusting alloy. The piece is probably a brace or stay to a boat. This is supported in particular by the four nails, as one could associate these with water craft built to resist the corrosive effects of salt water. The piece shows a slight compression of the wood in the area of the nails indicating the brace was once nailed to another parallel-sided board.

## Discussion

The wood at the site could have been secondarily redeposited from anywhere south. The piece was found in the first strand line near the bank of the channel. The bucket was found in a flattened condition near the knoll, and it, together with the antler and bone fragments, is not believed to be redeposited. However, a chance does exist that they were ice-raftered. The site marks the location of a proto-historic or historic period hunting camp. The cultural affiliation is unknown. It may be related to Eskimo use of the area, or it may just as easily be the remains of an Euro-American exploration party.

<u>Catalog #</u>	<u>Description</u>
UA77-240-1	Antler Fragment
UA77-240-2	Wood Plank with five Square Nails
UA77-240-3	Metal Bucket Fragment

IKR-038

Location: Sec. 24, T.1S., R.12W., Umiat Meridian  
UTM 5/434250/7692700

Class: III

## Location and Setting

IKR-038, a lithic and wood scatter, is on a river terrace approximately .5 km east of the confluence of the Kigalik and Ikpihpuk Rivers, and Maybe Creek. It is bordered on the east by Maybe Creek. A meander of the Kigalik River lies to the west. The site is situated along the east side of a large area of raised sandy ground, measuring several hundred meters in diameter. The area is characterized primarily by alpine tundra vegetation including bog blueberry, labrador tea and bearberry. Several large blowouts or sandy depressions exist on the terrace. The low-lying area between the drainages and the terrace consists of tussock and sedge vegetation. High stands of willow and alder border the river and creek. The site area is several meters above the area of seasonal flooding, or second terrace, and there was no evidence that it has ever been inundated. The low-lying area east of the terrace may mark an old meander channel. The east side of the terrace was estimated to be 6 m to 7 m above the bed of Maybe Creek. The site affords a good view of surrounding terrain in all directions. Several large herds of caribou were observed traveling along the river beds and trails on top of the banks. They would spook easily and stampede up and down the drainage channels, stirring up great clouds of dust on a dry day.

### Site Information

The site consists of three lithic scatters and a wood scatter distributed along the east side of the terrace for a distance of approximately 90 m (Fig.5). Each lithic concentration is associated with a slight bump or knoll. The knolls may be the result of frost heaving. Scatter 1, to the west, consists of a utilized, black flake of CCS. Use-retouch is evident along its right and left lateral margins. A flake of grey CCS was observed nearby. Scatter 2, to the east, consists of four small flakes of dark grey CCS. No use-retouch was noted. The third concentration lies approximately 48 m east of Scatter 1 and 42 m west of Scatter 2. It consists of three flakes of black CCS, one including cortex, and one flake of grey CCS; no signs of utilization were noted. Several pieces of charred wood were observed scattered along the length of the terrace. A concentration of what appears to be axe-cut willow or alder fragments covers an area measuring roughly 9 m in diameter, approximately 6 m south of flake Scatter 2. A piece of worked wood was located 10 m southwest of this same lithic scatter. The piece is symmetric, excurvate longitudinally, planoconvex in cross section, and measures 17.80 cm in length, with a thickness of 1.60 cm. It is 4.80 cm wide on one end and approximately 2.60 cm wide on the other. The corners are slightly rounded. A hole had been drilled along the medial line of the piece approximately 9.90 cm from the widest end. The long end had been sawn. The wood appears to be some species of conifer. A blowout or depression measuring approximately 5 m in diameter lies 5.5 m west of flake Scatter 3. A tractor trail runs along the low ground to the east of the site.

### Discussion

The site is classified as a camp site and/or hunting lookout probably of the late prehistoric or early historic period. Aside from the presence of wood, there was no way to estimate the relative age or cultural affiliation of the materials. It is conceivable that the wood debris marks the remains of recent activity associated with the tractor trail which runs just east of the site, or it could be from early USGS exploration parties (Smith and Mertie, 1930). Final determination will have to await further work. A test pit on the high ground southeast of lithic Scatter 3, and one just southwest of lithic Scatter 2, brought no cultural material to light. It is thought that the cultural material observed was at one time covered by the sparse vegetative mat and has since weathered out of the blowouts, or has been exposed through ground squirrel activity. Ground squirrel activity was associated with each of the small knobs or knolls where the lithic materials were located. This site may be the one visited by a USGS survey party in 1924 (Smith and Mertie, 1930; Smith 1924), and thought to be the village site of Kigalik visited by Howard in 1886 (Stoney 1900; Hall 1977). Through an air and ground search of the Ikpiuk River basin, Hall (1975) attempted to locate the sites observed by Smith and Mertie. However, he did not succeed in locating these sites, or any others in the vicinity. The site may represent one of a number of seasonal camps at which Nunamiut or Inland Eskimo awaited spring breakup to travel down the Ikpiuk River to the coast. If so, it would date as early as the late prehistoric period.

IKR 038

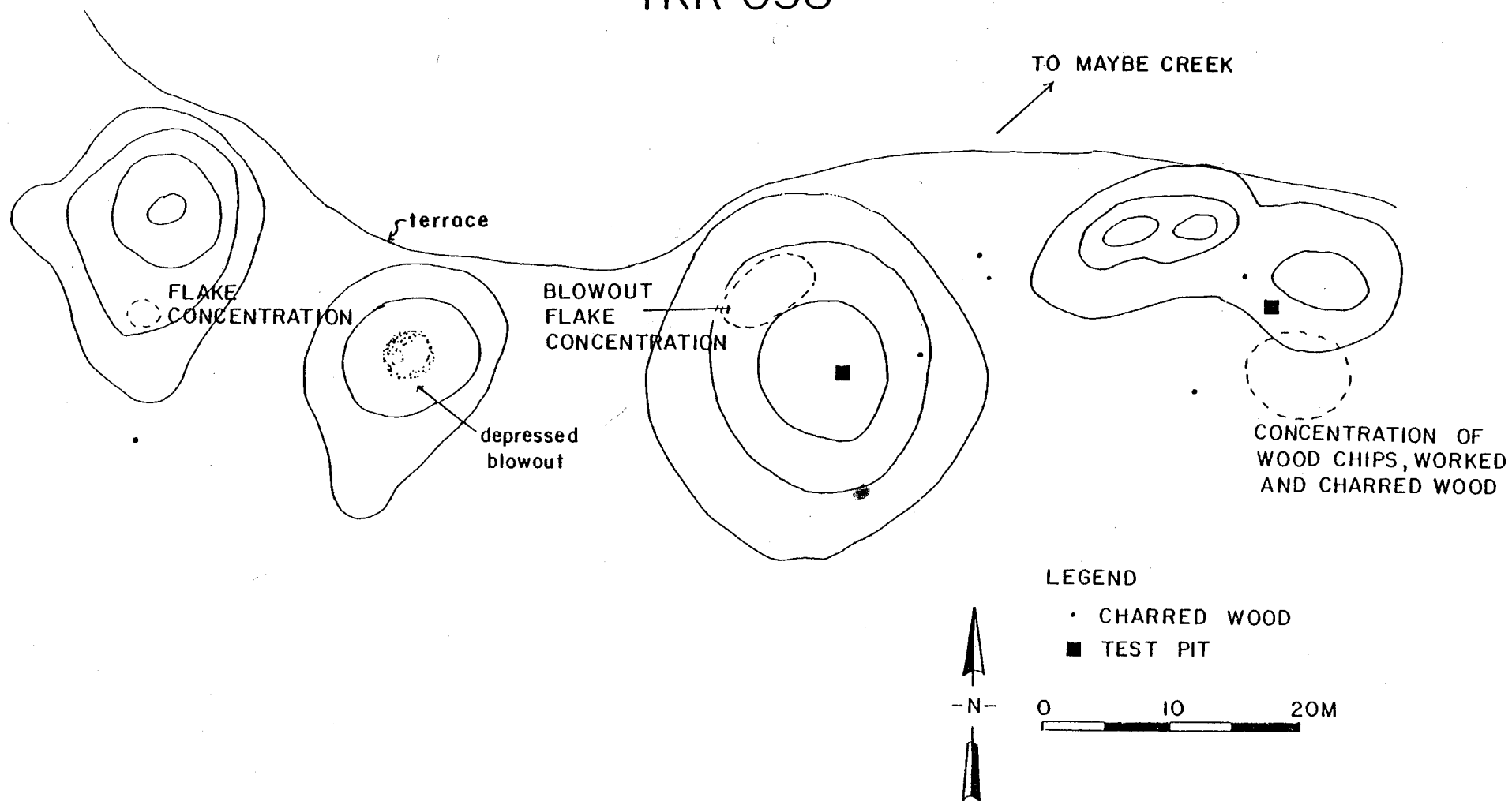


Figure 5



IKR-039

Location: Sec. 31, T.1S., R.11W., Umiat Meridian  
UTM 5/435900/7689475

Class: I

#### Location and Setting

IKR-039, a small lithic scatter, is on an old river terrace remnant approximately .5 km south of Maybe Creek, and roughly 3 km southwest of Howard Hill. It is several hundred meters east of a large oxbow lake. The terrace remnant is one of the largest of several found in the vicinity, measuring approximately 40 m by 15 m. A number of smaller knolls or pingos exist in the area. The terrace is covered with several small birch and willow shrubs, assorted moss and grass and alpine tundra vegetation and constructed of alluvial sand. Several areas are denuded of vegetation. The terrace is surrounded by wet tussock meadow. Just east of the terrace is a water-filled slough marking an old meander channel of Maybe Creek. The view from the site is limited to the creek floodplain and nearby hills. IKR-040 is located approximately 130 m east of IKR-039.

#### Site Information

The cultural material consists of two pieces of black CCS, one of which may not be man-made, while the other is definitely man-made. The man-made piece is a small flake, snapped in several places, measuring 2 cm in its longest dimension. No utilization was noted and it was not collected. The lithics were 2.8 m apart and located in a bare stony area near the high point of the terrace on the side facing the old drainage slough. A small test excavation did not expose any other cultural material.

#### Discussion

The terrace remnant is a well-drained prominent feature of the floodplain, making it an excellent location for a temporary camp or hunting lookout. The view is not extensive, however, and since there are better vantages for lookout stations in the area, the latter classification is questionable. It may mark a tool manufacturing station where lithic or wood materials were fashioned, although this is purely speculative. There are dense stands of alder and willow available along the banks of Maybe Creek to the north. It is possible that the site was occupied when Maybe Creek actively flowed in the old channel just to the east. Dense stands of shrubs would have then bordered the creek in the vicinity of the terrace or sand bar. Further work is needed to determine whether the site is more extensive than surface remains indicate. The cultural affiliation cannot be determined at this time.

<u>Catalog #</u>	<u>Description</u>
UA77-241-1	Nonutilized Flake

IKR-040

Location: Sec. 31, T.1S., R.11W., Umat Meridian  
UTM 5/436000/7689450

Class: I

#### Location and Setting

IKR-040, a small lithic scatter, is on an old terrace remnant or river sand-bar located approximately .25 km south of Maybe Creek and several kilometers southwest of Howard Hill. The terrace marks the east bank of an old meander of Maybe Creek. The old drainage slough is still discernable to the west. Another terrace remnant, where IKR-039 is located, lies 130 m west of IKR-040. The terrace is covered with low shrubs, assorted moss and grass, and other small plants. It measures roughly 43 m by 18 m, and is oriented southwest to northeast. Several areas of exposed sand occur along the feature. The surrounding area is primarily tussock meadow. The view is not extensive, and is limited primarily to the immediate floodplain and contiguous high ground.

#### Site Information

The cultural materials observed consisted of several blade-like flakes of CCS, and a flake of fine-grained basalt. The CCS material is red brown, brown, and medium grey in color. One piece may be a burin. It is not known whether any of the lithics evidenced use-retouch. No material was collected. A test pit in the vicinity of the lithic scatter did not reveal any cultural material below the surface. The lithics were concentrated in two clusters consisting of two artifacts each and located 7.5 m apart. The red brown and brown CCS blade-like flakes were found together. The basalt flake and a possible burin of grey CCS made up the other group.

#### Discussion

IKR-040 appears to be, at the minimum, a temporary camp at which lithic reduction activities could have taken place. The terrace or sand bar remnant is well-drained and is a veritable oasis compared with the majority of surrounding terrain, making it an ideal location for a stopover. The variety of material of the observed specimens suggests that the locale may be more extensive than surface remains indicate, especially since the lithic pieces appear to have eroded out from under the vegetative mat covering the feature. The lithic clusters suggest two separate activity loci. IKR-040 may be related to nearby IKR-039. It is not known whether the site was utilized before or after the drainage slough ceased to be an active channel of Maybe Creek. The cultural affinity of the site is unknown.

IKR-041

Location: Sec. 31, T.1S., R.11W., Umiat Meridian  
UTM 5/435850/7689300

Class: I

#### Location and Setting

The site, consisting of an isolated piece of worked wood, is located approximately 215 m southwest of IKR-040, in an area of open tussock meadow. The southeast arm of a large oxbow lake lies about 50 m south of the site and the track of a seismic train trail (evidenced by a swath of dead tussocks) is approximately 80 m north. The piece was found just west of the old drainage slough which cuts near IKR-039 and IKR-040.

#### Site Information

The worked wood fragment (UA77-242-1; Pl. 62 2; v.4:256) is made of a piece of planed board. The specimen was made from a species not found on the North Slope. A section of one corner was cut from the piece. Two holes, apparently drilled bi-directionally, are located at the same end. The ends had been sawn.

#### Discussion

The piece may have been dropped by an oil exploration crew, or it may be part of a Native-made object. Its identity will probably never be known. It could also have been secondarily deposited by flood waters from the east. The piece did smell "fishy". The fact that the wood has survived suggests that it is no more than 100 years old at best.

<u>Catalog #</u>	<u>Description</u>
UA77-242-1	Possible Kayak or Sled Part

IKR-042

Location: Sec. 31, T.1S., R.11W., Umiat Meridian  
UTM 5/435500/7689400

Class: III

#### Location and Setting

IKR-042 is situated on what appears to be a river terrace or bar remnant located south of Maybe Creek, several kilometers above its confluence with the Kigalik River. The locale is approximately 30 m away from the easternmost tip of a large oxbow lake. The terrace is characterized by assorted grasses, mosses and other small plants, and small patches of exposed sandy ground, and encompasses an area measuring approximately 95 m by 43 m oriented north to south. It rises roughly a meter above

surrounding tussock meadow and low-lying wet ground. Maybe Creek lies about 100 m due north. The view is limited to the immediate floodplain and adjacent higher ground. IKR-039 is approximately 460 m east.

#### Site Information

Cultural materials observed include a saw-cut moose scapula, a saw-cut caribou long bone, approximately 50 pieces of axe or knife-cut alder or willow, dog sled rails (?), a complete sled runner and fragment, a powder flask, a bullet mold, an iron pipe fragment, an iron bar, a piece of tin similar to stove pipe, approximately 1.8 m of 3/32" diameter wire, and a piece of worked wood with a metal alloy nail in it. The powder flask, bullet mold, worked wood, pipe, iron bar and cut wood were at the northern end of the terrace. while the sled runners and other possible dog sled remains and the 3/32" diameter wire were approximately 35 m south, near the highest point of the terrace. The lead pipe fragment measures 97.00 cm in length, with an inside diameter of 0.8 cm and an outside diameter of 1.20 cm. The piece is bent slightly. The metal bar measures 30.70 cm by 3.80 cm and has a semicircular hole in one end approximately 0.70 cm in diameter. There is another hole at the opposite end, and one in the center of the piece. Both holes measure approximately 1 cm in diameter. The worked-wood piece is slightly rounded at one end and flat at the other, measuring 45.50 cm in length and tapering in width from 5.00 cm at the rounded end to 2.60 cm at the flat end. Nail holes occur at 5.00 cm, 12.00 cm and 26.00 cm from the rounded end, oriented toward the left side of the piece. The third hole has a tin alloy (?) nail in it. Two square holes occur 8.50 cm and 17.10 cm from the rounded end, each oriented toward the right side of the piece. The sled runner measures 130.00 cm by 12.00 cm, and has four small holes about 1 cm in diameter near the tip. A larger hole is situated near the top of the runner, a few centimeters further back from the tip. The piece is bowed and the bottom rounds up to meet the tip at the point of the runner. The bullet mold (UA77-243-1; Pl. 54 1; v.4:274) and powder flask (UA77-243-2; Pl. 54 4; v.4:272) were collected.

#### Discussion

The presence of extruded wire, iron pipe, bullet mold etc., place this site firmly in the historic period. It is tentatively classified as interior Eskimo, although it is remotely possible that it is related to early Euro-American explorations of the reserve in the late 1880s or early 1900s. Surface evidence indicates that portions of game animals were utilized at the site. Since the animal remains do not appear to be extensive, it is thought that they were transported to this location. It is not known why the bullet mold was discarded. It is suspected that the items associated with weaponry were no longer of use, for example the powder or shot may have given out. The flask is bent and the top cut open, but it is still complete except for the plug. Wood was also being chopped or worked at this site. The numerous sled parts, wire and other associated materials scattered around the southern point of the terrace may indicate that extensive repairs on the sled may have been attempted. The sled may have broken up near this spot. If the scene is one of an accident, one wonders if the party survived. The alloy nail in the worked-wood piece is almost identical to the nails found in the wood piece at IKR-038.

<u>Catalog #</u>	<u>Description</u>
UA77-243-1	Bullet Mold
UA77-243-2	Tin Can

IKR-043

Location: Sec. 16, T.5S., R.9W., Umiat Meridian  
UTM 5/458400/7656000

Class: II

#### Location and Setting

IKR-043 is a lithic scatter located on the steep slope of a northwest-southeast trending ridge overlooking the Colville River in the vicinity of Killik Bend. The site is near the ridge margin at an elevation of approximately 300 m. The ridge slopes about 35 m before leveling off to a small bench or terrace. Below the bench is a steep hill, grading to the Colville River. The slope is covered with tussocks, willows, grasses and assorted small plants, and eroding stone dykes running perpendicular to the margin of the slope. The site commands a view of the west side of Killik Bend and the northwest of the Colville River all the way to Kakvuiyat Bend.

#### Site Information

Cultural material observed consisted of approximately 20 flakes of CCS and a flake core. The core and one flake were observed together while the other flakes were concentrated approximately 15 m away, further downslope. The core was about 10 m downslope from the ridge margin. All materials were located in an area of eroding stone. No material was collected.

#### Discussion

The site is classified as a hunting lookout and chipping station. It is advantageously placed to observe game moving along the hills and ridges bordering the Colville River, and along the Colville River banks and bars. Nodules for chipping can be found among the Colville River gravels. The survey party observed that some flakes matched the core and were probably derived from it. It is reasonable to believe that the material found along the slope eroded out from a point on the ridge margin. The cultural affiliation is unknown.

IKR-044

Location: Sec. 36, T.4S., R.9W., Umiat Meridian  
UTM 5/461400/7659700

Class: III

#### Location and Setting

IKR-044 is a flake scatter located along the margin of a northeast trending ridge overlooking the Colville River as it flows northeast from Killik Bend. Tussock vegetation predominates along the ridge, although lowbush cranberry, grass, lichen, and moss occur around several conglomerate outcrops located along the ridge margin. Below the margin is a slight terrace where tussock vegetation is not as dense. The site area affords an excellent view of the Killik and Colville river confluence, the basin of the Colville River to Killik Bend on the southwest, and the Colville basin from Starfish Bluff and beyond to the northeast. The active channel of the Colville River lies roughly 4 km southeast. A well-used caribou trail follows the margin of the ridge in the vicinity of the site.

#### Site Information

The site consists of three lithic concentrations located along the margin of the ridge. The westernmost locality consists of two flakes of black CCS located approximately 8 m apart. The next locality, 160 m east, consists of two concentrations, approximately 10 m apart: one with 25 flakes of black and grey CCS and the other with six flakes of black CCS occupying an area of less than 1 m in diameter. The easternmost locality consists of 35 flakes of grey and black CCS in an area measuring 3 m to 4 m in diameter. A single flake was found 12 m south of this scatter. A test pit near the westernmost locality did not result in the discovery of other cultural material. The onset of rain precluded examination of the lithics and no information is available as to utilization or retouch of the observed pieces.

#### Discussion

IKR-044 appears to be a hunting lookout and chipping station. The lookout designation is supported by the fact that this site commands an excellent view of the Colville River basin to the southwest and northeast, and of the confluence of the Killik and Colville rivers. The Killik River is an important route for the seasonal migration of caribou in both spring and fall (Hemming 1971). The distribution of lithics suggest the area was used on a short-term, intermittent basis, over an unknown period of time. The cultural affiliation of the materials is unknown.

IKR-045

Location: Sec. 18, T.1S., R.11W., Umat Meridian  
UTM 5/434600/7694900

Class: I

#### Location and Setting

IKR-045 consists of an isolated tool of CCS located on a gravel bar on the north side of the Ikpiuk River approximately 1.5 km south of its confluence with Kay Creek. The bar is on a bend of the river as it cuts almost due west away from the northwest side of Howard Hill. A small, seasonal drainage cut enters the Ikpiuk River several hundred meters southeast of the spot where the tool was found. The cut drains an area on the north side of Howard Hill. Vegetation is typical of that found along streams in the area, with willow along the bank and wet areas of tussocks and sedge on the floodplain. The immediate area does not afford a view of the surrounding terrain, although higher ground is available a few hundred meters east.

#### Site Information

Cultural material consists of an isolated end scraper of black CCS (UA77-245-1; Pl. 18 14; v.4:104). The piece is a thick, blade-like flake, intentionally retouched at the distal end. It is plano-convex in longitudinal section, and evidences continuous use-retouch along the right lateral, left lateral and distal margins (dorsal surface). Wear consists of step flaking and rounding, particularly along the distal margin. The bulb is slightly thinned and a distinct platform is present. The specimen exhibits nibbling along the left lateral margin on the ventral surface near the distal end, and along the dorsal surface toward the proximal end. The piece has apparently been used as a side scraper, although it is principally an end scraper. Assorted pleistocene faunal materials were found on the gravel bar near the find including the tip of a mammoth tusk, several vertebrae (bison ?) and what were tentatively identified by the field party as two bison phalanges.

#### Discussion

An isolate does not offer the best basis for interpretation; however, the piece may indicate the presence of a more extensive site further upstream. A search of the area did not locate a cultural site, or the section of the river bank from which the faunal materials had eroded out. The end scraper wear suggests it was used on relatively hard material and was not used to process hides. It could have been used to process wood, bone or antler. Willows grow to be quite large in this area and are among the largest specimens existing on the north slope. The specimen is very similar to a piece illustrated in Anderson's (1970a:Fig. 29, 23) Akmak publication. On this basis, the site is placed in the American Paleo-Arctic tradition on this basis. It is realized, however, that the piece could be found in more recent assemblages. It is felt that the area deserves further survey in order to resolve this issue.

<u>Catalog #</u>	<u>Description</u>
UA77-245-1	End Scraper

IKR-046

Location: Sec. 3, T.5S., R.9W., Umat Meridian  
UTM 5/459500/7658300

Class: II

#### Location and Setting

IKR-046 consists of cultural material associated with a large rock outcrop on a northeast trending hill overlooking the Colville River, approximately 5 km northwest of the Killik and Colville rivers' confluence. The rock outcrop juts from the side of the hill, presenting a steep fragmented stone face approximately 4 m to 5 m in height and width. The top is flat and sparsely vegetated. The outcrop is surrounded by tussock meadow. The hill is slightly terraced below the outcrop and a number of large boulder remnants are strewn over the area. A line of alders runs parallel with the hill along the slope on which the outcrop sets. A "cave" or grotto measuring approximately 1 m to 2 m in width and 10 m in length, with a height of roughly 1 m, exists in the face of the outcrop, just under the main body of rocks. The grotto has been fashioned primarily by natural forces. The locale commands an extensive view in all directions except the north.

#### Site Information

Cultural materials consist of a stone cairn set on top of the outcrop and a flake of black CCS located on the floor of the "cave" or shelter. Two 5-gallon "Chevron Aviation Fuel" gas cans were located on the terrace below the outcrop. The cairn consists of 15 to 20 boulders and slabs set in a roughly triangular pile. A willow or alder stick was found protruding upright from the center of the cairn. The top of the stick had been broken off. The stones making up the cairn and the top of the outcrop evidence considerable lichen growth on their surfaces. The lithic piece was a percussion flake measuring approximately 2 cm by 1 cm. No utilization was noted.

#### Discussion

The area appears to be the location of a temporary camp and probable hunting lookout dating to the recent period, although the lithic material seems to indicate an earlier component. Aviation gas, when mixed with oil, fuels snowmobile engines and it is hypothesized that it had been used for this purpose. The outcrop is a distinctive feature of the hill and visible for many kilometers. It is probable that this landmark was used as a hunting station or temporary layover point. The "cave" or rock shelter bears further investigation. This feature appears to have been used as is. The field crew examining the site observed that the feature was large



enough for two people to lie prone side by side. The most recent occupant appears to have been a fox, indicated by scat at the entrance. It is possible that the fox excavated part of the feature and that the flake was brought in fortuitously. The slight slope below the entrance is made up of recent dirt dug from the inside. The dirt had fox tracks impressed in it. This does not, of course, preclude the use of the "shelter" by man. No test pit was dug in the cave.

IKR-047

Location: Sec. 3, T.5S., R.9W., Umiat Meridian  
UTM 5/459900/7658700

Class: II

#### Location and Setting

IKR-047 consists of two small lithic scatters situated on a hill approximately 5 km northwest of the confluence of the Killik and Colville rivers. The site is approximately .5 km northeast of IKR-046. Each lithic scatter is associated with a distinct, highly visible, rock outcrop. Vegetation in the area is mixed, consisting primarily of tussocks, grasses, willows and dense clumps of alder. The outcrops are located along the slope of the hill and the only effective view is southwest along the hill or east toward the Colville River basin and floodplain.

#### Site Information

Locality 1 consists of approximately 25 flakes of black CCS in an area measuring 3 m by 1 m. Locality 2, about 100 m west, consists of one black flake of CCS. Both loci are situated on the top of small rock outcrops each no more than 1 m in height and a 2 m in diameter. The isolated flake at Locality 2 may have been uncovered through the efforts of a ground squirrel, since the flake was resting on his back dirt. The flakes do not appear to be utilized. Test pits at each locale failed to produce any other cultural material.

#### Discussion

IKR-047 appears to be a short-term hunting lookout and chipping station. It affords an excellent view of surrounding terrain, and the outcrops make available a dry, well-drained platform for spending the vigil. The cultural affiliation is not known. It is suspected, in light of the flake near the squirrel burrow at Locality 2, that other materials exist under the vegetative mat. It is assumed that lithic materials were being worked at these locations by individuals watching for game.

<u>Catalog #</u>	<u>Description</u>
UA77-251-1	Utilized Blade-like Flake

IKR-048

Location: Sec. 3, T.5S., R.9W., Umiat Meridian  
UTM 5/459100/7658400

Class: III

#### Location and Setting

IKR-048 is a lithic scatter distributed along the top of a rock outcrop at the western end of a hill approximately 5 km northwest of the Killik and Colville rivers' confluence. The outcrop presents a steep face approximately 3 m to 4 m in height. The hill slopes gently away from the bottom of the rocky scarp. The outcrop is composed of badly weathered conglomerate. The lithics are distributed over the relatively denuded sand and gravel surface of the outcrop margin. Dense tussock meadow exists north and east of the outcrop, while the area below is characterized by extensive frost boil activity and is mainly covered by alpine tundra vegetation. The outcrop faces southeast toward the Killik and Colville confluence, and commands an excellent view of this area, although one can also get a good view of the Colville River and Knifeblade Ridge to the northwest. The edge of the hill continues several hundred meters west of the outcrop. The hill is heavily vegetated except for a few areas of bare gravel along the margin. A small rock outcrop is located approximately 80 m west. IKR-046 lies approximately .5 km east.

#### Site Information

Cultural materials are exposed at two localities at this site. Locality 1, on the denuded surface above the small western outcrop, consists of approximately 50 flakes of grey and black CCS, and a pebble flake core measuring 8 cm by 6.5 cm by 5 cm. The piece is predominately cortex with eight to ten flakes having been removed from one face. A section of the flake core evidences slight edge attrition. Over 300 flakes of black and grey CCS are located along the margin of the main outcrop, approximately 80 m east of the first locality, in an area measuring roughly 60 m by 5 m, oriented east to west. A pebble core remnant measuring approximately 8 cm by 5 cm by 3 cm was present at this location. A small portion of cortex remains on the piece, but the specimen appears to have exhausted its usefulness. Two small flakes of a translucent, smokey obsidian were noted at Locality 2, along with a flake of brown CCS. A microblade core tablet (UA77-247-1; Pl. 23 18; v.4:164) and the distal end of a microblade (UA77-247-2; Pl. 33 39; v.4:197) were collected at Locality 2. The core tablet is interesting in that the piece was removed by a blow struck from the blocky rear of the specimen using a retouched, natural fracture plane at this location as a platform. The platform of the original core had apparently become unusable and attempts were made to thin the top by directing blows to the right lateral side, resulting in a very concave shape in the platform. The platform from which the microblades were removed was prepared by a blow directed transversely to the faceted end of the core. The tablet evidences slight bifacial nibbling with stepping and rounding of a portion of the blade scars on the left distal part of the faceted end. The microblade fragment is of the same material as the core. The micro-

blade has been snapped resulting in a distinct hinge fracture at the distal end. It is possible that this specimen is a burin spall, but this is open to debate. The piece is triangular in cross section and has a single arris. It exhibits nibbling along the left lateral dorsal surface at the distal end and some attrition of the left lateral margin. None of the other flakes on the site were examined for utilization.

#### Discussion

IKR-048 is a major site in the Killik Bend area. It occupies a strategic position for monitoring the movement of game east of Killik Bend in the vicinity of the Colville and Killik confluence. It is clear that extensive reduction of lithic material took place here as is evidenced by the presence of the microblade core tablet and the cobble flake cores. It can be assumed that the cobbles have been derived from the gravels of the Colville River. The locale may be a multicomponent site, but as yet the only clue to its cultural affiliation is the microblade core tablet. The attributes of this piece suggest that it is an element of the American Paleo-Arctic tradition (Anderson 1970a; 1970b). It should be noted that material can be found down the embankment of the scarp, indicating that erosional processes have had a negative effect upon the integrity of the site.

<u>Catalog #</u>	<u>Description</u>
UA77-247-1	Microcore Tablet
UA77-247-2	Microblade

IKR-049

Location: Sec. 7, T.5S., R.8W., Umiat Meridian  
UTM 5/464700/7657000

Class: II

#### Location and Setting

IKR-049 is a flake scatter located along the western margin of the upper terrace of a hill, overlooking the confluence of the Killik and Colville Rivers. It is approximately 2 km east of the confluence, and several kilometers southwest of Puivlik Bluff. Dense tussock meadow covers the hill-top to the east. The hill below the margin slopes steeply (approximately 30°) for about 20 m to a wide terrace or bench, then grades abruptly to the Colville and Killik floodplain. The hill is covered with dense shrubs of alder and willow and other assorted vegetation. The slope near the margin is partially denuded of vegetation, although alder and willow shrubs extend into this area. Vegetation along the margin is an alpine tundra variety. The nearest water can be found in the rivers. Numerous well-used caribou trails run from the top to the bottom of the hill, and signs of moose and caribou were extensive in the thickets and on the sand bars of the floodplain.

## Site Information

The site consists of several lithic localities distributed along the margin of the terrace. Locality 1, to the south, consists of two grey flakes, one black flake, and one grey red flake of CCS distributed over an area measuring 35 m by 5 m along the terrace margin. The flakes are over 2.5 cm long in their largest dimension, and two flakes exhibit cortex. None appears to be utilized. Locality 2, consisting of roughly 50 flakes of black CCS, lies about 67 m north of Locality 1, and approximately 50 m downslope. The material includes small pressure flakes, flakes exceeding 2.5 cm in their longest dimension, and flakes with cortex present. None of the flakes appeared to be utilized. Locality 2 is near the turn in the hill where it begins to parallel to the Colville River. Locality 3, approximately 50 m northeast of Locality 2, consists of one flake of black CCS with cortex present on a portion of its distal end. It did not appear to be utilized. Another area, Locality 4, is situated roughly 75 m northeast of Locality 3 and approximately 7 m downslope. The feature consists of several fragments of burned and charred willow or alder and several suspicious depressions measuring approximately 2 m on a side. These were located on a slight bench along the hill slope. A small test pit in one of the depressions did not provide any information as to whether or not they were man-made, but they were suspicious enough to be noted. The charred wood was thought to be the remains of a fire, but it is strange that the pieces were scattered all over the hill. The pieces were charred in very odd locations and it did not look like wood that would have been used in a hearth. Other charred wood localities were found during survey of the southern section of the hill. One such occurrence was associated with a destroyed alder shrub, the branches of which had been charred. The remains of the shrub were distributed in a circular pattern outward from the main trunks of the shrub, both upslope and downslope. It was then realized that these phenomena resulted from lightning striking the bushes along the ridge. This adequately explains the distribution of the remains and the differential and puzzling charring of the wood. No lithic or wood specimens were collected.

## Discussion

IKR-049 is classified as a hunting lookout and chipping station used by individuals monitoring the movement of game to and from the Killik River corridor. It may also be a hunting station for the interception of caribou moving up and down the hill slope. No data was available to determine the cultural affiliation of the materials.

IKR-050

Location: Sec. 8, T5S., R.8W., Umiat Meridian  
UTM 5/465500/7657300

Class: I

### Location and Setting

IKR-050 is a small lithic scatter on a knoll approximately 1 km northeast of IKR-049 in the vicinity of Puivlik Bluff. The knoll is located east of a small seasonal drainage gully which bisects a portion of a northeast trending bluff paralleling the Colville River. The knoll is surrounded by tussock meadow, although dense alder thickets exist in the seasonal drainage. Numerous berries were noted in the vicinity. The knoll is characterized by several areas of exposed ground, small willow and birch shrubs, and alpine tundra vegetation. The site overlooks the Colville River basin and hills adjacent to the floodplain. The places where sites IKR-044, IKR-046 and IKR-047 are located can be seen on the hills along the north side of the Colville River. The only access to the Colville River is via a precipitous path along the steep drainage cut bisecting the bluff. Caribou tracks were noted along the path. Arctic grayling are numerous in the isolated river pools near the bottom of the bluff face.

### Site Information

Cultural material consists of five flakes of black CCS distributed over an area measuring approximately 20 m east-west by 15 m north-south. A small test pit in the vicinity of the flakes did not result in the discovery of other lithic debitage. The material included two small thinning flakes and three larger fragments measuring more than 3.5 cm to 5 cm in their longest dimensions. The large flakes had numerous flake scars on their dorsal surfaces. One flake had a prepared platform and evidenced utilization of its distal margin and a portion of the left dorsal edge.

### Discussion

IKR-050 is tentatively classified as a hunting lookout and chipping station. It is also possible that wood products could have been worked at the site, particularly with the abundance of alder in the seasonal drainage nearby. The location's primary advantage seems to be in the view it provides of the Colville River basin and nearby hills. It is difficult, but not impossible to get down the cliff face to the floodplain. An alternative may be to view the site as a hunting station for the interception of game driven along the cliff from points east or west. Numerous caribou tracks cover the hilltop. The trails seem to head for the Killik River basin in the vicinity of IKR-049 to the west. The trails were relatively new, and it was apparent that animals were present in the area in considerable numbers during the 1977 survey season. No argument is being made for a "cliff drive"--only to suggest that the Puivlik Bluffs could be used to advantage by hunting groups. No information was available to determine site cultural affiliation.

IKR-051

Location: Sec. 29, T.4S., R.8W., Umiat Meridian  
UTM 5/465650/7662100

Class: IV

#### Location and Setting

IKR-051 is on the denuded point of a southeast trending spur of a hill located just north of the Colville River, approximately 4 km due north of Puivluk Bluff. The area is bordered on the east and west by steep slopes leading to southeast flowing seasonal drainages which bisect the slope of the hill. A meander channel of the Colville River lies very close to the bottom of the hill. From the point, the hill (covered with dense tussock vegetation) grades upward to the north. The point is characterized by a large area of denuded gravels covered with intermittent patches of alpine tundra vegetation including skeleton leaf willow, bearberry, dwarf birch, and assorted grasses. A steep, rocky slope, approximately 10 m in height forms the southern face of the point. The slope levels off onto a well-defined terrace and then grades rather sharply to the floodplain. The terrace is covered primarily with alder, tussock and grass. The slope, from the terrace to the floodplain, is covered with dense alder growth. The site location commands an excellent view of the Colville River floodplain and hills along both sides of the river. A major caribou trail trends east-west through the site area and along the adjacent hills. IKR-052 is approximately .25 km west of IKR-051.

#### Site Information

The site consists of a scatter of approximately 500 lithics distributed over the top of the point in an area measuring roughly 30 m in diameter. Flakes were also noted to extend approximately 5 m down the west slope. Two possible cache pits were also noted. Lithic materials include flakes of predominately black CCS, although flakes of grey, reddish brown, and cream colored CCS were also observed. Two flakes of a translucent, smokey obsidian were also present. A steeply retouched end scraper of black CCS, discoidal in shape (UA77-248-3; Pl. 19 4; v.4:106), and two side-notched knives or points of black CCS were collected. The end scraper is asymmetrically concavo-convex and unifacially flaked, and the bulb of percussion appears to have been intentionally thinned. The specimen exhibits heavy crushing and step flaking along the distal end with occasional rounding of the margin. The left lateral margin exhibits continuous nibbling, crushing and rounding. Wear patterns suggest the piece was used transversely on relatively hard material. A side-notched point specimen, UA77-248-2; Pl. 3 12; v.4:26), is asymmetrically biconvex in cross section, roughly symmetric in shape. It is straight based, bifacially flaked, basally thinned, corner notched, has an excurvate blade form and is shouldered. Crushing and step flaking occur along the lateral margins and on the distal end. The notched areas exhibit crushing and heavy rounding. The piece appears to have been used in a longitudinal action on hard material with the right lateral evidencing the heaviest use. The top of the piece may have been used in a transverse action. Specimen

UA77-248-1 (Pl. 3 15; v.4:23) has been broken at the proximal end. It is biconvex in cross section and is slightly asymmetric in outline. It is bifacially flaked, exhibits weak shouldering, has a straight thinned base, and is side-notched. The blade is quite wide. The right lateral margin exhibits discontinuous, slight to medium crushing, while the left lateral margin exhibits slight to medium rounding. The base shows heavy bifacial rounding and crushing. The notches exhibit heavy bifacial rounding. The field party also noted that flake burins (?), side scrapers, steep-edged end scrapers on blade-like flakes, microblades, and microblade sections are present. The presence of burins is open to question since few specimens were looked at in any detail. Two microblade fragments measured approximately 2.60 cm by 1.30 cm, and 2.60 cm by .6 mm. A number of utilized flakes were observed. The majority of flakes were thinning flakes, including pressure flakes. An isolated flake was found on a lower terrace, northeast of the point and about 55 m from the main lithic concentration. Two possible depressions which may mark the location of cache pits were observed on top of the point. The depression near the west side measured approximately 1 m in diameter and had a depth of .30 m. Lithic debris was found in and around this depression, and sliding down the steep embankment nearby. A few willow shrubs and assorted grasses were concentrated in this area. Another possible cache pit was located 10 m southeast of the one noted above, near the southern edge of the point. The site was not tested.

#### Discussion

IKR-051 is best classified as a hunting lookout and chipping station. It may also be a short-term camp for parties moving up or down the Colville River by boat, or on foot via the high ground along the river. The proximity of the meander channel and the vantage afforded from this location supports both of these contentions. Lithic material was being worked at the site and indications are that nonlithic materials were being processed as well. A Northern Archaic component has been recognized for the site based upon the presence of the side-notched points (Anderson 1968a; 1968b). Similar points are known from the Palisades site near Cape Krusenstern (Giddings 1962; 1967) and at Anaktuvuk Pass in Campbell's (1961; 1962) Tuktu Complex. The presence of microblades at IKR-051 may be important, particularly since Campbell (1961) lists them as an element of the Tuktu complex. However, microblades are not an element of the Northern Archaic tradition as defined. The obsidian may also be an important element in making this determination, particularly since it was associated with a side-notched point (UA77-248-1). Obsidian has been recognized as an important element of Northern Archaic levels at Onion Portage although obsidian is by no means limited to the Northern Archaic period (Anderson 1968a). It could be argued that the microblade fragments can be associated with either the American Paleo-Arctic tradition or the Denbigh phase of the Arctic Small Tool tradition, but this is not demonstrated. It is perhaps significant that no "mitten-shaped burins" were observed, nor cores of any type. The steep-edged end scraper is consistent with a Northern Archaic classification. The presence of other components at IKR-051 and a confirmation of the presence or absence of certain tool types can only be resolved through further study and analysis.

<u>Catalog #</u>	<u>Description</u>
UA77-248-1	Projectile Point
UA77-248-2	Projectile Point
UA77-248-3	End Scraper

IKR-052

Location: Sec. 29, T.4S., R.8W., Umiat Meridian  
UTM 5/465200/7661800

Class: I

#### Location and Setting

IKR-052 is a small lithic scatter on the point of a southeast trending spur of a hill just north of the Colville River and approximately 3.5 km due north of Puivlik Bluff. The site is bordered on the east by a seasonal drainage bisecting the hill and flowing into the Colville River. The spur grades uphill to the north where it intersects a northeast trending hill system. It is covered with tussock vegetation and dense thickets of alder and willow shrubs. The slopes and top of the point where the site is located are characterized by a relatively heavy cover of alpine tundra vegetation although denuded patches of ground occur. The point is roughly triangular in shape with a steep embankment to the south, east and west. The embankment is about 10 m in height. At the bottom of the embankment is a small terraced area which then grades rather steeply downhill to the Colville River floodplain. IKR-051 is located on another point approximately .25 km across the seasonal drainage. A caribou trail runs east and west through sites IKR-051 and IKR-052. The site commands an excellent view of the Colville River floodplain and adjacent hills. A meander channel of the Colville River runs near the base of the hill, approximately .5 km south of the site.

#### Site Information

Cultural materials consist of two flakes and a microblade segment. These were distributed around the eastern section of the point in an area measuring roughly 5 m north-south by 4 m east-west. Several small holes appear to have been dug in the area outlined by the lithic debris. The lithics consisted of a flake of black CCS measuring approximately 3.20 cm by 2.50 cm by 1.30 cm and a flake of grey CCS measuring roughly 5.10 cm by 3.20 cm. The microblade segment is a medial section of grey CCS measuring 1.10 cm by 0.90 cm. The material was located on the surface in exposed areas of bare ground. The grey flake was found near a small depression measuring roughly 20 cm square. The black flake was near a larger rectangular depression measuring about 60 cm by 30 cm. The holes are not oriented consistently toward any one cardinal direction. They could represent testing or "potting" of the site. It was not noted whether any of the artifacts had been utilized.



## Discussion

The site has been tentatively classified as a hunting lookout. It may be related to IKR-051 nearby. No definitive observations can be made as to cultural affiliation. However, the presence of the microblade or bladelet would seem to place the site no later than the Denbigh phase of the Arctic Small Tool tradition.

IKR-053

Location: Sec. 13, T.5S., R.16W., Umat Meridian  
UTM 5/396100/7656900

Class: II/III

## Location and Setting

This lithic site was found on the bluff overlooking the north bank of the Colville River and affords an excellent view of the lowlands on the opposite side. The site is west of the confluence of the Awuna and the Colville Rivers, that is visible from the site. The bluff top is a flat, bare area of soil and gravel with occasional outcrops of sandstone. Forty meters away from the edge, a tussock meadow completely covers the rolling terrain. There is a dense growth of willow and alder at the base of the bluff extending to the edge of the Colville River.

## Site Information

About 20 CCS flakes in a 12 m by 10 m area were observed. Three different types of CCS were present. One 50 cm by 50 cm by 20 cm deep test pit was dug and provided no cultural material. One distinctive artifact was found and that was a microblade (UA77-215-8; Pl. 33 33; v.4:197). This grey, CCS, medial section has three facets and is lightly utilized.

## Discussion

The microblade indicates that this site is early Arctic Small Tool tradition in age or older. Its location is a logical one for river travelers to use as a lookout spot.

<u>Catalog #</u>	<u>Description</u>
UA77-215-1	2 Nonutilized Flakes
UA77-215-2	2 Nonutilized Cortical Flakes
UA77-215-4	Burinated Flake
UA77-215-5	Utilized Flake
UA77-215-6	Utilized Flake
UA77-215-8	Microblade

IKR-054

Location: Sec. 24, T.5S., R.25W., Umat Meridian  
UTM 5/396100/7656400

Class: I

#### Location and Setting

This sandstone cairn was found on the exposed ring of the bluff on the north side of the Colville River, just upstream from the confluence of the Awuna and the Colville Rivers. The cairn is easily visible from the Colville River, 300 m away. The base of the bluff is covered by a dense growth of willow and alder thickets while the top has an alpine tundra vegetation with exposed gravel and soil ground cover. The bluff is actively eroding and the slope is covered by fallen rock and soil.

#### Site Information

The cairn is constructed of a slab of tabular sandstone averaging 10 cm thick and measuring 40 cm wide and 66 cm high for the above ground portion. Part of the slab is buried in the ground. The long axis of the slab is perpendicular to the ground surface and is propped with smaller stones around the base. It is situated 2.5 m from the edge of the bluff. In addition, an isolated, utilized flake of dark grey CCS was found on the northeast edge of a vegetated bench on the talus slope about 40 m below and east of the cairn. This flake was probably redeposited from a higher location, but its source was not discovered.

#### Discussion

This cairn, which is obviously man-made, probably served as a location marker for a cache, a meeting spot, or something similar. Several other cairns like it were found along the Colville River, and one similar (XLR-078) was discovered 25 km west on the Awuna Ridge. The badly eroded condition of the bluff prevented any further investigation by the survey crew.

<u>Catalog #</u>	<u>Description</u>
UA77-216-1	Utilized Flake

IKR-055

Location: Sec. 30, T.2S., R.11W., Umat Meridian  
UTM 5/435850/7682300

Class: I

#### Location and Setting

IKR-055 consists of two pieces of lithic material located on a sand bar along the north side of the first unnamed drainage entering September Creek from the west. The drainage in question enters September Creek approximately 3.5 km south of the creek's confluence with Maybe Creek. The site is roughly 4 km up the drainage from September Creek. The creek cuts through an area of low, gently rolling hills covered with tussock meadows. The banks of the drainage are bordered by dense thickets of tall willow shrubs. A substantial caribou trail runs along the creek's south bank. Major resources noted are caribou and ptarmigan. One small grayling carcass was noted along the creek, but no concentrations of grayling were seen during survey of the drainage in late June. A large willow thicket exists just north of the sandbar within the active floodplain of the drainage. The view from the creek bed is limited. A wider vantage can be obtained from higher ground adjacent to the drainage. A small pond is located nearby on the south bank of the creek.

#### Site Information

The two lithics, both of black or very dark grey CCS, were located together on the upper portion of the sand bar near the creek's north bank. Specimen UA77-336-1 (Pl. 37 2; v.4:206) is a flake exhibiting a platform remnant at its proximal end, and a hinge fracture at the distal end. The piece is rather thick. The flake has a section of cortex present along its right dorsal side. It exhibits bifacial step flaking and rounding along the left and right lateral margins but it cannot be readily discerned whether the attrition is the result of intentional use-retouch or stream action. The piece is water-worn but this wear is not that pronounced. A possible burin blow was struck on the ventral surface from the right proximal edge.

#### Discussion

The materials comprising IKR-055 appear to be secondarily deposited. Nevertheless they could derive from an activity site that was once on the floodplain to the north, or from a location further upstream. Some cutting or scraping activities are suggested if the wear patterns on UA77-336-1 can be ascribed to intentional use. Nothing can be said about the cultural affiliation of the materials, other than to assign them to the prehistoric period.

<u>Catalog #</u>	<u>Description</u>
UA77-336-1	Blade-like Flake

IKR-056

Location: Sec. 10, T.2S., R.11W., Umat Meridian  
UTM 5/440100/7687250

Class: I

#### Location and Setting

IKR-056 consists of a single wooden artifact found on the north bank of Maybe Creek across from its confluence with September Creek. The banks of the creek are approximately 3 m high at this location and are subject to undercutting and sloughing caused by high water during spring breakup each year. The bank is very steep and difficult to climb. The creek is bordered by willow thickets. A caribou trail runs along the top of the bank.

#### Site Information

The wooden piece (UA77-254-1; Pl. 64 3; v.4:255), broken into two sections while in transit from the field. It is rectangular in cross section and outline, and has been formed by adzing or planing. The wood is not willow. Both ends are concave. Each concavity is oriented to the width of the piece. All edges of the piece are bevelled. Holes have been drilled or punched through the side about 3 cm from each end.

#### Discussion

The piece appears to be secondarily deposited by flood waters. It is conceivable that the specimen came from the top of the bank and had moved down when fragments of the bank sloughed away, but this is doubtful. The piece was on top of a sloughed segment of bank approximately one-third of the way up from water level. A search of the immediate area did not bring to light any other cultural material on either the sloughed portions of the bank, the bank face, or along the top. The piece could be a brace for a kayak or dog sled, or it may represent material lost or discarded by USGS or geophysical crews operating in the area.

<u>Catalog #</u>	<u>Description</u>
UA77-254-1	Possible Kayak/Umiak Crosspiece

IKR-056

Location: Sec. 10, T.2S., R.11W., Umiat Meridian  
UTM 5/440100/7687250

Class: I

#### Location and Setting

IKR-056 consists of a single wooden artifact found on the north bank of Maybe Creek across from its confluence with September Creek. The banks of the creek are approximately 3 m high at this location and are subject to undercutting and sloughing caused by high water during spring breakup each year. The bank is very steep and difficult to climb. The creek is bordered by willow thickets. A caribou trail runs along the top of the bank.

#### Site Information

The wooden piece (UA77-254-1; Pl. 64 3; v.4:255), broken into two sections while in transit from the field. It is rectangular in cross section and outline, and has been formed by adzing or planing. The wood is not willow. Both ends are concave. Each concavity is oriented to the width of the piece. All edges of the piece are bevelled. Holes have been drilled or punched through the side about 3 cm from each end.

#### Discussion

The piece appears to be secondarily deposited by flood waters. It is conceivable that the specimen came from the top of the bank and had moved down when fragments of the bank sloughed away, but this is doubtful. The piece was on top of a sloughed segment of bank approximately one-third of the way up from water level. A search of the immediate area did not bring to light any other cultural material on either the sloughed portions of the bank, the bank face, or along the top. The piece could be a brace for a kayak or dog sled, or it may represent material lost or discarded by USGS or geophysical crews operating in the area.

<u>Catalog #</u>	<u>Description</u>
UA77-254-1	Possible Kayak/Umiak Crosspiece

IKR-058

Location: Sec. 21, T.4N., R.12W., Umiat Meridian  
UTM 5/428900/7732700

Class: I

#### Location and Setting

IKR-058 was identified by Richard Stern of the Alaska Division of Forest, Land and Water Management. The site, a cranium of a large mammal tentatively identified as a whale, is located east of the Ikpikpuk River on top of an eroding slope adjacent to the river. The slope rises about 25 m to 30 m above the river. There are a series of 10 erosion slopes fronting the Ikpikpuk River at this location. The site is approximately 36 km northwest of the confluence of the Ikpikpuk River and Kay Creek and 19 km southwest of the Ikpikpuk River's confluence with the Price River. Site vegetation consists of alpine tundra on top of sandy ground. Light ground squirrel activity occurs in this area. The alpine tundra grades into an area of moist tundra and then into an area of wet tundra near some small lakes or ponds east of the site. The site has a good view to the south, east and west.

#### Site Information

The cranium was oriented lengthwise east to west and was apparently found lying upside down. A live .410 gauge red shotgun shell (#4 shot) was sitting inside the skull. There was some lichen accumulation observed on some of the exposed bone surfaces. The skull appears to have been recently overturned. Some candy bar wrappers and other debris were observed approximately 15 m west of the site. The bone is visible from the river. The site was given the field designation ROS 78-003 by Stern.

#### Discussion

Stern believes that the skull may possibly mark a human burial, i.e., the remains are inferred to exist underneath the cranium. It is unusual to find whale skulls transported this far inland from the coast. The presence of the specimen at this location is significant and warrants investigation. It is also conceivable that the skull marks a camp or other activity area along the Ikpikpuk River, particularly since it is clearly visible from the river. The skull, however, may not be that of a whale at all. It may be the skull of a mammoth. No attempt has been made as yet to determine to which mammal the skull belongs. If a burial does in fact exist at this location, and the skull is that of a whale, it could be assigned to the recent or early historic periods. It may also be posited that the burial is that of a coastal Eskimo. Some light may be shed on the topic if it can be determined why a whale bone was transported this far inland. What might be the utility of such a piece other than marking a burial? It might also be suggested that the piece was transported via boat or dog sled. The skull measures roughly 75.00 cm in length and over 37.50 cm in width.

KIR

Killik River

KIR

Killik River



KIR-009

Location: Sec. 33, T.5S., R.17W., Umat Meridan  
UTM 5/382350/7652600

Class: I

#### Location and Setting

A CCS flake scatter was found at the SE tip of a rock garland located above the Etivluk River mouth about 0.8 km SE of the datum for KIR-037. The cairns of site KIR-037 stretched the length of the garland to the northwest. Aside from the hill obstruction to the west and northwest, the general setting, view and vegetation at this site is nearly identical to that for sites KIR-037 and KIR-040.

#### Site Information

The scatter was near a shelf, below which the garland thinned significantly and trailed farther southeast along the hill crest. There were about 40 grey and black, cortical and interior CCS flakes. None appeared to have been utilized.

#### Discussion

This was likely a hunting lookout station. Its main advantage is as an overlook of the long southeastward slope toward the Colville River and the valley to the east.

KIR-010

Location: Sec. 30, T.4S., R.16W., Umat Meridian  
UTM 5/398600/7655000

Class: II

#### Location and Setting

A flake scatter was found on a high terrace 8 km north of the Colville River floodplain. The terrace is about 110 m above the river and rises about 8 m above the immediate hillside. It has one other terrace step before dropping again steeply toward the river. KIR-043 lies about .32 km west. Two-thirds of that distance in the other direction is KIR-048.

An extensive view of the Colville valley is available from the site. Close parts of the river, however, are obscured by the lower hillside. The northern view is blocked by the slight rise behind the terrace, however, a 50 m walk in that direction will bring much of the Awuna River valley into view.

Much of the ground surface is exposed on top of the terrace with small patches of mat and cushion-forming vegetation increasing and mixing with

grass tufts and low shrubs on the terrace face. Tussocks cover much of the lower slopes.

The site datum was placed on a mound of earth about .5 m high and 3 m in diameter. Its surface is largely covered with grass tufts and avens.

#### Site Information

Six CCS flakes and one burin (UA77-332-1; Pl. 21 7; v.4:ix) were found within a 19 m area of the terrace surface. All were of black material with the exception of one grey flake. One black, blade-like flake had evidence of utilization.

#### Discussion

The site was probably a hunting lookout station and the earth mound, a nunatuk (Bane 1978; personal communication; see "Discussion" for site XHP-169). Although incomplete, the burin most closely resembles the classic Denbigh mitten-shaped burin (Giddings 1964;210-222), or what is termed a "pseudo-burin" by Bandi (1963;24). Hence the site can be placed within the Arctic Small Tool tradition.

KIR-011

Location: Sec. 20, T.5S., R.8W., Umiat Meridian  
UTM 5/465700/7653500

Class: IV

#### Location and Setting

KIR-011 consists of a large lithic scatter and a possible cache pit located near the point of a hill roughly 1 km west of the Killik River and 3 km southeast of the Colville and the Killik river confluence. Mayuasanik Creek trends west to the Colville River approximately .5 km west of KIR-011. High ground, over 240 m in elevation, lies just west of Mayuasanik Creek. No sites were located in this area. The site affords a view of the Killik River floodplain to the north and east. It is on the third hill terrace in an area of extensive frost boil activity and eroding sandstone broken by patches of alpine tundra vegetation. The point of the hill slopes rather steeply on the northeast to the Killik River floodplain and on the west to Mayuasanik Creek. The point grades gently uphill to the southeast. This area is vegetated with tussocks, grasses, low shrubs and patches of alder. Major caribou trails run along the point in a southerly direction. They can also be seen along the hills to the west. KIR-013 is approximately 2 km WNW.

#### Site Information

Cultural materials consist primarily of 300 or more flakes of CCS distributed in an area measuring approximately 35 m east-west by 25 m north-south. Several fragments of what were tentatively identified as fire cracked rock were located along the hill's northeast margin. A possible

cache pit or cairn of sandstone slabs measuring approximately 1 m in diameter and .5 m in height was situated near the northwest perimeter of the site. No tests were made in this feature. A number of willow or alder fragments were distributed in an area measuring roughly 8 m north-south by 5 m east-west, just south of the cairn. Lithic materials include flakes of black and grey CCS with black predominating. One flake is heavily patinated, having a chalky white exterior. Also observed were two cortical flakes of translucent, smokey obsidian. Other lithics include microblade fragments, point bases and tips, knife flake fragments or burin fragments, a rough biface, an expended flake core fragment, and assorted flakes. Few utilized flakes were noted, although it should be mentioned that not all materials were checked for signs of utilization. The biface (not collected) measured approximately 7.30 cm by 4.60 cm and was crudely worked. This piece may be a preform. Also observed was a blade-like flake of grey CCS measuring approximately 4.00 cm by 1.70 cm. The microblade fragments included three of black and one of grey CCS. The grey fragment measures approximately 1.30 cm by .80 cm. It appears to be a medial section.

Two of the black microblade fragments measure 1.90 cm by .65 cm and .80 cm by .50 cm. The larger of the two is a medial section. The microblade segments were not collected. Specimen UA77-249-1 (Pl. 21 15; v.4:125) is a tool fragment which has been snapped at its distal end. The snap occurs along a notch on the dorsal surface of the left distal end. The specimen has been made on a flake, and a pronounced platform is still evident. The bulb has been extensively thinned by the removal of parallel, oblique flakes from over one-half of the ventral surface. The piece exhibits step flaking, crushing, and rounding along the left and right lateral margins, suggesting its use on moderately hard materials. It is very similar in form to mitten-shaped burins characteristic of the Denbigh Flint Complex (Giddings 1964), although no burin blow had been struck from the piece. The specimen apparently broke during manufacture. The fragment may originally have been a flake knife or even a scraper at one time. Specimen UA77-249-3 (Pl. 2 19; v.4:16) is a bifacial fragment of black CCS evidencing parallel oblique flaking technique. The piece has been snapped at the distal end. It does not appear to have been completely finished. The left and right lateral margins exhibit nibbling, stepping and rounding, suggesting longitudinal use on a moderately hard material. The supposed use-wear may be more the result of flaking preparation. It is perhaps a Denbigh phase point fragment or possibly a knife (Giddings 1964). Specimen UA77-249-4 (Pl. 3 17; v.4:25) is the base segment of a side-notched point of black CCS. The piece is basally thinned and has a straight base. It exhibits heavy crushing and rounding on all but the snapped margins. The wear is evidently the result of the manufacture of the notches and preparations made for hafting the piece. This specimen is tentatively classified as an element of the Northern Archaic tradition (Anderson 1968a; 1968b).

Specimen UA77-249-5 (Pl. 1 1; v.4:3) is a projectile point fragment exhibiting fine, parallel oblique flaking on one surface, with parallel flaking on the other side. The piece has been snapped, presumably at the proximal end. This specimen is classified as a Denbigh Flint Complex projectile point (Giddings 1964). UA77-249-7 (Pl. 17 6; v.4:95) is a flake knife of

the Arctic Small Tool tradition. The fine flaking suggests the Denbigh Phase of the tradition. The piece has been snapped at the distal end. The fragment is triangular in shape and has been intentionally retouched along its left and right lateral margins, resulting in a relatively steep edge. Both margins exhibit step flaking and crushing, suggesting their use transversely on relatively hard material. The left, lateral edge is the most heavily utilized. The dorsal side has several parallel oblique flake scars. Specimen UA77-249-8 (Pl. 3 5; v.4:20) is a projectile point base of black CCS, snapped at the distal end in two planes. The piece evidences parallel oblique flaking, and has a straight base with contracting sides. The base is bifacially thinned. Slight shouldering is present. The lateral margins exhibit heavy step flaking, crushing, and rounding, presumably the result of hafting. The piece is similar to Choris elements (or at least Post-Denbigh materials) observed in the collections for Band 3 at Onion Portage. The Choris identification seems to be the best classification at the present time.

Specimen UA77-249-9 (Pl. 1 3; v.4:4) is a projectile point or side blade fragment which has been snapped at one end. Parallel oblique flaking is evident. It could fit easily into any of the phases of the Arctic Small Tool tradition, but because of the assemblage characteristics at KIR-011, it is tentatively classified as a Denbigh or Choris element. Two flakes of black CCS were located in a test pit dug toward the east end of the lithic concentration. They were found at a depth of approximately 16 cm below surface in a light colored, yellow brown, clayey loam, intermixed with sedimentary rock fragments. No stratigraphic changes were evident in the profile of the test pit. One of the flakes exhibits step flaking and crushing along the right lateral margin suggesting its possible use on hard material. Artifacts seem to have been displaced due to the frost boil activity in the site area.

#### Discussion

KIR-011 is classified as a hunting lookout and chipping station that was apparently used by members of several cultural traditions. As has been noted above, elements of the Northern Archaic tradition, and the Choris and Denbigh phases of the Arctic Small Tool tradition have been tentatively identified at this locale. KIR-011 may be a site transitional between the Denbigh and Choris phases of the Arctic Small Tool tradition. This recognizably tenuous argument is based upon the presence of specimen 249-8, a piece classified as an element of the Choris Phase. This view assumes that the Arctic Small Tool tradition elements at the site can be treated as a single assemblage. Otherwise we are dealing with site occupations by several major cultural traditions. The production and repair of weapons may have been a primary activity at KIR-011, as is evidenced by the several point fragments scattered around. The possible cache pit (or cairn) and fire cracked rocks suggest the site may have been used as a temporary camp and game storage area. The proximity of water and wood, key resources, and the well-drained nature of the area make it an ideal camp location. The site is strategically placed for intercepting caribou moving along the Killik River corridor. A brief reconnaissance along the hill line about .25 km kilometer south of KIR-011 resulted in finding other sites associated with denuded areas of ground. It should be noted that

one was a microblade/blade site. Time constraints and distance outside of the Reserve led reluctantly to a decision to pass up the formal recording of these materials.

<u>Catalog #</u>	<u>Description</u>
UA77-249-1	Possible Burin Preform
UA77-249-2	Utilized Flake
UA77-249-3	Projectile Point
UA77-249-4	Projectile Point
UA77-249-5	Projectile Point (End Blade)
UA77-249-6	Amorphous Biface
UA77-249-7	Flake Knife
UA77-249-8	Projectile Point
UA77-249-9	Projectile Point
UA77-249-10	Retouched Flake
UA77-249-11	Retouched Flake

KIR-012

Location: Sec. 36, T.5S., R.9W., Umiat Meridian  
UTM 5/462700/7650900

Class: I

#### Location and Setting

KIR-012 consists of an isolated flake of CCS found on a terrace or bench of a hill approximately .5 km east of Kaklik Naitka Creek, 1 km from the confluence of this creek and the Colville River, in the general vicinity of Killik Bend. The site is approximately 5 km SSW of the confluence of the Killik and Colville rivers. Tussocks are the predominant vegetation. The terrace consists of a sandy loam mixed with water-worn gravels. It was covered with bearberry and skeleton leaf willows, with assorted grasses growing along the highest points. The field crew identified the site area as an eroding bank with a relatively denuded margin about 1 m wide near the top, giving way to dense tussock growth further uphill. Several caribou trails come up the hill toward the site from the creek. The creek is a seasonal drainage containing standing pools of water. The site affords a view south and north along Kaklik Naitka Creek. The Colville River and Pingaluligit Mountain can be seen from the top of the terrace.

#### Site Information

Cultural material consists of an isolated flake of black CCS located about 2 m from the terrace top. It measures approximately 7 cm in its longest dimension. No evidence of flake utilization was noted. The flake was not collected.

#### Discussion

No valid estimates can be made concerning the function or cultural affiliation of this site. It is probable that it represents a hunting lookout for monitoring game moving along Kaklik Naitka Creek.

## KIR-013 Killik Bend Site

Location: Sec. 24, T.5S., R.9W., Umiat Meridian  
UTM 5/463700/7654000

Class: IV

### Location and Setting

KIR-013 is a large camp or village site located along the southern bank of the Colville River east of Killik Bend. It is approximately 1.5 km south of the confluence of the Colville and Killik rivers and includes the area north of the confluence of the Colville River and Mayuasanik Creek. The area is within the old floodplain of both the Colville and the Killik rivers. The Killik River is currently cutting its active channel several kilometers east and north. The portion of the valley where the site is located is currently the floodplain of Mayuasanik Creek, and several old meander scars and drainage sloughs attributable to this creek can be seen in high altitude aerial photographs of the area. Two distinct terraces are present along the southern bank of the Colville River. Cultural features and materials were found on each of the terraces. The lower terrace abutting the river is approximately 60 m wide and characterized by dense alder and willow thickets. Small areas of grassy meadow can be found near the Mayuasanik Creek confluence. A steep slough bank approximately 2 m to 3 m high forms the border of the terrace. A gravel bar exists below the bank during periods of low water. The Colville River has been actively eroding this bank during spring breakup or high water stage.

No evidence of terrace flooding was noted during August 1977. This is significant given the fact that the spring of 1977 was viewed as an unusually high water period for the Colville River by residents of Umiat, Alaska. Stratigraphic profiles of the bank indicate that the terrace has been inundated several times in the past, resulting in the deposition of approximately 1 m of alluvium. The second terrace, to the east, is approximately 1 m to 2 m in elevation above the first and forms the aforementioned floodplain of Mayuasanik Creek. The terrace is underlain by sorted gravels laid down by either the Colville River or Killik River when they cut to this side of the valley during a considerably earlier period. The Killik River has been downcutting further east of this area, leaving this portion of the valley intact and subject only to the meandering effects of Mayuasanik Creek. The terrace margin is characterized by small willows, dwarf birch shrubs, and assorted alpine tundra vegetation. This vegetational regime gives way further east to tussock and grasses, with sedge and other aquatic species present in and around low centered polygons, old meander sloughs, and reclaimed oxbow lakes. Some of the plants identified along the margin of the terrace, aside from those mentioned above, include labrador tea, coltsfoot, lowbush cranberry, bearberry, and assorted mosses and lichens. Dense alder and willow thickets can be found along Mayuasanik Creek to the south. The floodplain of the valley and surrounding hills can be seen from the second terrace. The general locations of sites KIR-011, IKR-043, IKR-044, and IKR-046 through IKR-049 can also be seen. A large number of caribou trails crosscut the valley and adjacent hills, confirming the area as a major caribou travel route.

(Hemming 1971). Whitefish and arctic grayling are important river resources. Arctic Char, burbot, pike, and suckers occur throughout the drainage, and chum salmon are known to ascend into headwater streams (Sloan 1976:11; White et al. 1977).

#### Site Information

Cultural materials and features were found along the gravel bar, bank and terraces for a distance of approximately 1100 m (Fig. 6). A number of loci were noted. One area (Locality 1), approximately 200 m south of Mayuasanik Creek, consists of two small concentrations of lithic debris and a drilled metal object distributed over an area measuring roughly 5 m in diameter. Flakes of grey, black, and red brown CCS were observed. No use-wear was noted. Unfortunately, the material was found along the river gravels and on top of portions of sloughed bank sections. A brief test pit was dug on top of the bank but no cultural material or levels were found. The iron metal object (UA77-250-69; Pl. 55 3; v.4:276) resembles a spoon or scoop handle, though it could have functioned as a net sinker or line weight. It had a small hole drilled at one end. The presence of the materials, especially the variety of lithics, suggests that a camp or activity area may have existed at this location.

A piece of sawed antler, two flakes of CCS, and a worked ivory object (Locality 2) were observed on the gravels approximately 180 m to 200 m north of Locality 1, in an area just south of where Mayuasanik Creek enters the Colville River. The materials were distributed for a distance of roughly 15 m along the bottom of the cutbank on the gravel bar of the river. One flake was of grey CCS. No use-wear was noted on the lithics. The worked ivory object (UA77-250-68; Pl. 45 1; v.4:226) is a crescentic wedge of mammoth tusk that had two holes drilled at each point. The piece had been shaped by sawing. The specimen evidently functioned as a net weight, and can be assigned to the proto-historic or historic period.

Two black CCS decortication flakes and assorted caribou bones (a scapula, ribs, and long bones) were located approximately 100 m north of Locality 2. The flakes were found on the gravel bar and the bones were found protruding from the face of the cutbank approximately 12 cm from the top of the bank. The materials at Locality 3, were located near an old cut of Mayuasanik Creek, approximately 90 m north of the current creek outlet, suggesting that a camp or activity area was once located here, perhaps when this creek channel was active.

Another concentration of cultural debris, Locality 4, was located approximately 70 m north of Locality 3. The material, consisting of a flake core, waste flakes, caribou bones and fragments, fire cracked rock, and a worked bone piece, was distributed for a distance of approximately 30 m along the gravels at the base of the cutbank. A piece of caribou antler and caribou long bone were found protruding from the side of the cutbank. Lithic materials consisted of decortication flakes and other debris of black and grey CCS. The flake core was found in the middle of a small flake concentration. The caribou innominate bone was observed on the river gravels. A worked bone piece (UA77-250-67; Pl. 46 5; v.4:226),

# KIR 013 KILLIK BEND SITE

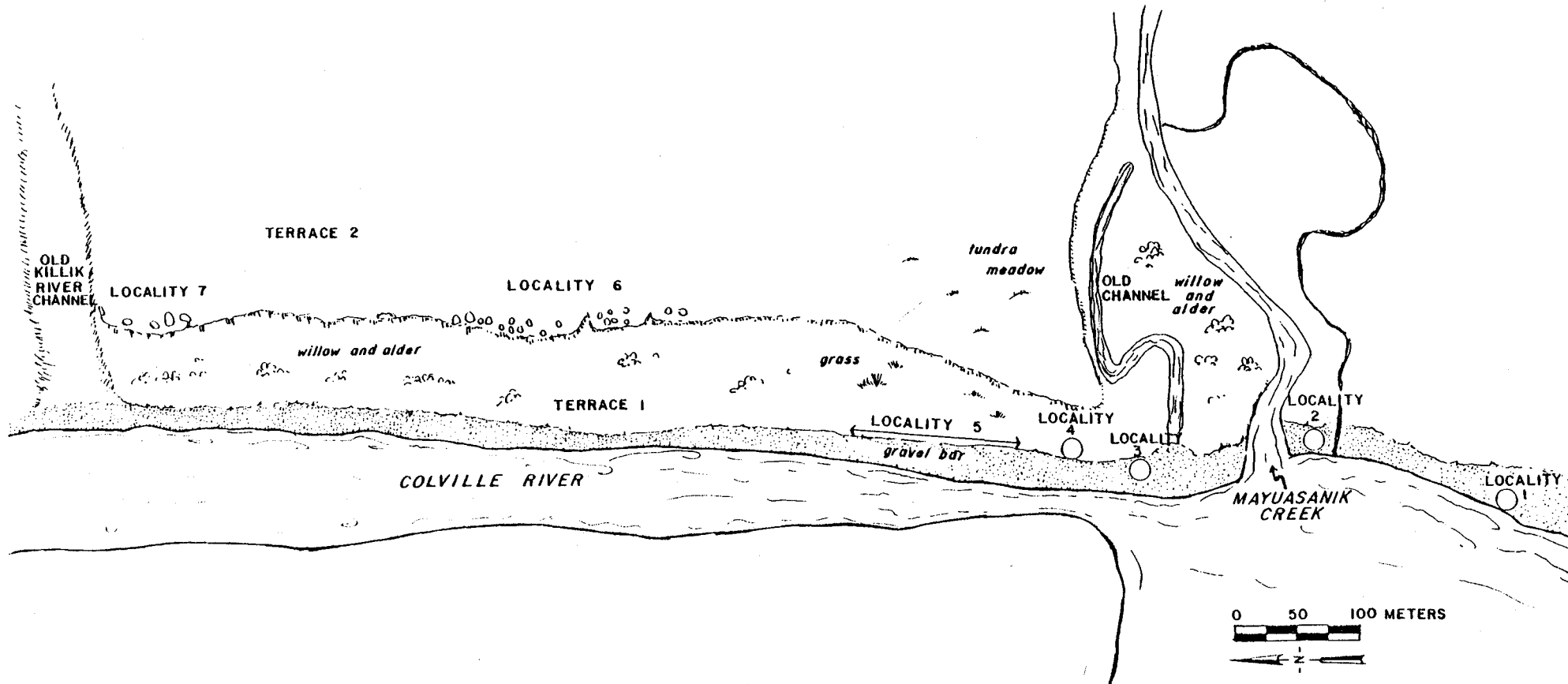


Figure 6



located in the same area approximates a parallelogram in shape. It has two holes drilled in corners opposite one another, suggesting its use as a net sinker or weight.

A large concentration of cultural debris (Locality 5) was located approximately 30 m north of Locality 4. The material was found protruding from the face of the cutbank and was distributed along the gravels near the bottom of the bank for a distance of over 200 m. The cultural material was found to extend to a depth of about 30 cm below the surface of the bank. The material apparently represents the location of a large seasonal camp or village site that is eroding into the Colville River. The loci to the south of Locality 5 (i.e., Localities 1 through 4) may be extensions of this concentration, or they may represent different uses of the area over time. Only further work at KIR-013, barring its destruction by the Colville River, will lend insight into this problem.

Cultural materials and features at Locality 5 include hearths; fire cracked rock; sawed, cut, and broken caribou bones; large rocks (perhaps part of structures); lithic and bone tools; sawed or cut antler and ivory; and metal implements and fragments. More specifically, a functional list of items includes cores, utilized flakes, knives, drills, bifaces, scrapers, points, and other debitage of CCS; iron material such as the octagonal barrel of a weapon, spoons, a kettle fragment, a spoon-like fragment or net weight, and other miscellaneous bands, scraps, and pieces; whetstones or abraders; bone and antler points; sled runner segments of antler and whale bone; a piece of drilled mammoth tusk; a metal fishing lure; a glass bead; and miscellaneous items of carved, cut, sawn, drilled, or otherwise fashioned pieces of antler, bone, and ivory, including numerous net weights or sinkers, and a comb. The assemblage has a proto-historic or early historic cast, but it may be entirely possible that a late prehistoric component is represented.

Elements characteristic of the American Paleo-Arctic tradition, Northern Archaic tradition, and Arctic Small Tool tradition are present on the hills surrounding the area of the Killik and Colville river confluence, so it is quite possible that sites of these traditions can be found on the floodplain. This scenario depends upon the assumption that the area would have been a preferred location over a considerable period of time. Thus far, no evidence exists to support this speculation, and it is mentioned only to suggest caution when assessing the significance of the area.

Some lithic elements indicative of a late prehistoric or proto-historic component at Locality 5 include specimens UA77-250-20 (Pl. 2 5; v.4:25), UA77-250-59 (Pl. 2 11; v.4:19), UA77-250-17 (Pl. 7 2; v.4:52), and UA77-250-18 (Pl. 11 11; v.4:78).

UA77-250-20 and UA77-250-59 appear to be late prehistoric projectile points or point fragments (Ford 1959:135-137; Giddings 1952:Pl. I, XVII) UA77-250-17 appears to be a knife blade. UA77-250-18 is similar to hand drill bits illustrated for the same period by Giddings (1952: Pl. XXXIV 12-14). The end scrapers (UA77-250-4, 42, 78; Pl. 18 6, 3, 5; v.4:101, 100, 101) present at the site are plano-convex although two exhibit bifacial working (UA77-250-16, 35; Pl. 11 5, 8; v.4:75). This can be placed in

either late prehistoric or early historic collections (Hall 1971: Pl. 7 30 31; Campbell 1962:372, Fig. 278; Stanford 1976: Pl. III a). Two whetstones (UA77-250-21 and 48, Pl. 40 1, 4; v.4:207, 208) are generally rectangular in shape and closely correspond to examples cited by Giddings (1952: Pl. VI 1-7) for Ambler Island. Ford (1959:172) notes that whetstones are a "pañ-Eskimo" trait. The impression is that this type is generally late, although Ford notes similar examples in Okvik, Old Bering Sea, and Ipiutak indicating that shape is not a reliable indicator of cultural affiliation or period. Giddings and Anderson (n.d.:Pl. 110 1, 111) also illustrate a rectangular whetstone from a Birnirk beach at Cape Krusenstern, and several others from Ipiutak House 30 at the Cape.

Bone or antler items are considered next. A large number of pegged sled shoe fragments were found at the site (some of the specimens, particularly the smaller segments could also be "reinforcement pieces"). One can argue for a late prehistoric, or early historic classification for KIR-013 based upon Giddings' (1952) dating of the appearance of dog-drawn sleds at his Kobuk River sites. He specifies that pegged shoes (versus lashed shoes) are a later development; that is, after Intermediate Kotzebue which dates around 1550 AD (1952). Most of the shoes are made of whale bone indicating contact with coastal groups. Campbell (1962) discusses the "Nunamut" tendency to use caribou antler for their sled shoes. The presence of whale bone sled shoes at KIR-013 indicates that coastal materials or products were available to inland people, assuming that the site does not represent the use of the Killik River area by a "coastal group". The existence of trade networks and coastal contacts seems to be supported. Net sinkers (see above) found at Locality 5, and Locality 2 and 4, are similar to types used by late prehistoric and historic Eskimo groups (Ford 1959:100, Fig. 451; Campbell 1962:288, Fig. 86; and Nelson 1971:188-189). A comb made of antler was also located (UA77-250-15, Pl. 47 4; v.4:235). Similar specimens can be found in Ford (1959: Fig. 100b and Carter 1966: Pl. XXXVIII 4). Ford notes that the earliest known comb was located on the Kobuk River at Ekseavik (Ford 1959:208; Giddings 1952:89; Pl. 33, Fig. 19).

Antler arrow points and a leister prong located at the site also support a late prehistoric and/or early historic dating for Locality 5 (UA77-250-65, UA77-250-9, UA77-250-12, UA77-250-8, UA77-250-13 and UA77-250-11; Pl. 42 7, 4, 5, 2, 3, 10; v.4:221, 223, 222, 222, 222, 224). Points 250-9 and 250-65 are typical Type 1, Class 1, Style 1 antler arrowheads with single barbs (Hall 1971; Giddings 1952; Corbin 1975; Campbell 1962; Ford 1959; and Alexander 1969) of the late period. UA77-250-8, UA77-250-12, and UA77-250-13 are unique in that they have a blade slot for inseting an end blade.

The tangs for specimens UA77-250-8 and UA77-250-12 exhibit a slight knob near the base. The knob takes the form of a slight ledge or lip. It is present only on one side of the tang. The tang on UA77-250-13 is too fragmentary to tell whether it had the lashing knob. Points UA77-250-8 and UA77-250-12 are single barbed and have square shoulders. Specimen UA77-250-13 exhibits what appear to be the remnants of two barbs. The tangs on all the specimens (except for the knobs noted above) are cylindrical in shape, and taper toward the base. Ford (1959:127, Fig. 58,

especially g) illustrates points which are very similar to the specimens from KIR-013. The points are listed as spurred tang arrow points with barbs and stone points and are described as follows (1959:126):

"These arrow points have a well-defined shoulder and tapering tang with tiny spurs on opposite sides that characterize most of those of the Utkiavik phase. They are made of deer antler and average 10 cm in length (range, 9 to 14 cm). Above the tang the stems are round or oval in cross-section. Toward the tip they have one, or sometimes two, pronounced barbs placed only in one side. At the tip is a socket, lens-shaped in section, which is slit so that its two sides may be pulled together with binding to clamp the butt of a stone point. The broad groove to hold the binding is usually well made. Chipped flint points... were used in this variety of antler arrowhead.... Arrowheads of this type were in use in the latter part of the nineteenth century.... They were used to hunt large game such as polar bear."

The examples from KIR-013 fit this description almost to the letter. The one important difference is that the tangs on the KIR-013 specimens are not spurred, but instead, for the two that exhibit the feature, have single knobs. Knobs are present on other types of antler points of the same period, so the difference is probably a minor one. Knobs occur somewhat earlier than spurs in the archeological record at Barrow, but persist well into Utkiavik times. The points then date to the latter half of the nineteenth century, a dating consistent with the presence of other materials at KIR-013. An interesting note is that the blade slot form also occurs on Cape Smythe harpoon head types (Ford 1959: Fig. 32 b-d) from Utkiavik, which also date fairly late at Barrow (1959). Ford states that harpoons resembling the Cape Smythe type are found in the Okvik period on St. Lawrence Island, in Canadian Thule sites, and in Ipiutak sites (1959). One can only wonder, as did Ford (1959), what forms connect Ipiutak and Okvik types with the later Cape Smythe type. One can also wonder as to the distribution and development of the antler points common to Utkiavik and KIR-013. Might they have the same origins as the harpoon points, based upon the morphological similarities of the blade slot element? Two alternatives are available to explain the presence of the arrow points at KIR-013. The points either represent a style that has been maintained for some time among inland groups, or the points were traded or brought inland from Utkiavik, or the Barrow vicinity. To my knowledge, no points of this type have been found elsewhere in the interior. Thus, the latter explanation would seem to be the best. This is supported by the fact that interior populations are documented as making annual trips down the Ikpiupuk River and along the coast to trade at Barrow (Utkiavik is specifically mentioned), or down the Colville River to trade at Nirlik near the river's delta; people from Barrow also traded at Nirlik (Spencer 1959; Rausch 1951; Larsen and Rainey 1948; Gubser 1965).

The ivory leister prong is similar to types illustrated by Giddings (1952, Pl. 1) for Ambler Island which dates between 1730 and 1760. Hall (1971: 87, Pl. 4 2) illustrates a leister for Kangiguksuk, but it does not bear as much resemblance to specimen UA77-250-11 as does Giddings' example.

Giddings and Anderson (n.d.:Pl. 50 7) illustrate a specimen which very closely corresponds in form to 250-11, but is made of antler. It is labeled as a side prong for a bird spear. What can be safely identified as antler arrowhead preforms were also located at KIR-013 (UA77-250-44, UA77-250-46, and UA77-250-54; Pl. 43 8, 9, 10, v.4:232) suggesting that arrow-points were being manufactured at the site. Stanford (1976), Alexander (1969), Giddings and Anderson (n.d.:Pl. 82 1), and Ford (1959) illustrate similar items some of which are identified as antler arrowhead preforms. Stanford's examples (Pl. 73 g, 88 0-g, 102 f, 115 e, and 119 i) are particularly applicable.

Metal items, of course, confirm the presence of a proto-historic or historic component at Locality 5. Specimen UA77-250-30 (Pl. 54 3; v.4:275) is a handle segment of an iron kettle. Specimens UA77-250-6 (Pl. 55 2; v.4:273), UA77-250-32 (Pl. 55 1; v.4:272), and UA77-250-69 (Pl. 54 3; v.4:276) are identified as metal spoons. Two sections of what is identified as the hexagonal barrel of a rifle or musket (?) were also located (UA77-250-33 and UA77-250-72; Pl. 66 6, 57 7; v.4:277). Murdoch (1892) discusses in some detail the introduction of firearms into northwestern Alaska, and lists the specific models observed during his stay at Barrow. An outside guess would be that specimens UA77-250-72 and 33 represent possibly a Jaeger rifle of American manufacture, but given its state of preservation, it would be very difficult to make a definite determination. There were many other "hexagonal" barrelled weapons available to the Eskimo, especially English sporting or fowling pieces and assorted American weapons, further complicating matters. The weapons, based on Murdoch's (1892) information, were probably acquired after 1850 (also refer to Hall 1975). The last metal item to be mentioned is a fishing lure-made by J. T. Buel of Whitehall, New York (UA77-250-1; Pl. 55 9; v.4:274). This specimen was made at least 70 years ago according to Ruth Jackson who once owned the manufacturing rights to these types of lures (personal communication). The lure was found on the gravels near the river-cut bank, in association with other items collected from Locality 5. The piece either is associated with Eskimo use of the area, or it could have been lost by members of early USGS exploration parties or other infrequent visitors to this section of the North Slope. In fact, our survey crew lost its share of fishing lures during our stay in the area. I am inclined to accept the possibility that the piece was associated with Eskimo use of KIR-013 simply because this interpretation seems to be more consistent with the character of the historic period aspects of the site.

One lithic specimen that deserves some attention is specimen UA77-250-22 (Pl. 7 1; v.4:53). This is a large bi-pointed biface of black CCS. It appears to be a knife end blade, and possibly an ulu. Hall (1971:97, Pl. 11 9-10) illustrates similar items from his Kangiguksuk site. Kangiguksuk dates to the middle of the sixteenth century. The piece at first glance reminds one of Ipiutak type knife side blade specimens although it is somewhat larger (Giddings and Anderson n.d.:Pl. 101 2 for an example from Birnirk beaches at Cape Krusenstern and Pl. 104 1 4 for examples from an Ipiutak house at the Cape; also, Larsen and Rainey 1948). The piece may represent a continuity in style from some earlier northwestern Alaskan traditions. This interpretation would be consistent with the suggested affinities of the antler arrowheads noted above. It should be added

that a few large boulders were observed protruding from the cutbank. Others were distributed at the base of the cutbank on the gravel bar. These boulders were considerably larger than the general range of stone making up the gravel bar. They were intentionally selected for use either as weights to secure tents, or in the construction of firepits or other features. A number of fire cracked rocks were found scattered along the bottom of the cutbank and were observed in situ in the face of the bank, near the top. The fire cracked rocks in the cutbank were usually associated with caribou bones, assorted lithics, and ash. These materials can be classified as firepits or hearths. The site is probably composed of a variety of such features.

KIR-013 also includes approximately 25 depressions which may represent habitation structures and/or cache pits (Localities 6 and 7; Fig. 7). The features were approximately 300 m NNE of Locality 5. At least three types of depressions, set off in several distinct clusters, are suggested. These depressions are located along the edge of the second gravel terrace east of the Colville River. The clusters are located on distinct terrace segments, each bordered to the north and south by slight swales which may be remnants of old drainage cuts. The southern group of depressions (Type 1) is located on two of the terrace sections and part of a third. It consists of 11 features (numbers 1-8a). They are roughly circular in shape and average approximately 1.70 m in length, 1.30 m in width, and .40 m in depth (Fig. 8). The depressions are all located on top of the terrace.

The middle group of depressions are cut into the side of the terrace (types 2 and 3), and are roughly rectangular in outline. There are seven examples in this group, excluding three Type 1 pits which were included in the southern group. The Type 1 depressions associated with the middle group are on the southern part of the second terrace section and are clearly related to the other Type 1 depressions located approximately 8 m south. The Type 2 and Type 3 depressions, in cross-section, consist of a slight rim at the front, where the depression meets the slope of the terrace, the depression proper, and then a steep, relatively high, back wall formed by the cut made into the terrace side. Walls of varying height form the other two sides of the depressions (refer to the profile, Fig. 9). The rear walls vary in height from .80 m to 1.10 m above the bottom of the depressions. The front berms vary in height from .10 m to .25 m above the bottom of the depressions. The depth in the middle of the depressions, relative to the north and south sides of the features, varies between .30 m and .80 m. The depressions sort into two groups based upon differences in overall measurements. Type 2 depressions (numbers 9-16) are smaller than Type 3 pits, measuring on the average of 1.70 m in length and 1.60 m in width, with a depth varying between .30 m and .50 m at the center to .75 m to .90 m at the rear wall. The depth at the front, from the front edge to the bottom of the pit is usually less than .15 m, although the two largest depressions of this type have depths of .20 m to .25 m near the berm, similar to measurements for the Type 3 depressions nearby. There are seven examples of this type. Type 3 depressions are considerably larger than Type 2 pits in all dimensions (Fig. 9). There are two examples of this type in the middle group of depressions (numbers 16-17). Both occur at the northern end of the group. One depression measures 3.90 m by 3.50 m and the other 3.00 m

KIR 013 - KILLIK BEND SITE - LOCALITY 6,7

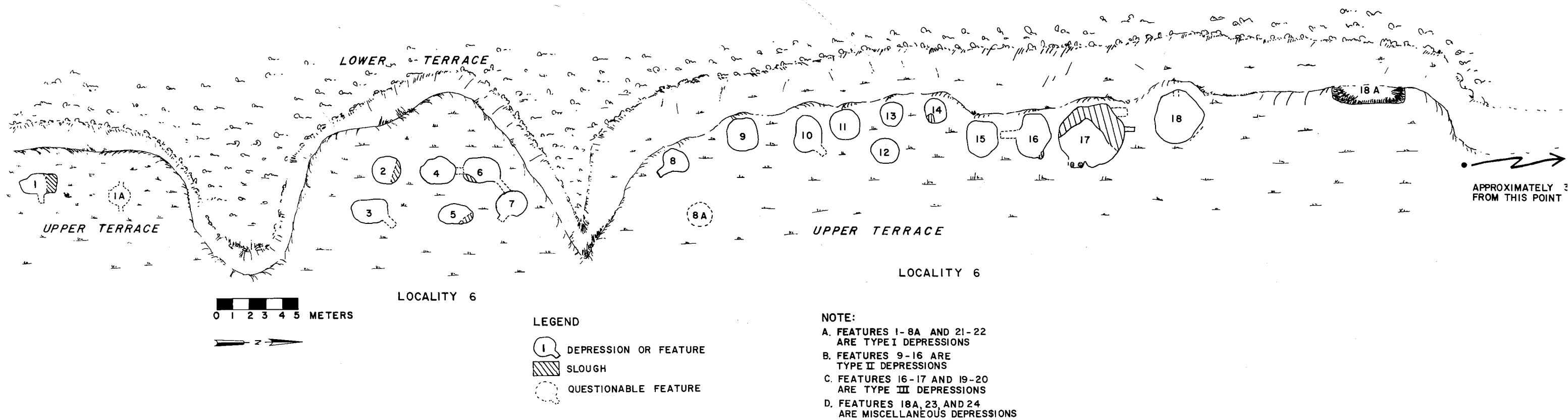


Figure 7

# KIR 013 - KILLIK BEND SITE - LOCALITY 6,7

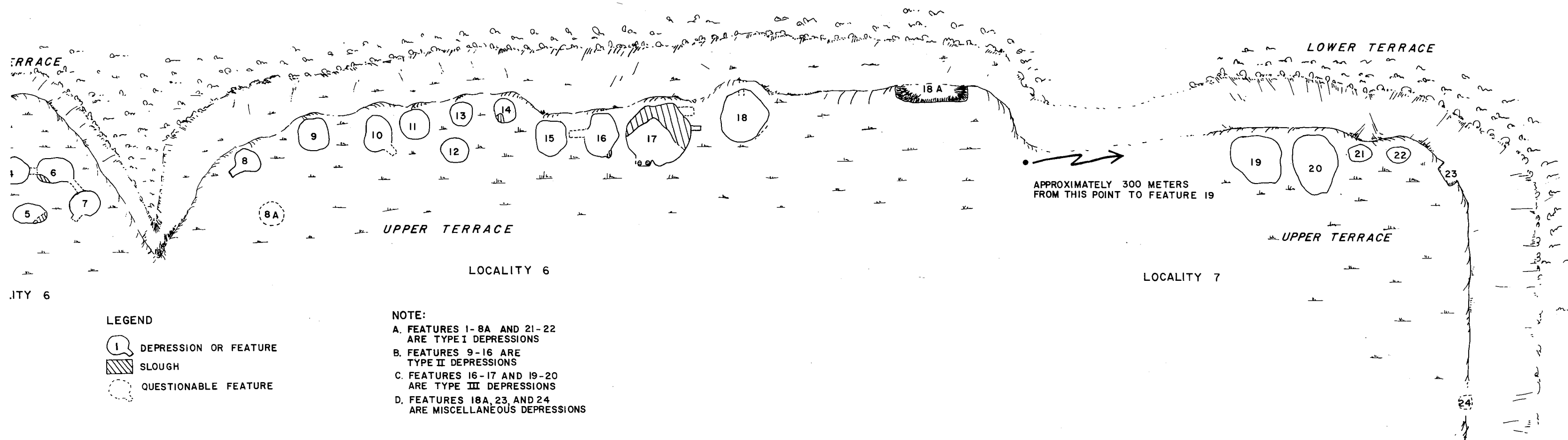


Figure 7

# KIR 013 FEATURE DETAIL LOCALITY 6

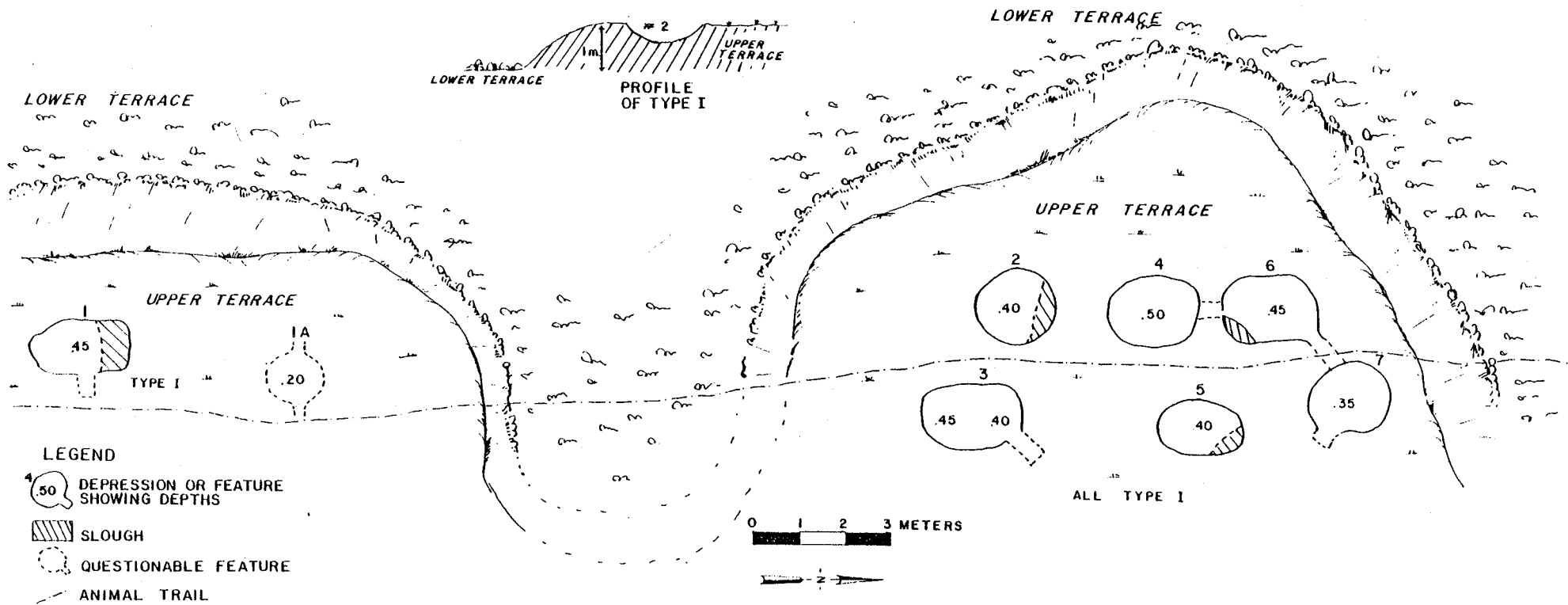


Figure 8



# KIR 013

## FEATURE DETAIL LOCALITY 6

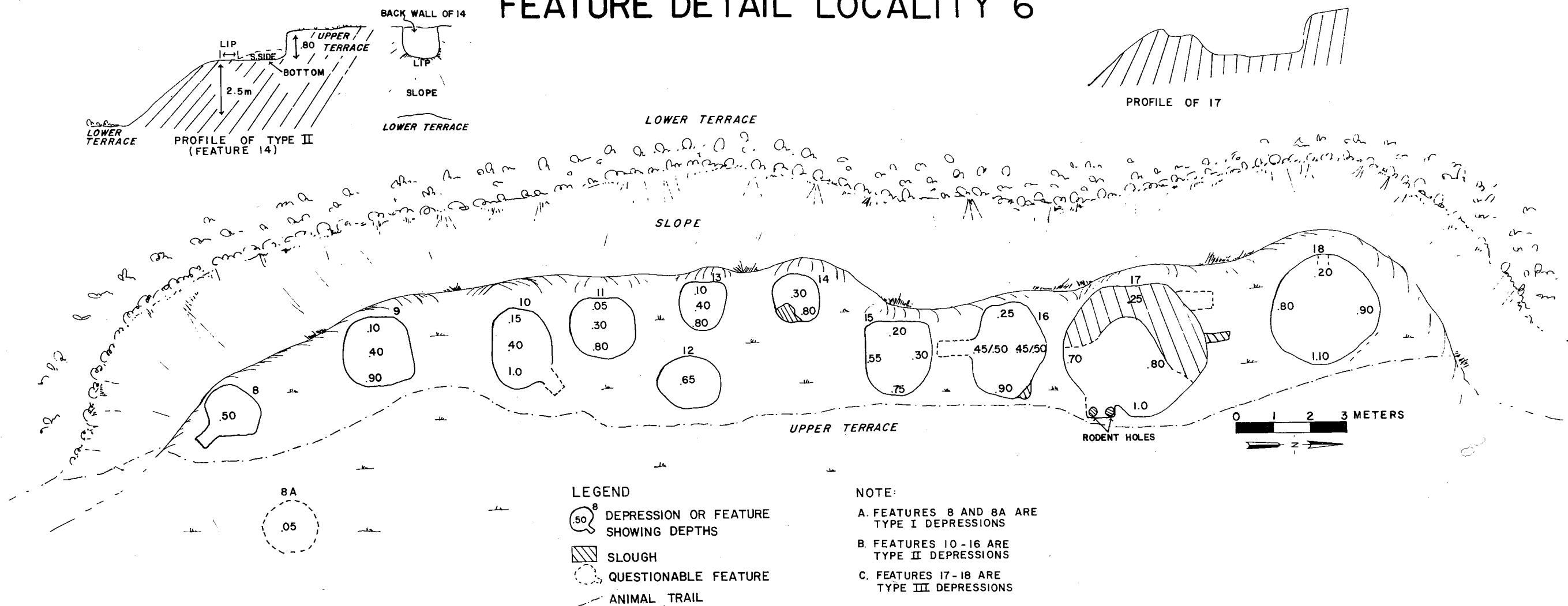


Figure 9

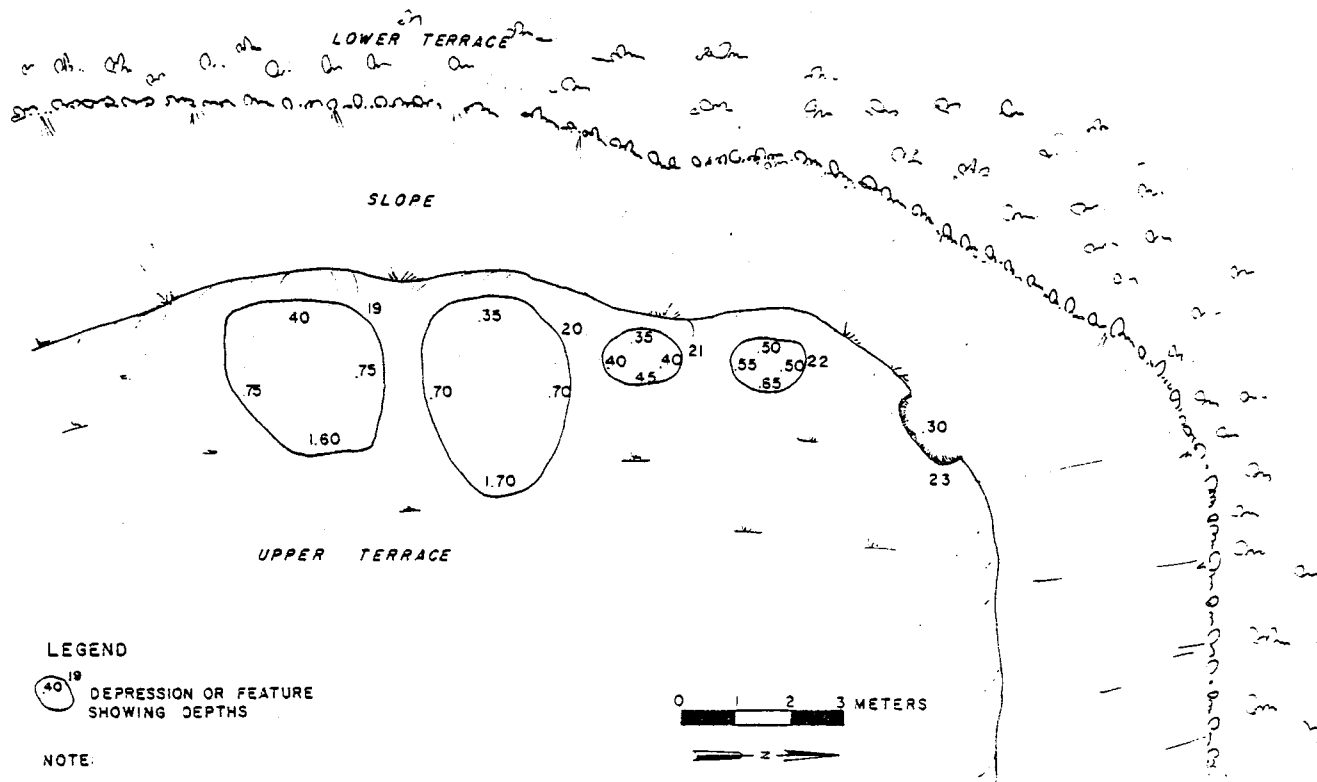
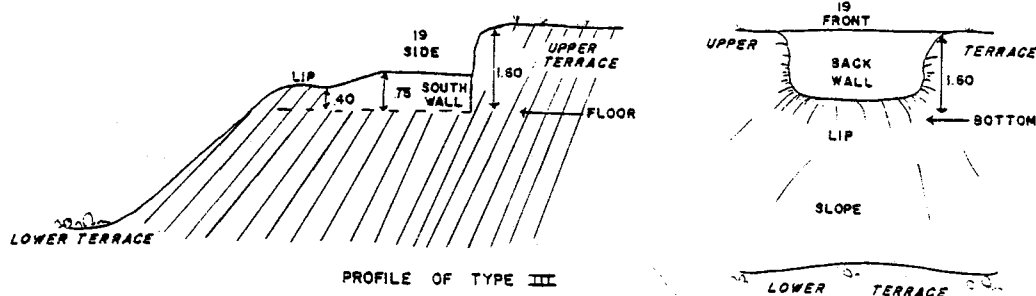
by 3.00 m, with a depth at the back wall of 1.00 m and 1.10 m respectively. The depth at the center, relative to all sides, averages about .80 m for both depressions.

Two other Type 3 depressions (numbers 19 and 20) are situated on the same terrace approximately 250 m north of the middle group. The first depression measures 2.90 m by 2.80 m and the second 3.50 m by 2.60 m, with depths at the back wall of 1.60 m and 1.70 m respectively. The depth at the center of each feature varies between .70 m and .75 m. The depth from the bottom of the depression to the top of the rim at the front ranges between .35 m to .45 m for both depressions. Two Type 1 depressions, measuring 1.30 m by 1.00 m and 1.30 m by .90 m with depths ranging between .35 m to .45 m and .55 m to .65 m, respectively, lie just a few meters north of the Type 3 features in this group (number 21 and 22). Features 19 through 22 comprise Locality 7 (refer to Fig. 10). An old meander channel of the Killik River is approximately 10 m further north. Several miscellaneous suspect pits are located along the upper margin of the old channel.

In summary, Localities 6 and 7 include several concentrations of depressions distributed over 300 m along the second terrace (Fig. 7). The depressions consist of three identifiable types clustered generally by group from south to north. The types have been classified by the investigator, and it is open to question whether or not the distinctions made reflect real differences related to structure or function of the original features. It is suspected that the Type 1 depressions are cache pits based principally upon their size. The Type 3 features could be the remains of house structures of some kind. The Type 2 depressions are difficult to classify, even on a tentative basis. They are similar in size to the Type 1 depressions and probably cache pits, but the structural differences are perplexing. One could argue that the Type 3 depressions are also cache pits--just a larger version. Certainly, no possibility can be excluded, particularly since none of the depressions were tested. A significant factor to be taken into consideration is the lack of any visible cultural debris in the vicinity. No bone or lithics were observed. The vegetative cover (alpine tundra) in and around the depressions was well established. Dense stands of shrub birch were located in the depressions. This may indicate a considerable age for the features. No stone slabs were located near any of the depressions as might be expected if they were used as cache pits. There certainly are ample stones available for this purpose on the gravel bars of the Colville River. It is conceivable that the depressions could have been covered with sod, willow and alder branches, or even snow. The major habitation area, if all the depressions are in fact cache pits, and if such an area was located nearby, might have been located a short distance further inland from the terrace, or in the area of the first terrace (i.e., between the river cutbank and the second terrace). Nothing was found to support this contention. An alternate explanation which may be particularly applicable to the larger depressions, is that they were dug to be used with a tent or as part of some other habitable structure. I am assuming that their original size has not changed appreciably. I can envision a tent or similar arrangement, an Ivrulik for example (Corbin 1975),

# KIR 013

## FEATURE DETAIL LOCALITY 7



### LEGEND

④<sup>19</sup> DEPRESSION OR FEATURE  
SHOWING DEPTHS

### NOTE:

- A. FEATURES 19 AND 20 ARE TYPE III DEPRESSIONS
- B. FEATURES 21 AND 22 ARE TYPE II DEPRESSIONS
- C. FEATURE 23 IS A MISCELLANEOUS DEPRESSION

Figure 10

centered over each depression. The depression might then have functioned as a cold sink or it may have been used as an activity area of some sort, as a firepit for example. The upper area or edge of the depression could have been used as a bench. This, of course, is the purest speculation. Testing of the features is certainly necessary to attempt to resolve this issue. I merely suggest the above scenarios to develop a sense of caution on the part of any investigator who may be given the opportunity to deal with these features. If one is willing to assign considerable time-depth to the features, they could represent the sloughed and filled remains of other types of habitation structures (perhaps sod houses) and their associated storage units.

### Discussion

KIR-013 is an extensive site covering a distance of over 1100 m along the southern Colville River shore just south of the confluence of the Colville and Killik rivers, in the vicinity of Killik Bend. Most of the localities at the site (e.g., 1-5) evidence a strong proto-historic or early historic character. Certain antler and lithic forms suggest a late prehistoric component. No materials were located which could be assigned to the American Paleo-Arctic tradition, the Northern Archaic tradition, or the various phases of the Arctic Small Tool tradition, but sites of these traditions have been located on the hills surrounding the Killik Bend area (IKR-048, IKR-051, KIR-011, and KIR-047). The contention is that the floodplain east of Killik Bend may contain sites assignable to these traditions. Aerial photographs indicate that terraces useful for habitation or activity sites may also exist along the Colville River just west of Killik Bend. Hall (1975) located what he identifies as an early historic site on the bank of the Colville River across from its confluence with the Killik River. The site consists of a single house which has partially eroded into the river. Caribou and fish bones, wood chips, organic debris, and other materials were noted. A list of items includes the following: an antler mallet head, an antler mesh gauge, four pieces of metal, a walrus jaw (?), a piece of window glass, two biface fragments, cut bone, three pieces of cut ivory, six antler shafts, a crooked knife of antler with metal blade, bone sled shoes, a compound knife handle, antler flaking hammer head, and assorted lithics, some with edge retouch. Also observed was the cylinder to a double-barrel, muzzle-loading percussion cap shotgun suspected to date after A.D. 1840. The house is identified as an Eskimo habitation based upon the character of the artifacts. This site appears to be very similar in cultural affiliation and time period to components at KIR-013. They may even be contemporaneous. Hall (1975) also discovered a number of sites in the upper Killik River area. Based upon the materials observed, they can be assigned to the Arctic Small Tool tradition and to the historic period. Earlier traditions are suggested by the presence of face-faceted and end-faceted microblade cores.

Some insight into the historic use of the Killik Bend area can be gained from an account collected by William Schneider (1978:5) from a 76 year old "old timer" named Horace Ashogeak, now of Barrow:

"His grandfather and family stayed at Niglik (at the mouth of the Colville River) waiting for the summer trading. They acquired whale oil, seal oil, and ugeruk before heading up inland

during the last part of August. Some people headed for the mouth of the Anaktuvuk River, some for the mouth of the Killik River to hunt caribou. They walked inland. When they got caribou before freeze-up, they went to get them good eating. They then went up to the mountains, sometimes before November. When they got there, the sheep were fat and they were able to hook lots of fish at Killik River; sometimes they used fish spear. They were hunting all they could before December, January and February (the cold months) for wolf, wolverine, and sheep."

It is apparent that around the turn of the century Eskimo groups were still using the general Killik Bend area for hunting and perhaps fishing activities. The quote cited above is consistent with what is known about inland group seasonal rounds, that is, that the Killik River confluence more than likely served as the location for spring and fall camping, hunting and fishing activities while awaiting breakup for down river boat travel or freezeup for sled travel to the mountains. The large pits at the site would have served as useful caching facilities, particularly for storing fish and game taken in the fall for winter supplies. Amsden (1975) also documents the use of the area by Killik River and Anaktuvuk River groups during the early 1900's. Other accounts describing use of the area by Killik River Eskimos (Killikmiut), including details of their lifestyles and seasonal rounds, can be obtained from Gubser (1965), Rausch (1951), Ingstad (1954), and Spencer (1959).

Estimates can be made concerning the date of the various locales at site KIR-013. I would suspect that the large locale eroding from the cutbank (Locality 5) dates to the late 1800's, with earlier periods of use entirely possible. Locality 6, the large group of depressions to the north, is suspected to be much older than Locality 5, but not enough data is available to resolve this issue. The materials present at Localities 1 through 4, suggest that they can also be assigned, at least, to the proto-historic or early historic periods with possible prehistoric components also present. Whatever the nature of the localities described, KIR-013 appears to exhibit use over an extended period of time. An important research focus will be to identify the other sites in the vicinity and reconstruct the prehistoric and historic use of the strategic Killik Bend area. It is reasonable to assume that human groups have recognized the area's potential and have utilized this potential for a considerable period of time. The variety of sites in the vicinity and their cultural affiliation supports this contention.

<u>Catalog #</u>	<u>Description</u>
UA77-250-1	Metal Fishing Lure
UA77-250-2	Bone Fish Spear Prong
UA77-250-3	Knife End Blade
UA77-250-4	End Scraper
UA77-250-5	Knife Side Blade
UA77-250-6	Metal Spoon or Ladel
UA77-250-7	Awl or Unfinished Gorge
UA77-250-8	Unilaterally Barbed Point

<u>Catalog #</u>	<u>Description</u>
UA77-250-9	Unilaterally Barbed Point Fragment
UA77-250-10	Possible Worked Bone
UA77-250-11	Unilaterally Barbed Leister Prong
UA77-250-12	Unilaterally Barbed Point
UA77-250-13	Unilaterally Barbed Point
UA77-250-14	Miscellaneous Knife Fragment
UA77-250-15	Comb
UA77-250-16	Bifacial Scraper
UA77-250-17	Knife End Blade
UA77-250-18	Drill
UA77-250-19	Sled Fragment
UA77-250-20	Projectile Point
UA77-250-21	Whetstone
UA77-250-22	Knife End Blade
UA77-250-23	Net Sinker
UA77-250-24	Miscellaneous Knife Fragment
UA77-250-25	Miscellaneous Knife Fragment
UA77-250-26	Metal Stake
UA77-250-27	Sled Runner
UA77-250-28	Sled Runner
UA77-250-29	Net Weight
UA77-250-30	Iron Pot Fragment
UA77-250-31	Net Sinker
UA77-250-32	Spoon
UA77-250-33	Gun Barrel
UA77-250-34	Metal Strap (Possible Barrel Hoop)
UA77-250-35	End Scraper
UA77-250-36	Sled Runner
UA77-250-37	Cut/Sawn Antler
UA77-250-38	Face-faceted Flake Core
UA77-250-39	Miscellaneous Knife Fragment
UA77-250-40	Amorphous Biface Fragment
UA77-250-41	Biface, Preform
UA77-250-42	End Scraper
UA77-250-43	Sled Part
UA77-250-44	Antler Projectile Point Preform
UA77-250-45	Retouched Flake
UA77-250-46	Antler Projectile Point Preform
UA77-250-47	Metal Spike
UA77-250-48	Whetstone
UA77-250-49	Possible Net Weight
UA77-250-50	Worked Bone
UA77-250-51	Sled Fragment
UA77-250-52	Sled Part
UA77-250-53	Sled Part
UA77-250-54	Antler Projectile Point Preform
UA77-250-55	Sled Runner
UA77-250-56	Sled Runner
UA77-250-57	Sled Runner
UA77-250-58	Sled Runner
UA77-250-59	Projectile Point

<u>Catalog #</u>	<u>Description</u>
UA77-250-60	Net Sinker
UA77-250-61	Biface, Preform
UA77-250-62	Miscellaneous Knife Fragment
UA77-250-63	Miscellaneous Knife Fragment
UA77-250-64	Biface, Preform
UA77-250-65	Unilaterally Barbed Arrow Point
UA77-250-66	Miscellaneous Knife Fragment
UA77-250-67	Net Sinker
UA77-250-68	Net Sinker
UA77-250-69	Metal Object
UA77-250-70	Rodent Jaw Bone
UA77-250-71	Gun Barrel Fragment
UA77-250-72	Gun Barrel Fragment
UA77-250-73	Antler Fragment
UA77-250-74	Sled Runner
UA77-250-75	Glass Bead
UA77-250-76	Sled Runner Fragment
UA77-250-77	Stone (Possible Net Weight)
UA77-250-78	End Scraper
UA77-250-79	Ivory Object
UA77-250-80	Sled Runner
UA77-250-81	Unilaterally Barbed Projectile Point
UA77-250-82	Sled Runner
UA77-250-83	Utilized Cortical Flake
UA77-250-84	Cut Bone
UA77-250-85	Carved Bone
UA77-250-86	2 Nonutilized Cortical Flakes
UA77-250-87	Utilized Core Fragment
UA77-250-88	Utilized Flake
UA77-250-89	Utilized Thinning Flake
UA77-250-90	Biface, Preform

KIR-020

Location: Sec.  
UTM 5W/390250/7650450

Class: I

#### Location and Setting

A CCS flake scatter and some possibly fire cracked cobbles were found on a terrace located 9.3 km east of the Etivluk River mouth and 30 m above the Colville River's southern bank. Most of the distance from the river is in the form of a steep bluff, with a narrow level step separating it from the base of the terrace itself. The terrace rises about 6 m from the step and, although steep on its face, blends gently into the hillside to the rear.

The terrace's surface, up to 240 m by 80 m across, is completely covered with cobbles. Grass tufts and mat and cushion-forming vegetation sparsely line the terrace face and edges. Tussocks and low shrubs increase beyond there.

The view is an excellent one of the river valley for about 5 km to the NE and NW. Hills and steep bluffs prevent wider or more distant coverage.

#### Site Information

Within 15 m of the terrace face was a small scatter of CCS flakes. All had very weathered edges and an off white surface patination. In two other locations there were broken cobbles which may have been fractured by heat.

One feature at the site was a line of cobbles stretching for 60 m or more right at the crest of the terrace face. Many were slightly larger than others nearby and appeared to have rotated, such that some of their bottom, weathered surface was exposed.

#### Discussion

The site very likely served as a hunting lookout station. Fire cracked cobbles, if present, would indicate other possible uses, and the line of cobbles is still unexplained. Possibly it is a natural occurrence resulting from solifluction, separating materials on the slope from those on the level surface. Those cobbles in the line may mark the division between the two zones.

No age has been determined for the site but the high degree of patination and weathering on the CCS flakes indicates it is of some antiquity.

KIR-021

Location: Sec. 32, T.5S., R.17W., Umiat Meridian  
UTM 4W/619300/7653000

Class: III

#### Location and Setting

A number of flake scatters, tools and fire cracked cobbles were found on top of a steep eroding bluff situated at the northern edge of the Colville River valley 3.5 km west of the Etivluk River mouth. The bluff extends about 1.6 km in total length and is sectioned in many places by steep-sided gullies. At the site location this bluff section is higher and more eroded than anywhere else along its length. From its 40 m to 45 m height above the floodplain there is an excellent view of many kilometers of the Colville-Etivluk confluence area. Also within view is a 1.2 km slope to sites on the ridge above.



The site is a large flat or gently sloping surface with a sparse cover of mat and cushion-forming vegetation, sedge grass tufts, lupines and some willows. At the bluff edge soil and shale slabs are mixed, but a few meters down the slope only the slabs are visible. Willows line both the base of the bluff and gullies to the sides.

#### Site Information

Cultural materials were found along an 85 m stretch of the bluff edge and extending up to 22 m behind it. Various CCS flakes, some tools, one flake, and a fire cracked rock cluster were found out of context along the bluff face. The latter cluster was also partially evident at the top and was one of three hearths found. Near one cluster, a test pit revealed fire cracked rock and CCS flakes from ground surface to a depth of 16 cm. Included in this were a utilized microblade (UA77-308-27; Pl. 33 46; v.4:204), a biface trimming flake and an amorphous biface.

Three other biface fragments, two flake core fragments (UA77-308-4; Pl. 32 8; v.4:193) and a possible blade core (UA77-308-5, Pl. 26 5; v.4:175) were also found.

Further evidence for a blade technology was revealed by the presence of a possible facial rejuvenation flake (UA77-308-2, Pl. 29 7; v.4:187). An additional microblade (UA77-308-10; Pl. 33 44; v.4:204) and one microblade core (UA77-308-11; Pl. 24 5; v.4:146) further address microblade production. Core and blade technology was also evidenced by two flake knives produced from blades. One thin one with serrated edges (UA77-308-8; Pl. 17 12; v.4:97) and a blocky one (UA77-308-9; Pl. 17 3; v.4:96) were also found.

#### Discussion

American Paleo-Arctic and Arctic Small Tool tradition traits are present within the artifact assemblage at this site. The microcore has a blocky platform shape similar to that of the Denbigh cores. It also has a wedge-shaped base, retouch and blade removal from more than one face, and a platform angled at roughly 90° from the direction of blade removal. Add to those features bi-directional blade removal, for two blades were removed from the bottom, and a Paleo-Arctic influence is strongly evident (Giddings 1964:203; Dumond 1977:43; Anderson 1970a and b; Robert Gal 1979, personal communication).

The Denbigh Phase is represented again by a thin flake knife with fine serration. A second flake knife found near the first was considerably thicker without finely serrated edges, and could fit within any phase of the Arctic Small Tool tradition (Giddings 1964:223-226).

One object recorded was a small piece of cobble with part of its surface polished smooth and evidence of a possible hole or deep groove along the break. It was from the test pit with many other fire cracked cobbles, CCS flakes and a microblade fragment. Such polishing may also fit within the Denbigh Phase (Giddings 1964; Anderson 1970b).

Evidence presented here raises the possibility of two separate site occupations. However, the artifacts discussed and their spatial relationships give strength to the interpretation of a single pre-Denbigh period of occupation, transitional between the Paleo-Arctic and Arctic Small Tool traditions.

<u>Catalog #</u>	<u>Description</u>
UA77-308-1	Utilized Cortical Flake
UA77-308-2	Facial Rejuvenation Flake
UA77-308-3	Amorphous Biface
UA77-308-4	Flake Core Fragment
UA77-308-5	Blade Core
UA77-308-6	Amorphous Biface Fragment
UA77-308-7	Amorphous Biface Fragment
UA77-308-8	Flake Knife
UA77-308-9	Flake Knife
UA77-308-10	Microblade
UA77-308-11	Microcore
UA77-308-12	28 Nonutilized Flakes
UA77-308-13	20 Nonutilized Cortical Flakes
UA77-308-15	Utilized Flake
UA77-308-16	Utilized Flake
UA77-308-20	Utilized Flake
UA77-308-21	Utilized Flake
UA77-308-23	Utilized Flake
UA77-308-25	Biface Trimming Flake
UA77-308-26	Amorphous Biface Fragment
UA77-308-27	Microblade
UA77-308-28	Utilized Cortical Flake

KIR-022

Location: Sec. 32, T.5S., R.17W., Umat Meridian  
UTM 4W/619900/7653000

Class: I

#### Location and Setting

Two CCS flakes were found .6 km east of KIR-021 and on a small section of the same bluff where that site is located. This section is about 30 m across and not over 25 m above the floodplain level. Two higher and longer bluff sections lie between this site and KIR-021 to the west. Another higher bluff with KIR-023 upon it is immediately east.

A dense vegetative cover, composed largely of avens, sedge and moss, leaves little ground exposed, and that which is exposed is due to rodent burrowing at and near the bluff's tip. Other aspects of the site's general setting and view are quite similar to that for site KIR-021.

#### Site Information

One of the two flakes was a black blade-like flake. A nearby test revealed no other cultural material.

#### Discussion

This was probably a hunting lookout station.

<u>Catalog #</u>	<u>Description</u>
UA77-309-1	Blade-like Flake

KIR-023

Location: Sec. 32, T.5S., R.17W., Umat Meridian  
UTM 4W/620200/7653000

Class: I

#### Location and Setting

A flake scatter and one fire cracked cobble were found on a bluff section immediately east of KIR-022. Although this site is about 3 m higher than KIR-022, the setting, view and vegetation are nearly identical.

#### Site Information

Two grey cortical flakes and two black interior flakes were found within 10 m of the bluff's edge. Near them was a single fire cracked cobble. All were found above one of the gullies along the bluff's western slope.

#### Discussion

From the presence of the fire cracked cobble, this site is more likely a temporary camp rather than a hunting lookout.

KIR-024

Location: Sec. 32, T5S., R.17W., Umat Meridian  
UTM 4W/619800/7653850

Class: I

#### Location and Setting

A single CCS flake was found on the ridge crest east of VABM "Thunder" and almost .8 km east of XHP-274. In general, the setting, view and vegetation here are the same as at XHP-274. One difference is that the view here also takes in some of the northern valley and a little of the Awuna River.

### Site Information

A single black interior CCS flake comprises the site.

### Discussion

This was most likely a hunting lookout station.

KIR-025

Location: Sec. 32, T.5S., R.17W., Umat Meridian  
UTM 4W/619900/7653850

Class: I

### Location and Setting

A bifacial tool base was found on the ridge crest, about 100 m east of site KIR-024. The general setting, view and vegetation are almost identical at the two sites. One difference is that this site has a slightly more extensive westward view. Another is the slightly greater amount of exposed ground surface here than at the other site.

### Site Information

The point base (UA77-310-1; Pl. 2 12; v.4:18) is from a dark grey CCS material. It exhibits one face with indistinct parallel flaking, and a thick, slightly contracting base. One test pit was excavated

### Discussion

This site may have been a hunting lookout station.

<u>Catalog #</u>	<u>Description</u>
UA77-310-1	Lance or Dart Point Base
UA77-310-2	23 Nonutilized Flakes
UA77-310-3	9 Nonutilized Cortical Flakes
UA77-310-4	Utilized Flake
UA77-310-5	Utilized Flake
UA77-310-6	Utilized Flake
UA77-310-7	Utilized Flake
UA77-310-8	Utilized Flake
UA77-310-9	Utilized Flake
UA77-310-10	Utilized Cortical Flake
UA77-310-11	Utilized Cortical Flake
UA77-310-12	Utilized Cortical Flake
UA77-310-13	Utilized Flake
UA77-310-14	Utilized Flake
UA77-310-15	Utilized Flake
UA77-310-16	Utilized Flake

KIR-026

Location: Sec. 32, T.5S., R.17W., Umat Meridian  
UTM 4W/620000/7653850

Class: I

#### Location and Setting

A .44 shell casing, a scatter of CCS flakes, bone, and wood, were found on the ridge crest east of VABM "Thunder" and 340 m east of KIR-025. The two sites' general settings, views and vegetative covers are nearly identical.

#### Site Information

One isolated CCS flake was found (eroding over the ridge crest) 45 m from datum. All other materials were found within a 55 m by 15 m area on top of the ridge.

A historic period use of the site is evident from the .45 casing (UA77-311-3; Pl. 41 15; v.4:268), a cut bone piece and two pieces of cut wood. Both wood pieces were small stakes which could have been used to hold down a small trap, or possibly served as a peg for holding down and/or working a hide.

All CCS materials could have been of the historic period. Some, however, including a crude unifacial tool (UA77-311-1, Pl. 20 14; v.4:115), had a patina, indicating a considerably earlier site occupation.

#### Discussion

During both occupations the site was probably used as a hunting lookout. Other activities such as hide working and trapping may also have occurred. The one expended shell was not necessarily dropped at the spot where it was shot, for it could have been carried a long distance for the purpose of reloading or reshaping for use as a blunt arrow tip.

<u>Catalog #</u>	<u>Description</u>
UA77-311-1	Graver
UA77-311-2	Wooden Peg or Stake
UA77-311-3	Rifle Shell
UA77-311-4	Cut Bone Fragment

KIR-027

Location: Sec. 32, T.5S., R.17W., Umat Meridian  
UTM 5W/380150/7653750

Class: I

#### Location and Setting

A CCS flake scatter was found on the ridge crest east of VABM "Thunder" and about 115 m west of KIR-028. The general setting, view and vegetation are very similar to that of KIR-024, KIR-025 and KIR-026 located immediately west.

#### Site Information

The scatter consisted of five grey cortical and interior flakes spread over an area of one square meter. None appeared utilized.

#### Discussion

This was most likely a hunting lookout station.

KIR-028

Location: Sec. 32, T.5S., R.17W., Umat Meridian  
UTM 5W/380200/7653700

Class: I

#### Location and Setting

A CCS flake scatter was found on top of the ridge crest east of VABM "Thunder" and about 115 m east of KIR-027. The general setting, view and vegetation at this site is quite like those for the other ridge top sites to the west (KIR-024, KIR-027).

#### Site Information

Comprising the site were five black, interior CCS flakes within a 1.50 m by 1.50 m area.

#### Discussion

This was likely a hunting lookout station.

KIR-029

Location: Sec. 32, T.5S., R.17W., Umat Meridan  
UTM 5W/380250/7653600

Class: II

#### Location and Setting

A CCS flake scatter and fallen cairn were found on the ridge top east of VABM "Thunder". KIR-028 is west and KIR-030 is about 150 m east. This site's general setting, view and vegetation are similar to the other ridge top sites west (KIR-024, KIR-028). Slightly more of an eastward view of the Colville River is afforded from this site than from those to the west. It is also closer to the river level, due to a gentle eastward slope which continues from XHP-274 down to KIR-033.

#### Site Information

The scatter contained a number of grey, black and brown CCS flakes some of which were cortical, and a majority of which had evidence of utilization. Three other grey flakes were found in two locations within 20 m of the scatter. Nearly 40 m from the scatter were two slabs of shale which had apparently once been fitted against each other in a nearly upright position. The larger of the two would have stood .50 m above the ground with an axis oriented roughly NW-SE.

#### Discussion

Most likely this site served as a hunting lookout station. The quantity of utilized flakes indicates another activity was also performed here.

The cairn may have been either a directional or locational marker. Its orientation toward the cairns of site KIR-037 on the next hill to the SE supports the latter possibility.

KIR-030

Location: Sec. 32, T.5S., R.17W., Umat Meridan  
UTM 5W/380350/7653550

Class: II

#### Location and Setting

A number of CCS flake scatters were found on the ridge crest east of VABM "Thunder". KIR-029 is 150 m west and KIR-031 lies 115 m east. The general setting, view and vegetation are similar to those of the flanking sites.

### Site Information

Five concentrations of CCS flakes were noted along a 95 m stretch of the ridge crest. Cortical, interior and pressure flakes were found in all but two of them. Colors ranged through tan, grey, black and red brown. Many isolated flakes were also seen between all the scatters. None were obviously utilized.

### Discussion

This was most likely a hunting lookout station which was visited a number of different times.

KIR-031

Location: Sec. 32, T.5S., R.17W., Umat Meridian  
UTM 5W/380400/7563500

Class: I

### Location and Setting

An isolated CCS flake was found on the ridge crest east of VABM "Thunder". KIR-030 is 115 m west and KIR-032 lies 138 m farther east. The general setting, view and vegetation of these sites are all alike.

### Site Information

The isolate was a black CCS flake found 4 m from the bluff's lip.

### Discussion

This site was likely a hunting lookout station.

KIR-032

Location: Sec. 32, T.5S., R.17W., Umat Meridian  
UTM 5W/380550/7653450

Class: I

### Location and Setting

A CCS flake scatter was found on the ridge crest east of VABM "Thunder". KIR-031 lies 138 m west, and KIR-033 lies 140 m east. The general setting, view and vegetation are similar to that of other sites (KIR-024-031) farther west.

### Site Information

The scatter contained one grey and three black interior flakes, none of which were utilized. Thirty-eight meters away from these were a few



shattered granitic stone chips from a small stone with a rounded, possibly polished, surface. As the ridge crest is entirely of shale this artifact had to have been brought to the site from a lower level. While its function is uncertain its shattered condition indicates it received at least one hard blow.

#### Discussion

This site was likely a hunting lookout station.

<u>Catalog #</u>	<u>Description</u>
UA77-312-1	2 Nonutilized Cortical Flakes

KIR-033

Location: Sec. 32, T.5S., R.17W., Umat Meridian  
UTM 5W/380600/7653400

Class: II

#### Location and Setting

A cairn, a possible cache and some CCS flakes and scatters were found on the eastern end of the ridge which extends from VABM "Thunder". KIR-032 through KIR-024 line the same bluff lip on the westward incline. East of the site the bluff swings from facing SW to south. Below its southern face is a steep-sided, willow-lined drainage, across which is KIR-038. The general setting, view and vegetation are very similar to those at other ridge top sites to the west.

#### Site Information

All recorded materials were found along a 150 m length of the bluff and within 20 m of its lip. All but four isolated flakes were close to where the bluff changed direction, within a 60 m stretch of its length. Four scatters of grey and black flakes were found. None held utilized flakes, although cortical and pressure flakes were each noted to occur in two scatters.

The cairn was a tumbled pile of 12 or more stone slabs. It was 3 m from five other slabs placed upright in the soil that may have marked a stone-lined cache. Two sticks between 30 cm or 45 cm long were also found on the site. Both were unworked, crooked and weathered willow or alder pieces, larger in thickness than any other shrubs growing on the bluff top. Likely they were brought to the site from a lower level.

#### Discussion

The site likely served as a hunting lookout station. Use during the historic period may be represented by the cache, the cairn and the two sticks. Other aspects of the site are of less determinable age.

KIR-034

Location: Sec. 33, T.5S., R.17W., Umat Meridian  
UTM 5W/381400/7654450

Class: I

#### Location and Setting

Caribou bone and antler pieces were found on a rock garland about 2.8 km NNS of the confluence of the Colville and Etivluk rivers. The garland lies about 170 m above the river level and, stretches along the hill crest for nearly 1.6 km north. To the south, after a break covered with tussocks, is another small section of the garland. KIR-035, .32 km away, is located there. The Colville River is blocked from view by the local hills, most notably by the ridge leading toward VABM "Thunder". Within sight are long sloping hills toward the Awuna River 5.6 km north. Vegetation is limited to lichens on the rocks and tussocks which surrounds the garland.

#### Site Information

Two right halves of caribou racks were found within 8 m of each other. Both appear to have had tines hacked and snapped off, but were apparently dropped from the animal naturally. An unmarked caribou tibia was found 60 m from the antlers.

#### Discussion

This may have been a caribou kill and/or cache site. If the racks were from killed animals, they were taken in the late fall or early winter when the antlers were about to separate from the skull naturally.

Stones and tussocks could have been used to bury any local kills and the antlers may have been left as markers. Once opened and the covering scattered about, the cache(s) may have become difficult to recognize.

A historic period site use is probable, for the antlers appeared to have been hacked with a metal tool such as a heavy knife. The bone and antlers were also in a condition suggesting that an earlier date for the materials is unlikely. An association may exist between this site and the village of Etivolipar visited by Howard in 1886 (Stoney 1965).

KIR-035

Location: Sec. 33, T.5S., R.17W., Umat Meridian  
UTM 5W/381200/7654200

Class: III

#### Location and Setting

A cache and/or kill site was found on a small rock garland located .3 km south of KIR-036. The site's general setting and vegetation are quite

similar to those at KIR-034. Its view, however, does not take in the Awuna River. Instead there is a southward overlook of the Etivluk River valley from just beyond its mouth. Gently sloping hillsides block SE and SW views.

#### Site Information

Within a 5 m by 10 m area there were three slight depressions in the surface of the stone garland. These were 2 m to 3 m across, under .5 m in depth and had stones lining the bottom. They were apparently made by removing stones from one area and putting them around the edge.

One depression held two left and two right caribou antlers. Another held one left antler and nine unidentifiable pieces. The third feature was empty. Spread over a 15 m by 15 m area immediately south of the depressions were 13 caribou bones and 11 other rack pieces. Many of these had saw or cut marks as would be delivered by metal tools. A couple of others had less defined cut marks which also may have come from stone tools.

#### Discussion

The depressions are probably former caches which have had their stone and earth covers thrown to the side and their contents removed. Conceivably, any meat in them was from animals killed and butchered nearby.

The cairns of KIR-037 may have served as a caribou fence to channel game toward this site. Other now unrecognizable inuksuks may also have been closer to the site, for in certain places there are anomalous rises to the stone garland which may not be natural formations. In a few places on the garland there are small patches of mat and cushion-forming vegetation (1 m to 4 m across) making a level spot that largely or completely covers the rocks underneath. Although no artifacts were found on any of them, they may represent former inuksuks, cache cover material, or some other undetermined cultural feature.

This is most likely historic period site and very possibly one associated with the village of Etivolipar visited by Howard in 1886 (Stoney 1965). The presence of cut marks, which may have been from a stone tool, raises the possibility of prehistoric use also. This is unlikely, however, for there was little weathering difference between any of the antler and bone found.

KIR-036

Location: Sec. 33, T.5S., R.17W., Umiat Meridian  
UTM 5W/

Class: II

#### Location and Setting

Some cut antler and wood artifacts were found on a small section of rock garland located on the steep hill immediately opposite the Etivluk River

mouth. One section of garland contains KIR-035 and lies .8 km northwest. Another large section which curves southeasterly around the peak of the hill and contains KIR-037, begins .16 km SE.

The site lies about 190 m above the Colville at a point offering an excellent view up both the Colville and Etivluk rivers. West is the long ridge with KIR-024 through KIR-033. Nothing of the Colville down river is in view. Other aspects of the general setting and vegetation are similar to those for KIR-034 and KIR-035.

#### Site Information

All four antler pieces found had cut or saw marks, apparently produced by metal tools. One of the antlers was still attached to the skull. Another had been dropped. Near the cut antlers were two worked pieces of wood. One was a shaft 5.50 cm thick and 64 cm long; this was probably the handle of a snow shovel. One blade-like piece (UA77-313-1; Pl. 64 8; v.4:259) was also found. Similar snow shovels are depicted by Murdoch (1892: Fig. 306) and by Ford (1959:144), with historic period and Birnirk period associations, respectively.

#### Discussion

As was determined for KIR-034 and KIR-035, this was probably a historic period site. The presence of one antler which appeared to have been dropped, but which may have been easily separated from the skull after a kill, indicates the possibility of late fall to winter use. Winter use is all the more probable when considering the snow shovel which, according to Murdoch, (1892:306) was an "Indispensable part of the travelers outfit in winter."

<u>Catalog #</u>	<u>Description</u>
UA77-313-1	Snow Shovel Part

KIR-037

Location: Sec. 33, T.5S., R.17., Umiat Meridian  
UTM 5W/391900/7653300

Class: III

#### Location and Setting

Forty-three cairns were found spread out over 900 m of a stone garland located on a hilltop directly opposite the mouth of the Etivluk River. The garland lies at 190 m to 170 m over the river and slopes gently downward to the southeast. To the south, on the side facing the river, are a series of steps and steep slopes which reach the river, .72 km away. The garland reaches over 1.2 km in total length and over 80 m in width. Between the tumbled stones are occasional grass tufts and patches of mat and cushion-forming vegetation. Many of these are near cairns and are con-

spicuously larger than others more distant. A superb view which takes in many kilometers of the Colville and Etivluk river valleys is available from the hilltop. As an observer travels eastward on the garland, much of the view directly westward toward VABM "Thunder" is blocked by the hill. Otherwise, only distant northern views are unavailable.

#### Site Information

Of the 43 cairns only four were comprised of more than 10 stones, and over half were of three to five stones. Some were simply two slabs leaned against each other (Fig. 11) while others were piles of up to nearly 30 pieces (Fig. 11). Another now fallen cairn was formed of one elongated chunk which had been braced upright with smaller stones at its base. It would have stood over 1.2 m tall when erect.

One artifact was found at the site datum. It is a rectangular, weathered piece of worked ivory (UA77-314-1; Pl. 44 10; v.4:234) and with a small, carved projection at the end. The projection has a thin groove around it, which, if meant for tying, would only accommodate something comparable to thin baleen wire. The surface of the opposite end could have been sawn flat with a metal tool.

#### Discussion

Some of the cairns may have served as directional markers or cache markers. It may be that some of the smaller cairns mark subterranean caches. Taken as a group they potentially form one long caribou fence. One possibly associated hunting spot would be at KIR-035.

Certain vegetative patches at or near the cairns seem large enough to have also been created by the former local inhabitants. Possibly they result from earth being thrown from or over a food cairn, or were made to have a small shelter placed over them. They could also have been made for use as a working area.

It is likely that most of the cairns were used during the historic period, most likely in the 1880's by people from Etivolipar (Stoney 1965) located near the Etivluk River mouth below.

<u>Catalog #</u>	<u>Description</u>
UA77-314-1	Finished Bone Tool

KIR-038

Location: Sec. 33, T.5S., R.17W., Umiat Meridian  
UTM 5W

Class: 11

#### Location and Setting

A widely dispersed series of CCS flakes was found 1.6 km west of the Etivluk River mouth on a hillside outcrop 60 m above and .32 km north of

KIR 037

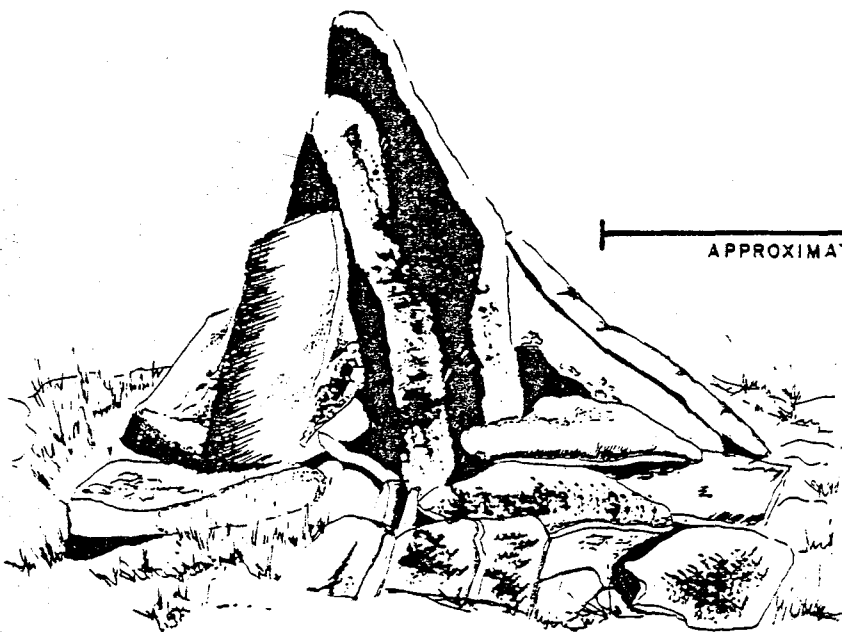
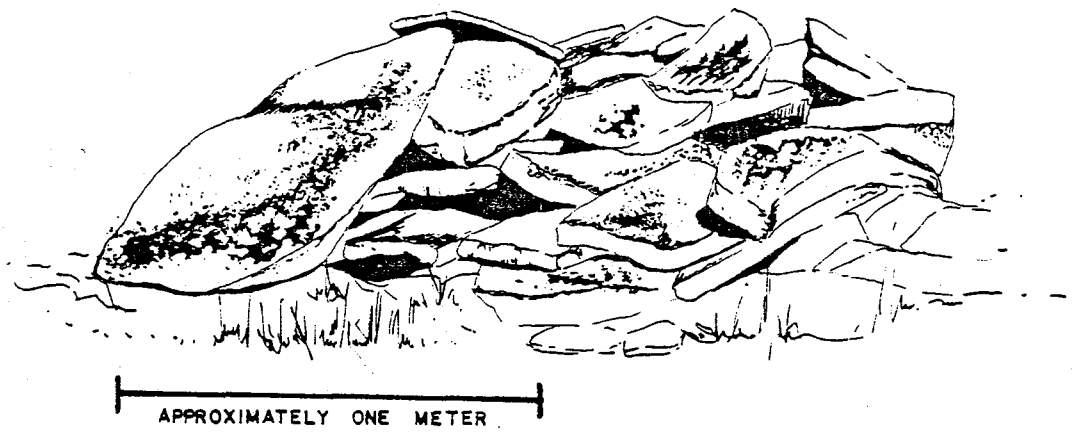
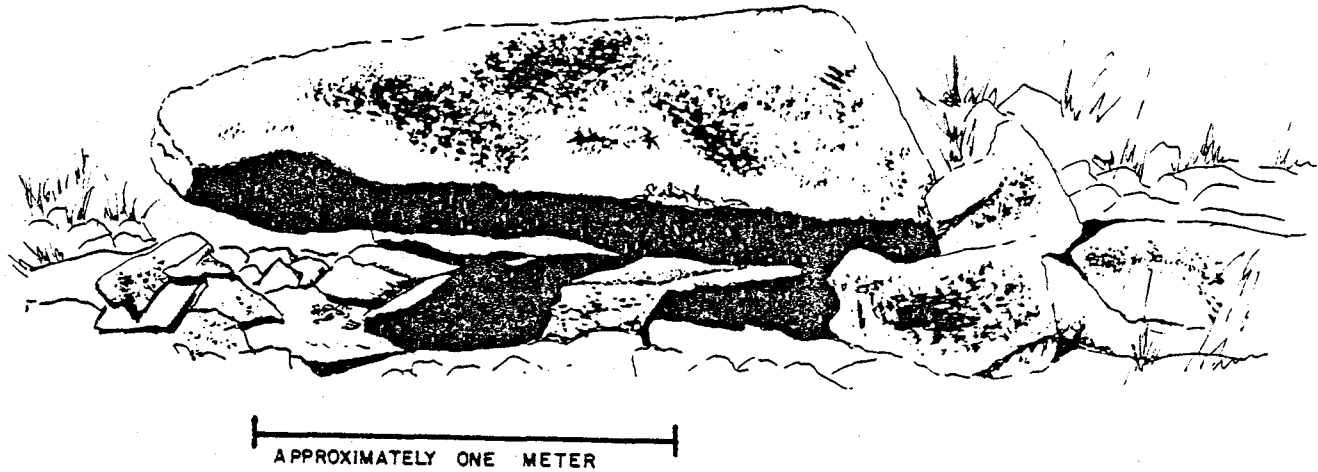


Figure 11

the Colville River. West of the site is a steep-sided, willow-lined draw, across which is KIR-033. Although lower than KIR-033, this site is on the same eastward sloping sedimentary layer as the whole series KIR-024 through KIR-033. Here, however, the hill rises to the ENE at least another 120 m before reaching its crest.

Due to local terrain only 2.4 km of the Colville River is visible to the east. Views south over the confluence area and west up the Colville extend for several kilometers. A northwesterly view up the ridge crest toward VABM "Thunder" is also afforded.

Tussocks cover the slopes above the site. At the site these give way to a largely barren shale exposure with patches of moss, grass tufts and occasional low shrubs. Variations of all these occur on the steps and slopes below.

#### Site Information

A total of about 50 CCS flakes were seen to cover a 90 m by 25 m area. No concentrations of flakes, tools or utilized flakes were noted. Materials ranged in color through grey and brown to black. Cortical and interior flakes were seen in all colors.

#### Discussion

Most likely this was a hunting lookout station.

KIR-039

Location: Sec. 32, T.5S., R.17W., Umat Meridian  
UTM 5W/3910950/7653000

Class: I

#### Location and Setting

A single CCS flake was found 1.7 km west of the Etivluk River mouth and 30 m immediately above the Colville's north bank. KIR-038 lies .4 km ENE across a steep-sided, willow-lined drainage. Below is a steep bank to the river, while above, a number of steps and slopes rise to the ridge crest at KIR-033.

From the site is an excellent view of the confluence area to the south and east as well as of the northern hillsides stretching to sites above. Knolls to the west block some of the NW side of the Colville valley.

A dense shrub growth covers slopes below the site, with sedge grass and shrubs covering the slopes above. The site is a small exposure, with sedge, shrubs, avens, and fireweed around it.

#### Site Information

The site consisted of one large grey cortical flake.

#### Discussion

The site was probably a hunting lookout station.

KIR-040

Location: Sec. 33, T.5S., R.17W., Umat Meridian  
UTM 5W/391950/7653200

Class: I

#### Location and Setting

One CCS flake was found in a rock garland above the Etivluk River mouth and about 200 m SE of the datum for KIR-037. The general setting, view and vegetation for the two sites are virtually identical.

#### Site Information

The single, black cortical flake was found 15 m from the ridge crest.

#### Discussion

This could have been produced by a hunter while on the lookout for game or while butchering a recent kill.

KIR-043

Location: Sec. 30, T.5S., R.16W., Umat Meridian  
UTM 5W/398250/7655000

Class: I

#### Location and Setting

A CCS flake and a caribou long bone piece were found on the same terrace as KIR-010 and about .32 km west. The site's general setting, view and vegetation are similar to that at KIR-010.

#### Site Information

The bone was found in an area riddled with rodent holes and topped with a few grass tufts. A grey utilized flake was found 14 m from the bone.

#### Discussion

The site is likely to have been a hunting lookout station. The bone may have been from a kill or cache location. Either mounded earth or a more lush vegetative growth could have helped attract rodents to the spot. Their activities have made it difficult to determine the actual presence or absence of the cache.



<u>Catalog #</u>	<u>Description</u>
UA77-315-1	Utilized Flake

KIR-044

Location: Sec. 21, T.5S., R.9W., Umiat Meridian  
UTM 5/458400/7653200

Class: IV

#### Location and Setting

KIR-044 consists of several lithic scatters, a possible cache pit, and worked-wood fragments located along the upper margin of a hill north of the Colville River in the western side of Killik Bend (Fig. 12). Steep cliffs drop precipitously to the Colville River just west of the site. The major lithic concentration is on a small denuded point of the hill measuring approximately 15 m in diameter, that slopes abruptly to the east. The slope south of the point grades gently downhill until it meets the floodplain of the Colville River. Small patches of willow and alder cover the tussocked slopes. Lithics are also distributed along the relatively steep hill margin from the point of the hill north for approximately 175 m. The margin of the hill is characterized by areas of eroding sand and rock with intermittent patches of alpine tundra vegetation forming a strip a few meters wide. The margin is bordered on the east by dense tussock growth. The site commands an excellent view of the western section of Killik Bend and the Colville River floodplain. The confluence of the Oolamnagavik River and the Colville River can be seen to the south. The confluence is roughly 1 km from this site. A game trail runs south of the point along the hill. KIR-047 is approximately 350 m northeast, on a conspicuous bench of the hill.

#### Site Information

The primary lithic scatter and a possible cache pit are located on the point of the hill. Approximately 75 lithics were distributed around the top of the point in an area measuring roughly 29 m northsouth by 14 m eastwest. Material was also found to be eroding down the steep slopes of the point. The survey team made no inventory of the types of lithics present, but the material was noted to consist of flakes of green, grey, and black CCS. The possible cache pit was located toward the center of the point, about 10 m from the western edge. The feature measures approximately 1 m in diameter and consists of a scatter of large sandstone slabs, which could also be the remains of a cairn. It was not tested. Fragments of wood, belonging to what was once a single piece, were found lying near the feature. The overall piece, when the two sections are fitted together, measures 31.40 cm in length, 2.40 cm in width, and is septagonal in cross-section. It tapers at both ends. The specimen (UA77-244-1; Pl. 58 2; v.4:250) is apparently a tent stake. An isolated flake was noted approximately 120 meters north of the major lithic concentration along the hill margin. Another major concentration of over 40 pieces of debitage was

KIR 044,047

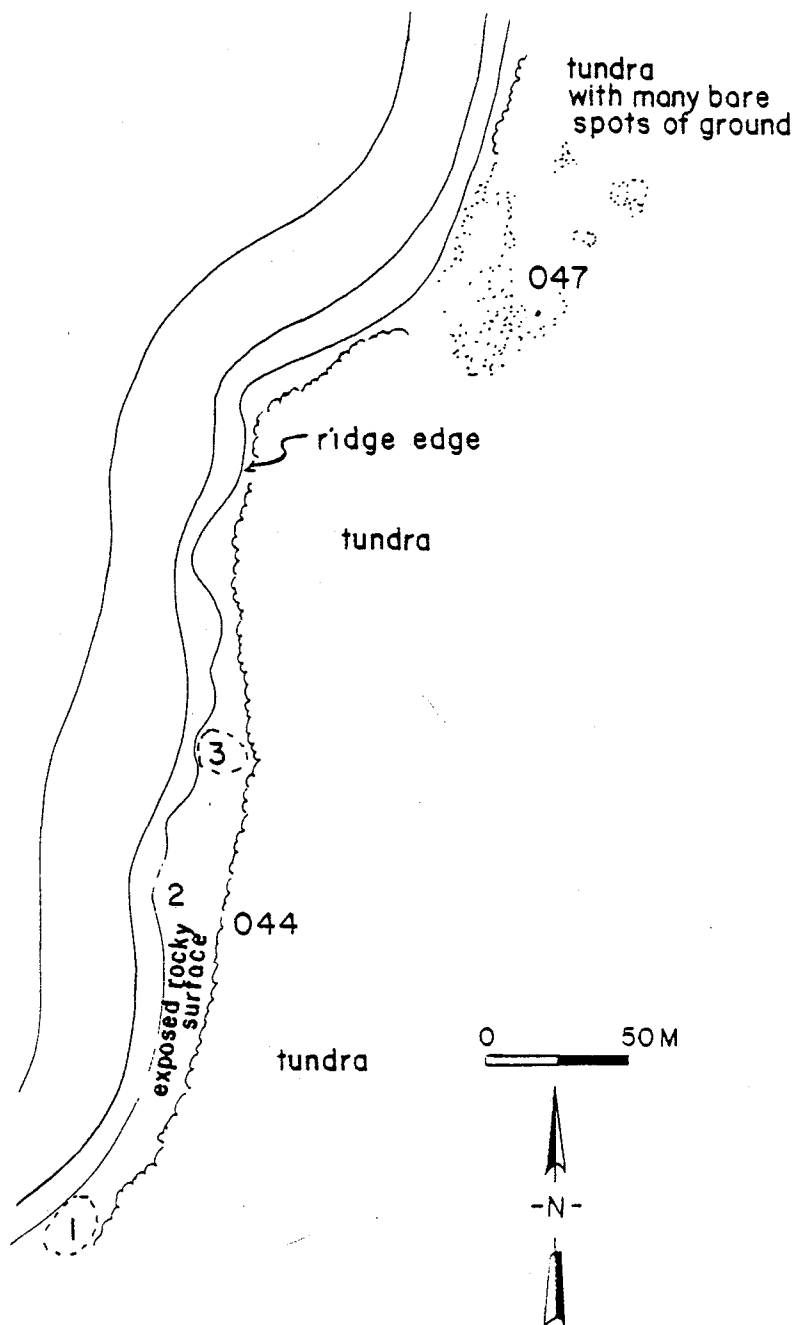


Figure 12

located 50 m to 60 m north of the isolate, in an area measuring roughly 9 m northsouth by 18 m eastwest. The concentration was about 9 m from the edge of the hill. This locale is at a higher elevation than the point of the hill to the south. KIR-044 was not tested.

#### Discussion

KIR-044 is classified as a hunting camp and lithic chipping station. It is well placed for observing game in the western Killik Bend area, particularly the Colville River floodplain and contiguous hills, and the broad floodplain of the Oolamnagavik River southwest. It is possible that caribou or other game could have been driven toward the point of the hill where their movements would be restricted by the steep cliffs and bluffs. A late prehistoric or early historic assignment is postulated for the site based on the survival of the wooden artifact. However, since the lithics were not examined in any detail, it is entirely possible that other, perhaps earlier, components may be present. Erosion has caused a loss of provenience for some of the materials at this site.

<u>Catalog #</u>	<u>Description</u>
UA77-244-1	Wooden Stake

KIR-045

Location: Sec. 22, T.5S., R.9W., Umiat Meridian  
UTM 5/460600/7653800

Class: IV

#### Location and Setting

KIR-045 is a lithic scatter and possible cache pit along the upper margin of a hill north of the Colville River in the center of Killik Bend. The hill margin is faced to the southwest by steep rock cliffs. The Colville River runs along the hill in a southeasterly direction at the base of the cliffs. The hill margin on which the site is located consists of two distinct terraces or benches covered with large rock outcrops and areas of exposed sand and sandstone. Alpine tundra vegetation covers the majority of the site area, including the lower bench. Dense tussock meadow covers the hill to the north. A small stand of alder is present on the upper bench or terrace. The confluence of the Killik and Colville rivers is located approximately 4 km northeast. The site commands an exceptional view of the Colville River and its floodplain to the east and west. A game trail follows the margin of the hill, crossing through the site. KIR-046 is along the hill margin, approximately 275 m northwest.

#### Site Information

Lithics were concentrated in four major clusters along the hill margin in an area measuring approximately 170 m east-west by 30 m north-south. Assorted lithic materials were scattered between the major clusters. Lithics

were also found on the lower bench. The survey team did not note any "diagnostic" lithics. Black CCS flakes predominate, although seven specimens of grey CCS were observed. No estimate was made of the amount of material present simply because there was so much. A possible cache pit was located in the northeast section near the line of tussock vegetation. The feature consists of large sandstone slabs strewn about a small depression, measuring approximately 3.5 m north-south by 3.0 m east-west. No test of the feature was made. A test pit dug near the western end of the site did not uncover any cultural material below the surface.

Two flakes were collected. Specimen UA77-337-1 (Pl. 20 1; v.4:111) is a large utilized flake of dark grey CCS with a pronounced hinge fracture at its distal end. The left lateral margin exhibits continuous step flaking and crushing, suggesting its use transversely on hard material (i.e., as a scraper). Specimen UA77-337-2 is a utilized flake of black CCS.

#### Discussion

KIR-045 is classified as a hunting camp and flint knapping station. It provides an excellent vantage for the observation of game moving through the Killik Bend area, or toward the confluence of the Killik and Colville rivers. The possible cache pit suggests that game was taken in this area and stored for later retrieval and use. The site's cultural affiliation cannot be determined at the present time.

<u>Catalog #</u>	<u>Description</u>
UA77-337-1	Flake Scraper
UA77-337-2	Utilized Flake

KIR-046

Location: Sec. 22, T.5S., R.9W., Umiat Meridian  
UTM 5/460100/7654050

Class: IV

#### Location and Setting

KIR-046 is a large lithic scatter along the upper margin of a hill north of the Colville River, toward the center of Killik Bend. Steep cliffs and bluffs form the southern face of the hill. At the bottom of the bluff is the Colville River floodplain. The present Colville River channel lies approximately 1.5 km southeast. The cultural material is generally found on the exposed, rocky surface of the hill margin at the top of the bluffs. Vegetation in the area consists of alpine tundra intermixed with grasses, tussocks, dwarf birch and occasional small willows. Dense tussock meadow exists a few meters away from the margin, toward the north. The site occupies the highest point for several kilometers in any direction, and thus commands an excellent view of the Colville River floodplain and contiguous hills. The confluence of the Oolamnagavik and the Colville rivers can be seen to the southwest. This confluence is approximately 2 km

southwest of the site. The confluence of the Killik and Colville rivers can be seen to the northeast. A game trail runs along the margin of the hill. KIR-045 is approximately 275 m southeast.

#### Site Information

The site consists of four major lithic concentrations distributed along the margin of the hill. Locality 1 is located to the east on a small bench of an eroding bluff. Seventeen flakes of black CCS were found in an area measuring 19 m north-south by 6 m east-west. Most of the lithics are cortical flakes. Locality 2 was approximately 105 m west of Locality 1 in an area measuring roughly 6 m in diameter. Locality 2 consists of five flakes of black CCS (some cortical). Locality 3, 58 m west of Locality 2, consists of seven flakes of black CCS distributed over an area measuring 17 m east-west by 6 m north-south. Locality 4 is 87 m west of Locality 3 and consists of approximately 25 flakes of predominantly black CCS distributed in an area measuring 11 m north-south by 32 m east-west. Several flakes of grey CCS were observed at this locale. No other information was recorded concerning the lithics. None of the areas was tested.

#### Discussion

This site is classified as a chipping station and probable game lookout. The cultural affiliation is not known. The large amounts of cortical flakes present in several of the material scatters indicate that concerted lithic reduction activities were taking place here. It appears that major preparations were being made for the hunting and processing of game.

KIR-047

Location: Sec. 21, T.5S., R.9W., Umiat Meridian  
UTM 5/458600/7654000

Class: IV

#### Location and Setting

KIR-047 is a large lithic scatter on a hill north of the Colville River in the western side of Killik Bend (Fig. 12). The site is on a bench near the upper margin of the hill. The hill slopes abruptly west of the bench until it meets the upper edge of steep cliffs abutting the east side of the Colville River. Steep bluffs can be found to the east. The hill, covered with dense tussock vegetation, grades gently uphill to the north. A series of small terraces exist downhill and south of the site area. The bench is covered with assorted tussock vegetation, broken by denuded areas of rock and sand. It commands an excellent view of the Killik Bend area. One can see approximately 10 km up the Colville River, WNW toward Kakvuiyat Bend. The confluence of the Oolamnagavik and the Colville rivers can be seen to the southwest, and the low-lying floodplain of the Colville River can be seen to the east. KIR-045 and KIR-046 can be seen on top of the steep cliffs and bluffs to the east. KIR-044 is located along the lower section of the hill, approximately 350 m to the south (Fig. 12). Caribou trails cross through this site and parallel the margin of the hill.

### Site Information

Several hundred lithics were observed on the bench in an area measuring approximately 110 m north-south by 75 m east-west. A concentration of hundreds of pressure and thinning flakes were located toward the center of the distribution. Larger flakes could be found throughout the rest of the area. Two other flake clusters were identified. One is in the north-east section of the bench, and the other near the eastern side. An obsidian flake measuring 2 cm by 1 cm was observed. A point tip (UA77-246-1; Pl. 2 18; v.4:16), snapped at the proximal end, was collected. The specimen exhibits excellent parallel oblique flaking on both faces. The piece has been classified as a projectile point of the Denbigh phase of the Arctic Small Tool tradition (Giddings 1964, Pl. 72 7). A utilized blade-like flake of black CCS was located at a depth of 6 cm in a test pit dug on the site. The piece exhibits unifacial use-retouch along the lower ventral section of the right lateral edge. Microwear consists of slight nibbling. The test pit revealed an undifferentiated strata of brown rocky silt. A Geophysical Services Institute stake (labeled "L0L07 SP490 Party 1195 Feb. 1977") was found set vertically in the ground approximately 195 m north of the site.

### Discussion

This site is classified as a hunting lookout and knapping station tentatively assigned to the Denbigh phase of the Arctic Small Tool tradition. In light of the large amount of lithic material present, it is probable that elements of other cultural traditions are present.

<u>Catalog #</u>	<u>Description</u>
UA77-246-1	Projectile Point

KIR-048

Location: Sec. 30, T.5S., R.16W., Umat Meridian  
UTM 5W/398800/7655200

Class: 1

### Location and Setting

Two CCS flakes were found on the same terrace as KIR-010 but about .2 km east. While this site has a more extensive view than KIR-010, both have similar settings and vegetative covers.

### Site Information

This site consists of two grey CCS flakes found next to each other. One was a utilized blade-like flake.

## Discussion

This site probably served as a hunting lookout station.

<u>Catalog #</u>	<u>Description</u>
UA77-316-1	Utilized Blade-like Flake

KIR-090

Location: Sec. 21, T.5S., R.16W., Umat Meridian  
UTM 5/390800/7655400

Class: III

## Location and Setting

This lithic scatter is on the crest of the high ridge between the Awuna and the Colville rivers. Both rivers and their confluence are visible from this site. VABM "Bump" marks the highest point in the vicinity and is just north of the site. The higher parts of the ridge have a ground cover of alpine tundra vegetation, but there are bare areas of soil and gravel. The lower parts of the ridge are covered with tussock meadow. There are excellent views in all directions, but the best are to the south and east, of the lowlands on the other side of the Colville River.

## Site Information

In a 35 m by 15 m area of exposed soil and gravel, 13 CCS flakes and two tools were found. A variety of types of CCS were observed. Two small 50 cm by 50 cm by 15 cm deep test excavations were dug at opposite ends of the site area. TP-B yielded a single black CCS flake at a depth of 4 cm below surface. TP-A was unproductive.

All of the flakes were secondary percussion flakes and some had cortex present. The biface fragment (UA77-209-2; Pl. 8 5; v.4:59), of black CCS, is rather roughly flaked but shows heavy utilization. There is a snap break termination that could be indicative of hafting. Microwear analysis indicates longitudinal use on medium to hard materials and indicates a functional knife. The other tool is a microblade (UA77-209-1, Pl. 33 27; v.4:197) of grey CCS. The proximal portion of the blade shows very little utilization except on the lateral edges, where some nibbling is present, indicative of use, if any, on soft material.

There is also a historic component on this site. The bench mark was put in by a USGS crew in 1955. The site area is littered with historic debris and garbage such as old cans, .22 shells, old cigarette filters, burnt wood, polaroid film pieces, moist towlettes, etc. This debris is indicative of recent untidy visitors.

## Discussion

KIR-090 is one of a cluster of lithic sites in the immediate vicinity of VABM "Bump", which contains several microblade components. A limiting date of 3700 BP is given on this basis. The historic material indicates recent visitors, and it is likely that the older components were disturbed by these later visitors. This is a logical lookout and camping area because it is on high ground at a major confluence on the Colville River.

<u>Catalog #</u>	<u>Description</u>
UA77-209-1	Microblade
UA77-209-2	Miscellaneous Knife Fragment
UA77-209-3	4 Nonutilized Flakes
UA77-209-4	Utilized Cortical Flake
UA77-209-5	2 Nonutilized Flakes
UA77-209-6	Nonutilized Flake

KIR-091

Location: Sec. 21, T.5S., R.16W., Umat Meridian  
UTM 5/390800/7656000

Class: III

## Location and Setting

This small, dense lithic site is just north of VABM "Bump" on the high ridge between the Awuna River drainage to the north, and west of the confluence of the Awuna and Colville rivers. The site, on a north facing slope above a small drainage, is on an area of fragmented tabular sandstone and exposed soil and gravels. There is alpine tundra vegetation in the immediate vicinity and extensive tussock meadow on the lower slopes and down toward the Awuna River. The site is on the edge of a ridge-like shelf of tabular sandstone and bedrock, and could be eroding out as the shelf weathers.

## Site Information

KIR-091 is a 2 m by 2 m site weathering out of the ridge's north slope. Several hundred flakes of a wide variety of CCS were observed on the surface. A single 40 cm by 40 cm by 20 cm deep small test pit was excavated in the lithic scatter. Lithic material was found at a depth of 12 cm. However, there was a layer of fragmented sandstone at a depth of 4 cm below the surface. It is possible that this layer represented the original surface, and the material found deeper fell through the cracks between the slabs. It is also possible that the layer of sandstone at 4 cm represents a collapse from the shelf further up the slope, and that the material above the 4 cm level represents a later occupation. Further excavation would be needed to resolve this question.



An interesting group of artifacts was found on the surface and in the test excavation. There were a number of unutilized and utilized flakes, some with cortex, in a variety of types of CCS. On the site's surface several small microblade fragments were found, all manufactured from grey CCS. Several showed nibbling on the lateral edges. Also found was a thick, rectangular flake (UA77-210-17, Pl. 21 17; v.4:125) of black CCS. It has two platforms with steep, unifacial retouch that show heavy utilization. It also has five burin blows on the lateral edges.

In the test excavation, mostly in the top 6 cm, several more microblade fragments were found. One was found at a depth of 12 cm. Also found at a depth of 8 cm below the surface was what appeared to be a wedge-shaped microblade core (UA77-210-30, Pl. 25 12; v.4:156). Manufactured of grey CCS, this core, made from a thick flake, has a prepared platform, several blade facets, and the bottom has been unifacially retouched and utilized, possibly as a scraper. On the other hand, this could also be a transverse burin similar to those found at Anangula or on the Alaska Peninsula in the Ugashik Narrows phase (Henn 1978:165, Pl. III; Dumond 1979; personal communication).

Another artifact on this site, but on the surface, was a weathered bone tool. A short piece of long bone had been made into a bipointed awl-like tool, probably by grinding and polishing (UA77-210-6, v.4:241). Both tips and both lateral edges show wear.

#### Discussion

This could be a three-component site. The bone tool could represent a historic or late prehistoric (Arctic Tundra tradition) component. The burin core could be from a Choris phase occupation. Specimen UA77-210-17 fits Giddings and Anderson's (n.d.:640) description of a Choris burin spall core from the Cape Krusenstern collection. Finally, the microblades and microcore/transverse burin could be indicative of an American Paleo-Arctic component.

However, the total site area is only 2 m by 2 m and both the burins, microblades and microcore were found on or in the 50 cm by 50 cm test pit. This seems to indicate a single component. If this site is actively eroding out of the slope, it could be much more extensive, and that would make the possibility of a multicomponent site more reasonable. If it is a single component site, then it could be a transitional site of the period when Choris was still developing, and there were still microblades being made. The microcore (UA77-210-30) is not a classic Campus-type core and could be interpreted as a type of burin. On the other hand, the burin could be interpreted as Paleo-Arctic, or even as an aberrant microblade core. These questions will not be answered until there is a more extensive site investigation.

<u>Catalog #</u>	<u>Description</u>
UA77-210-1	3 Nonutilized Flakes
UA77-210-2	Microblade
UA77-210-6	Possible Bone Awl

<u>Catalog #</u>	<u>Description</u>
UA77-210-7	6 Nonutilized Cortical Flakes
UA77-210-8	Nonutilized Cortical Flake
UA77-210-9	7 Nonutilized Flakes
UA77-210-10	Utilized Cortical Flake
UA77-210-11	Utilized Retouched Cortical Flake
UA77-210-12	Microblade
UA77-210-13	3 Nonutilized Flakes
UA77-210-14	6 Nonutilized Cortical Flakes
UA77-210-15	Microblade
UA77-210-16	Microblade
UA77-210-17	Burin Spall Core
UA77-210-18	3 Nonutilized Flakes
UA77-210-19	3 Nonutilized Cortical Flakes
UA77-210-20	Utilized Cortical Flake
UA77-210-21	Utilized Cortical Flake
UA77-210-22	Microblade
UA77-210-23	10 Nonutilized Flakes
UA77-210-24	2 Utilized Cortical Flakes
UA77-210-25	Microblade
UA77-210-26	Microblade
UA77-210-27	3 Nonutilized Flakes
UA77-210-28	Microblade
UA77-210-29	Nonutilized Flake
UA77-210-30	Transverse Burin or Microcore
UA77-210-31	Microblade

KIR-092

Location: Sec. 20, T.5S., R.16W., Umat Meridian  
UTM 5/390300/7655600

Class: I

#### Location and Setting

This two-flake superficial site, 162 m west of VABM "Bump", is on the broad backbone of the high ridge separating the Awuna and Colville rivers. Both drainages are visible from the site. Alpine tundra vegetation covers about 60% of this part of the ridge, the remainder is fragmented, tabular sandstone and exposed soil and gravel.

#### Site Information

This site consists of two flakes, found 160 cm apart on the ridge surface. Both flakes are CCS and one of them is a blade-like flake showing some intentional retouch and utilization (UA77-211-2; Pl. 37 7; v.4:x). The other flake was an unutilized cortical flake of a different type of CCS and is heavily patinated.

## Discussion

This site is probably related to the cluster of sites around VABM "Bump". The location is ideal for lookout and camping sites.

<u>Catalog #</u>	<u>Description</u>
UA77-211-1	Nonutilized Cortical Flake
UA77-211-2	Blade-like Flake

KIR-093

Location: Sec. 21, T.5S., R.16W., Umiat Meridian  
UTM

Class: II

## Location and Setting

This diffuse flake scatter is about 300 m NE of VABM "Bump" and KIR-090. It is on a broad strip of exposed sandstone slabs, soil and gravel on the crest of the ridge between the Awuna and Colville rivers; both are visible from the site. The site is 32 m at a bearing of 132° north from the eastern azimuth marker of VABM "Bump". The lower terraces of the ridge are covered by tussock meadows, and the higher elevations have a ground cover of alpine tundra vegetation.

## Site Information

KIR-093 is a diffuse CCS scatter of eight flakes and a burin in a 60 m by 40 m area. There was one cluster of five flakes; another one of two flakes. There was one isolated flake. The burin was also an isolate. A 40 cm by 30 cm by 20 cm deep test pit was excavated; one unutilized flake was recovered from the 4 cm below surface level.

The burin (UA77-212-3; Pl. 21 18; v.4:126) was manufactured from grey CCS and is an asymmetric flake. It has the appearance of an end scraper, with steep unifacial retouch on two edges. The other two edges each have two burin blows. Apparently, one of the burinated edges was retouched to make a platform for the burin blows on the lateral edge. This retouched distal end shows utilization scars, and microwear analysis indicates use on medium to hard materials with a transverse action. This burin is probably from the Arctic Small Tool tradition, and probably from the Choris phase. It fits Giddings and Anderson's (n.d.:641) description of a Type 2 Choris burin from Beach 47 of Cape Krusenstern. This type of burin is a "unifacially flaked, sub-rectangular artifact with longitudinal burin facets created by blows from one or more of its four corners. Many, but not all, of the artifacts show wear along the lateral edges of the burin facets....". It also could be considered a dihedral burin of the type associated with microblades at Girl's Hill and with microblades and kayak-like points at Tunalik (Robert Gal: personal communication).

## Discussion

The site has some historic debris. Survey stakes and tape, drill holes in the ground and general garbage, such as old tin cans, litter the area around VABM "Bump". This material could be from the USCGS survey crew or from later visitors such as a seismic line crew or hunters.

<u>Catalog #</u>	<u>Description</u>
UA77-212-1	Utilized Cortical Flake
UA77-212-2	Utilized Cortical Flake
UA77-212-3	Burin Spall Core
UA77-212-4	Utilized Cortical Flake
UA77-212-5	Nonutilized Cortical Flake

KIR-094

Location: Sec. 22, T.5S., R.16W., Umat Meridian  
UTM 5/393000/7655400

Class: II

## Location and Setting

This is a small flake scatter on the north slope, 12 m from the crest, of the ridge separating the Awuna and Colville rivers. Both rivers are visible from the site area. VABM "Bump" is approximately 850 m due west. The site is on the southern periphery of a 100 m wide strip covered 40% by alpine tundra vegetation and 60% by exposed fragmented tabular sandstone and subangular gravel.

## Site Information

This site, in a 4 m by 5 m area, contains a cluster of one retouched, black CCS flake, two black, CCS, pressure flakes and three grey, CCS, secondary flakes. Two isolates were also found--a grey CCS secondary flake and a burinated, grey, CCS flake. A 30 cm by 40 cm by 5 cm deep test pit was dug, and two more black CCS pressure flakes found at the 3 cm below surface level.

The burinated flake (UA77-213-2, Pl. 22 12; v.4:131) is a small, asymmetric flake. A notch has been chipped at one corner and a burin blow was made longitudinally from the notch. One edge along the burin blow shows light utilization. This type of burin is hard to assign temporally. It could be an American Paleo-Arctic burin such as those found in the Akmak levels of Onion Portage (Anderson 1970a:48, Fig. 42). It also could be from the early Arctic Small Tool tradition, either Denbigh or Choris phases (Giddings and Anderson n.d.:640-641) as found at Cape Krusenstern.

## Discussion

The burin is indicative of considerable age for this site. KIR-094 is one of a cluster of sites near VABM "Bump" and indicates that the whole ridge above the confluence of the Awuna and Colville rivers is worth further investigation.

<u>Catalog #</u>	<u>Description</u>
UA77-213-1	Utilized Flake
UA77-213-2	Burin on a Flake

KIR-095

Location: Sec. 22, T.5S., R.16W., Umat Meridian  
UTM 5/393000/7655400

Class: II

## Location and Setting

This lithic site was found 294 m west of KIR-094 and 539 m, at a bearing of 86° true north, to KIR-093. It is on the ridge crest between the Awuna and Colville rivers; both can be seen from the site. The confluence of these rivers is visible to the east. The site is on the southern edge of the same strip of exposed sandstone slabs and gravel as KIR-094.

## Site Information

This site, containing 10 flakes on the surface, was found in a 10 m by 5 m area. A small 35 cm by 35 cm by 7 cm test pit yielded lithic material to a depth of 8 cm below surface. Of the nine flakes collected from the test pit, eight of them are rough chunks, with cortex, of several types of CCS. One flake, from the surface of the test pit, had been slightly utilized.

## Discussion

The lithic material found indicates that this site was a place where cobbles of CCS, probably from the Awuna or Colville rivers, were broken apart and tested for suitability for further knapping.

<u>Catalog #</u>	<u>Description</u>
UA77-214-1	Nonutilized Flake
UA77-214-2	Utilized Flake
UA77-214-3	Nonutilized Cortical Flake
UA77-214-5	Utilized Cortical Flake
UA77-214-6	2 Nonutilized Cortical Flakes
UA77-214-7	3 Nonutilized Cortical Flakes

MIS

Misheguk Mountain

MIS-129

Location: Sec. 33, T.7S., R.34W., Umiat Meridian  
UTM 4/453950/7630800

Class: II/III

#### Location and Setting

A buried campsite is on a fan-like feature on the actively eroding south central shore of Noluck Lake in the vicinity of a cabin belonging to the Naval Arctic Research laboratory (NARL). This site is on the west side of an unnamed stream 3 m to 5 m above the lake level. Steep bluffs form the lake shore boundary to the west, with the stream cutting a steep gully on the east, bisecting the site at the northern end. The isolated portion lies northeast of the stream, just east of an old outlet channel. The area is covered with a fairly mature tundra mat. Grasses are high in density but do not predominate. Grasses and sedges predominate on the banks of the stream which is subject to seasonal overflow. The soil profile, as seen in four test pits, is fairly complex, indicating periods of inundation and emergence. The present organic layer exists in the upper 10 cm with the beginning of pedogenesis noted by a red clayey layer. Below this is 35 cm to 50 cm of sands and silts of unknown origin followed by a thin organic layer containing woody shrub remnants. At the bottom of the profile is a grey clay that appears to be lake bottom sediment. A rather low-angle view of the Noluck Basin is afforded from this point.

#### Site Information

MIS-129 is a medium-sized, diffuse camping area. Scattered about the surface is abundant evidence of NARL activities within the recent past. Of primary interest are the parts of the site evidencing past aboriginal use, all of it subsurface. Edwin S. Hall, Jr., (1975) recorded a site, Misheguk 7, for this locale in a 1967 survey of the petroleum reserve. The exact location was unknown so 12 random shovel tests were excavated in hopes of unearthing Hall's site. Deep snow banks around the lakeshore at the time of our arrival prevented examination of the bluffs. Four of these tests revealed cultural manifestations and the excavations were expanded to 50 cm square test pits, designated from north to south A, B, C, and D.

TP-A was on the small knoll across the creek from the main site area. It possessed the greatest density of cultural material at two different levels. Two utilized flakes, two waste flakes, and two bone fragments were uncovered just below the organic layer in the 5 cm to 10 cm occupation level. At 45 cm to 50 cm in an organic layer full of woody shrubs, eight caribou bone fragments were found. Two of these fragments may have been cut. TP-B yielded one utilized blade-like flake at a depth of 18 cm. TP-C, while not possessing any cultural material, contained a disturbance in what appeared to be a substantial peat layer. It was felt that this cut could have been man-made. Finally, TP-D yielded a single waste flake at 40 cm.

Forty meters south of the tested area is another place that could be a locus of human use. Situated behind a wrecked C-46 on the shore and adjacent to a short but steep cut into the lakeshore, lie some bone and good-

sized pieces of crudely worked wood. Wood was noted on top of the bluff, as well as at the bottom of the bluff. Quite likely the pieces toward the bottom have sloughed off from the top. Based on the surface and subsurface evidence the site seems to be in three parts. The first small knoll where TP-A is located is quite separate and distinct from the second, lightly used area on the other side of the creek. The third area, behind the aircraft, is discrete from the second area to the north. It is quite possible, however, that the distinction between areas is the result of site preservation and site testing. The stream divides the first two areas and may in fact have wiped out most of the site. A change in stream directions is indicated by the previously existing channel east of the little knoll. Since there were no test pits between TP-D and the surface wood behind the aircraft, it is not certain that they do not connect. Altogether the site measures 160 m (N-S) by 30 m E-W.

### Discussion

MIS-129 is a late prehistoric campsite ideally at the juncture of a fresh water stream and a lake. Excavations show two levels. One is found between 0 cm and 10 cm. This is best seen at TP-A and the southernmost site area. The investigator believes the flake at 18 cm in TB-B is part of this occupation. The other occupation is between 40 cm and 45 cm below surface as seen in TP-A and TP-D. Age is based on similarities with MIS-162 in ground cover, and bone and wood preservation. MIS-162 is radiocarbon dated to  $335 \pm 75$  B.P. (I-10,657). While part may have washed away when the stream changed courses, MIS-129 retains the potential to give some information on late prehistoric adaptations to the southern foothills area.

<u>Catalog #</u>	<u>Description</u>
UA78-147-1	Utilized Blade-like Flake
UA78-147-2	Cut Bone Fragment
UA78-147-3	Utilized Blade-like Flake
UA78-147-4	Utilized Flake
UA78-147-5	2 Nonutilized Flakes
UA78-147-6	Long Bone Fragment
UA78-147-7	Long Bone Fragment (bird?)
UA78-147-9	2 Long Bone Fragments Possibly Cut
UA78-147-10	6 Unmodified Bone Fragments
UA78-147-11	Blade-like Flake
UA78-147-12	Nonutilized Flake



MIS-130

Location: Sec. 3, T.8S., R.34W., Umiat Meridian  
UTM 4/460980/7630450

Class: II

#### Location and Setting

A dispersed flake scatter of moderate size was found on two benches of Ridge 1, 500 m east of Noluck Lake (Fig. 13). The benches, one right above the other at the west end of the ridge, provide an excellent view of the entire Noluck Basin. The site area is covered with intermittent patches of alpine tundra as is the entire ridge, which is surrounded by tussock meadow.

#### Site Information

Twenty to thirty CCS flakes constitute this site. The scatter is fairly thin over the 90 m by 20 m area with most of the material on the upper bench. The long axis is oriented 120°-300°. Most of the flakes are of a light grey CCS; one is black CCS. Also found were a burin on a flake with utilization of one of the long steep edges, a blade-like flake with cortex, and a hammerstone of quartz diorite. The greatest concentration of flakes appeared adjacent to a dense mat of alpine tundra. It is quite possible that more cultural material can be found there. Finally, it should be noted that material on both benches seems to be eroding downslope.

#### Discussion

Because of its excellent view and great distance from water, this site very likely functioned as a lookout. Unfortunately the lack of diagnostic material prevents the assignment of this site to any specific cultural phase or period.

MIS-131

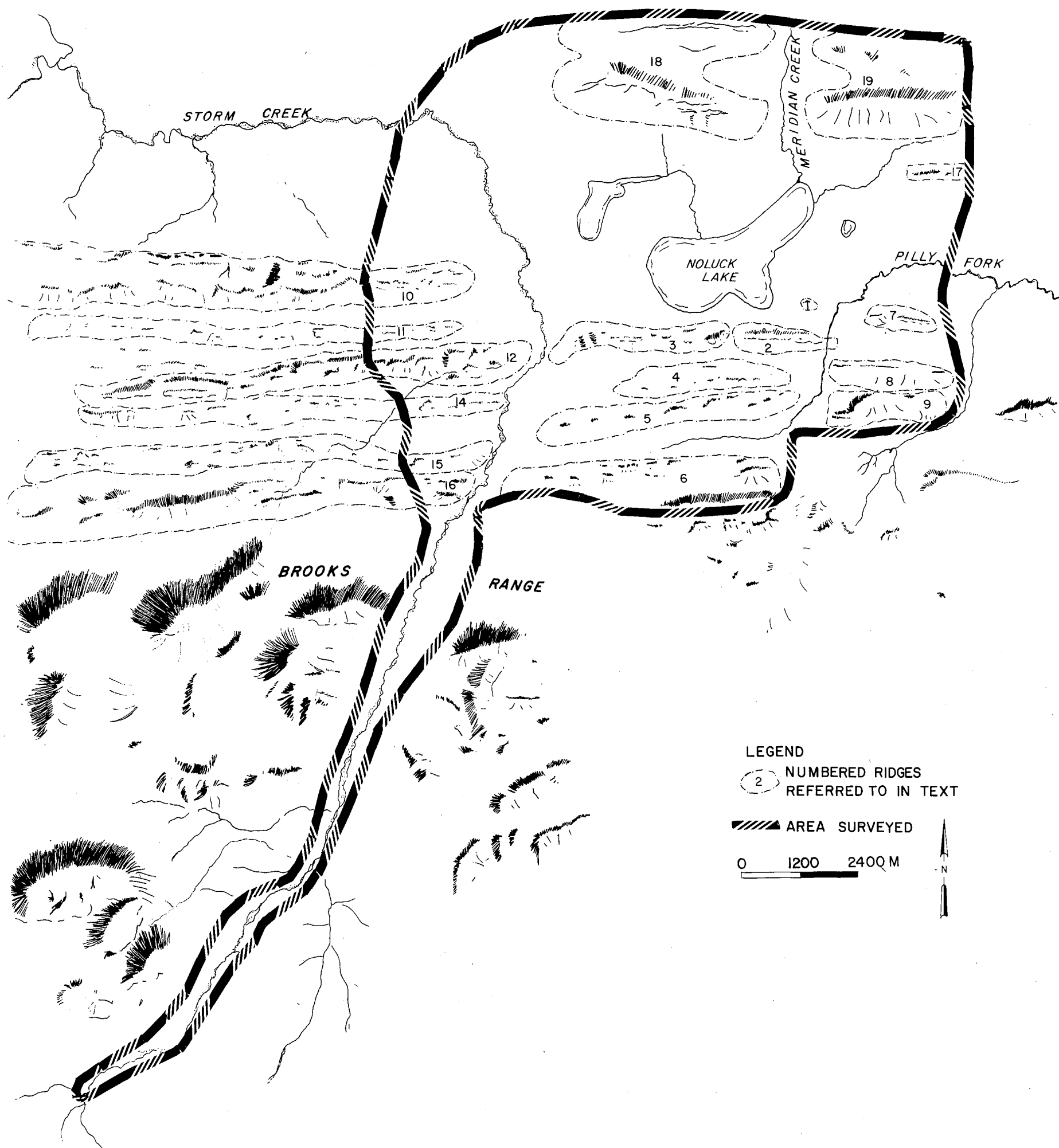
Location: Sec. 3, T.8S., R.34W., Umiat Meridian  
UTM 4/461110/7632420

Class: III

#### Location and Setting

A flake scatter was found on the top, south slope, and eastern end of Ridge 1 (Fig. 13). It is 900 m east of Noluck Lake and 400 m west of the Pilly Fork of the Nuka River. The graveled bedrock surface is covered with open-mat alpine tundra vegetation. Tussock meadow surrounds the ridge. There is an excellent view north, south and east of the Pilly Fork valley.

# NOLUCK LAKE - STORM CREEK STUDY AREA



### Site Information

This fairly thin flake scatter contains roughly 45 CCS flakes in an area measuring 150 m by 40 m. Approximately 20 flakes occur on top in an area 40 m by 20 m. The rest can be found on the southern and eastern slope. These flakes on the slope appear to have been eroded from higher up. The flakes are mostly grey but range from black to a very light grey. Cortex flakes indicate stream cobbles as the preferred source of CCS. A small, thick lanceolate-shaped projectile point was found with the scatter on top of the ridge (UA78-148-1; Pl. 1 20; v.4:14). Its general form and manner of manufacture suggest relationship to the Itkilik phase as seen in Onion Portage.

### Discussion

This lookout site appears to be about 1400 years old and of possible Indian affiliation. The above interpretation is based on Anderson's (1978) ideas concerning the Itkilik phase of his Onion Portage sequence. The extension of this group onto the North Slope addresses questions concerning the distribution of these people. This site derives its unique importance from being the only Indian related site in the Noluck Lake-Storm Creek survey area.

<u>Catalog #</u>	<u>Description</u>
UA78-148-1	Projectile Point

MIS-132

Location: Sec. 3, T.8S., R.34W., Umiat Meridian  
UTM 4/461420/7630480

Class: I

### Location and Setting

Two flakes were found on a small, low-lying segment of Ridge 1 (Fig. 13). This is the easternmost portion of the ridge, lying 300 m west of the Pilly Fork and 900 m east of Noluck Lake. Its open-mat alpine tundra vegetation is only 1.5 m above the surrounding tussock meadow. The location provides an adequate but hardly expansive view of the immediate surroundings.

### Site Information

Two grey CCS flakes were found 7.5 m apart at a 73°-253° orientation.

### Discussion

The site function is difficult to assess due to lack of cultural material. Its low-lying location as well as great distance from water seems to negate the

possibilities of a lookout or campsite. Because there were no diagnostics, cultural affiliation and period are impossible to determine at this time.

MIS-133

Location: Sec. 3, T.8S., R.34W., Umat Meridian  
UTM 4/461240/7630075

Class: II

#### Location and Setting

A small flake scatter is located at the eastern end of Ridge 2 on its northern side (Fig. 13). It is 120 m west of where the Pilly Fork cuts the ridge, on a 10° slope, with solifluction lobes running perpendicular to the slope. Vegetation is open-mat alpine tundra on the ridge and tussock meadow off the ridge. The view is north to a portion of the Pilly Fork valley.

#### Site Information

About 40 CCS flakes are in a 22 m by 12 m area, oriented 75°-255°. Most flakes are of black CCS, with one grey and one translucent flake. About one-quarter had been utilized. As a whole, the flakes seem to be the result of thinning or shaping larger preforms into finished tools. There are two main concentrations and both seem to be eroding downhill in the same direction as the solifluction lobes. More material could be buried in the slow-moving, churning lobes.

#### Discussion

This site probably functioned as a lookout, with the two concentrations possibly representing two periods of use. The view, while not being great, is adequate for game-watching. Despite its proximity to water, the investigator believes it was not used as a camp because of the lack of level or near-level ground. The site is believed to have been originally deposited on this slope and is not there as a result of erosion from further uphill. The lack of diagnostic material prevents any assignment of cultural phase or period.

MIS-134

Location: Sec. 3, T.8S., R.34W., Umat Meridian  
UTM 4/461220/7630020

Class: II

#### Location and Setting

This flake scatter is situated somewhat in the middle of the eastern facing slope at the end of Ridge 2 (Fig. 13). It is 150 m west of the Pilly Fork

and 130 m upslope from MIS-133. Vegetation on the site and immediately around it is open-mat alpine tundra. The ridge is surrounded by tussocks. There is an excellent view to the north and south, overlooking a segment of the Pilly Fork Valley.

#### Site Information

Approximately 10 CCS flakes are strung out in a 10 m by 1 m area and oriented E-W. Forty-eight meters west of the main concentration is a biface that appears to be a multipurpose scraping-cutting tool. All artifacts are of a light grey CCS. Some flakes are utilized. The flakes are rather large (4 cm in either dimension) and indicate secondary stages of stone tool manufacture. Site erosion is indicated by the lineation of cultural material in the same direction as the slope. More material could be buried in the slopewash.

#### Discussion

This site probably functioned as a lookout with possibly two events represented. This two-time use is inferred on the basis of the distance between the biface and the rest of the cultural material. The view up and down the valley is commanding enough to make this a worthwhile observation point. A lack of diagnostic material prevents any assignment to a cultural phase or period.

MIS-135

Location: Sec. 3, T.8S., R.34W., Umiat Meridian  
UTM 4/460850/7630010

Class: I

#### Location and Setting

An isolated flake is situated on the crest of Ridge 2, 600 m west of the Pilly Fork and 800 m southeast of Noluck Lake (Fig. 13). The predominantly bedrock surface sports a growth of open-mat alpine tundra; tussock meadows surround the ridge. There is a superb view north, overlooking the Noluck Basin and part of the Pilly Fork Valley, as well as south overlooking the drainage between this ridge and the next, in addition to the continuation of the Pilly Fork.

#### Site Information

A single, grey CCS flake of moderate size is located here.

#### Discussion

It is very difficult to determine much of anything about this site on the basis of a single flake, if nothing else demonstrates usage of this part of the survey area. Determination of culture and associated period is impossible at this time.

MIS-136

Location: Sec. 5, T.8S., R.34W., Umat Meridian  
UTM 4/459080/7630180

Class: III

#### Location and Setting

A flake scatter is situated in a deep saddle between the main part of Ridge 3 and its northernmost segment 480 m south of Noluck Lake (Fig. 13). This area is at least 10 m below the main level of the ridge in a protected location. The site is ideally placed to be out of the northwest wind at the base of a bare rock outcrop. A strip of graveled bedrock overlain with open-mat alpine tundra vegetation occurs on the south half of the segment. The site is at the eastern end of this strip between the edge of a tussock meadow and the beginning of bare rock. Most of the site is on a slope of 5° but portions near the rock outcrop are close to 30°. The view is exclusively to the east of a portion of the Noluck Basin and the Pilly Fork Valley. However, from the top of the outcrop the whole northern panorama opens up from Storm Creek on the west, to the Pilly Fork on the east.

#### Site Information

Over 125 flakes and 10 pieces of bone were observed on the surface in an area measuring 25 m by 8 m. The scatter is oriented 65°-245°. A number of concentrations were noted and two 50 cm square test pits were placed near separate flake clusters. TP-A was excavated near a cluster on the lower slopes of the outcrop. This was the most productive pit and yielded material down to 15 cm below surface. It showed a typical profile with angular to subangular pebbles in a matrix of eolian silts and sands. The percentage of gravel increased with depth. Altogether 594 waste flakes and 23 utilized flakes were found in two major concentrations, mostly from the top 5 cm. In addition there were four bifaces that appear to be knife preforms. One piece in particular seems to be a knife side blade (UA78-149-11; Pl. 5 12; v.4:49). TP-B was somewhat less endowed and produced only 10 waste flakes, a burin spall, and a cut bone fragment in the top 5 cm.

#### Discussion

Despite its .5 km distance from the nearest water, the positioning of MIS-136 in the lee of a prominent outcrop, suggests its use as a camp where stone tool manufacturing was a major activity. At the same time, the proximity of the outcrop with its spectacular view sets the scene for it being a game lookout as well. As in many instances, it probably served as both. Age and cultural affiliation is another problem. There are no diagnostics per se at the site, although the knife sideblade fragment had a distinct Arctic Small Tool tradition shape.

<u>Catalog #</u>	<u>Description</u>
UA78-149-1	8 Nonutilized Flakes
UA78-149-2	Utilized Cortical Flake
UA78-149-3	Utilized Flake
UA78-149-4	Utilized Flake
UA78-149-5	Utilized Flake
UA78-149-6	Nonutilized Flake
UA78-149-7	Utilized Flake
UA78-149-8	Utilized Flake
UA78-149-9	106 Nonutilized Flakes
UA78-149-10	8 Nonutilized Cortical Flakes
UA78-149-11	Knife Side Blade
UA78-149-12	Miscellaneous Knife
UA78-149-13	Knife Side Blade
UA78-149-14	Miscellaneous Knife
UA78-149-15	Utilized Flake
UA78-149-16	Nonutilized Cortical Flake
UA78-149-18	Utilized Flake
UA78-149-19	Utilized Flake
UA78-149-20	Utilized Flake
UA78-149-21	Utilized Flake
UA78-149-22	Utilized Flake
UA78-149-23	Utilized Flake
UA78-149-24	Utilized Flake
UA78-149-25	Utilized Flake
UA78-149-26	Utilized Blade-like Flake
UA78-149-27	Utilized Flake
UA78-149-28	Utilized Flake
UA78-149-29	Utilized Flake
UA78-149-30	Utilized Flake
UA78-149-31	Utilized Flake
UA78-149-32	Utilized Flake
UA78-149-33	Utilized Flake
UA78-149-34	27 Nonutilized Flakes
UA78-149-35	434 Nonutilized Flakes
UA78-149-36	Nonutilized Cortical Flake
UA78-149-37	9 Nonutilized Flakes
UA78-149-38	Cut Long Bone Fragment
UA78-149-39	Burin Spall

MIS-137

Location: Sec. 5, T.8S., R.34W., Umat Meridian  
UTM 4/458100/7629900

Class: III

#### Location and Setting

A flake scatter was found on two adjacent segments of Ridge 3, 800 m southwest of Noluck Lake (Fig. 13). The gravelly bedrock surfaces sup-

port a growth of open-mat alpine tundra vegetation. Tussocks grow around and between the segments. The site runs from the north side of the ridge to the middle, possessing an excellent view of the Noluck Basin to the north.

#### Site Information

A moderately dense scatter of CCS flakes covers an area 90 m by 75 m trending 150°-330°. Approximately 90 CCS flakes, several of which were utilized, are located in three main concentrations with roughly 10 CCS flakes lightly scattered in between. In addition, five biface fragments were identified. One of these appeared to be from a bifacial scraper and another from a side blade; the others were rather amorphous. The southernmost concentration contains 20 flakes and a flake knife (UA-78-150-1; Pl. 17 5; v.4:95). The two northern concentrations occur on a separate ridge segment and consist of 50 flakes in one and 20 in the other. The bifaces occur outside these groupings. The predominant color of CCS is black, with grey occurring in low percentages.

#### Discussion

MIS-137 is an Arctic Small Tool tradition lookout site. The presence of the flake knife, bifacial scraper and side blade irrefutably leads to such a conclusion although finer distinctions are less conclusive. The lack of microblades makes it a post-Denbigh phase site. A bifacial scraper denotes a Norton or Ipiutak phase affiliation. The flake knife fits a Norton form from Iyatayet quite closely and is within the range of those illustrated for the Ipiutak site (Giddings 1964:Pl. 54 5; Larsen and Rainey 1948). Based on these comparisons, a Norton/Ipiutak affiliation seems likely.

<u>Catalog #</u>	<u>Description</u>
UA78-150-1	Flake Knife

MIS-138

Location: Sec. 6, T.8S., R.34W., Umiat Meridian  
UTM 4/457350/7629500

Class: III

#### Location and Setting

MIS-138 is a flake scatter situated on one of the southern segments toward the western end of Ridge 3 (Fig. 13). It is 1.5 km southwest of Noluck Lake and 1 km east of Storm Creek. Open-mat alpine tundra vegetation covers the gravelly bedrock surface. Tussock meadow surrounds this segment. The best views are to a small valley south of the ridge and a portion of Storm Creek east of the ridge. The nearest water lies 480 m south in an unnamed beaded stream.



### Site Description

A medium-sized dense flake scatter with a single cairn occupies a 220 m by 17 m area. Hundreds of grey and black CCS flakes lie in many concentrations on the tops and sides of this ridge segment. The cairn is roughly midway on the south side of the segment. It is 1.9 m long by .6 m to .9 m wide by .2 m to .3 m high and carefully constructed from moderately sized flat pieces of local bedrock. A small portion was disassembled but nothing was found underneath. The only tools noted on the surface were a weapon side blade (UA78-151-1; Pl.4 1; v.4:31) and a tip fragment of knife or projectile point.

### Discussion

The site probably functioned as a lookout. Its sheer size indicates use over a long period of time, but it is not known if it is multicomponent or not. The artifacts and tools in conjunction with a lack of microblades point toward a post-Denbigh phase of the Arctic Small Tool tradition. A finer diagnosis is not possible based on the present assemblage; the side blade could easily fit in collections from Choris, Norton, or Ipiutak phase sites (Giddings 1964; Giddings and Anderson n.d.; Larsen and Rainey 1948).

<u>Catalog #</u>	<u>Description</u>
UA78-151-1	Weapon Side Blade

MIS-139

Location: Sec. 5., T.8S., R.34W., Umiat Meridian  
UTM 4/458190/7630010

Class: I

### Location and Setting

An isolated flake is located on a small segment of Ridge 3, 650 m southwest of Noluck Lake and 50 m north of MIS-137 (Fig. 13). The gravelly bedrock surface has open-mat alpine tundra vegetation and the ridge is surrounded by tussocks. This particular segment is on the north side of the ridge and offers an excellent view of Noluck Basin.

### Site Information

A relatively small, less than 2 cm in any dimension, light grey CCS flake was found.

### Discussion

It is very difficult to determine much of anything about this site on the basis of a single flake. In fact it is conceivable that it could have blown

over in a high wind from nearby MIS-137. However, if it is a primary deposition, it at least confirms usage of this part of the survey area. Determination of cultural phase and associated period is impossible at this time.

#### MIS-140

Location: Sec. 6, T.8S., R.34W., Umiat Meridian  
UTM 4/457325/7629750

Class: III

#### Location and Setting

A large flake scatter was found on a segment of Ridge 3, 360 m south of an unnamed beaded stream and 900 m southwest of Noluck Lake (Fig. 13). Open-mat alpine tundra vegetation grows on the graveled bedrock surface. This location is slightly higher in elevation than MIS-138 to the west, affording the same good view to the south and west, as well as a better view of the basin to the north.

#### Site Information

This dense scatter of mostly black and grey CCS flakes with clusters of patinated flakes, covers an area 660 m by 20 m to 60 m trending E-W. A significant portion of the flakes appeared utilized. The scatter, containing some bits of bone, is fairly continuous with changes in density marking concentrations. The only tool found was a fragment of a rhomboid shaped projectile point (UA78-152-1; Pl. 1 14; v.4:9).

#### Discussion

MIS-140 is a lookout site belonging to the late Arctic Small Tool tradition. The projectile point very closely matches Type 5 specimens from the Norton levels at Iyatayet and the Near Ipiutak burials from Point Hope (Giddings 1964:Pl. 48 1-18, 20; Larsen and Rainey 1948: Pl. 80 1-14). Since there are no points of this type in the Ipiutak material, it seems that this artifact is of Norton phase affiliation. However, the absence of check-stamped pottery calls this interpretation somewhat to question due to general similarities between Norton and Ipiutak lithic material.

<u>Catalog #</u>	<u>Description</u>
UA78-152-1	Projectile Point

MIS-141

Location: Sec. 5, T.8S., R.34W., Umiat Meridian  
UTM 4/458000/7629990

Class: III

#### Location and Setting

A flake scatter is situated on two segments on the north side of Ridge 3, 780 m southwest of Noluck Lake and 360 m north of an unnamed beaded stream to the south (Fig. 13). Open-mat alpine tundra grows on the graveled bedrock surface with tussocks occurring around and in between the segments. The view varies depending on what part of the site one is on, but is best to the north, south, and west.

#### Site Information

This moderately dense flake scatter covers a 95 m by 65 m area trending N-S. Concentrations of CCS flakes are spread out rather evenly over the site with 5 to 15 flakes in 10 to 15 scattered areas. Few flakes were utilized and only one tool, a side blade fragment (UA78-153-1; Pl. 4 14; v.4:35), was located. Black and grey CCS predominated.

#### Discussion

This lookout site appears to be part of the Arctic Small Tool tradition occupation of this area. The broad, shallow parallel oblique flake scars on the side blade suggest Choris phase affinities.

<u>Catalog #</u>	<u>Description</u>
UA78-153-1	Weapon Side Blade

MIS-142

Location: Sec. 5, T.8S., R.34., Umiat Meridian  
UTM 4/458810/7629900

Class: II

#### Location and Setting

A small flake scatter was found toward the eastern end of Ridge 3, 360 m northeast of an unnamed beaded stream and 720 m south of Noluck Lake (Fig. 13). The gravelly bedrock surface, located on the south side of the ridge, is primarily bare but what vegetation there is, is alpine tundra. The slopes immediately surrounding the site area have a dense mat of avens and sphagnum moss surrounding the tussocks. This location obtains its best view to the south where the small drainage separates this ridge from the next one. This site is one of the highest on this particular ridge.

### Site Information

Approximately 10 CCS flakes and two biface fragments were noted in a 30 m by 16 m area. The long dimension is oriented 30°-210°. There is a mix of black and light grey to grey CCS. Most of the flakes are rather large thinning flakes, a couple of which have been utilized. This type of flake indicates secondary stages of stone tool manufacturing. The bifaces appear to have functioned as knives when whole. There was one major flake concentration. Three flakes, 5 m to 15 m apart, were strung out away from the main grouping.

### Discussion

The site probably functioned as a lookout. A lack of diagnostic material prevents any assignment of age or cultural phase.

MIS-143

Location: Sec. 5, T.8S., R.34W., Umat Meridian  
UTM 4/458850/7630000

Class: II

### Location and Setting

A flake scatter is located toward the eastern end of Ridge 3, 500 m south of Noluck Lake and 1.3 km southwest of the NARL cabin (Fig. 13). The gravelly bedrock surface, located on the north side of the ridge, is covered with open-mat alpine tundra vegetation and small pockets of tussock tundra. The ridge segment is surrounded by tussocks. An excellent view exists of the Noluck Basin and the Storm Creek drainage to the WNW. The site is one of the highest on this particular ridge.

### Site Information

About 16 CCS flakes and two biface fragments were found in a 90 m by 17 m area. The long dimension of the site is oriented N-S. There is one main concentration of about 10 grey flakes, and about six black flakes scattered at odd intervals. The two bifaces are about 20 m from each other and from the main concentration; one is of grey CCS and the other is of a reddish brown CCS.

### Discussion

This site probably functioned as a lookout. A lack of diagnostics prevents any assignment of age or cultural affiliation.

MIS-144

Location: Sec. 5, T.8S., 34W., Umiat Meridian  
UTM 4/458650/7629800

Class: III

#### Location and Setting

MIS-144 is a large site with five localities located on three segments of Ridge 3, 240 m north of an unnamed beaded stream and 540 m south of Noluck Lake (Fig. 13). The cultural material exists on open and closed mat alpine tundra vegetation. Open areas bare the graveled bedrock surface on all three segments. The first two localities occur on the upper and lower portions of an oblong ridge segment. The other three localities are on the top and sloping sides of a large hummocky ridge segment. Stray bits of artifactual material are found on the segment immediately south of the last three localities. There is an excellent view to the north and south. To the east and west the view is somewhat obstructed by the ridge itself.

#### Site Information

A combination of flake and bone is scattered across five localities over a roughly 240 m by 240 m area. The area also includes stray flakes between localities. Locality 1 is the farthest south and sits on the lower bench of a knoll-like ridge segment below Locality 2. It consists of 12 CCS flakes including a unifacially retouched blade. Half the flakes are black and half are grey. Locality 2, located on top of the knoll, is also made up of 12 black and grey CCS flakes. In a 50 m square area north of Locality 2, on the east slope of the adjacent segment, is a scattering of saw-cut antlers and fragments of a carved wooden object (UA78-154-3 and 4; Pl. 61 2. v.4:260). This is Locality 3. Locality 4 is to the west of Locality 3, on top of a ridge-like portion of this segment. This area possesses some bone fragments and a great number of predominately black CCS flakes. A grey CCS projectile (UA78-154-2; Pl. 1 11; v.4:7) with a broken tip and a generally rhomboid shape was collected from this locality. Locality 5 is situated on the lee side of a steep, high, ridge-like feature on the north side of this segment. This is a dense CCS flake and bone scatter among which was found a stemmed projectile point with a long tapering blade (UA78-154-1; Pl. 3 3; v.4:22). The setting of this locality is highly reminiscent of MIS-136. Finally, on the ridge segment to the west of Localities 3, 4, and 5 an occasional CCS flake was noted.

#### Discussion

This site seems to have served many purposes. Localities 1, 2, 4, and 5 are probably lookouts. This is based on their views or access to even better views nearby. The density and situation of Locality 5, however, suggests possible use as a camp as well. Locality 3 could be a butchering site with the cut antler. Another possibility is that it would be a quarry of sorts where choice parts of racks were sawed off whole ones and then

removed. The wooden object in this area appears to be a crude doll. Perhaps a child stood by watching while these family activities were being executed. Finally, at least two time periods are represented: Arctic Small Tool tradition and Historic. Both types of points found reflect a Norton phase occupation. The stemmed point is very much like a rare type illustrated by Giddings (1964:Pl. 50 17) from the Norton levels at Iyatayet. While this type might be rare at Cape Denbigh, it seems to be common enough up here since Hall (1975:Pl. 4 13-14; this Report Pl. 38 20, 21) found two other specimens on Ridge 3 during his 1967 survey. To proceed perhaps a little further, it seems that these points could be an early Norton phase type. This is based on the quality of the flaking; the parallel oblique scars are reminiscent of the workmanship on the early Norton cache of arrowheads from Cape Krusenstern (Giddings and Anderson n.d.:Pl. 124). The other projectile point, from Locality 4, also fits in the Norton phase. It is quite within the range of Type 5 points from Iyatayet and some points from the Near Ipiutak burials at Point Hope (Giddings 1964:Pl. 48 1-18, 20; Larsen and Rainey 1948:Pl. 80 1-14). Finally, the metal-saw-cut antler in Locality 3, along with the state of preservation of the wood, suggests an early historic use of the site as well.

<u>Catalog #</u>	<u>Description</u>
UA78-154-1	Projectile Point
UA78-154-2	Projectile Point
UA78-154-3	Worked Wood Object
UA78-154-4	Worked Wood Object (piece #2)

MIS-145

Location: Sec. 5. T.8S., R.34W., Umiat Meridian  
UTM 4/458460/7629990

Class: II

#### Location and Setting

A flake scatter is located on a series of small exposures on top of Ridge 3 at the northern edge (Fig. 13). It is 780 m southwest of Noluck Lake and 1.9 km southwest of the NARL cabin. The gravelly bedrock surfaces are covered with open-mat alpine tundra vegetation. These segments are surrounded by tussocks. An excellent view exists here of the Noluck Basin and the Storm Creek drainage WNW.

#### Site Information

About 40 CCS flakes and a biface were found in a 113 m by 4 m area. The site is oriented 75°-225° with the series of bedrock exposures. There are several minor flakes strung out over the site. Most flakes are grey, but there are a few black ones. The biface is a lightly patinated CCS that was originally grey. It measures 5.2 cm by 2.8 cm by 1.0 cm, and was probably used as a knife. There is some erosion at the site area, but it does not seem to be extremely active.

### Discussion

This site was probably a lookout. Because of its number of small concentrations, it was probably used several times over an unknown duration. A lack of diagnostics prevents any assignment of age or cultural affiliation.

MIS-146

Location: Sec. 5, T.8S., R.34W., Umat Meridian  
UTM 4/457550/7629720

Class: II

### Location and Setting

A flake scatter was found on a low, gravelly bedrock knoll on the south side of Ridge 3 (Fig. 13). It is 240 m north of a small, beaded stream and 2 km southeast of the NARL cabin. Vegetation is sparse alpine tundra. The outcrop is bounded by tussocks on the north, south and west, and to the east is a series of frost boils, separating another ridge segment from this one. The view is fairly well limited to the small stream valley on this side of the ridge.

### Site Information

Approximately 25 CCS flakes and a biface fragment were found in a 15 m by 5 m area with a 65°-245° orientation. The scatter seems to represent a single locus of activity. Most of the material is black, with some grey. Two flakes were utilized. The biface fragment appears to have been part of a knife. The vast majority of flakes are of the thinning variety used in secondary stages of stone tool manufacture, although looked like they were pressure flakes representing a final stage of manufacturing.

### Discussion

This site was probably a lookout. The single concentration indicates a single occupation. Without diagnostics a determination of cultural phase and associated period is impossible.

MIS-147

Location: Sec. 31, T.7S., R.34W., Umat Meridian  
UTM 4/457150/7630990

Class: I

### Location and Setting

Two flakes were found on the highest of three aligned bedrock knolls on the western side of the Noluck Basin. The site is 900 m west of Noluck

Lake and 840 m south of Ridge 3. The knolls trend almost due E-W, at 100°-280°. Starting with the lowest knoll on the east, each knoll is successively less vegetated; the highest one has the least with about 50% coverage of alpine tundra vegetation. The knolls are surrounded by tussock meadow. This site has an excellent view of the basin to the east.

#### Site Information

Two CCS flakes were found 75 m apart. One flake is banded black and grey, the other is grey. Because of extensive ground cover, it is possible more material may be beneath nearby vegetation.

#### Discussion

Site function is difficult to assess because of the paucity of cultural material, although the location affords excellent lookout potential as well as close access to game traveling through the basin. As neither artifact was diagnostic, cultural affiliation and period are impossible to determine at this time.

MIS-148

Location: Sec. 6, T.8S., R.34W., Umiat Meridian  
UTM 4/456400/7629550

Class: III

#### Location and Setting

MIS-148 is a flake and bone scatter located in the southwest corner of Ridge 3 (Fig. 13). The site is 300 m north of a small, beaded stream and 360 m east of Storm Creek. This fairly barren bedrock section of the ridge possesses some open-mat alpine tundra vegetation on top, with closed-mat alpine tundra on the slopes blending into the surrounding tussock meadow. There is an excellent view north and northwest of the Storm Creek area.

#### Site Information

About 200 CCS flakes are located in an 80 m by 35 m area trending 100°-280°. There are a number of concentrations within the site with one being particularly noteworthy. In a very small area there are about 120 flakes no doubt representing a single flaking episode. None of the flakes in this group was utilized (there are only a very few utilized flakes throughout the site). Outside of the one concentration the rest of the site is mixed grey and black material. There are, however, occasional pieces of magenta and grey flakes with streaks of olive drab. The types of flakes present indicate that secondary and final stages of artifact manufacturing occurred here. Also found were two projectile point tips, one of grey CCS and one of black CCS, both having parallel, oblique flaking. Besides the above mentioned material, a few caribou fragments were found scattered about the site.



## Discussion

This was probably a lookout site.. A number of flake concentrations make more than one period of use very likely. The size and manner of flaking of the two point fragments suggest that at least one of the occupations here was a post-Denbigh phase of the Arctic Small Tool tradition, likely of Choris or Norton phases.

MIS-149

Location: Sec. 6, T.8S., R.34W., Umat Meridian  
UTM 4/456490/7630000

Class: III

## Location and Setting

A flake scatter was found on a long, ridge-like segment of Ridge 3, 1.8 km southwest of Noluck Lake and 600 m east of Storm Creek (Fig. 13). Open-mat alpine tundra vegetation grows on the graveled bedrock surface. Tussock meadow surrounds the segment and separates it from nearby portions of the ridge. The view is excellent from two high points on the ridge, to the north of Noluck Basin and south of a small unnamed stream valley.

## Site Information

This dense concentration of flakes covers an area 465 m by 60 m trending E-W. The denser portions correspond to the two highest points of the segments. Overall, there are easily more than 1,000 flakes of black, grey, green, and cream colored CCS in many concentrations with many tools. Noteworthy tools include: A Type 1a mitten-shaped burin (UA78-155-2; Pl. 21 2; v.4:118); a knife side blade preform with parallel oblique flaking (UA78-155-45; Pl. 16 1; v.4:82, 83); a square-based projectile point fragment with parallel oblique flaking (UA78-155-3; Pl. 1 27; v.4:12); and a small, finely worked knife or perforator (UA78-155-1; Pl. 11 9; v.4:78) (Giddings 1957:Fig. 8 and 9; 1964: Fig. 49, pp. 6-7; Giddings and Anderson n.d.:Pl. 126 II, 130, 2, 159 8). These were found at the denser, eastern end of the site within about 200 m of each other.

## Discussion

This lookout site appears to have been used primarily in early Arctic Small Tool tradition times. The broad, shallow, parallel oblique flaking on the preform and point base illustrates the Choris phase flaking style. Also the shape of that base is seen in Choris forms from the Choris Peninsula and Cape Krusenstern and Punyik Point as well as the early Choris phase camps from Cape Krusenstern. The lack of microblades on the site make a Choris phase affiliation likely, especially since these related artifacts were scattered over such a large portion of the site. However, the sheer size of this site, indicating long and intense use, makes multiple components a definite possibility.

<u>Catalog #</u>	<u>Description</u>
UA78-155-1	Perforator
UA78-155-2	Mitten-Shaped Burin
UA78-155-3	Projectile Point
UA78-155-4	Preform
UA78-155-5	Preform (piece #2)

MIS-150

Location: Sec. 6, T.8S., R.34W., Umiat Meridian  
UTM 4/457390/7629780

Class: III

#### Location and Setting

A flake scatter was found on two benches on the side of a large ridge segment at the western end of Ridge 3, 360 m east of Storm Creek and 480 m north of an unnamed beaded stream (Fig. 13). Open-mat tundra vegetation grows on the two benches with hummocky closed-mat alpine tundra in between. The closed-mat tundra blends with tussocks to the east and west of the site area. When compared to MIS-148 on the ridge segment south, this spot is fairly protected. It also gives a good view to the north and that portion of the Storm Creek valley.

#### Site Description

Two small but dense flake scatters occupy an area 27 m by 22 m. They were divided into Locality 1 and Locality 2. Locality 1 measures 20 m E-W by 8 m N-S and contains over 300 flakes. Also found were a large CCS cobble, partially flaked, and one-half a knife side blade (UA78-156-1; Pl. 5 9; v.4:43). Locality 2, measuring 22 m E-W by 11 m N-S, is even more dense than the other. Over 700 flakes were counted but no tools were found. Both localities have a bit of bone scattered about, probably caribou. Most of the material, including the cobble, is black CCS, but about 30% is of light grey CCS. Relatively little debitage was utilized.

#### Discussion

These two areas seem to represent several activities. A number of factors address this conclusion. The small dense cluster certainly seems to represent short-term intensive use such as one would expect from a camp. The view to the north speaks to its potential as a lookout. Primary resource reduction and tool manufacture can be inferred from the CCS cobble. Finally, the presence of the broken knife side blade suggests miscellaneous cutting activities. Age can be grossly determined on the basis of the side blade. Because of this type's persistence in the archeological record, the knife side blade can be no more finely placed than in the post-Denbigh phase of the Arctic Small Tool tradition (Giddings 1964:Pl. 46 and 52; Giddings and Anderson n.d.:Pl. 105, 113 7-16, 130 14-17, 131 1-16; Larsen and Rainey 1948:Pl. 12 and 13.

<u>Catalog #</u>	<u>Description</u>
UA78-156-1	Knife Side Blade

MIS-151

Location: Sec. 6, T.8S., R.34W., Umiat Meridian  
UTM 4/456900/7630000

Class: III

#### Location and Setting

A flake scatter is situated on a ridge-like segment toward the western end of Ridge 3 on the north side, 1.4 km southwest of Noluck Lake and 1 km east of Storm Creek (Fig. 13). The graveled bedrock surface possesses open-mat alpine tundra vegetation and is surrounded by tussocks. There is a good view of the entire Noluck Basin and the northern portion of Storm Creek.

#### Site Description

Several hundred CCS flakes are distributed in three major concentrations over an E-W trending area measuring 225 m by 30 m. Unlike the other sites, nearby MIS-138 and MIS-149, there is a significant amount of reddish brown CCS, however, black and grey do predominate. Many tools were seen in different portions of the site. Of greatest interest are two weapon insets (one collected, UA78-157-2; Pl. 4 6; v.4:35), a thick knife or preform, three similar square-based projectile point fragments with parallel-oblique flaking (one collected, UA78-157-1; Pl. 1 25; v.4:12), and one straight based tapering projectile point base fragment with parallel oblique flaking.

#### Discussion

This lookout site appears to be affiliated with the post-Denbigh phase Arctic Small Tool tradition. The point bases all seem to relate to the Choris phase as seen at Cape Krusenstern and the Choris Peninsula (Giddings 1957:Fig. 9 8-9; Giddings and Anderson n.d.:Pl. 126 11, 159 8). The broad, shallow, parallel oblique flaking on these points helps confirm this placement. The side blade seems to relate most closely to specimens from Iyatayet and Point Hope Ipiutak (Giddings 1964:Pl. 46 3; Larsen and Rainey 1948:Pl. 2 33, 13 9). The artifact in question is borderline in size between weapon inset and knife side blade. Despite its closest ties to types from Norton and Ipiutak phases, it could be part of a Choris assemblage since Choris possesses that general artifact type. It is conceivable that this association of tools represents a late Choris phase where this kind of side blade is being introduced to the standard Choris phase assemblage.

<u>Catalog #</u>	<u>Description</u>
UA78-157-1	Projectile Point
UA78-157-2	Weapon Side Blade

MIS-152

Location: Sec. 6, T.8S., R.34W., Umiat Meridian  
UTM 4/456000/7629450

Class: III

#### Location and Setting

A flake scatter was found on the westernmost segment of Ridge 3, 150 m west of Storm Creek and 75 m north of an unnamed stream (Fig. 13). The graveled portions of the ridge, including the top and a bench to the north, are covered by open-mat alpine tundra vegetation. Tussocks occur around the ridge as well as in the intervening area between the ridgetop and the bench. The predominant view is of the Storm Creek drainage north and south of the site.

#### Site Information

Two localities contain approximately 180 CCS flakes in a 75 m by 65 m area trending 84°-264°. Locality 1, the largest, covers a 65 m by 25 m area on the ridgetop. Around 175 black and grey flakes including a few black and grey banded pieces were seen. Many of the larger flakes were utilized. One area was a cobble reduction station where there were several pieces from two cobbles, with flakes from them scattered nearby. A projectile point with a heart-shaped blade and slightly contracting stem came from the southcentral margin of the locality (UA78-158-1; Pl. 3 1; v.4:27). Locality 2 is quite small, 3 m by 1 m, and contains six CCS flakes. Finally, the site as a whole contains a light scattering of bone.

#### Discussion

This is a lookout site that appears to have been used at least twice, given the two localities. The stemmed point confirms placement in a post-Den-high phase, Arctic Small Tool tradition context. Finer distinctions are not quite as simply derived and present some interesting comparisons. The stemmed point is greatly reminiscent of Type 6 and 7 arrowpoints, as well as a miscellaneous type, from the Norton phase at Iyatayet (Giddings 1964:Pl. 49 13-16; 50 8). However, the exact configuration of this point is not present; some points have the proper stem shape, but not the proper blade, and vice versa. The blade shape, however, can be seen in early Choris camps from Cape Krusenstern (Giddings and Anderson n.d.: Pl. 159 4). The flaking style resembles Choris phase workmanship, but can also be seen on early Norton phase specimens. Putting this all together leads one to conclude that this may be a late Choris, early Norton phase projectile point, thus placing the site in a transitional time period.

<u>Catalog #</u>	<u>Description</u>
UA78-158-1	Projectile Point

MIS-153

Location: Sec. 5, T.8S., R.34W., Umat Meridian  
UTM 4/457520/7629900

Class: III

#### Location and Setting

A flake scatter is located on nine knoll-like segments on the northern front of Ridge 3, 900 m southwest of Noluck Lake and 480 m north of an unnamed beaded stream to the south (Fig. 13). The segments are covered with open-mat alpine tundra vegetation with tussocks and frost boils around and in between. The view is most noteworthy of the Noluck Basin of which this site sits on the very edge.

#### Site Information

Almost all of the exposures mentioned above contain some flaking debris. Some exposures have fairly dense scatters and in some cases material extends out into the tussocked and frost-boiled area between segments. The whole series is about 635 m E-W, by 20 m N-S. A knife side blade fragment was the only tool found at the eastern end of the site (UA78-159-1; Pl. 5 8; v.4:43).

#### Discussion

This is a lookout site belonging to the post-Denbigh phase of the Arctic Small Tool tradition. While the artifact type is characteristic of the latter part of the tradition it is not characteristic of any particular phase (Giddings 1964:Pl. 46, 52; Giddings and Anderson n.d.:Pl. 105, 113 7-16, 130 14-17, 131 1-16, 134 12; Larsen and Rainey 1948:Pl. 12, 13). At least one of the many uses of this area can be ascribed to these times.

<u>Catalog #</u>	<u>Description</u>
UA78-159-1	Knife Side Blade

MIS-154

Location: Sec. 6, T.8S., R.34W., Umiat Meridian  
UTM4/456760/7629400

Class: III

#### Location and Setting

A stream terrace adjacent to the confluence of Storm Creek and the stream south of Ridge 3 is the location of a flake scatter (Fig. 13). The graveled terrace appears, through the excavation of test pits, to be a reworked section of bedrock, probably belonging to the Ridge 3 complex. The surface is quite uneven in many portions of the site due to extensive frost boil activity. Open and closed-mat alpine tundra vegetation covers all areas of the site depending on the degree of ground stability. The actual main channel of Storm Creek is presently cutting away at the site area.

#### Site Description

Roughly 1500 or more flakes were found along the curving terrace edge in an area measuring 140 m by 40 m. Many concentrations were noted, each concentration containing from 10 to over 500 flakes. These concentrations occurred by the frost boils as well as on more stable ground. Black CCS far out number other CCS colors. Most flakes are quite small indicating an emphasis on tertiary tool shaping behavior. Two broken projectile point tips, one of brown CCS, speak toward hunting activities. A few pieces of bone were found on the site, but association with the cultural material is not certain.

Four 50 cm square test pits were placed in the site area. Two were located on a small terrace below that contained no surface indications of cultural materials, but appeared to be a good camp site. These two proved to contain no artifacts. The other two, TP-A and TP-B, were placed to avoid obvious surface concentrations and subsequently illustrated that there is often nothing to be found if there is an absence of a surface concentration. The small bit of material found was between near vertical, decomposing plates of bedrock. This included a very finely worked end blade on a microblade found at 12 cm in TP-A (UA78-160-3; Pl. 1 4; v.4:4). Thus, the cultural material is primarily surface in nature with some having worked its way down into the mixed bedrock-soil matrix.

#### Discussion

The location of this site is excellent for a camp. While little fuel is available for fires, access to water and raw CCS is very good. However, the dearth of formal tools and even utilized flakes suggests that tool production was the only activity carried out. Perhaps this site functioned as a camp but only for the purpose of finishing tools to be removed for use elsewhere. The absence of a great number of large cortex flakes or even the low number of CCS cobbles on the site indicates that the raw material was initially worked elsewhere. Perhaps this helps reinforce the idea of

this as a camp, because material was brought in from a remote work area to be further refined here. The only diagnostic piece is the end blade which is a classic Denbigh phase form, with the tip and base broken. However, the absence of microblades presents some problems in assigning this affiliation. This is due to the continuity in forms from late Denbigh to early Choris (Giddings and Anderson n.d.). In any event, this site is most certainly affiliated with early Arctic Small Tool tradition cultures.

<u>Catalog #</u>	<u>Description</u>
UA78-160-1	2 Nonutilized Flakes
UA78-160-2	Nonutilized Flake
UA78-160-3	Projectile Point
UA78-160-4	Retouched Cortical Flake
UA78-160-5	Nonutilized Flake

MIS-155

Location: Sec. 6, T.8S., R.34W., Umiat Meridian  
UTM 4/455870/7629080

Class: II

#### Location and Setting

A flake scatter is located on a terrace remnant at the confluence of Storm Creek and an unnamed creek south of Ridge 3 (Fig. 13). The site is 270 m southwest of the actual confluence and 110 m southeast of Storm Creek at its nearest point. The graveled bedrock surface is covered with open-mat alpine tundra vegetation and bounded on the north, south, and east by tussock. To the west is the damper sedge meadow of the Storm Creek floodplain with willows on the gravel bars and banks. There is an adequate view of the immediate area within a kilometer or two, but it is hardly expansive.

#### Site Information

Roughly 400 CCS flakes, including two biface fragments, are situated in an area 35 m by 20 m trending 80°-260°. There are about seven concentrations in the site of varying sizes as well as a number of dispersed flakes. Black and grey CCS predominate, but there is one banded black and grey piece and also a small number of brown flakes. A number of grey pieces have a moss agate appearance. Of interest is a flaked CCS cobble obviously brought up from the nearby stream gravels of Storm Creek. Very few flakes had been utilized.

#### Discussion

Discerning the function of this site is somewhat of a problem. In one sense it is a workshop site for the purpose of reducing raw CCS cobbles into usable pieces, probably preforms of some sort. The two biface frag-

ments could be evidence of this activity. The site's location, however, on dry, level ground near water and fuel show its advantages as a campsite, where the above activities could have taken place as well. If a camp was here, the lack of cultural material indicates that it was only used on a short-term basis. The number of concentrations show that there was more than one flaking episode, but whether they were contemporaneous or not is hard to tell. Due to the lack of diagnostics cultural affiliation and associated chronology is impossible to establish at this time.

MIS-156

Location: Sec. 7, T.8S., R.34W., Umat Meridian  
UTM 4/456220/7628080

Class: II

#### Location and Setting

A possible cache pit is located on the westernmost segment of Ridge 5,540 m west of an unnamed tributary of Storm Creek (Fig. 13). The bedrock surface is quite bare except for occasional patches of alpine tundra vegetation. Tussock tundra surrounds this segment as well as the ridge itself. There is an adequate view to Storm Creek and drainages on either side of the ridge.

#### Site Information

The possible cache pit is 1.9 m by 1 m by 0.75 m deep trending exactly E-W. It is excavated into the sandy shale bedrock with plate-like fragments scattered around the hole. The larger slabs are all stacked at the western end.

#### Discussion

There is some doubt as to the validity of this feature as a cultural manifestation. The hole is quite close to a ground squirrel village and therefore a likely spot for a bear digging. However, the symmetry of the pit, its E-W orientation, and the stacking of larger slabs in one location make a good case for it being man-made, despite its lack of any other material. Cultural affiliation is hard to determine because of lack of diagnostic artifacts. The condition of the pit, however, with its fairly sharp outline and lack of fill, seems to indicate that it is recent, possibly no more than 100 or 200 years old. The people known to be occupying this area at that time were members of the Arctic Tundra tradition.



MIS-157

Location: Sec. 7, T.8S., R.34W., Umat Meridian  
UTM 4/455350/7627950

Class: III

#### Location and Setting

A flake scatter is situated on a south-facing spur at the west end of Ridge 5,420 m northwest of the confluence of two unnamed tributaries and Storm Creek (Fig. 13). Except for the sandstone outcrop at the end of the spur, open-mat alpine tundra vegetation covers the site. The primary view is of the small unnamed stream valley south of the ridge, but a portion of the Storm Creek Valley to the west is also seen.

#### Site Information

Approximately 50 CCS flakes were found in two concentrations about 20 m apart. The first concentration near the end of the spur contains the majority of material. It seems to run in a widely scattered band across the spur, 70°-250°, covering a 36 m by 8 m area. Spread out over this area was broken CCS cobble, a biface fragment and a wedge-shaped microblade core (UA78-161-1; Pl. 25 4; v.4:153). The second concentration covers a band of 30 m by 4 m trending 160°-340° and containing ten flakes. All material is of black and grey CCS except for the cream colored, possibly patinated, CCS cobble.

#### Discussion

This is a lookout site that seems to have had at least two periods of use. The presence of the wedge-shaped core indicates American Paleo-Arctic tradition affiliation for at least the one concentration. Erosion down the sides of the spur accounts to a degree for the spread and scatter of the cultural material.

<u>Catalog #</u>	<u>Description</u>
UA78-161-1	Microblade Core

MIS-158

Location: Sec. 18, T.8S., R.34W., Umat Meridian  
UTM 4/457180/7627270

Class: I

#### Location and Setting

MIS-158 is an isolate found on the south side of Ridge 6 (Fig. 13). It is 240 m to the nearest water, a small unnamed tributary drainage of Storm

Creek to the west. The bedrock surface is mostly bare, but there is an occasional patch of alpine tundra. The ridge is surrounded by tussock meadow. The view is very limited.

#### Site Information

There is a single black CCS cortex flake at this spot.

#### Discussion

It is very difficult to determine much of anything about this site on the basis of a single flake. If nothing else, it demonstrates usage of this part of the survey area. Determination of cultural affiliation and period is not possible at the present time.

MIS-159

Location: Sec. 2, T.8S., R.34W., Umiat Meridian  
UTM 4/462550/7630390

Class: II

#### Location and Setting

MIS-159 is a flake scatter on the south side of Ridge 7 (Fig. 13). It is 600 m southeast of the nearest water at the Pilly Fork, and 1.7 km east of Noluck Lake. The graveled bedrock surface is covered with open-mat alpine tundra vegetation. Tussock meadow surrounds the ridge. A small rise near the center of the site is pocked with ground squirrel holes. There is a good view to the south, including the valley between Ridge 7 and 8, as well as a portion of Noluck Lake and the Pilly Fork.

#### Site Information

About 60 grey CCS flakes and one piece of cut antler occupy an area 45 m by 30 m trending 45°-225°. There is only one main concentration and several flakes are scattered downslope. Only a few of the flakes are utilized, one of which is large, blade-like, and seems to have been used as a knife. There is some disturbance due to downslope movement, and possibly some due to ground squirrel activity. In addition there were some "Cat" tracks and a stake left behind with a tag-reading "L124, TBML", 100 m southwest.

#### Discussion

This site appears to have functioned as a lookout, and, by the appearance of the scatter, for one time only. The lack of diagnostics make it hard to place this site in a cultural sequence. If the antler and the flakes are associated, the site would be more than a couple of hundred years old. The predominant people around at that time were of the Arctic Tundra tradition.

MIS-160

Location: Sec. 17, T.8S., R.34W., Umat Meridian  
UTM 4/457520/7627510

Class: I

#### Location and Setting

This is a flake scatter on the south side of a segment belonging to Ridge 6, 420 m south of an unnamed tributary of Storm Creek (Fig. 13). The graveled bedrock surface is covered with open-mat alpine tundra vegetation. Tussock meadow surrounds the ridge. The view is quite limited.

#### Site Information

This is a five-flake site. Four black CCS flakes were found in a fairly tight cluster, with another 71 m down the ridge. None of the flakes is utilized.

#### Discussion

It is a real problem determining much of anything about this site on the basis of five flakes. The distance between the cluster and the isolate indicates at least two different events. If nothing else, the site confirms usage of this part of the survey area. Establishing this site's place in a cultural sequence is impossible at the present time.

MIS-161

Location: Sec. 2, T.8S., R.34W., Umat Meridian  
UTM 4/462980/7630400

Class: I

#### Location and Setting

This site is an isolate found on a bench on the south side of Ridge 7, 300 m north of an unnamed, beaded stream that is a tributary of the Pilly Fork (Fig. 13). The graveled bedrock surface is covered with open-mat alpine tundra vegetation. The ridge is surrounded by tussock meadow. There is a good view to the south, including the small valley and ridges, as well as a portion of the Pilly Fork.

#### Site Information

A single, grey CCS flake is located here.

#### Discussion

It is difficult to establish much of anything about this site on the basis of a single flake. If nothing else, it demonstrates usage of this part of the

survey area. Determination of this site's place in a cultural sequence is not possible at this time.

MIS-162

Location: Sec. 4, T.8S., R.34W., Umiat Meridian  
UTM 4/459150/7630320

Class: III

#### Location and Setting

A buried campsite is situated on the actively eroding southwestern shore of Noluck Lake. The site is on a raised, well-drained piece of land next to a short but well defined stream cut that is barely distinguishable from the shoreline on either side. The whole shore in this sector of the lake is generally scalloped, formed by the action of short, locally fed drainages. The stream adjacent to the site is the most distinctive as well as the largest of these drainages. These drainages appear to be frost cracks, enlarged by seasonal runoff to the lake. The vegetation is a mature mat and cushion tundra with grasses, mosses, and willows predominating. Tussock tundra surrounds it on three sides. The stratigraphy, as seen in a 170 cm deep bluff profile, shows roughly alternating peat and loam layers. As a result, alternating wet and dry cycles are inferred, suggesting raising and lowering of the lake level. Peat levels are seen as being comparable to the extremely wet areas found now at various points around the lake basin. Radiocarbon dates on two of the peat levels suggest a fairly rapid accumulation rate with roughly 2000 (1505±90, 94 cm to 100 cm below surface, 1-10,678; 995±170, 68 cm to 74 cm below surface, 1-10,656) radiocarbon years accounting for the observed profile.

#### Site Description

The site was discovered and delineated by a careful examination of the eroding bluffs on the lakeshore. The change in vegetational type, however, from mat and cushion to tussock tundra was used to arrive at a site size of 23 m by 15 m oriented 60°-240°. The recovered cultural material came from the creation of a 170 cm by 50 cm profile and the dissection of a badly slumped soil block. While the soil block was broken off from the bluff, the depths relative to surface were still reflective of the in situ situation. Two levels were revealed in the slump block that are quite comparable to the levels seen in TP-A at MIS-129. At 10 cm to 15 cm some bone was found below a large flat rock. The rock is an obvious manuport from Ridge 3,350 m south. At 35 cm to 40 cm, several bone fragments and two small flakes were recovered. The profile presented a slightly different picture with a single cultural layer containing bone, wood and a cluster of flat bedrock plates from the ridge. The layer is 20 cm to 40 cm below surface. The rock cluster occurred with a large chunk of wood which appears to be the remains of a spruce log. These features seem to be under a perceptible dip in the ground at the bluff's edge. The dip could be slumpage, but it seems more likely to represent what is left of a house

depression of which the other features are a part. Finally, the proximal end of an arrow shaft was found on the bluff slough (UA78-162-1; Pl. 50 5; v.4:245).

#### Discussion

This site seems to be a seasonal camp belonging to the late prehistoric period. The late period context is based partially on the arrow shaft which falls within the range of ethnographic and late prehistoric types (Ford 1959; Giddings 1964; Murdoch 1892; Nelson 1899). In addition, a single radiocarbon date from the wood in the cultural level yielded a date of  $335 \pm 75$  radiocarbon years B.P. (I-10,657).

<u>Catalog #</u>	<u>Description</u>
UA78-162-1	Wooden Arrowshaft Base
UA78-162-2	2 Nonutilized Flakes
UA78-162-3	7 Bone Fragments
UA78-162-4	3 Bone Fragments
UA78-162-5	Calcinated Bone Fragments
UA78-162-6	Bone Fragment
UA78-162-7	Mandible and Innominate Fragments

MIS-163

Location: Sec. 2, T.8S., R.34W., Umat Meridian  
UTM 4/463220/7630330

Class: I

#### Location and Setting

An isolate is located on the crest of Ridge 7, 300 m north of the nearest water in a small stream, and 2.8 km southeast of Noluck Lake (Fig. 13). The graveled bedrock surface has open-mat alpine tundra vegetation. MIS-163 possesses an excellent view north and east as well as a good view south to Ridge 8.

#### Site Information

The site consists of a single, broken, mottled, dark grey, light grey, red, CCS cobble with two flake scars.

#### Discussion

It is difficult to say much about MIS-163 at this time on the basis of a single, flaked cobble. If nothing else, it confirms usage of this part of the survey area. It is impossible to assign a cultural affiliation and associated period.

MIS-164

Location: Sec. 5, T.8S., R.34W., Umiat Meridian  
UTM 4/458250/7630790

Class: III

#### Location and Setting

An extensive buried midden was found in the southwest corner of Noluck Lake, 450 m south of Ridge 3 and 2.5 km east of Storm Creek. The site is rather discontinuous, being located on the more elevated segments of the now actively eroding shore. Short seasonal drainages act to divide these areas and in some cases constitute an additional source of erosion. It appears that many of these drainages post-date the occupation of the site, as they are seen to cut through the midden in a couple of places. Mat and cushion tundra vegetation cover the site segments, being gradually replaced by tussock tundra a short distance from the shore. Drainages or small swales of grasses, willows, and birch occur between site segments. The bluff face over most of the site area reveals a fairly simple profile of present soils overlying a thick peat layer. Below the peat are two layers; the upper clay is mixed with organic material, the lower is purer grey clay. A more complex profile was found at the northernmost end of the site, indicating a very different depositional history than the rest of the shore in this area. An interpretation of this array of clay and loam layers will not be attempted at this time; some of it, however, may be due to cultural activities.

#### Site Description

Bone, wood, and flakes were found eroding out of the bluffs along 320 m of the shore. It is estimated that the material extends back away from the shore no more than 10 m. Bird bones, probably from waterfowl, were found along with an assortment of caribou bones. A flake concentration was located at the northwest end of the site, 40 cm below surface. Three utilized flakes and 126 waste flakes were recovered. In addition, a carved wooden object of triangular cross-section with square slots carved into one side came from the bluff sluff in the middle of the site (UA78-163-1; Pl. 61 1; v.4:252). This object is of unknown function, but might be a portion of a sled. All cultural material found in situ was 40 cm to 50 cm below surface.

#### Discussion

A series of temporary, seasonal camps are ideally located at the southwest end of the lake to take advantage of the predominant northeast wind. Discussions with Ray Bane (1979) concerning the strategy of caribou drives suggest that Natives allow prevailing winds to blow the dead caribou into shore where they are butchered. The location of the largest lakeshore site in this spot would seem to support this scenario. This would in turn support a fall occupation since the lake would have to be ice free to take advantage of the above circumstances. On the basis of comparable vegeta-

tive cover, and bone and wood preservation with nearby MIS-162. the investigator places this site in the late prehistoric period and the Arctic Tundra tradition. MIS-162 has been dated to  $335 \pm 75$  radiocarbon years B.P.

<u>Catalog #</u>	<u>Description</u>
UA78-163-1	Possible Wood Sled Part
UA78-163-2	Utilized Flake
UA78-163-3	Utilized Flake
UA78-163-4	Nonutilized blade-like Flake
UA78-163-5	Utilized Cortical Flake
UA78-163-6	106 Nonutilized Flakes
UA78-163-7	19 Nonutilized Cortical Flake

MIS-165

Location: Sec. 1, T.8S., R.35W., Umat Meridian  
UTM 4/455610/7629480

Class: III

#### Location and Setting

A flake scatter was found on a stream terrace segment at the eastern end of Ridge 10, 350 m west of Storm Creek (Fig. 13). Open-mat alpine tundra vegetation covers the graveled bedrock surface. Wet sedge, mat and cushion tundra are located down off the ridge to the north and east. Tussock tundra occurs south and west of the terrace segment. A modicum of brush including willow and birch can be found on the nearby Storm Creek floodplain. The primary view is of a few kilometers of the Storm Creek valley north and south of the site. A portion of the Noluck Basin is observable, but certainly not to the degree that the basin is viewed from Ridge 3.

#### Site Information

A scatter in excess of a 1000 observable CCS flakes measures 125 m by 80 m and trends  $70^{\circ}$ - $250^{\circ}$ . Fifteen concentrations, each containing between 10 and 100 flakes, were observed. In addition, 46 tools and flakes were found lying between the flake clusters. All grades and colors of CCS found over the entire survey area were seen including but not limited to fine grained to sugary black, grey, green, red brown and chalcedony. Flake sizes also run the gamut from tiny finishing flakes to huge primary flakes in excess of 10 cm in the largest dimension. Several tools were identified. There were several biface fragments, including knives, side blades, and projectile points, a large flake end scraper, the base of a side notched projectile point (UA78-164-2; Pl. 3 20; v.4:23), and a rhomboid-shaped projectile point (UA78-164-1; Pl. 1 10; v.4:7). Perhaps 10% of the flakes showed utilization.

## Discussion

The size of this site, as well as the density and variety of cultural material, suggests many different uses over a considerable period. The location itself addresses the site's use as a camp and a lookout. While water and fuel are at quite a distance now, they may easily have been closer at some time in the past. The elevation allows a view of several kilometers up and down the valley. Knives, projectile points, scrapers, and a number of utilized flakes suggest tool maintenance, hide preparation and butchering activities were carried out. Also the range of flake types suggests that the inhabitants carried out all stages of stone tool manufacture. These are the kinds of activities that can be associated with one and/or the other type of site.

The sheer size of the site and the density of material suggest a long term use of this area rather than short, intense occupation. Two diagnostic artifacts help support this. The side-notched point base, although somewhat thicker than normal, indicates a Northern Archaic tradition component (Anderson 1968a). The other diagnostic relates to a type of projectile point found in the Norton component at the Iyatayet site and the Near Ipiutak component at Point Hope (Giddings 1964:Pl. 48 1-18, 20; Larsen and Rainey 1948:Pl. 80 1-14). This indicates a Norton phase occupation as well. In addition many of the miscellaneous biface fragments had a generalized Arctic Small Tool tradition flavor. As a result, it seems safe to say that there are at least two components at MIS-165.

<u>Catalog #</u>	<u>Description</u>
UA78-164-1	Projectile Point
UA78-164-2	Projectile Point

## MIS-166

Location: Sec. 3, T.8S., R.34W., Umiat Meridian  
UTM 4/461780/7630020

Class: II

## Location and Setting

A flake scatter was found on a terrace segment just 50 m east of the Pilly Fork and 2.4 km ESE of the NARL cabin. The terrace segment is actually a reworked segment of Ridge 2 (Fig. 13). Tussock meadow surrounds the alpine tundra terrace. There is a limited but adequate view to the north.

## Site Information

Six CCS flakes were found in a 40 m by 20 m area trending 130°-310°. There were four light grey flakes, one black flake and one grey burinated flake. None was utilized.



## Discussion

This site's location near water, on level dry ground, and its thinly scattered remains, seems to point toward it being a short term camp site or resting area. The presence of so many good lookout points nearby appears to support this conclusion. The lack of diagnostic artifacts makes it impossible to fit this site into a cultural sequence at this time. While the presence of a burin technology might provide a limiting date, it would be tenuous at best to make such an inference on the basis of a single example.

MIS-167

Location: Sec. 1, T.8S., R.35W., Umat Meridian  
UTM 4/455420/7629570

Class: III

## Location and Setting

A flake scatter in two localities is situated on a graveled terrace remnant of the east end of Ridge 10, 240 m northwest of Storm Creek (Fig. 13). This site lies directly across from the confluence of Storm Creek, an unnamed west running drainage and MIS-154. Open-mat alpine tundra vegetation covers the site area with sedge and mat and cushion tundra down the ridge to the east leading to some brush on the floodplain. Tussock meadow is on the other three sides. There is a fair view of the Storm Creek valley for a few kilometers north and south.

## Site Information

Roughly 300 CCS flakes were found in two locations within an area measuring 80 m by 65 m trending 170°-350°. Locality 1, at the north end of the site, contained the most material. It measures 65 m by 45 m and trends 80°-260°. Separated by 20 m of tussocks and frost boils from Locality 1, Locality 2 measures 30 m by 15 m and is oriented the same way as its neighbor. There are many utilized flakes and some were intentionally retouched. A few biface fragments were observed, including a crude side blade fragment and a well-made side blade fragment (UA78-165-2; Pl. 6 5; v.4:44) and two similar projectile point fragments with tip and base broken in similar fashion (UA78-165-1; Pl. 1 13; v.4:8). Both point fragments appear to be of a diamond-shaped variety. A CCS cobble flake core was also seen. Besides some large secondary and primary cortex flakes, small thinning and retouch flakes were found. Blade-like flakes occur, but not in great numbers.

## Discussion

Much that was said about MIS-165 can be said here as well. The location is suitable for use as a camp and a lookout. The side blades, projectile points, and utilized flakes suggest tool maintenance, hide preparation, and

butchering activities. All phases of stone tool manufacture are readily observable in the many kinds of flakes found.

It seems that at least two and probably more occupations are represented here, although the diagnostic material suggests a single tradition and probably one phase of that period. Both points are of a type only found in Norton phase components at Iyatayet and Point Hope (Giddings 1964:Pl. 48 1-18, 20, Larsen and Rainey 1948:Pl. 80 1-14). The collected side blade fragment is of a generalized type common to all of the post-Denbigh Arctic Small Tool tradition phases (Giddings 1964:Pl. 46, 52; Giddings and Anderson n.d.:Pl. 105, 113 7-16, Pl. 130 14-17, 131 1-16, 134 12; Larsen and Rainey 1948:Pl. 12, 13).

<u>Catalog #</u>	<u>Description</u>
UA78-165-1	Projectile Point
UA78-165-2	Knife Side Blade

MIS-168

Location: Sec. 3, T.8S., R.34W., Umiat Meridian  
UTM 4/469650/7622120

Class: I/II

#### Location and Setting

An isolated flake is situated at the eastern end of the second segment from the west of Ridge 8, 660 m east of the Pilly Fork of the Nuka River (Fig. 13). Open-mat alpine tundra vegetation covers the graveled bedrock surface. The primary view is to the north and that portion of the Pilly Fork and Ridge 7.

#### Site Information

A single grey CCS flake was found near the southern margin of the outcropping ridge segment.

#### Discussion

This is a lookout site of indeterminable age. Without diagnostic artifacts it is impossible to place this site in a cultural sequence. A point of interest is some naturally occurring flaked CCS nodules. These nodules appeared to be inclusions weathering out of the bedrock and are of a qualitatively different kind of CCS than the flake noted above. Many of these nodules are flaked, most in a haphazard fashion. One of the better looking pieces (UA78-166-1; Pl. 16 14; v.4:89) appears to be a preform for a small knife of some sort. The problem with these pieces concerns whether they are naturally occurring or not. All specimens like this were found on the southern margin of this entire portion of Ridge 8 from the site, west past MIS-170, to where the segment ends. There is a much better quality CCS

1 km south on Ridge 9, but that CCS showed no signs of having ever been touched. In any event, there seems to be a question concerning the human origin of the flaking on these nodules. If they were worked by man they should be occurring on other parts of the ridge. The question arises as to how flakes could be removed by natural means, because they are indeed flaked. When returning to the area, this matter should be investigated further.

<u>Catalog #</u>	<u>Description</u>
UA78-166-1	Amorphous Biface Fragment
UA78-166-2	Chert Nodule
UA78-166-3	Flaked Chert Nodule
UA78-166-4	Utilized Flake

MIS-169

Location: Sec. 12, T.8S., R.35W., Umiat Meridian  
UTM 4/455360/7629280

Class: III

#### Location and Setting

A flake scatter was found on a graveled terrace remnant at the east end of Ridge 10, less than 75 m southwest of the active floodplain of Storm Creek (Fig. 13). It is also within 300 m of the confluence of Storm Creek and an unnamed drainage to the northwest. Open-mat alpine tundra vegetation occurs in groups on the site, with tussock meadow bounding the area north and west. To the east and south the ridge drops sharply down to the floodplain area where some willows grow in more active zones. The view north and south of Storm Creek valley is adequate for monitoring local game movements, but hardly expansive.

#### Site Information

Roughly 200 flakes were located in some 11 concentrations over a 47 m by 41 m area. Five identifiable tools were found scattered about the whole site area. A rhomboidal shaped projectile point (UA78-167-3; Pl. 1 16; v.4:8), a base of a large lance (UA78-167-2; Pl. 2 20; v.4:18) and a tip of a thin projectile point were found in different parts of the site. On the other hand, a knife side blade fragment and a flake knife (UA78-167-1; Pl. 17 15; v.4:98) were found in a single concentration. In addition, there were two interesting odds and ends, a piece of spruce wood 48 cm long (possibly a tent pole or perhaps a sled part) and a single microblade fragment. All flaked material is of either black or grey CCS and only some of the flakes are utilized.

#### Discussion

Like its nearby neighbors to the north, MIS-165 and MIS-167, this site probably functioned as a camp and a lookout with a variety of activities taking place. Nearby water and willows make it an ideal camp location. The variety of tools and utilized flakes tend to represent activities found

in a camp. However, the same conformation of cultural material, in conjunction with the view, could indicate a lookout. More than likely, here, as in the other two sites, all these activities and functions were simultaneously carried out over a substantial length of time. The time span seems to be considerable as at least two traditions are known to be here. A single microblade fragment hints at the earliest occupation, which would have a limiting date of 3700 B.P., making it an early Arctic Small Tool tradition component or perhaps earlier. The small projectile point very strongly indicates a Norton phase occupation (Giddings 1964:Pl. 48 1-18, 20; Larsen and Rainey 1948:Pl. 80 1-14. Larsen and Rainey 1948:Pl. 16, 17). The lance base is somewhat enigmatic in that it resembles in size, shape and flaking, examples from one of the early Western Thule houses at Cape Krusenstern, 900 A.D. to 1300 A.D. and from NR-5, a Kayuk-related site (Anderson 1972:80, 83; Pl. 4 2, 5; Giddings and Anderson n.d.:Pl. 66 25). A difference is noted in the lack of grinding on the lateral margins of the Cape Krusenstern specimens. In terms of shape and flaking this piece could also fit in with some of the Ahteut lances from the Kobuk River, 1250 A.D. (Giddings 1952:Pl. XVII 11). Two affiliations place this artifact in the early portion of the late prehistoric period in the interior of NPR-A; the third places it in the more interior oriented Kayuk culture Ca-3500-3000 B.P. (Anderson 1972). Finally the presence of an exotic wood in reasonably good condition suggests an even later occupation. In conclusion, a fairly continuous occupation from Arctic Small Tool tradition times through the late prehistoric period can be hypothesized for this site.

<u>Catalog #</u>	<u>Description</u>
UA78-167-1	Flake Knife
UA78-167-2	Projectile Point
UA78-167-3	Projectile Point

#### MIS-170

Location: Sec. 3, T.8S., R.34W., Umiat Meridian  
UTM 4/462000/7629620

Class: I

#### Location and Setting

MIS-170 is a flake scatter found on the south side of a segment of Ridge 8 (Fig. 13). The site is 540 m east of the Pilly Fork and 29 km southeast of the NARL cabin. There is open-mat tundra vegetation on the gravelly bedrock surface. The lower sides of the ridge form a dense closed-mat alpine tundra that grades into the surrounding tussock meadow. There is a good view to the north, including part of the Noluck Basin and Pilly Fork valley.

#### Site Information

Three CCS flakes are strung out for 55 m, E-W, along this ridge segment. Two, one of which is a blade-like flake, are of light grey CCS and one

black. All exhibit use retouch.

#### Discussion

This was probably a lookout site, based on its great distance from water and good view. The separation of the three artifacts suggests use at three different times. The lack of diagnostic artifacts makes it impossible to assign a cultural affiliation or temporal position at the present time.

MIS-171

Location: Sec. 12, T.8S., R.35W., Umat Meridian  
UTM 4/455330/7629030

Class: III

#### Location and Setting

A flake scatter is situated on a segment of Ridge 10 120 m south of Storm Creek and less than 250 m southeast of the confluence of an unnamed drainage and Storm Creek (Fig. 13). The graveled bedrock surface supports a growth of open-mat alpine tundra vegetation. Tussock meadow surrounds the segment, even down off the ridge to the south. From this point the view is fairly open to the south until Ridge 16 blocks the view further upstream.

#### Site Description

Approximately 200 flakes were found in an area 205 m by 35 m trending E-W. Most of the material, however, is located at the eastern end of the segment with the artifact density getting lighter further to the west. Several projectile point fragments were observed, four of which were identifiable. One is a basal half with side notches and a concave base (UA78-168-1; Pl. 3 16; v.4:28). Another, with a heart-shaped blade, is missing the stem (UA78-168-2; Pl. 3 2; v.4:27). Next, what is likely a preform for a rhomboidal-shaped projectile point has a corner broken (UA78-168-3; Pl. 1 18; v.4:9). Finally, a point fragment similar to the one above was recorded but not collected. A single burinated flake was also noted. While both grey and black CCS were found, grey by far predominated.

#### Discussion

This is likely a lookout site very closely related to hunting activities. The presence of projectile points to the exclusion of almost all other tool types helps support this conclusion. At least two time periods are indicated by the point types. The earliest period relates to the side-notched point. Near duplicates of this type were found by Anderson (1972:Pl. 7 1-13) in his Noatak River survey at the NIM-11-1 site and by MacNeish (1956) at the Engigstciak site. Unlike Anderson, this investigator, notes broad similarities with the Northern Archaic tradition in the side notching and the asymmetrical placement of the base in relation to the blade, but agrees

with Anderson that it does not lie within the tradition as defined at Onion Portage. Based on similarities with other assemblages, Anderson posits a date of somewhere between 2000 B.P. and 4000 B.P. The other component seems to be related to the late Choris or early Norton phase of the Arctic Small Tool tradition. The artifact supporting this inference is the point blade fragment which appears to be identical to the whole point from MIS-152. The investigator feels that elements of flaking, stemming and blade shape add up to the above ascribed affiliation (Giddings 1964:Pl. 49 13-16, 50 8; Giddings and Anderson n.d.:Pl. 159 4). Finally the rhomboidal-shaped points relate to types found exclusively in Norton related assemblages, such as found in the Near Ipiutak and Iyatayet sites (Giddings 1964:Pl. 48 1-18, 20; Larsen and Rainey 1948:Pl. 80 1-14). While the fine distinction might resemble a flight of fancy, the evidence does seem to indicate a post-Denbigh phase Arctic Small Tool tradition occupation.

<u>Catalog #</u>	<u>Description</u>
UA78-168-1	Projectile Point
UA78-168-2	Projectile Point
UA78-168-3	Projectile Point

MIS-172

Location: Sec. 35, T.7S., R.35W., Umiat Meridian  
UTM 4/453930/7630960

Class: II

#### Location and Setting

A flake scatter was found on the western end of two segments of Ridge 12, 480 m west of a small, unnamed stream (Fig 13). Each locality occurs on low benches associated with each segment. The gravelly bedrock is covered with alpine tundra in both cases, with tussocks on three sides of each bench. To the east is the rest of the ridge segment. Locality 2 possesses a much denser mat of alpine vegetation than Locality 1, 45 m south. Many of the artifacts at Locality 2 are encrusted with lichen. As they are not on the top of the ridge segments, the view from each location is somewhat impaired, with Locality 2 having the best view north of the broad Storm Creek floodplain.

#### Site Information

All together 36 CCS flakes were found in a 65 m by 5 m area trending 170°-350°. Locality 1 is a single concentration of nine pieces in a 3 m by 1 m area trending 120°-300°. The artifacts grade from black to light grey. There are two utilized biface fragments, one a scraper and the other a spokeshave, and two utilized flakes, one of which is blade-like. The rest are waste flakes.

Locality 2 has two concentrations in a 20 m by 5 m area trending pretty much the same direction as the whole site. One concentration has seven flakes and the other has 20. About half of the total flakes in this locality are utilized. There is one cobble flake core and a primary flake. Also present are a couple of white, patinated flakes (previously grey), a biface fragment, and a small biface, (not well made--of weapon inset size and proportions).

### Discussion

More than one kind of activity appears to have gone on here. In both localities the high tool to debitage ratio and lack of good view seem to indicate that activities other than looking for game took place, although, in each case just a few meters east brings one to a fairly good vantage point. Perhaps looking for game was carried out nearby with the hunters preferring to conduct their subsidiary activities off the ridge crest. Locality 1 seems to have been a place where wood or antler was worked on, as suggested by the spokeshave and the type of wear on the scraper. At Locality 2, the flaked cobble and the primary cortex flake suggest initial stages of tool manufacture and the production of preforms. The lack of a large number of flakes indicates that the raw material was not greatly reduced. The raw material was very likely brought up from Storm Creek where CCS cobbles abound. The utilized flakes and bifaces here also indicate a range of activities, such as butchering and the working of harder materials. The two localities seem to represent at least two events, with the likelihood of Locality 2 being older than Locality 1. This conclusion is based on the denser vegetation in Locality 2, including the greater degree of lichen growth on the artifacts and the presence of patination on two of the flakes. These differences could be due to microenvironmental factors, but in the opinion of the investigator, that is unlikely. This site can not now be placed in a cultural sequence because of the lack of diagnostic material.

MIS-173

Location: Sec. 36, T.7S., R.35W., Umat Meridian  
UTM 4/455190/7631040

Class: II -

### Location and Setting

A flake scatter is situated on the easternmost segment of Ridge 12 (Fig. 13). This segment constitutes a major feature rising out of the Storm Creek floodplain, looking somewhat like a loaf of bread. It is separated from the rest of the ridge to the west by some 750 m, whereas it is only 200 m from Storm Creek to the east. The graveled bedrock surface has open-mat alpine tundra vegetation and the ridge is surrounded by tussock meadow. There is an excellent view of the Storm Creek floodplain to the north and west, as well as a slightly more limited view of the valley and tributary drainages to the south. A portion of the Noluck Basin can be seen to the east.

### Site Information

Roughly 300 CCS flakes are located in a 140 m by 35 m area on top of the ridge segment trending E-W. The flakes are black and grey and occur in a low-density, but uniform, cover. Only two small concentrations were noted. The flakes are mostly of medium size, with few primary flakes and only very small finishing or sharpening flakes. Only a few are utilized. Some ground squirrel activity as well as downslope movement affecting the periphery of the site indicates that natural processes are slowly eroding the site.

### Discussion

This is a lookout site used over a long period. Duration is inferred on the basis of such a uniform cover over such a large area. As well as looking out for game. Time was spent reducing pieces of CCS to preforms for further shaping and finishing elsewhere. Lack of diagnostics make it impossible to place this site temporally and culturally at the present time.

MIS-174

Location: Sec. 35, T.7S., R.35W., Umat Meridian  
UTM 4/453750/7631020

Class: II

### Location and Setting

A flake scatter is situated just south of the crest of a segment of Ridge 12 (Fig. 13). It is 600 m west of an unnamed drainage between Storm Creek and Ridge 12. The irregularly shaped segment has open-mat alpine tundra vegetation on its graveled surface and is surrounded by tussocks. There is an excellent view of Storm Creek valley to the north and east.

### Site Information

A total of 11 light grey CCS flakes occupy a 95 m by 1 m area trending roughly NE-SW. There are actually three parts or loci to this site. The northeasternmost is a cluster of eight flakes in an 8.5 m by 1 m area. Four of the eight are utilized. This group is oriented E-W following the slope on this side of the ridge segment. Thirty-five meters SSW are two more flakes 8.5 m apart, one directly west of the other. Finally a single flake is located 52 m southwest of the flake farthest west of the two. Localities 1 and 2 possess the same good view; Locality 3 is on a lower bench.

### Discussion

This is a small lookout site. The three separate areas probably indicate three separate site uses. It is difficult, at this time, to place the site into a cultural sequence because of the lack of diagnostic artifacts.



MIS-175

Location: Sec. 36 T.7S., R.35W., Umat Meridian  
UTM 4/455100/7631280

Class: II/III

#### Location and Setting

A flake scatter was found on a knoll near a ridge which appears to be a structural outlier of the Ridge 12 system (Fig. 13). It is 325 m west of Storm Creek. The graveled bedrock surface is covered with open-mat alpine tundra vegetation and is surrounded by tussock meadow. The view of Storm Creek is not very good, especially when compared with the panorama from the top of the nearby ridge.

#### Site Description

MIS-175 is a small scatter of about 20 CCS flakes. All but one of the artifacts occur in a 15 m E-W by 3 m N-S area. This isolated piece is 22 m to the WNW of the main cluster. Three biface fragments and a flake knife fragment (UA78-169-1; Pl. 17 11; v.4:93) were discovered.

#### Discussion

This site could quite possibly be a butchering station. This is based on the relatively high number of cutting tools versus the low number of flake and its lack of lookout potential. Age determinations are even more tenuous. The single flake knife fragment suggests an Arctic Small Tool tradition component.

<u>Catalog #</u>	<u>Description</u>
UA78-169-1	Flake Knife

MIS-176

Location: Sec. 35, T.7S., R.35W., Umat Meridian  
UTM 4/453590/7631030

Class: II

#### Location and Setting

A flake scatter was found on a low, graveled bench or saddle between two higher segments of Ridge 12 (Fig. 13). The greatest concentration of material is below and south of the ridge crest, 850 m west of an unnamed drainage between the ridge and Storm Creek. There is open-mat alpine tundra vegetation on the bench, and tussock tundra east and west. More alpine vegetation grows on the bedrock outcrops to the north and south. The view is quite limited from the site itself, however, from the nearby

ridge crest one can see the Storm Creek valley to the north and east, as well as a considerable section of Ridge 12.

#### Site Information

Fifteen CCS artifacts were found in a 54 m by 10 m area. There is one major concentration measuring 5 m by 2 m, trending downslope at 170°-350°. In this group four flakes are utilized, and there is a bifacial flake core with three platforms that still possess some cortex. The core had a rectangular shape and was used for the purpose of removing blade-like and expanding flakes. It is similar to the cores at sites MIS-188 and MIS-215. Forty meters southwest of the main group is an isolated end and side scraper with cobble cortex forming the domed dorsal surface. Two or three other flakes are found widely separated over the rest of the site. All flakes are grey except for one black piece. Some erosion is taking place at the sloping sides of the saddle.

#### Discussion

While this site itself is not a good lookout, a good lookout position is only a few meters south. Perhaps game was watched for on the ridge crest, with other activities performed intermittently below the ridge crest, which offered decent shelter from the north wind. Association between the widely scattered material including the scraper and the main concentration is tenuous at best. The lack of association may indicate more than one use episode at this place. Of interest now is the flake core. It is of a type found elsewhere in the valley, and although it lacks diagnosticity now, it may attain such a status in the future when greater attention is paid to the technology of various cultures. For the moment, this site must lie outside existing cultural sequences until more work can be done.

MIS-177

Location: Sec. 35, T.7S., R.35W., Umat Meridian  
UTM 4/453520/7630980

Class: II

#### Location and Setting

A flake scatter was found at the center of Ridge 12 on a knoll-like segment possessing a commanding view of the entire area (Fig. 13). It is 300 m south of an unnamed drainage between Ridges 11 and 12. The broken bedrock surface supports a light growth of open-mat alpine tundra vegetation. Tussock meadows lie to the north and west, with the greater part of that ridge segment to the south and east.

#### Site Information

Twenty to twenty-five black to grey CCS flakes were in an area 50 m by 35 m trending NE-SW. There were roughly 10 cortex flakes as well as

several utilized ones. Eight flakes were found on top of the knoll, one flake was downslope to the south and the rest were downslope to the west. Presumably all had eroded from a single locus.

#### Discussion

This is a lookout site that has been disturbed by downslope movement. The lack of diagnostics makes it impossible at this time to determine cultural affiliation or period.

MIS-178

Location: Sec. 35, T.7S., R. 35W., Umat Meridian  
UTM 4/453070/7631070

Class: I

#### Location and Setting

This isolate is situated on the crest of a segment of Ridge 12 (Fig. 13). It is 660 m south of an unnamed stream and Ridges 11 and 12. There is open-mat alpine tundra vegetation on the graveled bedrock surface with tussock meadow to the south and on the rest of the segment. There is a good view to the north of the E-W flowing portion of Storm Creek.

#### Site Information

The single artifact here is a finely worked biface fragment of grey CCS, with a dark grey to black tip. It has fairly broad, shallow, parallel-oblique flaking. A hint of asymmetry indicates it is a side blade. Its size, however, is between weapon inset and knife.

#### Discussion

This site could represent a kill site or perhaps a near-kill site in which a broken weapon inset is all that remains of an arrow. It could have been lost or tossed by travelers using the ridge. At any rate, it indicates use of this part of the ridge, probably during the Choris phase. The manner of flaking exhibited by this piece is highly indicative of this time and culture. However, since this trait can crop up in other post-Denbigh phases as well, the conclusion is tenuous at best.

MIS-179

Location: Sec. 2, T.8S., R.35W., Umat Meridian  
UTM 4/453490/7630710

Class: II

#### Location and Setting

A flake scatter is on a segment of Ridge 12, 180 m north of an unnamed drainage and 1.9 km west of Storm Creek (Fig. 13). The undulating graveled bedrock segment is covered by open-mat alpine tundra vegetation and is surrounded by tussocks. The only view is to the south and the valley between Ridge 10 and 12, including the lower-lying Ridge 11.

#### Site Information

Six CCS artifacts were found strung out on the downslope portion of the ridge segment. Trending 20°-200°, the site area measured 76 m by 5 m. Five flakes, three waste and two utilized, were discovered along with a Type 1a mitten-shaped burin (UA78-170-1; Pl. 21 4; v.4:119) (Giddings 1964:217).

#### Discussion

This highly eroded site probably once functioned as a lookout site from the top of the segment. The burin is a type found in the Denbigh Flint phase and early Choris phase of the Arctic Small Tool tradition. Without additional indicators no finer distinctions can be made.

<u>Catalog #</u>	<u>Description</u>
UA78-170-1	Mitten-Shaped Burin

MIS-180

Location: Sec. 1, T.8S., R.35W., Umat Meridian  
UTM 4/455760/7629190

Class: III

#### Location and Setting

A flake scatter was found at the west end of a segment of Ridge 10, 180 m north of an unnamed tributary of Storm Creek (Fig. 13). The gravelly bedrock surface is covered with open-mat alpine tundra vegetation, with tussock meadow on three sides. More alpine tundra vegetation is found east on the continuation of this segment. There is a good view up Storm Creek valley to the south.

### Site Information

Roughly 20 black and grey CCS flakes are thinly spread out in this 90 m by 20 m area that trends almost due E-W. While flakes seem to group together, there are no real concentrations. The blade portion of a stemmed purplish black projectile point was found toward the west end of the site. It is similar to ones found at nearby MIS-167, 169, and 171 (Pl. 1 13, 16, 18).

### Discussion

Because of the paucity of cultural material it is difficult to determine site function. The location does not help as it could be a camp as well as a lookout. The projectile point is a product of the Norton phase that is so well represented in this area. It is similar to Type 5 in Giddings (1964:Pl. 48 1-18), Iyatayet Norton scheme. It also is related to the arrowpoints found with the Near-Ipiutak burials at Point Hope (Larsen and Rainey 1948:Pl. 80 1-14).

### MIS-181

Location: Sec. 1, T.8S., R.35W., Umiat Meridian  
UTM 4/455330/7629630

Class: II

### Location and Setting

A possible cache pit is on top of a segment of Ridge 10,600 m west of Storm Creek (Fig. 13). The graveled bedrock surface is covered with open-mat alpine tundra vegetation. Tussock meadow surrounds the entire segment. There is an excellent view of the N-S flowing portion of Storm Creek.

### Site Information

MIS-181 consists of a possible cache pit, a bone scatter, and a single, black CCS-flake. The pit discovered here is fairly regularly D-shaped with large flat rocks strewn about the periphery. Its inner dimensions are 1.5 m by 1.1 m by .40 m deep. Including the surrounding rocks it measures 2.7 m by 2.5 m and is oriented 60°-240°. The flake lies 7.5 m northeast. Down the nearby edge of the ridge segment, to the north, is the bone scatter. There are 17 pieces that seem to belong to a juvenile caribou.

### Discussion

There is some doubt as to the validity of this feature as a cultural manifestation. As there are a number of bear diggings in the general area; it is possible that this could be a neater version of this occurrence. However, the regularity of the pit, the high degree of neatness in the placing

of the surrounding slabs, and the presence of cultural material and bone nearby make a good case for it being cultural despite its lack of contents. Cultural affiliation is hard to establish because of the lack of diagnostic artifacts. The condition of the pit, with its fairly sharp outline and lack of fill, seems to indicate that it is recent, possibly no more than 100 or 200 years old. The people known to be occupying this area at the time were carriers of the Arctic Tundra tradition.

MIS-182

Location: Sec. 12, T.8S., R.35W., Umiat Meridian  
UTM 4/454730/7629000

Class: II

#### Location and Setting

A flake scatter was found on the south face of a segment of Ridge 10,500 m north of an unnamed stream and 1.1 km west of Storm Creek (Fig. 13). Open-mat alpine tundra vegetation covers the segment with tussocks surrounding. The site is on the south side of the segment and offers a view of only the immediate area. A short walk north to the top of the segment opens up a fairly expansive view to the east and north.

#### Site information

Approximately 55 flakes were found in a 50 m by 15 m area trending 70°-250°. Most of the artifacts came from one location measuring 10 m by 15 m. The scatter was oriented in the direction of the slope. Two flakes were found 40 m east. About 25 per cent of the flakes appear utilized. Several flakes possess stream cobble cortex. One flake had two stepped burin blows on the same edge, much after the fashion of a mitten-shaped burin (UA78-171-1; Pl. 22 20; v.4:134). The piece is quite amorphous and the blows are seated in a snap fracture. Black and grey CCS dominate with some black and grey mottled pieces present.

#### Discussion

This moderately eroding site is probably as much a lookout site as any other on the ridge. The position of flakes on the lee side of the segment suggests a blustery day at the time of use and a desire to minimize exposure. Periodic trips up the hill would provide the necessary viewing. Age and cultural affiliation are somewhat of a problem. The only possible indication is the burin blow on the flake which suggests an early Arctic Small Tool technique. This technique, minus the notching, also resembles some specimens from the Denali complex of the interior (Mauger 1970). The latter seems less likely but should be noted.

<u>Catalog #</u>	<u>Description</u>
UA78-171-1	Burinated Flake

MIS-183

Location: Sec. 1, T.8S., R.35W., Umat Meridian  
UTM 4/455080/7629280

Class: II

#### Location and Setting

A flake scatter was found on two small, knoll-like segments of Ridge 10 (Fig. 13). The nearest water is 240 m south in an unnamed tributary of Storm Creek, and the nearest fuel is at Storm Creek 360 m away. Open-mat alpine tundra vegetation covers the graveled bedrock surfaces. Tussock meadow separates as well as surrounds the two knolls. There is a fair view to the south, but it is obscured in other directions by intervening ridge segments.

#### Site Information

Roughly 50 CCS flakes were found with the bulk of material on the more westerly knoll. The site measures 140 m by 30 m and is oriented 80°-260°. The western knoll has one main concentration of about 20 flakes. The rest appear uniformly scattered about. Of interest is a large, unflaked, black CCS cobble (39 cm by 19 cm by 16 cm). It is of a poor quality and slightly water-worn. The site contained some utilized flakes and a possible burinated flake. Grey was the predominant material color; black was present as well.

#### Discussion

Site function is difficult to determine because of the paucity of cultural material and some conflicting factors. The location is not really good for camping because of the distance from fuel and water. It is also not that good for a lookout because it lacks the height to give it a really good view. The presence of the unworked raw material, obviously brought from the Storm Creek stream bed, indicates possible use as a workshop for the primary reduction of raw material, but this could have just as easily been done nearer the source. Given the problems mentioned here, this locale does not seem suited to any one of the above activities, although perhaps it is suited to all, and represents a mini-max solution to an individual or group needing to perform all three activities. Due to a lack of diagnostic artifacts this site cannot be placed into a cultural sequence at this time.

MIS-184

Location: Sec. 1, T.8S., R.35W., Umat Meridian  
UTM 4/454630/7629200

Class: II

#### Location and Setting

A flake scatter is situated at the east end of a relatively low-lying segment in the middle of Ridge 10, 400 m north of an unnamed tributary of Storm Creek (Fig. 13). Open-mat alpine tundra vegetation grows irregularly over the gravelly bedrock surface. Tussock meadow surrounds the segment. The view from here is less than adequate in any direction for the purpose of viewing game movements.

#### Site Information

Eight CCS flakes were found fairly evenly distributed over a 15 m by 10 m area trending 165°-345°. There are both black and grey flakes; some have cortex. All are utilized.

#### Discussion

The flakes are not concentrated enough to give the impression that they were all used at the same time. Yet if each flake resulted from single, casual use, why are all at one end of the ridge segment and in a relatively confined location? Perhaps they are all associated with some activity requiring a little more room, possibly the butchering of several animals over the area of the flake scatter. The presence of flakes with cobble cortex indicates the CCS came from the stream gravels. Cultural affiliation and time cannot be ascertained at this time due to the lack of diagnostic artifacts.

MIS-185

Location: Sec. 1, T.8S., R.35W., Umat Meridian  
UTM 4/454990/7629450

Class: II

#### Location and Setting

A flake scatter was found on a low-lying segment in the middle of Ridge 10, 360 m north of an unnamed tributary of Storm Creek (Fig. 13). The graveled bedrock surface has a cover of open-mat alpine tundra vegetation. The ridge is surrounded by tussocks. The view from here is somewhat limited.



### Site Information

About 15 CCS flakes and two biface fragments exist in a 60 cm by 30 cm area. Most flakes are either black or grey, with one brown specimen present. One of the biface fragments is the midsection of a crudely made knife, the other, of white veined grey, is most of the blade portion of a much more finely made piece. The flakes are all quite small and may be retouch or sharpening flakes from the bifaces.

### Discussion

These artifacts could indicate a kill site where some game was butchered. Its tight cluster almost certainly demonstrates a single use. The finer of the two resembles, in feel and cross-section, Choris phase bifaces from MIS-169. This conclusion is tenuous at best and is certainly subject to revision after more extensive work at the site.

### MIS-186

Location: Sec. 1, T.8S., R.35W., Umat Meridian  
UTM 4/454510/7629280

Class: I

### Location and Setting

MIS-186 is an isolated artifact found on a segment of Ridge 10, 330 m north of an unnamed tributary of Storm Creek bordering the south side of the ridge (Fig. 13). The segment has a patchy network of alpine tundra vegetation and is surrounded by tussock meadow. There is a good view of the E-W trending portion of the Storm Creek valley.

### Site Information

A black CCS knife-biface fragment was found here. It is rather crudely made.

### Discussion

Not much of anything can be said on the basis of a single artifact. If nothing else, it confirms use of this portion of the survey area. This site cannot be placed in a cultural sequence at this time.

MIS-187

Location: Sec. 1, T.8S., R.35W., Umat Meridian  
UTM 4/454870/7629080

Class: II

#### Location and Setting

A flake scatter is located on a triangular-shaped segment of Ridge 10, 240 m north of an unnamed tributary of Storm Creek (Fig. 13). The graveled bedrock surface has open-mat alpine tundra vegetation surrounded by tussock meadow. The view is generally good to the south and east, a portion of the N-S trending Storm Creek valley. The view is also partially open to the north including the eastern aspect of Ridge 12 and a portion of the Noluck Basin.

#### Site Information

Approximately 10 flakes are widely scattered, forming a rough "T" across the entire exposure. Each member of the "T" measures about 100 m, with the upper one bearing 80°-260°. Black and grey CCS are present. Some of the flakes are utilized. Also found was a thick biface fragment of black chert.

#### Discussion

Conceivably this site may have been used as a lookout, although its widely scattered nature suggests many occasional uses. Lack of diagnostics prevents assignment to any particular time or cultural phase.

MIS-188

Location: Sec. 2, T.8S., R.35W., Umat Meridian  
UTM 4/453850/7629310

Class: II/III

#### Location and Setting

A flake scatter is situated on a segment of Ridge 10, 360 m north of an unnamed stream and 1.7 km west of Storm Creek (Fig. 13). More specifically, the scatter is located high on a bench halfway up the segment's eastern slope. It is the westernmost site in the surveyed portion of Ridge 10. Open-mat alpine tundra vegetation covers the graveled bedrock surface and surrounding area. There is an excellent panoramic view to the north, east, and south of Storm Creek, the Noluck Basin and the surrounding terrain.

#### Site Information

Two small but dense flake concentrations contain 130 CCS flakes; most are

grey, but there are a few black pieces. The concentrations are about 50 cm apart and together measure 5 m by 3 m. Two other flakes lie 6 m to 7 m southwest. There are five bifacially flaked pieces and many utilized flakes. One flake in particular has four parallel flake scars all removed from the ventral face and the same cortex-covered platform (UA78-172-1; Pl. 31 12; v.4:191). It is irregular in outline, but the overall technique is reminiscent of a tabular microblade core. One of the bifacially flaked specimens appears to be a rectangular-shaped flake core (UA78-172-2; Pl. 30 8; v.4:192) for the removal of short, broad flakes. Others of this general type have been found in the survey area. The cortex seen on many pieces indicates a bedrock source for the CCS. The nearest known source would be about 4 km southeast near Storm Creek.

#### Discussion

This is a lookout site at which primary reduction of raw lithic material was conducted. Cores were being manufactured to obtain usable flakes for specific purposes. Because of the proximity of the concentrations, a single use by at least two persons is suggested. Cultural affiliation is highly problematic here. The hint of a microblade technology is present in the face-faceted flake discussed above. If this is accepted, a limiting date of 3700 B.P. would be called for.

<u>Catalog #</u>	<u>Description</u>
UA78-172-1	Flake Core
UA78-172-2	Flake Core

MIS-189

Location: Sec. 1, T.8S., R.35W., Umat Meridian  
UTM 4/454680/7629020

Class: III

#### Location and Setting

MIS-189 is a flake scatter found on a southfacing segment of Ridge 10 bordering a small unnamed drainage (Fig. 13). It is roughly 75 m north of the stream and 720 m west of Storm Creek. The segment is separated from other segments on the east, west, and north by tussock strips. Tussock meadow borders the south side down off the ridge to the banks of the stream. Open-mat alpine tundra vegetation grows on the graveled bedrock surface. The most expansive view is to the south of Ridges 14, 15, and 16.

#### Site Information

Approximately 500 artifacts are scattered across the 310 m by 80 m area. There are several concentrations as well as single flakes located on this ESE trending segment. Very few tools were in evidence with only a couple of biface fragments, a preform fragment (UA78-173-3; Pl. 16 2; v.4:83),

and two microblades (UA78-173-1,2; Pl. 34 62, 63; v.4:197) being observed. The preform is interesting from two perspectives. One, it exhibits a manufacturing technique that goes from a rough biface directly into a finished knife; and two, the parallel flaking pattern on the finished portion suggests an Arctic Small Tool tradition affiliation. The flakes themselves come in a wide variety of sizes, but only in two colors: black and grey. A number of the larger flakes are utilized and some others have cortex. A piece of possibly worked antler was also observed.

#### Discussion

This site is likely a lookout site where the manufacture of stone tools was carried out. Several periods of use are indicated by the distribution of material. The nearness of water makes camping a likelihood. Since the microblades were discovered in the presence of the Arctic Small Tool tradition biface, a Denbigh Flint phase occupation is suggested. The size of the site and the possibly worked antler allude to subsequent occupations.

<u>Catalog #</u>	<u>Description</u>
UA78-173-1	Microblade
UA78-173-2	Microblade
UA78-173-3	Preform

MIS-190

Location: Sec. 2, T.8S., R.35W., Umiat Meridian  
UTM 4/453730/7630210

Class: I

#### Location and Setting

MIS-190 is an isolate found on the southeasternmost segment of Ridge 11 (Fig. 13). The nearest water is 75 m west in a small, slow draining creek. The graveled bedrock surface has open-mat alpine tundra vegetation with tussock meadow to the north, south, and east. Sedge-covered wetlands exist to the west along the sides of the unnamed creek mentioned above.

#### Site Information

This site consists of a single, grey CCS flake.

#### Discussion

Not much can be said about this site on the basis of a single flake, although it does indicate use of this part of the survey area. It is not possible at this time to place this site in a cultural sequence.

MIS-191

Location: Sec. 12, T.8S., R.35W., Umat Meridian  
UTM 4/454580/7628810

Class: II

#### Location and Setting

This flake scatter is located on a segment of Ridge 10 separated from the rest of the ridge system by a well entrenched, unnamed stream that flows east into Storm Creek (Fig. 13). The stream is about 25 m north of the site. Alpine tundra vegetation sparsely covers the graveled bedrock ridge which is surrounded by tussocks. The view is somewhat limited in the immediate area.

#### Site Information

Approximately 30 flakes were found in a 37 m by 13 m area. Most of the flakes occur in a single concentration over a 15 m by 10 m area. Two more flakes were found 25 m off to the west. Only a couple of the grey and black CCS flakes were utilized and one was bifacially flaked.

#### Discussion

It is difficult at this time to determine site function. The lack of a good view, but good water access seems to suggest a campsite, although somewhat temporary. It could conceivably represent a special kind of lookout. Whatever, it does not seem to represent anything more than a single use. Because there were no diagnostic artifacts, it is not possible, at this time, to place the site in a cultural sequence.

MIS-192

Location: Sec. 12, T.8S., R.35W., Umat Meridian  
UTM 4/454470/7628800

Class: II

#### Location and Setting

A flake scatter is located on a small segment of Ridge 10 (Fig. 13). This segment is a southern extension of the ridge and separated from it by an unnamed, east-flowing tributary of Storm Creek. The bedrock surface has been reduced to a rubble or gravel that has combined with windblown silts to provide a suitable environment for low-growing, open-mat alpine tundra vegetation. Tussock tundra surrounds the graveled outcrop. The view is primarily of a large swale to the south between Ridges 10 and 14. Also seen is a low-angle view of Storm Creek and the west end of Ridge 3.

### Site Information

About 19 black CCS flakes, a single black CCS biface, and a grey CCS nodule occupy a 14 m by 1 m area trending 40°-220°.

### Discussion

It seems that this site is a lookout that may be associated with the production of rough bifaces or preforms. This seems legitimate, given the presence of a rough biface near a concentration of flakes of like materials as well as a nodule of unworked CCS. The evidence indicates at most two periods of use and very possibly only one, given the relative proximity of material. The lack of diagnostic artifacts makes it impossible at this time to determine cultural affiliation or age.

MIS-193

Location: Sec. 11, T.8S., R.35W., Umat Meridian  
UTM 4/454050/7629130

Class: III

### Location and Setting

A flake scatter is situated on a separate portion of Ridge 10 on the south side of an unnamed stream (Fig. 13). This portion is significantly lower in elevation than the rest of the ridge and is comprised of two major segments. The site is on the east end of the westernmost segment with the small stream only 30 m north and Storm Creek 1.1 km east. Open-mat alpine tundra vegetation grows in the site area and a considerable distance to the west on the ridge. The view is less than expansive, providing an adequate view of the immediate environs only. The nearest willow for fuel is at Storm Creek.

### Site Information

Sixty black, grey and tan CCS artifacts are rather tightly clustered in a 13 m by 8 m area trending 130°-310°. Very few of the flakes were utilized. A CCS cobble fragment was located as were a number of flakes with cobble cortex. The only significant artifact is a microblade core (UA78-174-1; Pl. 25 9; v.4:159). This piece is somewhat unusual in its appearance and merits a detailed description. Upon preliminary examination it resembled a tabular microblade core such as one might expect to find in interior Alaska. Closer inspection reveals that it is in fact within the wedge-shaped family of microblade cores. The emphasis on the broad facial element is due to flaws in the material on the core's fluted edge. Three hinged scars surrounding that edge attest to the problem of continued use in that portion of the core. A wedge element is also present further supporting its affiliation. Finally, the multidirectional platform preparation, while not common, is a form of preparation found on this type of core.

## Discussion

MIS-193 is a camping site that might represent a winter occupation. Assigned seasonality is based on two inferences. First, the tight clustering of artifacts very much suggests the confines of a structure that has since been distorted by erosional processes, and second, the majority of tool maintenance activities would have been performed inside a house during the winter. Admittedly tenuous, this line of reasoning provides an interesting and testable hypothesis for future work at the site. Finally, the wedge-shaped core implies fairly early occupation. The form of platform preparation indicates relations to Denbigh phase techniques (Anderson 1970b). However, the overall configuration more strongly ties this artifact and site to the American Paleo-Arctic tradition.

<u>Catalog #</u>	<u>Description</u>
UA78-174-1	Microblade Core

## MIS-194

Location: Sec. 11, T.8S., R.35W., Umiat Meridian  
UTM 4/454055/7629130

Class: II

## Location and Setting

A flake scatter exists on one of the southernmost segments of Ridge 10, about 100 m south of an unnamed drainage dividing this and one other segment from the rest of the bedrock outcrops (Fig. 13). The graveled bedrock surface has a sparse cover of alpine tundra vegetation. The outcrop is surrounded by tussocks. The view is to the south and east taking in a large low-lying area or swale between Ridges 10 and 14 and the west end of Ridge 3.

## Site Information

Roughly 25 CCS flakes are scattered over a 23 m by 12 m area trending pretty much E-W. Both grey and black material are present, as well as a grey CCS with mossy veins. There are a few utilized flakes, a couple that have been bifacially retouched, and none with cortex.

## Discussion

Although the material here is somewhat scattered, there is no reason to believe that this is anything but a single-use lookout. Cultural context and age cannot be ascertained at this time because of a lack of diagnostic artifacts.

MIS-195

Location: Sec. 11, T.8S., R.35W., Umat Meridian  
UTM 4/453650/7629080

Class: III

#### Location and Setting

A flake scatter is located on a separate portion of Ridge 10 on the south side of an unnamed stream (Fig. 13). This portion is significantly lower in elevation than the rest of the ridge and is comprised of two major segments. The site is on the western end of the westernmost segment. The small stream is 100 m north and Storm Creek is 1.3 km west. Open-mat alpine tundra vegetation grows on the site area and a considerable distance to the east on the ridge segment. Tussock meadow occurs on the other three sides. The view is less than expansive, providing an adequate view of the immediate area only. Storm Creek is the nearest source of wood for fuel.

#### Site Information

A small, tight concentration of 27 CCS artifacts occurs in a 2 m by 2 m area on the crest of the ridge segment. Six more CCS artifacts are found widely scattered to the east making the whole site area 40 m by 12 m trending E-W. Most pieces were black and grey; one specimen was a coarser CCS of greyish rose. There were five or six utilized flakes present, as well as a microblade core (UA78-171-1; Pl. 25 15; v.4:159). Despite the core's nearly conical, longitudinal cross-section, it is still a type of wedge-shaped microblade core. The presence of a well prepared wedge element could lead to no other interpretation. It was probably originally worked from a rather wide piece with the facial elements as well as the edge being used as loci of microblade removal.

#### Discussion

MIS-195 might be a camping site representing a winter occupation. As with MIS-193, the tight cluster artifacts suggest the interior of a structure. Considering that the inside of a structure would receive primary use in the winter, one would arrive at a use during the colder months. Cultural affiliation is nicely addressed by the wedge-shaped microblade core implying occupation by people of the American Paleo-Arctic tradition.

<u>Catalog #</u>	<u>Description</u>
UA78-175-1	Microblade Core



MIS-196

Location: Sec. 12, T.8S., R.35W., Umat Meridian  
UTM 4/454710/7626990

Class: III

#### Location and Setting

MIS-196 is a flake scatter found on the eastern end of the easternmost segment of Ridge 14, right on the edge of the Storm Creek floodplain (Fig. 13). Open-mat alpine tundra vegetation grows on the site and on the rest of the segment to the west. Tussock meadow grows on both sides, north and south of the ridge, whereas grass and willow grow in the floodplain down off the ridge to the east. The view is reasonably good of Storm Creek for 2 km up and downstream.

#### Site Information

Approximately 75 CCS artifacts were found widely scattered over a 212 m by 30 m area that trended roughly E-W. Black and grey CCS predominated. A wide variety of flakes occurred, including very small finishing flakes as well as larger flakes with cobble cortex. The largest concentration, at the western end of the site, contained around 50 flakes. Also present was a longitudinally split fragment of what could be a wedge-shaped microblade core. Further east was a small concentration of 10 flakes and a knife side blade (UA78-176-1; Pl. 6 3; v.4:42).

#### Discussion

This is likely a lookout site with at least two components present. The possible core fragment could address American Paleo-Arctic affiliations, and the knife sideblade addresses Post-Denbigh phase Arctic Small Tool affiliations (Anderson 1968b; Giddings 1964:Pl. 46, 52; Giddings and Anderson n.d.:Pl. 105, 113 7-16, 130 14-17, 131 1,16, 134 12; Larsen and Rainey 1948:Pl. 12, 13).

<u>Catalog #</u>	<u>Description</u>
UA78-176-1	Knife Side Blade

MIS-197

Location: Sec. 18, T.8S., R.34W., Umat Meridian  
UTM 4/457050/7626890

Class: III

#### Location and Setting

A scatter of lithic artifacts was found on a segment of Ridge 6, 60 m west of a small unnamed tributary of Storm Creek and 1.8 km northeast of

Storm Creek at the closest point (Fig. 13). Open-mat alpine tundra vegetation covers the site area. The entire segment is surrounded by tussocks. The only view is to the south and east of the small valley through which the unnamed stream flows.

#### Site Information

Twenty-five black and grey CCS artifacts were found in an area measuring 17.5 m by 7.5 m trending NW-SE. All but four pieces were in a single concentration 6.5 m by 1.5 m, strung out along the front of what appears to be a solifluction lobe. There were five utilized flakes and four very interesting artifacts. First, is a wedge-shaped microblade core with a large facial rejuvenational flake removed. The platform exhibits three blows perpendicular to the chord. It appears that the single blow used so often on this type of core was not sufficient in this case and two more blows were required to obtain the desired platform (UA78-177-1; Pl. 24 4; v.4:143). The next item is a possible tablet removed from a blade core. It is rather crude, but does exhibit the proximal sections of three blade scars on the long edge of the piece (UA78-177-3; Pl. 29 3; v.4:184). Following this we found the proximal portion of a blade (UA78-177-4; Pl. 36 4; v.4:197). Finally, an end scraper on a blade was found (UA78-177-2; Pl. 18 15; v.4:104). This piece is admittedly a bit thick for what is normally considered a blade, but given that the ventral face and scars on the dorsal face were all coming from the same direction, this interpretation is not out of line.

Certain elements suggest that there could be more material buried uphill and/or downhill from the main concentration. The positioning of the artifacts in a line parallel to the leading edge of a solifluction lobe suggest that the artifacts noted here are not in their original position and have been moved enough now to be artificially distributed. In this process it would have been feasible for additional material to get caught up and incorporated in the colluvium.

#### Discussion

MIS-197 is a campsite of the Akmak phase of the American Paleo-Arctic tradition. Camping is inferred from the site's proximity to water and the presence of a scraper, suggesting an activity associated with a more sedentary living situation than a hunting locale. The array of core types also supports this opinion, in that a full range of core types would be expected in a living site. The age is clearly seen in the assemblage here. The microblade core, blade, and end scraper on a blade accurately mimic elements of the Akmak component at Onion Portage (Anderson 1970a:Pl. 2, 3). The core tablet might be from an Onion Portage form of face-faceted core (Fig. 21, 22). While it is understood that artifacts of this type do not occur with Akmak at Onion Portage, the investigator believes this artifact is not unexpected and does fit into the technology of this period. It is understood that erosion has probably destroyed the original positioning of the artifacts of this site. However, it should be noted that this ancient site is still quite valuable for understanding a cultural period (north of the Brooks Range) that is little comprehended.

<u>Catalog</u>	<u>Description</u>
UA78-177-1	Microblade Core
UA78-177-2	End Scraper
UA78-177-3	Blade Core Tablet
UA78-177-4	Blade

MIS-198

Location: Sec. 12. T.8S., R.35W., Umiat Meridian  
UTM 4/455680/7628450

Class: III

#### Location and Setting

MIS-198 is a flake scatter confined to a terrace remnant near the ancient confluence of Storm Creek and an unnamed north-flowing drainage. It is presently 225 m west of the unnamed stream and 360 m east of Storm Creek. Open-mat tundra vegetation is growing on ground that is now quite hummocky. Except for a sedge meadow on the floodplain to the southwest, the site is surrounded by tussocks. The only view is a low-level one of the immediate surroundings.

#### Site Information

Approximately 450 CCS artifacts were located in a 36 m by 15 m area trending roughly E-W. Nearly all the material was on the north side of the segment. There was a wide variety of CCS including red brown, green, mottled brown and green, and chalcedony. As usual, black and grey dominated. Stream cobbles seemed to be the primary source of material, indicated by many cortex flakes and three broken CCS cobbles. Thinning flakes and pressure flakes were also observed. In addition, of the many flakes on the site very few had been utilized. There were three major concentrations, at least three smaller ones, and numerous scattered pieces. Of interest are three microblades, a finished graver/drill (UA78-178-1; Pl. 11 15; v.4:79), a possible side blade, a possible end blade, a couple of rough bifaces, five flake burins (UA78-178-3; Pl. 22 3; v.4:127), and a number of blade-like flakes. The side and end blade were quite delicate in appearance, but not finely worked. Also three of the flake burins were quite similar and all five were found in the same concentration.

#### Discussion

The situation here reflects a variety of camp activities. Given a slight shift in the present channels of Storm Creek and its nearby tributary, this site becomes ideal for camping. The wide variety of flakes in conjunction with very few that were utilized, suggest that lithic tool manufacture was a primary activity here. However, the other tools noted, such as the side and end blades, the graver, and the burins, suggest hunting and organic tool maintenance activities as well. Taken as a whole, this site

could fit in the Denbigh phase of the Arctic Small Tool tradition. The microblades, in combination with the side and end blades, suggest this. However, the quality of flaking on the blades is much less than is expected for Denbigh, and the large number of flake burins gives the assemblage a Choris cast. As a result, perhaps this site represents a late Denbigh site, transitional to the Choris phase.

<u>Catalog #</u>	<u>Description</u>
UA78-178-1	Graver
UA78-178-2	Possible Copper Ore Sample
UA78-178-3	Burin on a Flake

MIS-199

Location: Sec. 18, T.8S., R.34W., Umat Meridian  
UTM 4/456820/7626820

Class: II

#### Location and Setting

MIS-199 is a flake scatter found in a small, graveled swale between two more resistant outcrops on Ridge 6 (Fig. 13). It is 240 m southwest of a small, unnamed stream that flows approximately north into Storm Creek. The gravelly bedrock surface is covered with sparse, open-mat alpine tundra vegetation. The view from the site is quite limited; however, climbing one of the nearby outcrops, it opens up a bit more to the north, south, and west. It is still obscured down by higher ridges north and south to include only the swales or valleys on either side and a limited section of Storm Creek to the west.

#### Site Information

About 40 CCS flakes were found fairly evenly scattered in a 32 m by 9 m area trending roughly E-W. The predominant colors are black and grey with one gold and two patinated. Only two flakes appeared utilized. There are also a number of flaked CCS nodules. Three small concentrations were found in the scatter.

#### Discussion

This appears to be a somewhat protected lookout site, with the nearby outcrops being used for viewing. There seems to be more than one period of use here, indicated by the two patinated flakes, the three concentrations, and the way it is strung out. Placing MIS-199 into a cultural sequence cannot be done at this time due to lack of diagnostics.

MIS-200

Location: Sec. 13, T.8S., R.35W., Umat Meridian  
UTM 4/455330/7626680

Class: II

#### Location and Setting

A flake scatter was found on the westernmost segment of Ridge 6, 330 m east of a small, unnamed stream that flows north into Storm Creek (Fig. 13). The bench-like segment is covered with open-mat alpine tundra vegetation. Bare areas show decomposing bedrock gravels mixed with aeolian silts. This segment is surrounded by tussock meadows. The view is confined to the immediate environs within one-half kilometer.

#### Site Information

About 30 CCS flakes were found in a 15 m by 15 m area. A single, flaked CCS cobble is located 32 m west. There is mostly grey CCS, with some black and patinated CCS also. Cortex as well as thinning flakes occur at the site. A 10 flake concentration and a 20 flake grouping are about 5 m apart and constitute the major part of the site.

#### Discussion

This is a lookout site where primary reduction of raw material took place. The presence of two concentrations and some patinated flakes indicate more than one period of use. The cortex flaked cobble points toward the stream bed as the material source. Age and cultural affiliation cannot be established at this time due to the lack of diagnostic artifacts.

MIS-201

Location: Sec. 13, T.8S., R.35W., Umat Meridian  
UTM 4/455390/7627410

Class: II

#### Location and Setting

A flake scatter is situated on a weathered CCS outcrop 360 m southeast of Storm Creek. The outcrop is an E-W trending ridge whose western end has been reworked into a river terrace. Open-mat alpine tundra vegetation occurs on the site, and tussock meadow surrounds the ridge. There is a fair view of a portion of Storm Creek valley.

#### Site Information

A little over 100 light grey flakes were found in this ESE-WNW trending area of 115 m by 25 m. Most of the flakes, however, are in a small concentration measuring 90 cm by 60 cm at the west end of the site. Out of

100 odd flakes, none is utilized. All appear to have been the product of a single event. Four of the widely scattered remainders are within 24 m of the concentration; one lies 115 m northeast. None of the flaked CCS is made from the bedrock material. The CCS in cobble form and bedrock form are each of different quality. The flaked material no doubt came from the nearby stream bed at Storm Creek.

#### Discussion

Despite its location in a good camping spot, the site does not appear to have been used for residential purposes. It may have been a lookout where reduction of material suitable for flaking took place, or possibly vice versa, where the emphasis would be on tool production. MIS-201's place in the regional sequence cannot be determined at this time because of the lack of diagnostic tools.

#### MIS-202

Location: Sec. 12, T.8S., R.35W., Umat Meridian  
UTM 4/455390/7627680

Class: II/III

#### Location and Setting

A quarry site is situated on a weathered CCS outcrop 120 m east of Storm Creek and 630 m north of MIS-201. The outcrop is an E-W trending ridge whose western end has been reworked into a river terrace. Open-mat alpine tundra vegetation occurs on the site, with tussock meadow to the north and south. To the west is the sedge meadow of the floodplain and to the east is closed-mat alpine tundra vegetation overlying that section of the outcrop. There is a fair view of a portion of the Storm Creek valley.

#### Site Information

Thousands of grey CCS flakes are located in this relatively small area measuring 36 m by 20 m. The long axis orients 10°-190°. There are two major concentrations, each about 10 m square, containing thousands of flakes apiece, one being north of the other. The southern one contains just debitage with and without cortex. The northern one contains mostly thinning flakes with 10 rough bifaces noted in the area. Random flakes and small concentrations of 20 or so flakes lie between the two groupings and to the east, 20 m from the terrace edge. There is no doubt that the material source is the outcrop itself. All cortex flakes have the same fractured, weathered surface as the unworked nodules.

#### Discussion

This is a quarry site of unknown age. The two primary concentrations seem to represent two stages of manufacture that went on simultaneously or sequentially. Nodules were reduced to workable size and shape in the southern area, then made into bifacial preforms in the northern area. It

is, however, possible that they are indicative of two different events; but this is unlikely, given the juxtaposition of the different activities in such proximity. The smaller concentrations do seem to represent other uses of the quarry. Nothing diagnostic or approximating a finished tool was found, making it impossible at this time to place this site in a cultural sequence.

MIS-203

Location: Sec. 14, T.8S., R.35W., Umat Meridian  
UTM 4/453620/7626980

Class: I

#### Location and Setting

A flake scatter is located in a swale or saddle between two segments of Ridge 16, 90 m north of a small, unnamed tributary to Storm Creek (Fig. 13). The site is almost as high above as it is far away from the water. Open-mat alpine tundra vegetation blends into tussock meadow to the north, east and west. To the south lies a steep graveled slope. There is an excellent panorama of the Storm Creek area to the south.

#### Site Information

A broken biface and four flakes of black CCS were found in a 3 m by 1 m area at the edge of a closed alpine tundra mat. More artifacts may be beneath this mat.

#### Discussion

This is probably a lookout site. Age and cultural phase cannot be determined at this time due to the absence of diagnostic tools. It is possible, however, that this might be a kill/butchering site. During summer months caribou and their hunters seek high ridges to escape the mosquitos. The biface could have functioned as a knife for the skinning and/or initial dismemberment of a slain animal. Three of the flakes remaining appear to be sharpening flakes and the larger fourth flake may also have been used to cut in addition to the biface.

MIS-204

Location: Sec. 13, T.8S., R.35W., Umat Meridian  
UTM 4/454030/7625790

Class: I

#### Location and Setting

This flake scatter is located high on top of the crest of a segment of Ridge 16, 120 m from a small, unnamed tributary of Storm Creek (Fig.

13). This is one of the highest sites found on the survey, being at least 125 m above the surrounding terrain. There is an unusual amount of soil build-up, covered in most places by closed-mat alpine tundra vegetation. The presence of rodent burrows at the site might help account for the soil depth. Alpine tundra slopes away from the crest to the north and west. Bare rock slopes sharply south and east down to the floodplain of Storm Creek and its confluence with the unnamed drainage. This is the most expansive view of any site found on the survey. The whole Storm Creek drainage running north out of the Brooks Range can be seen, as well as Ridges 10, 12, 14, and 15 and a portion of the Noluck Basin.

#### Site Information

There are five light tan CCS flakes in a 1.1 m by 0.6 m area trending 60°-240°.

#### Discussion

This is a lookout site of indeterminable age. Without diagnostic artifacts it is impossible to place this site in a cultural sequence.

MIS-205

Location: Sec. 13, T.8S., R.35W., Umiat Meridian  
UTM 4/454530/7626720

Class: II

#### Location and Setting

MIS-205 is a flake scatter situated on the easternmost segment of Ridge 16 (Fig. 13). It is 180 m northwest of Storm Creek and about 75 m above the creek. The graveled bedrock surface is covered with sparse growth of alpine tundra and tussock tundra surrounds the whole ridge segment. The view is surpassed only by MIS-204. Portions of the Noluck Basin can be seen, as well as the N-S trending portion of Storm Creek beyond the Brooks Range.

#### Site Information

Roughly 40 CCS flakes are located in a 25 m by 10 m area trending 160°-340°. There is one major concentration of around 30 flakes. The rest of the flakes are scattered about downslope from the main grouping. A large, flaked nodule of CCS was also found, perhaps a flake core. The CCS is colored black, grey and grey with mossy veins.

#### Discussion

This is a lookout site. It is probably from a single use, with the scattered more isolated pieces having been displaced by erosion. Age and cultural affiliation cannot be ascertained at this time due to the absence of diagnostic artifacts.



MIS-206

Location: Sec. 14, T.8S., R.35W., Umiat Meridian  
UTM 4/453430/7627040

Class: II

### Location and Setting

MIS-206 is a combination of flake scatters and a caribou fence located on three segments of Ridge 15 (Fig. 13). The nearest water is in the headwaters of a very small stream about 250 m northwest. Storm Creek is 1.2 km west. As a whole, the site contains both open and closed-mat alpine tundra vegetation with open ground predominating. Two of the segments are CCS outcrops, the northernmost one is of sandstone. This is one of the highest sites found in the survey area and is about 150 m above the valley floor. The view here is only surpassed by MIS-204. Portions of the Noluck Basin can be seen as well as Storm Creek from where it leaves the Brooks Range to where it turns and flows west.

### Site Information

Two flake scatters and a caribou fence occur in an area roughly 289 m by 42 m trending NE-SW. The first flake scatter is at the southern end of the fence. It consists of around 90 grey, utilized CCS flakes in an area 5 m to 7 m in diameter. The material is from the bedrock, technically making this a quarry. One microblade fragment is noted as being here. The second flake scatter is 52 m beyond the northern end of the fence to the northeast on the sandstone outcrop. It is of the same grey CCS, no doubt from the outcrop as well. Besides the wide scattering of flakes, there were also two large flaked nodules (flake cores). There are 31 inuksuks in the caribou fence averaging 5 m apart. The separation between inuksuks varies somewhat with the greatest distance found on the slopes. The inuksuks are constructed of CCS nodules, some of which are quite large. None of the inuksuks is stacked to its original height, but is in a low pile consisting of two to six rocks. The CCS nodules continue out on to the sandstone outcrop as well, and some inuksuks contain sandstone slabs. The total length of the fence is 330 m as it snakes across the site area.

### Discussion

MIS-206 is a site that served two functions: a hunting site associated with a caribou drive and a lookout. The caribou fence is seemingly out in the middle of nowhere in terms of a drive. Its location is unlike those in the Howard Pass area, being quite high above its surrounding terrain, at least by 30 m. Perhaps the drive was oriented south where Ridge 16 drops steeply to an unnamed tributary of Storm Creek. This seems likely in light of data from the Kobuk Valley where a similar situation was used for caribou drives (Ray Bane 1978: personal communication). The fence is probably late prehistoric to early historic in age. Association of the flake scatters the fence is not very likely. There is no way to relate the two features at this time. Because of its microblade fragment, the first scatter

probably belonged to those cultures producing such artifacts prior to 3700 B.P., although this is hardly conclusive on the basis of a single specimen. The other flake scatter is of indeterminate age and cultural affiliation due to a dearth of diagnostics. The two flake scatters are probably not associated with each other.

MIS-207

Location: Sec. 13, T.8S., R.35W., Umat Meridian  
UTM 4/454830/7628050

Class: II

#### Location and Setting

A flake scatter was found on a flat, low-lying segment of Ridge 15, 75 m northwest of a small drainage flowing east into Storm Creek (Fig. 13). The graveled bedrock surface has a sparse growth of alpine tundra vegetation and is surrounded by tussock meadow. The view is not expansive, however, it is but adequate of a few hundred meters west and south, and about 2 km north and east.

#### Site Information

Eight flakes of black and grey CCS, including a broken biface, were found in a 10 m by 8 m area.

#### Discussion

This is a single-use lookout site. It cannot be placed in a cultural sequence at this time due to a lack of diagnostics.

MIS-208

Location: Sec. 12, T.8S., R.35W., Umat Meridian  
UTM 4/455020/7628420

Class: II

#### Location and Setting

MIS-208 is a flake scatter found at the edge of a CCS outcrop forming a segment of Ridge 15 (Fig. 13). It is on a series of solifluction lobes 360 m west of Storm Creek. Open-mat alpine tundra vegetation covers the lobes, with tussock meadows occurring to the north and west and more alpine tundra vegetation on the outcrop to the east and south. The view north and east is of a large swale between Ridge 14 and Ridge 15, as well as a portion of Storm Creek.

### Site Information

About 35 CCS flakes were found in a 35 m by 14 m area trending NE-SW. There are some small concentrations, but a number are more scattered isolated pieces. A couple of blade-like flakes, one of which is burinated, and some cortex flakes were found. The shape and character of the cortex indicate the material source was stream cobbles. Most flakes are of black CCS, but four pieces are honey colored, translucent CCS, as possibly chalcedony. The solifluction lobes may be responsible for scattering a once tighter cluster. These same lobes may also contain more material buried in their churning.

### Discussion

This site appears to be a lookout. The single, burinated flake is hardly indicative of a single cultural period since it could be accidental. It is impossible at this time to determine age or cultural affiliation due to the lack of diagnostics.

MIS-209

Location: Sec. 13, T.8S., R. 35W., Umat Meridian  
UTM 4/454830/7626690

Class: IV

### Location and Setting

A flake scatter was found on a large terrace remnant in the general vicinity of Storm Creek and its confluences with two unnamed streams. One of these streams borders the terrace segment on the east and flows south into Storm Creek 420 m north of the site. The other stream flows into Storm Creek from the west and is 450 m west of the site. Storm Creek at one time cut the western bluff into the terrace, but now is roughly 100 m away. Open-mat alpine tundra vegetation grows on the site. Sedge meadow and standing water occur on the Storm Creek floodplain to the west, but tussock meadow lies on all other sides. The view is rather limited to the west and east but moderately expansive to the north and south.

### Site Information

Over 525 CCS artifacts were found over an area measuring 310 N-S by 70 m to 40 m E-W. Black and grey CCS predominate, but a mossy-veined grey and brown type occurs as well. There are many small concentrations spread out over the area as well as a number of widely spaced individual specimens and they are all on the western half of the Storm Creek side of the terrace. Tools found on the site include a larger turtle backed flake core for the removal of blade-like and expanding flakes (UA78-179-1; Pl. 31 1; v.4:192); a utilized blade fragment (UA78-179-2; Pl. 35 14; v.4:198); a wedge-shaped microblade core with some cobble cortex remaining at the wedge element (UA78-179-3; Pl. 24 9; v.4:148); a core tablet from a wedge-shaped microblade core where microblade removal is seen on

the sides as well as the end (UA78-179-4; Pl. 23 16; v.4:163); a large knife side blade; and a projectile point fragment. There are also 31 utilized flakes, nine blades or blade fragments, five rough bifaces, and a few microblades. A wide variety of debitage is also present with flakes ranging in size and type from pressure retouch to large cortex laden primary flakes.

### Discussion

This campsite appears to have at least two cultural components. First, the site function is based on proximity to water and fuel, making this site ideal for camping. Also its lack of a really good view tends to support this idea although in a negative way. Finally, while the assemblage does not seem to provide indication of the range of activities one would find in a residence location, it does not negate the possibility either. It is understood, however, that at times the site could have functioned as a lookout under special conditions.

The primary component in evidence is affiliated with the Akmak phase of the American Paleo-Arctic tradition. The blades in association with the microblades and microblade cores strongly support this conclusion (Anderson 1970a & b). The flake core is not part of the classic assemblage at Onion Portage but it appears to have been made in the same mode and cultural milieu as the core bifaces and polyhedral cores from Akmak. The other component seems to be a late Arctic Small Tool tradition manifestation and is weakly represented by the knife side blade and the projectile point, which were left on the site.

<u>Catalog #</u>	<u>Description</u>
UA78-179-1	Flake Core
UA78-179-2	Blade
UA78-179-3	Microblade Core
UA78-179-4	Microblade Core Tablet

MIS-210

Location: Sec. 23, T.8S., R.35W., Umiat Meridian  
UTM 4/453580/7624810

Class: II

### Location and Setting

MIS-210 is a flake scatter found on a graveled stream terrace 100 m west of Storm Creek near the creek's confluence with an unnamed drainage. It is on the second terrace up from the floodplain and the first dry terrace. Open-mat alpine tundra vegetation covers the terrace remnant surrounded by tussock meadow which, to the east, leads to riparian vegetation along Storm Creek. Lookout potential is moderate; the best views are to the east across the creek. North and south, on the west side of the creek, the view is rather low-angled and limited.

### Site Information

About 40 CCS flakes were found in an 8 m by 5 m area oriented 130°-310°. The orientation pretty much follows the slope. Seven flakes had been utilized, and a flake cobble (flake core) was noted as well. The cobble was of a chalcedony-like material but no flakes of that material were found. What flakes had been removed from the cobble were side-struck and removed from two platforms.

### Discussion

This is very likely a temporary campsite used for a short period. Located on the nearest level dry spot to the creek, near water and fuel, its rather tight clustering, as well as its lack of a very good view, provide the bases for the above inference. An absence of diagnostics makes it impossible at this time to place this site in a cultural sequence.

MIS-211

Location: Sec. 26, T.8S., R.35W., Umat Meridian  
UTM 4/453000/7623200

Class: II/III

### Location and Setting

The flake scatter is on a terrace segment 100 m west of Storm Creek and 150 m south of a small unnamed drainage. The segment is on the second terrace up from the floodplain. A less well-defined tussock covered terrace exists roughly halfway between it and the modern floodplain. Open-mat alpine tundra vegetation grows on the broken bedrock that makes up the site's surface. Tussocks occur all around the site, but a short distance away is the sparse shrubbery of the floodplain. There is a moderately good view up and down the valley for a couple of kilometers.

### Site Information

Approximately 80 flakes of grey and black CCS exist in an area 110 m by 40 m trending 60°-240°. In addition there are two possible cache pits. Most of the materials occur in a single concentration of about 50 flakes. The rest of the artifacts are scattered in smaller concentrations or single pieces over the remaining area. This includes numerous large primary flakes, several utilized flakes, one burinated flake and an edge-faceted nodule of CCS (UA78-180-1; Pl. 35 3; v.4:194). This edge-faceted nodule is quite interesting in that the maker definitely had microblades in mind, but for some reason decided not to use a classic form. Perhaps this is a child's imitation of the more well known wedge-shaped core. The cache pits represent another problem of a different sort, i.e., whether one can accept their human origin. The first one measures 1.25 m square on the inside and about 3 m by 2 m on the outside, and the other is .95 m by .55 m on the inside and 2.5 m by 2 m on the outside. These outside dimensions include the bedrock pieces now laying about the edge that may

have covered the cache, as well as the contents of the original excavation. There is some doubt as to the validity of these features as cultural manifestations. As there are a number of bear diggings in the general area, it is possible that these could just be neater versions. Other factors, however, suggest otherwise; for instance, the lack of any ground squirrel burrows on the terrace segment, the regularity of the pits, the high degree of neatness in the placing of the bedrock slabs, and being in the general vicinity of other cultural debris. The investigator favors the idea of their human origin, but acknowledges the possibility of their non-human derivation.

### Discussion

At least two cultural components appear to be present, using the area in two different ways. First, the people responsible for the edge-faceted nodule probably used the site for a game lookout and a tool manufacturing area. The suggestion of microblade production here can do no more than provide a limiting date of 3700 B.P. Second, the two possible cache pits indicate use of the area for storage. Storage of what is another question and cannot be answered here. Some of the other flake concentrations could have been made by the same folks who created the pit, also indicating their use of the area for other purposes. Age of the pits can be indirectly inferred from their condition. Their fairly sharp outline, lack of fill and vegetation seem to indicate that they are recent, perhaps no more than 100 years old. The people occupying the area at that time would have been the historic Utuquarmiut, who used the area seasonally for hunting.

<u>Catalog #</u>	<u>Description</u>
UA78-180-1	Edge-Faceted Flake

MIS-212

Location: Sec. 13, T.8S., R. 35W., Umiat Meridian  
UTM 4/544300/7626980

Class: I

### Location and Setting

This isolate is situated on a relatively low ridge segment between Ridges 14 and 15 (Fig. 13). It is 150 m west of the creek on the easternmost outcrop of a very low-lying series of outcrops in this large swale between the two larger ridges. Open-mat alpine tundra vegetation grows on the site, surrounded by tussock meadow. The view is low-angled and limited to about 2 km up and down the valley.

### Site Information

A single, grey CCS flake was found here.

### Discussion

It is very difficult to determine much of anything about this site on the basis of a single flake. If nothing else, it demonstrates usage of this part of the survey area. Determination of MIS-212's place in a cultural sequence is not possible at this time.

### MIS-213

Location: Sec 23, T.8S., R.35W., Umat Meridian  
UTM 4/453780/7625020

Class: II

### Location and Setting

A small flake scatter is located on a terrace-topped bluff about 8 m above Storm Creek on the west side. The entire terrace top for hundreds of meters north and south is covered with open-mat alpine tundra vegetation. Not too far off the bluff edge to the west begins a huge tussock meadow. The view is limited on the west side of the creek, but is fairly expansive across the creek to the east.

### Site Information

Eight flakes are scattered in a 6 m by 4 m area trending NW-SE. There are black and grey CCS flakes, five of which are utilized.

### Discussion

The fairly tight clustering of such a high percentage of utilized flakes in a site indicates an intensive single-use activity such as butchering. MIS-213 may be a kill site where initial dismemberment and skinning took place before the game was removed to a camp. Unfortunately, the lack of diagnostics make cultural identification impossible at this time.

### MIS-214

Location: Sec. 23, T.8S., R.35W., Umat Meridian  
UTM 4/453590/7625000

Class: II

### Location and Setting

A flake scatter was found on a graveled stream terrace remnant near the confluence of Storm Creek and unnamed drainage. It is only 30 m north

of the smaller drainage and about 75 m west of Storm Creek. An open-mat of alpine tundra vegetation occurs on site with riparian growth to the south and east and more alpine tundra north and west on the terrace segment. The view from the flake scatter is poor, but only a few steps away one obtains a more open view of Storm Creek to the north, south, and east.

#### Site Information

Roughly 48 CCS flakes exist in an 18 m by 12 m area. However, 45 of these occur in a concentration 5 m by 2 m in an area trending 155°-335°. The orientation follows the slope at the south edge of the terrace where the site is, indicating some impact by natural processes. Secondary and tertiary reduction of tools is shown in the small, grey flakes of the concentration. This may indicate the finishing stages of tool manufacture or sharpening of an existing tool in association with an activity. There are no cortex flakes and only two of the flakes in the site appear utilized.

#### Discussion

While the function of this site is not readily apparent, its location is excellent for camping. In fact, it may be a temporary campsite of brief duration. There is certainly a single major event represented by the cluster of flakes. The more widely scattered ones could be from other more casual use of the area. Its place in a regional cultural sequence cannot be ascertained at this time due to the dearth of diagnostic artifacts.

MIS-215

Location: Sec. 13, T.8S., R.35W., Umat Meridian  
UTM 4/453990/7626170

Class: IV

#### Location and Setting

MIS-215 is an important lithic artifact scatter found on a stream terrace segment 360 m southwest of the confluence of Storm Creek and an unnamed tributary. Storm Creek is just 75 m south. Adjacent to this terrace segment are two lower benches or segments that seem to indicate another period of geologic stability between the time the upper terrace was created and the present. Open-mat alpine tundra vegetation covers the site area which is partially surrounded by tussocks. To the east, lies the floodplain and scattered shrub growth. A particularly dense willow thicket grows in the nearby confluence area. The stratigraphic profile as seen in four 50 m square test pits, is quite typical. It is shallow, gravel-loess mix with the percentage of gravel increasing with depth until bedrock is encountered about 10 cm below surface. The view is limited to the immediate environs with the best vista about a kilometer upstream.



## Site Information

This is truly one of the most significant and interesting sites found in the Noluck Lake-Storm Creek survey. There are literally thousands of CCS flakes and many tools scattered over a 96 m by 36 m area trending 100°-280° (Fig. 14). While black and grey CCS predominate, other colors such as red, olive and honey also occur in addition to a few patinated specimens. Most of the material actually occurs in a 60 m by 36 m area on the main terrace segment. A small segment 35 m northwest has a single concentration of 30 flakes. The main area, while uniformly covered with flakes, exhibits 11 loci of higher concentration. A complete range of flakes are to be found here from small pressure retouch to large primary flakes covered in cortex.

Scattered about are a number of blades and microblades. Also in evidence are several distinctive tools: a fragment of a stemmed or rhomboid shaped projectile point (UA78-181-1; Pl. 1 12; v.4:7), two mitten-shaped burins (UA78-181-2, 3; Pl. 21 11, 5; v.4:123, 120), a peculiar biface that could be a flake core or perhaps even an unfulfilled microblade core (UA78-181-4; Pl. 31 2; v.4:192), a very delicately worked projectile point tip with fine parallel-oblique flaking (UA78-181-5; Pl. 1 6; v.4:5), another projectile point tip with a burin blow along one of the snap fractures (UA78-181-6; Pl. 22 2; v.4:ix), and a fluted point (a lanceolate-shaped projectile point with heavy basal thinning) (UA78-181-7; Pl. 1 21; v.4:11) and finally, two blade cores fashioned on large split cobbles (UA78-181-8, 9; Pl. 28 4, 3; v.4:183, 182). All of the above are of CCS. Before moving on, immediate association of these types should be noted. One of the mitten-shaped burins and the finely worked point tip were found in one concentration. The flake core (maybe a microblade core preform), the other mitten-shaped burin, and the burinated point tip were found in another concentration. The fluted point and stemmed point fragment each occurred in separate concentrations. The blade cores were found off by themselves within a meter of each other near the terrace edge. None of these artifacts are more than 35 m from each other and many of the concentrations are no more than 2 m to 6 m apart. The blade cores are the farthest afield and they are 10 m from the nearest group of tools.

In addition to surface collections, four test pits were excavated. TP-A was placed in the vicinity of the blade cores, but yielded only one utilized flake. TP-B was excavated in the first artifact cluster mentioned above: it produced 92 waste flakes, three utilized flakes and a cobble flake core (UA78-181-35; Pl. 30 2; v.4:192) all in the first 5 cm. It also produced what Giddings (1964) would call a channeled knife or scraper (UA78-181-53; Pl. 16 3; v.4:83), but what I would call a fluted point preform. I will discuss this last artifact in some detail later. TP-C was put in near the fluted point and it contained 18 waste flakes and six utilized flakes in the first 10 cm. Finally, TP-D was placed on the edge of a flake concentration at the western end of the main site area. Thirty-one waste flakes, 18 utilized flakes and what could be a facial rejuvenation flake from a blade-like flake core (UA78-181-25; Pl. 29 9; v.4:188) were found. The high percentage of utilized flakes in this pit, as opposed to the others, suggest activities other than stone tool manufacture.

# MIS 215

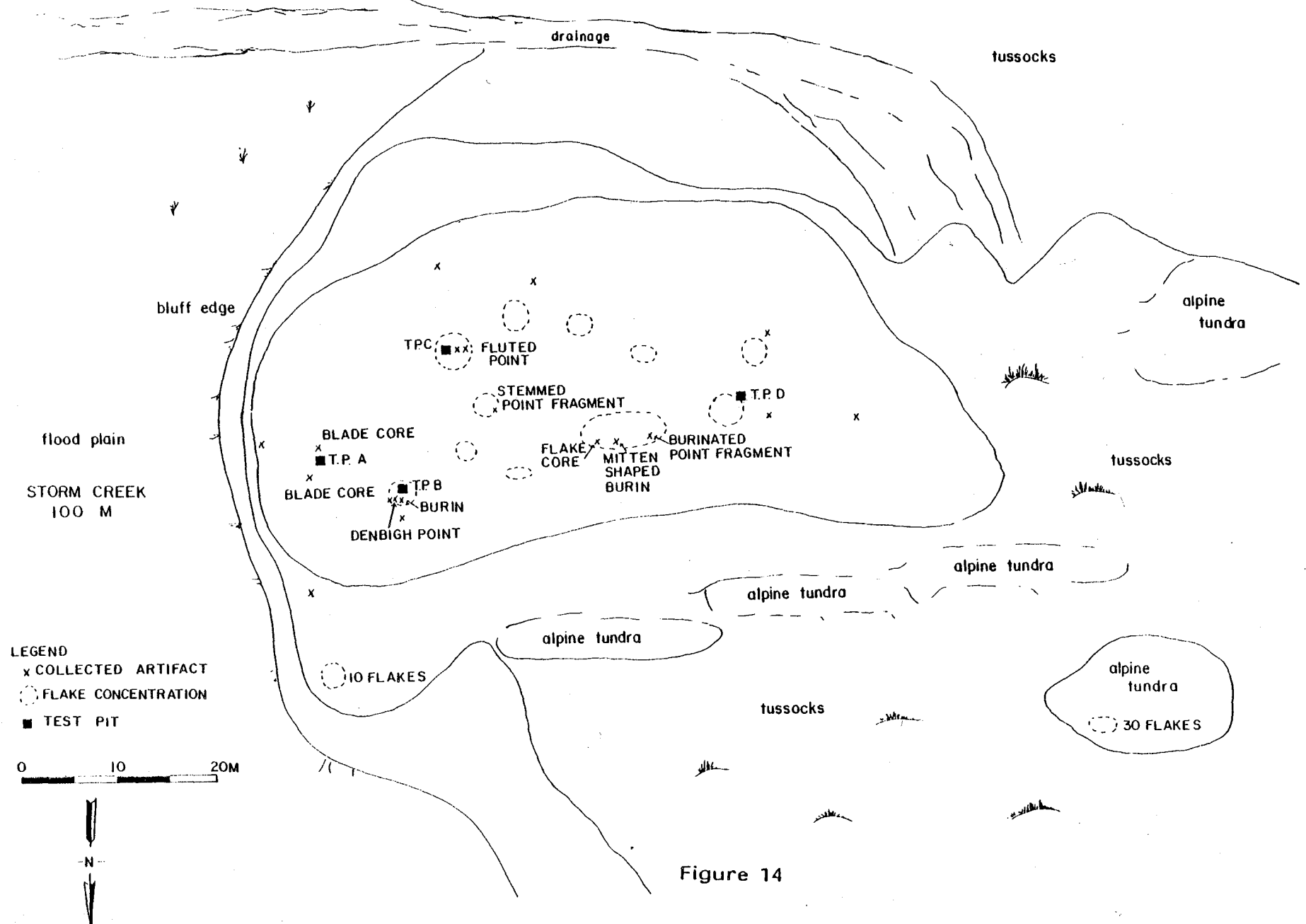


Figure 14

## Discussion

MIS-215 is a single component Denbigh phase campsite. A camping function is easily inferred on the basis of location, with easy access to water and fuel, and on the basis of the wide variety of tool types present. This diversity suggests a range of activities found only at a place of residence. Explaining the cultural affiliation is not straightforward and requires a somewhat explicit demonstration.

Taken as a whole, the artifacts on the site form a classic Denbigh assemblage such as found at Iyatayet. Microblades are associated with two Type Ia burins and a fragment of finely worked bipointed, projectile point (Giddings 1964:Pl. 66, 71-b). Also found at Iyatayet, although not as common, are a channeled knife or scraper, a stemmed projectile point fragment, and a fluted point (Giddings 1964:Pl. 70-b 5, 16, 233, Fig. 57a, Pl. 72 13). While the fluted point form from MIS-215 is hardly classic, it is well within the range of fluted points from Batza Tena (Clark and Clark 1975: Fig. 1 h). The burinated projectile point tip is not distinct enough to positively type, although the divergence of the sides suggest a point of harpoon blade proportions. This, in line with the flaking exhibited on it, would place it without much difficulty in a Denbigh context as well. The fact that there is a burin on this biface intimates Choris phase affiliation where this trait is so common. However, given the antecedent relation of one to the other and the possibility of the burin blow having been accidental or even intentional, the investigator finds no problem with this point in a Denbigh context. The blade core might at first seem out of place, but such an artifact type is hypothesized by Giddings (1964: 223) as being a part of the tool assemblage. This was done on the basis of many artifacts manufactured on blades or blade-like flakes. In fact, the general shape and platform angle of one of the cores (UA78-181-9) resembles that of the small Denbigh microblade core (Giddings and Anderson n.d.:Pl. 167 32; Irving 1964: Fig. 20, 21).

In view of the problems with fluted points in the north and their temporal and cultural affiliation, the association of this piece with this site and the Denbigh phase, will be discussed in more detail (Fig. 14). As was stated above, the fluted point was not found in a concentration with other Denbigh tools. The nearest Denbigh-related artifact is 9 m northwest. This is not terribly close, but the flake distribution is continuous and the association of these clusters is not yet thoroughly understood. Nine meters, however, might cause a few exacting people to balk at an association of Denbigh and fluted points, bringing us to the next issue--remember the channeled knife or scraper from TP-B? It can now be reinterpreted in light of new experimental data. J. Jeffery Flenniken (1978) re-evaluated part of the assemblage at the Lindenmeier Folsom site in light of some replicative experiments. In a seven stage scheme he outlined the process for manufacturing Folsom style fluted points as well as illustrating the product at each stage. This included samples of broken artifacts and what they would look like after a certain stage if the process was accidentally aborted. The channeled knife or scraper at this site, as well as the ones from Iyatayet, closely match Stage V preforms in which the artifact was broken in half by a reverse hinge. The only difference is that the Denbigh specimens lack the isolation of a basal nipple as in Stage IV. There

is no problem with this, however, since the time and space between these two cultures could not demand exact duplication of a technique. The essential matter here is that processes producing something as complex as a fluted point would be similar if they were to attain a certain degree of efficiency. Thus, since this artifact was found in a concentration with two other Denbigh tools, a stronger association between Denbigh and fluted points is deduced. Interestingly, a fragment of the "channel" flake from this piece was found in the debitage of TP-B. In summation, the Denbigh phase people seem to be the only groups to have used this site. It might be difficult for some investigators to accept the association of such diverse types of artifacts, but as has been demonstrated, this is a reasonable interpretation of the data. In the opinion of the investigator, it is the best option allowing for a possible solution of the Northern Fluted Point problem and thus provides a basis for future work at this site.

<u>Catalog #</u>	<u>Description</u>
UA78-181-1	Projectile Point
UA78-181-2	Mitten-shaped Burin
UA78-181-3	Mitten-Shaped Burin
UA78-181-4	Flake Core
UA78-181-5	Projectile Point
UA78-181-6	Burin on a Biface
UA78-181-7	Projectile Point
UA78-181-8	Blade/Blade-like Flake
UA78-181-9	Blade/Blade-like Flake
UA78-181-10	Utilized Flake
UA78-181-11	Utilized Flake
UA78-181-12	Nonutilized Cortical Flake
UA78-181-13	Utilized Flake
UA78-181-14	Utilized Flake
UA78-181-15	Utilized Flake
UA78-181-16	Utilized Flake
UA78-181-17	Utilized Flake
UA78-181-18	Utilized Flake
UA78-181-19	Utilized Flake
UA78-181-20	Utilized Flake
UA78-181-21	Utilized Flake
UA78-181-22	Utilized Flake
UA78-181-23	3 Nonutilized Cortical Flakes
UA78-181-24	11 Nonutilized Flakes
UA78-181-25	Facial Rejuvenation Flake
UA78-181-26	Utilized Flake
UA78-181-27	Utilized Flake
UA78-181-28	Utilized Flake
UA78-181-29	Utilized Flake
UA78-181-30	Utilized Flake
UA78-181-31	Utilized Flake
UA78-181-32	4 Nonutilized Cortical Flakes
UA78-181-33	13 Nonutilized Flakes
UA78-181-34	Utilized Flake
UA78-181-35	Flake Core
UA78-181-36	Utilized Flake

<u>Catalog #</u>	<u>Description</u>
UA78-181-37	Utilized Flake
UA78-181-38	Utilized Flake
UA78-181-39	Utilized Flake
UA78-181-40	15 Nonutilized Flakes
UA78-181-41	Nonutilized Cortical Flake
UA78-181-42	Utilized Blade-like Flake
UA78-181-43	Utilized Flake
UA78-181-44	2 Nonutilized Flakes
UA78-181-45	Nonutilized Cortical Flake
UA78-181-46	Utilized Flaked Nodule
UA78-181-47	2 Nonutilized Cortical Flakes
UA78-181-48	29 Nonutilized Cortical Flakes
UA78-181-49	6 Nonutilized Flakes
UA78-181-50	Nonutilized Cortical Flake
UA78-181-51	Utilized Flake
UA78-181-52	Utilized Flake
UA78-181-53	Preform
UA78-181-54	Utilized Flake
UA78-181-55	11 Nonutilized Cortical Flakes
UA78-181-56	4 Nonutilized Flakes

MIS-216

Location: Sec. 23, T.8S., R.35W., Umiat Meridian  
UTM 4/453830/7625190

Class: II

#### Location and Setting

This flake scatter is situated at the top and down the face of an actively eroding bluff. A flood channel of Storm Creek comes to the base of this CCS outcrop that has been reworked into a graveled terrace segment. Open-mat alpine tundra vegetation covers the whole segment which is surrounded on three sides by tussocks. There is a good view for a few kilometers up and down the valley.

#### Site Information

Approximately 120 flakes of black, grey and tan CCS were found in a 15 m by 5 m area including the bluff face. Most of the material was found on top of the bluff but a good deal of it was sliding down the face. A microblade was found on the terrace top; two biface fragments and a flake core were found on the bluff face. The flake core is interesting in that there are three parallel microblade-like scars on one face from two opposing platforms (UA78-182-1; Pl. 31 10; v.4:192). It is quite crude, but it further substantiates that microblade producing people used the site. Use of both stream cobbles of CCS and the bedrock CCS is in evidence, with the stream source predominating.

## Discussion

This lookout area was used as a quarry and lithic workshop sometime prior to 3700 B.P.

<u>Catalog #</u>	<u>Description</u>
UA78-182-1	Flake Core

MIS-217

Location: Sec. 13, T.8S., R.35W., Umat Meridian  
UTM 4/454610/7626370

Class: II

## Location and Setting

This flake scatter is located on a stream terrace segment in the general area of the confluence of two unnamed streams and Storm Creek. The site is situated between the stream approaching from the southeast and Storm Creek on the creek's east side. It is also directly across the creek from the confluence of the easterly flowing stream, about 200 m away. Tussocks surround the terrace segment and separate it from MIS-218 to the west and MIS-219 to the east, both within a 100 m. Open-mat alpine tundra vegetation occurs on the site. The view is moderately good for a few kilometers up and down the valley.

## Site Information

Roughly 50 flakes of black and grey CCS were found in a 40 m by 32 m area trending approximately E-W. There was a main concentration about 1 m by 2 m containing 25 flakes and another small concentration containing about eight flakes, in addition to a crudely flaked biface, possibly a flake core. The rest of the material, which is more evenly scattered about the rest of the area, includes a steeply retouched flake scraper. Approximately half the flakes on the site are utilized.

## Discussion

This site appears to be a campsite that may have been used more than once. The location plus the myriad of camp related activities, suggested by the large number of utilized flakes, the flake core, and the flake scraper support this conclusion. The activities include skin working as well as tool manufacture, wood and antler working. The lack of diagnostic artifacts makes it impossible at this time to determine cultural affiliation and associated period.

MIS-218

Location: Sec. 13, T.8S., R.35W., Umat Meridian  
UTM 4/454570/7626380

Class: III

### Location and Setting

Two tent rings and a flake scatter are situated on a terrace segment less than 50 m east of Storm Creek. This segment is the first of two major terraces worked on a large rock outcrop in the vicinity of Storm Creek and its confluence with the east-flowing stream and 900 m south of its confluence with the north-flowing stream. Open-mat alpine tundra vegetation covers the graveled terrace segment. Tussocks abound on the north, east and south sides of the site. Sparse shrub and low-growing moss and herb vegetation occur down off the segment near the creek. The view is less than spectacular and good only for several hundred meters up and down the creek.

### Site Information

Over 20 bone fragments and 350 artifacts, in addition to two tent rings, were found in an area 43 m by 26 m trending NNW-SSE (Fig. 15). The tent rings are constructed of fairly large stone slabs of local bedrock. Each ring has a slab or two of rock inside as well. The first ring to the west measures 2.9 m by 2.3 m on the inside and 3.6 m by 2.75 m on the outside; the second ring, 5 m southeast, measures 2.9 m by 1.9 m on the inside and 3.7 m by 2.5 m on the outside. Very little flaked material lies within the rings. Several concentrations, however, occur all over the terrace, ranging in size from 10 to 50 flakes. In all there were 17 utilized flakes and six biface fragments, including one unusual rectangular piece. A few broken CCS cobbles and many cortex flakes indicate the creek bed as the major source of raw material. Most of the CCS is black and grey, but some patinated CCS was noted as well. Bone fragments were found here and there around the terrace with a concentration observed at the far north end of the site. Of interest is a single, highly weathered bone artifact, a bird blunt (UA78-183-3; Pl. 44 3; v.4:220), found 6 m northeast of the tent rings. A single tight concentration of grey CCS flakes at the southeast end of the site is quite separate and distinct from the rest of the site. It occurs off the graveled portion in a heavier vegetated area to the east away from the creek. In this concentration was a nearly complete, delicately flaked end blade on a microblade (UA78-183-1; Pl. 1 5; v.4:4), the distal end of a mitten-shaped burin (UA78-183-2; Pl. 21 9; v.4:122), and a probable microblade fragment.

### Discussion

MIS-218 is a two-component campsite. Besides being in an ideal camping locale close to water and fuel, the presence of two living structures confirms the use of the place as a camp at least for the more recent component. The same can be suggested for the earlier occupation on the same locational basis and upon its more protected position away from the terrace edge, and therefore the best view of the valley.

# MIS 218

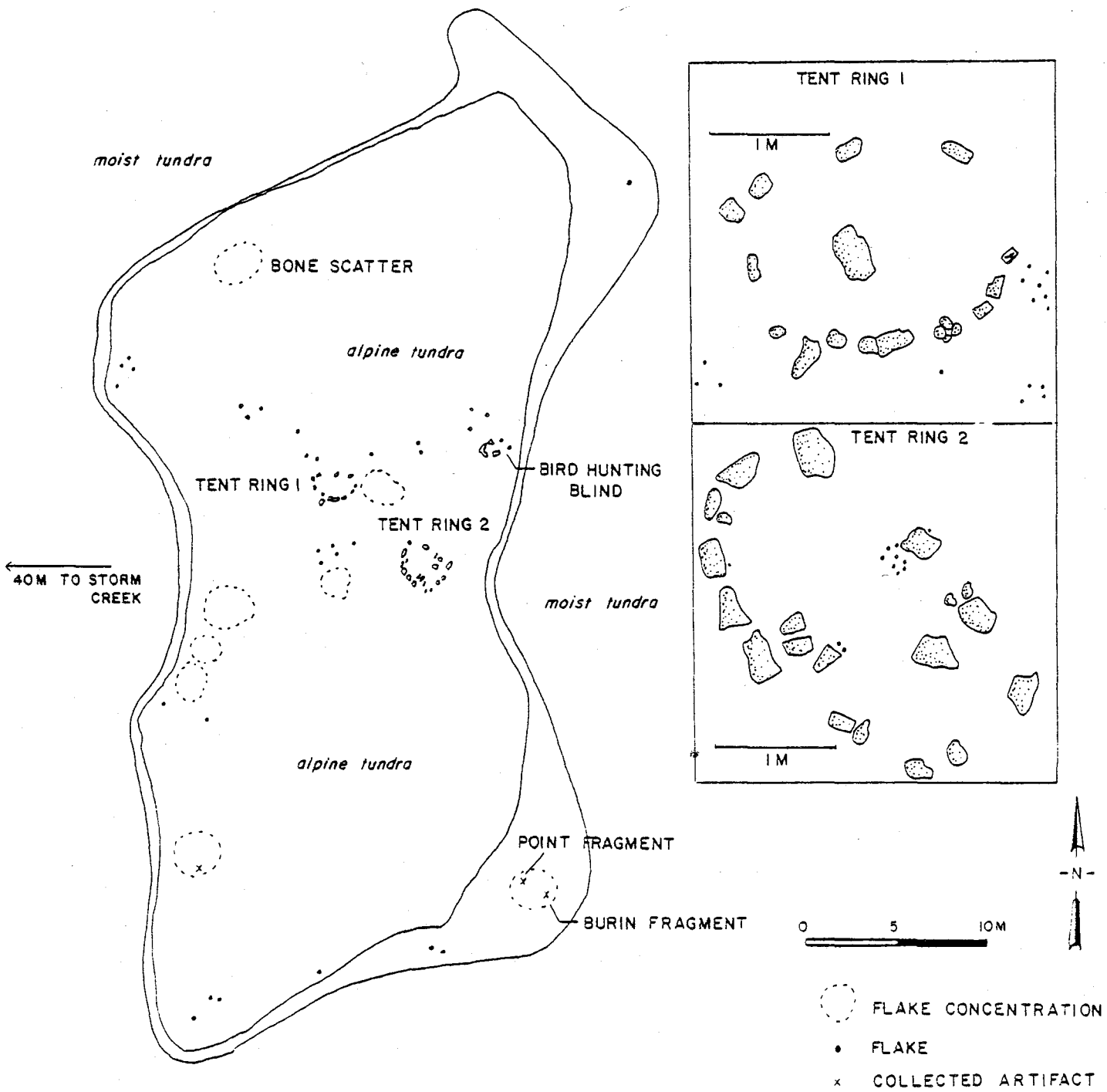


Figure 15



Age is easily assignable for each component. The bird blunt in conjunction with the tent rings and bone preservation bespeak a late prehistoric occupation. The bird blunt is of the split tang variety first seen in Ekseavik on the Kobuk River late in the 14th century and used up until early historic times (Giddings 1952: 46; Murdoch 1892). The houses are of a type known to have been used by Nunamiut people for summer use (Corbin 1975, 1976). A summer occupation seems likely here on the basis of the stones, which would be difficult to impossible to gather during winter, being used to hold the tent skins down. Also, all work appears to have been done outdoors, which is typical summer time behavior (Corbin 1975, 1976). The other component belongs to the Denbigh phase of the Arctic Small Tool tradition. The end blade and burin fragments closely mimic classic Denbigh forms (Giddings 1964: Pl. 66, Pl. 71-b). There is association with a microblade technology, which can lead to no other conclusion.

<u>Catalog #</u>	<u>Description</u>
UA78-183-1	Projectile Point
UA78-183-2	Mitten-Shaped Burin
UA78-183-3	Bird Blunt

MIS-219

Location: Sec. 13, T.8S., R.35W., Umiat Meridian  
UTM4/454710/7626420

Class: III

#### Location and Setting

A flake scatter in two localities was found on an hourglass-shaped terrace remnant 180 m east of Storm Creek and 60 m west of an unnamed tributary. This segment is actually the second of two major terraces worked on a large rock outcrop in the vicinity of Storm Creek and its confluences with two unnamed streams. The site is almost directly across from the confluence of the east-flowing stream 240 m away, and on the same side of the creek 900 m south of the confluence of the north-flowing stream, the same stream east of the site. Tussocks surround the segment, however, a sparse shrub and low-growing moss and herb vegetation grows on the Storm Creek floodplain to the west. Open-mat alpine tundra vegetation grows on the graveled terrace surface. The view leaves much to be desired and is only adequate of the immediately surrounding area.

#### Site Information

Over 900 CCS flakes were observed in two localities that overall measure 250 m E-W by 35 m to 75 m N-S. A large number of flake concentrations and a great many more isolated pieces were counted. As usual, black and grey CCS dominated with some olive colored material as well. Locality 1, the westernmost half of the hourglass, measured 85 m by 75 m and contained 631 flakes (of which 55 were utilized), and three biface fragments,

one of which had three very regular parallel-oblique scars. Locality 2, separated along the neck of the hourglass by 56 m from Locality 1, measured 110 m by 60 m and contained 279 flakes (of which 38 were utilized), four biface fragments, one microblade, and one mitten-shaped burin (UA78-184-1; Pl. 21 3; v.4:118). As is typical of many of these sites, an entire range of flake types were observed from tiny retouch to large primary and secondary flakes with cortex. A couple of broken CCS cobbles were also counted.

#### Discussion

The lack of a good view and its position near water and fuel is a better argument for this being a camp than the tool-poor assemblage. In any case, based on its extent and artifact density, this area has seen repeated usage over time. The Type 1a mitten-shaped burin and microblade in Locality 2 strongly indicate a Denbigh phase occupation. A more general Arctic Small Tool tradition occupation is intimated by the well made biface fragment in Locality 1. In general, there is no other occupation event except that of Arctic Small Tool tradition.

<u>Catalog #</u>	<u>Description</u>
UA78-184-1	Mitten-Shaped Burin

MIS-220.

Location: Sec. 13, T.8S., R.35W., Umat Meridian  
UTM 4/454650/7625830

Class: II

#### Location and Setting

MIS-220 is a flake scatter located on a graveled terrace remnant 250 m ESE of Storm Creek. It is the second terrace above the present floodplain and is covered with open-mat alpine tundra vegetation. The terrace is surrounded by tussock meadow. The best view is west across the creek where much of the floodplain can be seen for at least a kilometer in each direction. On the east side of the creek the view is somewhat more reduced because of the nearby ridges and knolls.

#### Site Information

Approximately 60 grey and black CCS flakes were found in a 33 m by 16 m area, with a single flake located 39 m to the west on a lower terrace. The main area is oriented 150°-330°. There are two primary concentrations of about 20 flakes each. Of all the flakes at the site only six were utilized. One biface fragment was found as well. The rest of the flakes are scattered over the remaining site area.

## Discussion

This site is probably a lookout, given its present distance from water and fair view of the floodplain. However, if the creek had, at the time of occupation, been close to this terrace, the site could have been a temporary camp of brief duration. The two concentrations indicate more than one period of use. Because there are no diagnostics, this site cannot be placed in a cultural sequence at this time.

MIS-221

Location: Sec. 13, T.8S., R.35W., Umat Meridian  
UTM 4/454810/7626380

Class: II/III

## Location and Setting

A flake scatter was situated on a terrace segment 180 m southeast of Storm Creek and 200 m west of an unnamed, north-flowing tributary of Storm Creek. The terrace is the second up from the floodplain on a reworked rock outcrop. This rock outcrop and the sites on it are situated between the confluence of two major tributaries and Storm Creek. MIS-221 is 780 m south of the confluence of the stream, with Storm Creek just east of the site, and 360 m southeast of the confluence of Storm Creek with the east-flowing creek. Open-mat alpine tundra vegetation grows on the site that is surrounded by tussocks. The view is quite limited.

## Site Information

Four small CCS flake concentrations, each about a meter in diameter, were found in a 10 m by 4 m area trending N-S. The cluster accounted for 60 flakes, with 10 to 15 loosely scattered about. Two side blade fragments were also located. One is a tip fragment of grey CCS (UA78-185-1; Pl. 4 10; v.4:33). The other is a midsection of brown CCS (UA78-185-2; Pl. 4 21; v.4:37). Both pieces exhibit parallel flaking.

## Discussion

This appears to be a small camping area used only a few times. The lack of view and proximity of water and fuel seem to address this function as opposed to any other. Age and cultural affiliation can be assigned to the Arctic Small Tool tradition. The side blade fragments suggest shapes that can be found in any phase of the Arctic Small Tool tradition. The flaking pattern also falls in that cultural milieu (Giddings 1964; Giddings and Anderson n.d.; Larsen and Rainey 1948).

<u>Catalog #</u>	<u>Description</u>
UA78-185-1	Weapon Side Blade
UA78-185-2	Weapon Side Blade

MIS-222

Location: Sec. 24, T.8S., R.35W., Umat Meridian  
UTM 4/454680/7625750

Class: I

#### Location and Setting

This flake scatter is located on a small ridge-like CCS outcrop about 600 m east of Storm Creek. The ridge is near the edge of a large continuous terrace of which MIS-220, MIS-223, and MIS-224 are situated. Open-mat alpine tundra vegetation covers the site. Tussock meadow surrounds the ridge. The view up and down the valley is good.

#### Site Information

Four flakes and a bifacially flaked piece constitute the site. All the artifacts are of black CCS and are utilized. They cover a 3.6 m by .9 m area oriented 45°-225°. The flakes are not of the local bedrock.

#### Discussion

MIS-222 seems to represent a single use, probably being associated with lookout activities. That all pieces were utilized, indicates more activities than idle chipping occurred. Age and cultural affiliation cannot be assigned at this time due to the lack of diagnostic artifacts.

MIS-223

Location: Sec. 13, T.8S., R.35W., Umat Meridian  
UTM 4/454510/7626020

Class: II

#### Location and Setting

A flake scatter is located on the first terrace up from the Storm Creek floodplain 150 m west. This is on the terrace directly below MIS-220 whose nearest artifact is 80 m east. The low-lying terrace is covered with open-mat alpine tundra vegetation, with tussock meadow to the north, west, and south. More alpine tundra leads east. There is a moderately good view of the Storm Creek floodplain and valley to the north and south.

#### Site Information

MIS-223 consists of about 20 black and grey CCS flakes in a 28 m by 13 m area trending roughly N-S. There are two major concentrations, one consisting of six and the other of nine flakes, separated by a few flakes in between. Only one flake was utilized.

### Discussion

This site was probably a lookout. However, if the stream channel was close to the terrace at the time of occupation, it would have been a good campsite and may have functioned as such. The number of concentrations and more isolated flakes indicate more than one period of use. The absence of diagnostic artifacts makes it impossible at this time to place this site into a cultural sequence.

MIS-224

Location: Sec. 24, T.8S., R.35W., Umat Meridian  
UTM 4/454380/7624680

Class: I

### Location and Setting

About 600 m east of Storm Creek are two flakes on a gravel terrace remnant. Open-mat alpine tundra vegetation covers the site area, with the terrace remnant surrounded by tussocks. There is a moderately good view up and down the Storm Creek valley from this somewhat elevated location.

### Site Information

Two grey CCS flakes were found 1.6 m apart trending 120°-300°. One seems to be utilized. Both are cortex flakes and are from stream cobbles.

### Discussion

Although it is hard to say anything on the basis of two flakes, the location of this site suggests it being a lookout. It seems that two flakes could not represent a camp, even if conditions were better and the water were much nearer. Without diagnostics, this site cannot be placed in a cultural sequence.

MIS-225

Location: Sec. 24, T.8S., R.35W., Umat Meridian  
UTM 4/454620/7625170

Class: I

### Location and Setting

MIS-225 is an isolate found on a graveled terrace remnant about 600 m east of Storm Creek. Open-mat alpine tundra vegetation occurs on the terrace remnant, with tussock meadow surrounding it. There is a moderately good view up and down Storm Creek valley.

#### Site Information

This is a single, grey, utilized CCS flake.

#### Discussion

Not much can be said on the basis of a single flake, although the site's position is not bad for a lookout. The lack of diagnostics precludes any determination of cultural affiliation or associated chronology.

MIS-226

Location: Sec. 35, T.8S., R.35W., Umat Meridian  
UTM 4/452630/7622170

Class: II

#### Location and Setting

MIS-226 is a flake scatter located on a terrace remnant at the confluence of Storm Creek and a small unnamed drainage. It is only 20 m north of the small stream and less than 50 m from the confluence. A closed-mat alpine tundra vegetation with occasional frost boils characterizes the site area. Tussocks surround the immediate site area, but heavy willow growth occurs at the confluence. The view is limited to about a kilometer or so up and down the valley.

#### Site Information

Twelve artifacts were found widely spread over a 25 m E-W by 9 m N-S. Of interest is a large face-faceted cobble core from which blades or blade-like flakes have been removed (UA78-186-1; Pl. 28 1; v.4:181). All material is of grey CCS.

#### Discussion

The investigator assumes this is a short-term camping location because of its ideal location and limited view. Cultural affiliation is not possible to determine at this time due to a lack of diagnostics. The core is intriguing, because of its regularity, but could have been made in almost any time period in which the inhabitants were interested in removing flakes longer than they are wide. It should be noted that this core is similar to a face-faceted core found at MIS-234. More material could be buried; the frost boil activity and solifluction could easily have covered a more extensive site.

MIS-227

Location: Sec. 25, T.8S., R.35W., Umat Meridian  
UTM 4/454190/7624260

Class: II/III

#### Location and Setting

MIS-227 is a flake scatter found on a high hill on the east side of Storm Creek some 600 m away. The hill, called One Cheek Peak by the survey party, is a sandstone outcrop rising at least 30 m from the terrace on which it sits. To the south and at a slightly lower elevation lies a rare outcrop of conglomerate. There is no vegetation on the hill. Alpine tundra vegetation begins on the lower slopes and extends on to the terrace adjoining to the north and south. To the east and west are tussocks leading to some sedge meadows on the floodplain to the west. This offers the best view of the surrounding area south of Ridge 16. Everything can be seen for many kilometers in all directions.

#### Site Information

At least 700 CCS flakes can be observed in a 45 m by 22 m area. The site is oriented 70°-250°. Most of the flakes are black and many are cortex flakes. The cortex indicates the transportation of stream cobbles to the top of the hill. About one-quarter to one-third of these flakes are utilized. There were at least nine concentrations noted, ranging from 20 to 180 flakes each. Many flakes appear to be eroding downslope from the top of the hill. Two flakes were found south on the conglomerate outcrop below the hill, perhaps an extreme case of erosion. Because of the rocky surface with no soil, many more flakes, and possibly tools, could have slipped between cracks and not been readily observed by the survey crew.

#### Discussion

This is a lookout site with many periods of use. Because no diagnostics were located, MIS-227 cannot be placed in a cultural sequence at this time.

MIS-228

Location: Sec. 35, T.8S., R.35W., Umat Meridian  
UTM 4/452590/7622170

Class: II

#### Location and Setting

A flake scatter is located on a terrace remnant of Storm Creek in the Brooks Range. Storm Creek is 50 m east. The graveled terrace is covered with open-mat alpine tundra vegetation and is surrounded by tussocks. Because of the nearby intervening mountains, the view up and down the valley is limited to just about a kilometer in each direction.

### Site Information

Thirteen grey CCS artifacts were found in an 11 m by 5 m area trending 125°-305°. There is one crude biface fragment, three utilized flakes, and nine waste flakes, one of which has cortex. The site is entirely on the downsloped, eastern edge of the terrace which affects the orientation of the material. More artifacts could be found in the slope wash.

### Discussion

This single-use site appears to be a very localized lookout, stationed to view the immediate portion of the valley. Given a less eroded, more level terrace remnant, it is possible that this may have been a campsite, as water and fuel are nearby. Age and cultural affiliation are not possible to determine at this time due to the dearth of diagnostic artifacts.

MIS-229

Location: Sec. 26, T.8S., R.35W., Umat Meridian  
UTM 4/452590/7623860

Class: II

### Location and Setting

A flake scatter is situated on a small knoll 50 m south of an unnamed tributary of Storm Creek and 350 m west of Storm Creek. The outcrop is a combination of CCS and sandstone. Its surface is covered with open-mat alpine tundra vegetation surrounded by tussocks. The view is rather limited up the valley to the south, but fairly good to the north.

### Site Information

Sixteen flakes were found in a 20 m by 7 m area trending 150°-330°. Two of the artifacts are blade-like flakes, one of these was utilized as was one of the other flakes. All are of grey, glassy, translucent CCS. Some flakes have mossy, black inclusions. The material is not at all like that on the outcrop and was presumably brought up from the stream. There is some downslope erosion to the west.

### Discussion

This is a lookout site whose place in a cultural sequence cannot be established at this time due to the lack of diagnostic artifacts.



MIS-230

Location: Sec. 35, T.8S., R.35W., Umat Meridian  
UTM 4/453580/7621620

Class: II

### Location and Setting

MIS-230 is a flake scatter located on a CCS outcrop at the edge of a bluff overlooking Storm Creek within the Brooks Range. It is 75 m east of Storm Creek and about 25 m above the floodplain. An open-mat alpine tundra covers the site with tussocks to the north, east, and south; there is a sharp drop to the west. From this point the view is good of the drainage within the mountains.

### Site Information

About 300 flakes and tools are situated in a 10 m by 8 m area trending 170°-350°. The material is of black, grey and green CCS; some pieces are even half black and half grey. There is no material that cannot be seen in the bedrock outcrop. The biggest of the two concentrations measures 5.7 m by 4.0 m and contains about 260 flakes. A 2.5 m by 2.0 m area containing approximately 35 flakes circumscribes the second concentration which is 2 m north of the first. As a whole, the site yielded nine utilized flakes, five bifacially flaked nodules (just bifacially flaked pieces, not shaped), and a hide scraper/softener a la Semenov (1964). Many of the waste flakes possessed an angular cortex surface.

### Discussion

This site appears to be a combination quarry/lookout. The quarrying is easily seen in the use of the bedrock underfoot, and the elevation and view afforded certainly provide an excellent game observation platform. The hide scraper/softener seems very much out of place, usually being associated with camp areas. Rather than trying to make a case for this being a possible campsite, it would be better to let the overall assemblage and location speak for themselves. Water and fuel are at a considerable distance, and would require great effort to obtain; also the tool to waste material ratio is low. This last observation makes the primary activity here the reduction of raw material, possibly for the manufacture of pre-forms. In light of the above, it seems likely that the scraper may have been dropped accidentally from a hunter's tool kit. The two concentrations indicate the area was used twice. Unfortunately, this site cannot be placed in a cultural sequence at this time because of the lack of diagnostic tools.

MIS-231

Location: Sec. 26, T.8S., R.35W., Umat Meridian  
UTM 4/453830/7623850

Class: I

#### Location and Setting

Two flakes were found on a ridge 400 m west of Storm Creek at the very base of the Brooks Range. The graveled bedrock surface of CCS and sandstone supports a growth of open-mat alpine tundra vegetation with tussocks to the north and south. Alpine tundra continues on the ridge to the east and west. The view is rather good downstream to about Ridge 16. There is virtually no view at all upstream.

#### Site Information

Two utilized, grey CCS flakes are 3.5 m apart trending WNW-ESE. Both appear to have been used for cutting; one piece exhibiting bifacial wear.

#### Discussion

Not much can be said on the basis of two flakes. The location, however, seems to indicate that it was a lookout, although the presence of only two utilized flakes may indicate a greater focus upon a single activity, such as butchering a kill. Age and cultural affiliation cannot be determined at this time due to the lack of diagnostic material.

MIS-232

Location: Sec. 26, T.8S., R.35W., Umat Meridian  
UTM 4/453520/7623820

Class: II

#### Location and Setting

A flake scatter is located on a remnant stream terrace 240 m east of Storm Creek. An open-mat alpine tundra vegetation covers the graveled terrace surface, which is limited by local relief in all directions. Only the area within .5 km radius can be seen completely.

#### Site Information

Sixteen artifacts are located in a 35 m by 13 m area trending 70°-250°. Actually, all but two flakes occur in an 8 m by 4 m area oriented 145°-325°. The other two are spaced out to the southeast at distances of 19 m and 31 m, respectively, from the main grouping. Eight of the flakes are utilized and two biface fragments were used as knives. Black and grey CCS predominate. The larger flakes are black and the smaller are grey. In two cases, on a biface fragment and a flake, the black grades into a banded, brown CCS.

## Discussion

This site seems to be mainly a single-activity area, possibly used to butcher game. The lack of view precludes the site's use as a lookout. The high percentage of utilized pieces in a small area suggest a single, focused use. The two colors of cherts could represent the trimming of different tools. Some of these flakes were in turn utilized. Its present distance from water makes it an unlikely camp spot, however, if at the time of use the stream had been closer to the terrace this possibility cannot be so easily dismissed. The two widely scattered flakes indicate other periods of casual use. The lack of diagnostics makes it impossible at this time to place the site in a cultural sequence.

MIS-233

Location: Sec. 35, T.8S., R.35W., Umiat Meridian  
UTM 4/452510/7621920

Class: II

## Location and Setting

A flake scatter is located on a high stream terrace about 150 m east of Storm Creek and about 15 m above the floodplain in the Brooks Range. It is just north of a small, unnamed tributary of Storm Creek. There are alternating strips of open and closed-mat alpine tundra vegetation. Frost boils occur as well and in fact many of the flakes occur on these. Steep slopes occur on the south and east sides going down to the two drainages. A good portion of the creek, can be seen in this area of high relief.

## Site Information

Roughly 58 flakes exist in a 96 m by 24 m area trending 20°-200°. The flakes are mainly on the western edge of the terrace and in many cases seem to be affected by downslope movement. Black and grey CCS are the dominant types of CCS, although there is a modicum of a chalcedony-like material. Nine of the flakes showed signs of utilization and five had cortex. The cortex indicates use of stream cobbles. More material could exist in the frost boils and slope wash.

## Discussion

This site appears to be a lookout that has undergone a number of uses, as indicated by the numerous flakes scattered lightly over such a large area. Age and cultural affiliation cannot be determined due to the absence of diagnostic artifacts.

MIS-234

Location: Sec. 7, T.9S., R.35W., Umat Meridian  
UTM 4/451410/7618530

Class: II

#### Location and Setting

A flake scatter is situated on a terrace remnant of Storm Creek in the Brooks Range physiographic province. It is 240 m northwest of the creek's confluence with a small unnamed stream and only 100 m southeast of the main channel of Storm Creek, although it is directly above the active floodplain. Open and closed-mat alpine tundra vegetation occur in the site area with most cultural material found in the open-mat zones. Tussocks grow around the part of the site farthest from the stream. However, grasses and sedge occur on both sides of the site in what appear to be old stream or drainage beds. A steep bluff at the northwest end of the site borders on the bare floodplain gravels below. For this portion of the creek the view is quite good for about one-half upstream and a kilometer or so downstream.

#### Site Information

About 125 CCS flakes were found on two portions of the terrace separated by a dense tundra mat. Altogether the site covered 41 m by 26 m trending 140°-320°. The first portion, right above the bluff, contained 25 flakes in an 18 m square area. Ten meters southeast is the second portion containing about 100 flakes in a 15 m by 10 m area. Rather than being dispersed as in the first area, the second is made up of several small concentrations of small flakes. A medium-sized edge and face-faceted, blade-like flake core (UA78-187-1; Pl. 27 3; v.4:180) came from this second area. Overall, there are 19 utilized flakes, two biface fragments and one possible blade.

#### Discussion

This site is in a good position for both camping and game observation. It seems to have had at least two periods of use. Age and cultural affiliation are somewhat of a problem. The one interesting artifact could be from any period whose inhabitants were interested in removing flakes longer than they are wide.

<u>Catalog #</u>	<u>Description</u>
UA78-187-1	Blade/Blade-like Flake Core

MIS-235

Location: Sec. 35, T.8S., R.35W., Umat Meridian  
UTM 4/452990/7621780

Class: II

#### Location and Setting

MIS-235 is a flake scatter situated on a high, broad, sloping terrace at the base of a hill between Storm Creek and an unnamed tributary stream in the Brooks Range physiographic province. The site is located in a large area of frost boil activity that is covered in open-mat alpine tundra vegetation. Tussock meadow surrounds this active frost area. The view downstream is excellent, but the upstream view is blocked by the hill.

#### Site Information

Sixteen black and grey CCS artifacts were found in a 2.8 m by 2.4 m area. One artifact is a large elongated biface. It is thoroughly, if somewhat irregularly, flaked (UA78-188-1; Pl. 7 5; v.4:55). Of the fifteen flakes three were utilized.

#### Discussion

The ratio of tools to flakes is quite high here, suggesting a single activity, probably butchering of game. The biface is quite distinctive in terms of size and boldness of flaking. While it is not unique enough to fit definitively into any one period, its general shape, size, thickness, and flaking pattern can be speculatively placed with the Northern Archaic tradition. Anderson (1968a) discusses elongated bifaces as characteristic of most phases of this tradition. In addition, several specimens of this genre are illustrated from his Noatak River survey (Anderson 1972: Pl. 4 6, 6 5-6, 7 8-9). His (1968a) general discussion of this artifact type has it being more common at hunting sites than base camps, such as, Onion Portage. This site seems to fit the hunting situation.

<u>Catalog #</u>	<u>Description</u>
UA78-188-1	Knife End Blade

MIS-236

Location: Sec. 6, T.9S., R.36W., Umat Meridian  
UTM 4/452020/7619950

Class: I

#### Location and Setting

MIS-236 is a flake scatter on a graveled terrace remnant 75 m east of Storm Creek and about 5 m above the floodplain. The terrace has open-

mat alpine tundra vegetation. Tussock meadow exists to the north, south, and east. The floodplain to the west has willows, grasses, and other riparian growth. This portion of the creek lies in the Brooks Range and the land is fairly open compared to the rest of the valley. The view is about 1 km in each direction.

#### Site Information

Five artifacts lie in an area of 50 cm by 30 cm trending N-S. There is one knife/biface fragment and a utilized flake. The rest are waste flakes. Black and grey CCS with black veins make up the material found.

#### Discussion

This site could represent many things and is at the very least a lookout. Its location is also good for camping, but the low number of artifacts seems to lessen that possibility. It might also represent a single activity, such as butchering a kill. Unfortunately, there is not enough information to indicate which one or combination of functions is correct. The lack of diagnostic artifacts makes it impossible at this time to place the site in a cultural sequence.

MIS-237

Location: Sec. 13, T.9S., R.36W., Umat Meridian  
UTM 4/450210/7617000

Class: I

#### Location and Setting

A flake scatter was found on a stream terrace remnant about 100 m east of Storm Creek. The graveled terrace is covered with open-mat alpine tundra vegetation and is surrounded by tussocks. This site lies within the Brooks Range portion of Storm Creek where the relief is great and the view is limited to only one-half kilometer or so up and down the creek.

#### Site Information

Three grey CCS flakes and a grey CCS flaked nodule were in a 10 m by 5 m area. One of the flakes was utilized. A single, grey CCS flake is located 30 m northeast of the main grouping.

#### Discussion

This site is probably an overlook for this narrow part of the valley. While the view is limited, it is adequate for the area that can be seen. More than a single use is indicated by the distribution of material. Cultural affiliation and age cannot now be assigned because of the lack of diagnostics.

MIS-238

Location: Sec. 7, T.9S., R.35W., Umat Meridian  
UTM 4/451090/7618490

Class: II

#### Location and Setting

MIS-238 is a flake scatter on top of a high terrace at the edge of a bluff. The bluff is on one side of a small canyon at a major bend in Storm Creek, within the Brooks Range. It is 20 m directly above the floodplain on the north side of the creek at this point. The site starts at the highest point (at the southwest end), is level for an interval, then gradually slopes downward. The material runs out about halfway down the slope. Open-mat alpine tundra covers the site with tussock meadow to the north, east, and west. There is a fairly good view of this narrow portion of the valley.

#### Site Information

A couple of hundred flakes occur in local concentrations over a 260 m by 50 m area trending NE-SW. Most material is a grey CCS and spread rather diffusely over the site. One noteworthy concentration is toward the northeast end of the site and contains about 90 flakes. Another contains 47 flakes and is located toward the other end. The rest of the material occurs in other, smaller concentrations and as single, widely scattered flakes. There are very few utilized flakes, and few flaked nodules of CCS.

#### Discussion

This site has served as a lookout for a long time as indicated by its size and numerous concentrations. The southwestern portion commands a view up and down the creek. The people using the area downslope could only view downstream. As there are no diagnostics, the site cannot be placed in a cultural sequence.

MIS-239

Location: Sec. 7, T.9S., R.35W., Umat Meridian  
UTM 4/451630/7618590

Class: III

#### Location and Setting

A large flake scatter and a tent ring are situated on a stream terrace and adjoining CCS outcrop at the confluence of Storm Creek and an unnamed tributary just east of the Storm Creek floodplain. The site occurs in three localities with open-mat alpine tundra vegetation on Localities 1 and 3, and the intervening Locality 2 possessing a closed-mat alpine tundra.

Riparian growth with only a very few willows occurs to the west, north, and east. A tussock swale followed by another terrace remnant exists to the south. The view is quite limited except for the immediate area several hundred meters up and down the valley from the site.

#### Site Information

Approximately 600 CCS flakes, and a possible tent ring, were observed over three localities in a 125 m by 40 m to 70 m area trending roughly NE-SW (Fig. 16). Locality 1, the farthest southwest, seems to be primarily a quarry on a high quality outcrop of CCS. This area is 90 m by 30 m trending 10°-190°. One hundred fifty-three flakes were noted in localized concentrations with some more isolated pieces. Grey CCS predominated, with a few pieces of black and olive colored also occurring. Twenty-three utilized flakes and a knife/biface were also recorded. Locality 2 has 108 flakes noted, most of which were grey CCS with a few black and olive color. Nineteen of these flakes are utilized and two pieces appear haphazardly flaked. This locality measures 75 m by 3 m trending NW-SE, and the flakes are more thinly but uniformly distributed. Finally, Locality 3 is 40 m by 25 m in extent and trends E-W. A total of 336 flakes were observed, about two-thirds of which are grey CCS; the rest are black except for a very few olive colored pieces and one red brown piece. Twenty-three flakes were utilized. Five pieces appear to be haphazardly flaked. One finished artifact appeared here in the form of a well-made knife side blade. Overall, the flakes in this locality occur in a number of concentrations, one of which is fairly dense, and a number of more isolated single flakes. The amorphously flaked pieces in Localities 2 and 3 may be flake cores of some sort. Also found on Locality 3 is a possible tent ring (Fig. 16). It measures 3.7 m by 2.0 m and possesses what might be an exterior hearth.

#### Discussion

It seems this site represents a number of functions. Most likely, people camped here while mining a particular good CCS source. The camping aspects are clearly seen in the tent ring of Locality 3. Other activities besides quarrying may be seen in the numerous utilized flakes. Since there is not a good view here, perhaps the utilized flakes indicate artifact maintenance activities associated with a camp rather than a lookout. At least two components are represented and there are probably more. The field observation of the knife side blade indicates a post-Denbigh phase of the Arctic Small Tool tradition. Later stages of the late prehistoric or the early historic period seem evident by the use of the tent ring. This form of structure is mostly associated with summer use of the area by the historical occupants. While tent rings may be associated with earlier periods, it is unlikely that they would survive the rigors of a periglacial environment in a recognizable form. Hence the age is hypothesized as not being very great. The season is inferred on the basis of Corbin's (1975, 1976) ethnographic observations placing the use of this type of structure during the summer months. The reason for this is the inability to find stones under the snow cover or to extract them from frozen ground.



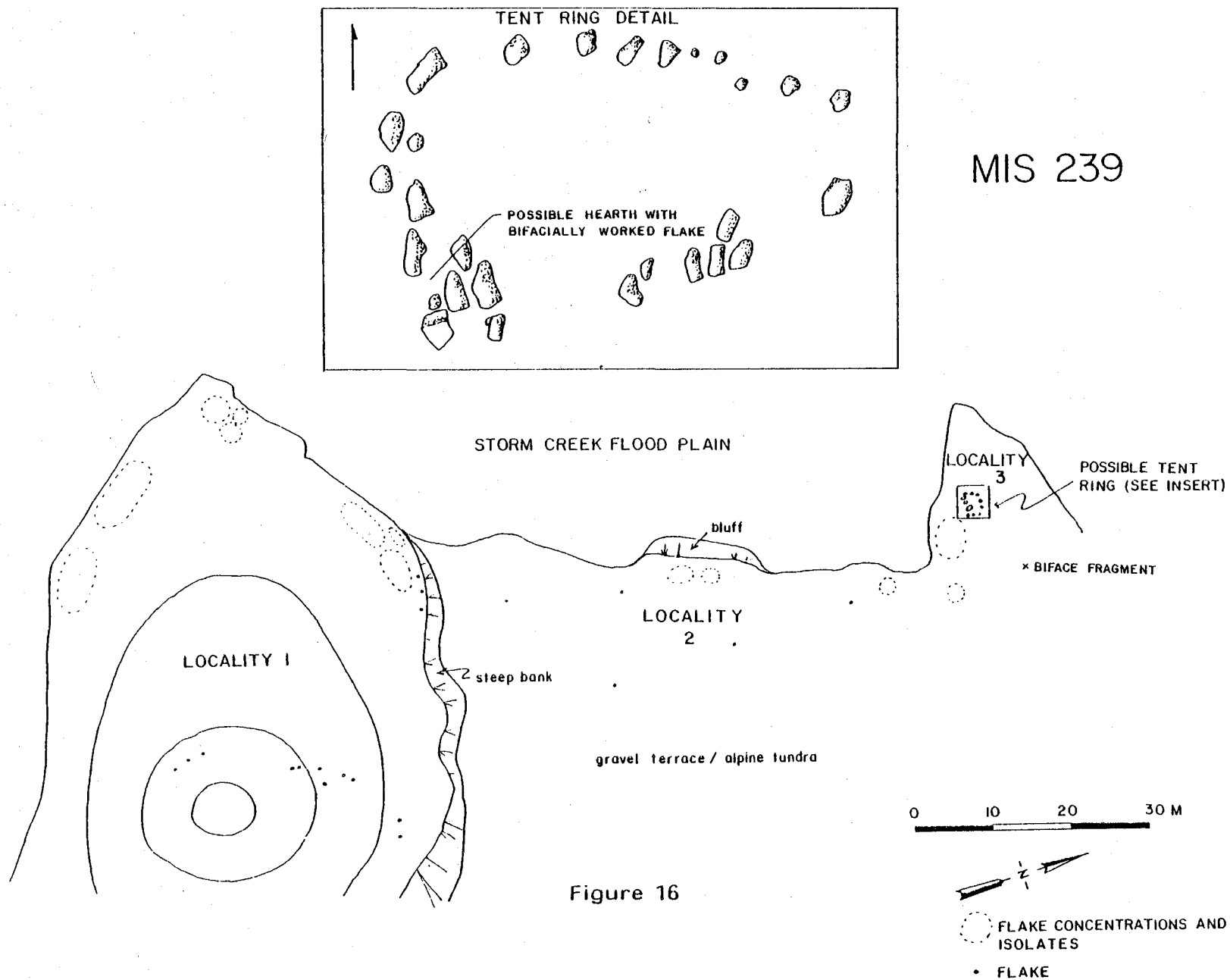


Figure 16

MIS-240

Location: Sec. 7, T.9S., R.35W., Umat Meridian  
UTM 4/451380/7618630

Class: II

#### Location and Setting

MIS-240 is a flake scatter located on a stream terrace near a bluff edge on a rock outcrop about 6 m above the floodplain and 100 m west of the main channel of Storm Creek. The scatter occurs between two slightly raised areas caused by ground squirrel disturbance. Open-mat alpine tundra vegetation occurs in the area of the flakes, and grasses have taken over the burrows or more disturbed areas. The view is poor upstream and only a bit better downstream.

#### Site Information

Eleven flakes were noted in an area 3 m by 2.5 m, trending 45°-225°. All flakes are grey CCS. Two flakes are utilized; one of these appears to be a blade possessing two arrises.

#### Discussion

This site may be a temporary camp. Its lack of view seems to preclude its use as a lookout and its location favors it as a campsite. Given its size, it was probably ephemeral in nature. While one blade hardly defines the presence of a blade industry, it does hint at the possibility of the site having some age.

MIS-241

Location: Sec. 7, T.9S., R.35W., Umat Meridian  
UTM 4/451590/7618950

Class: III

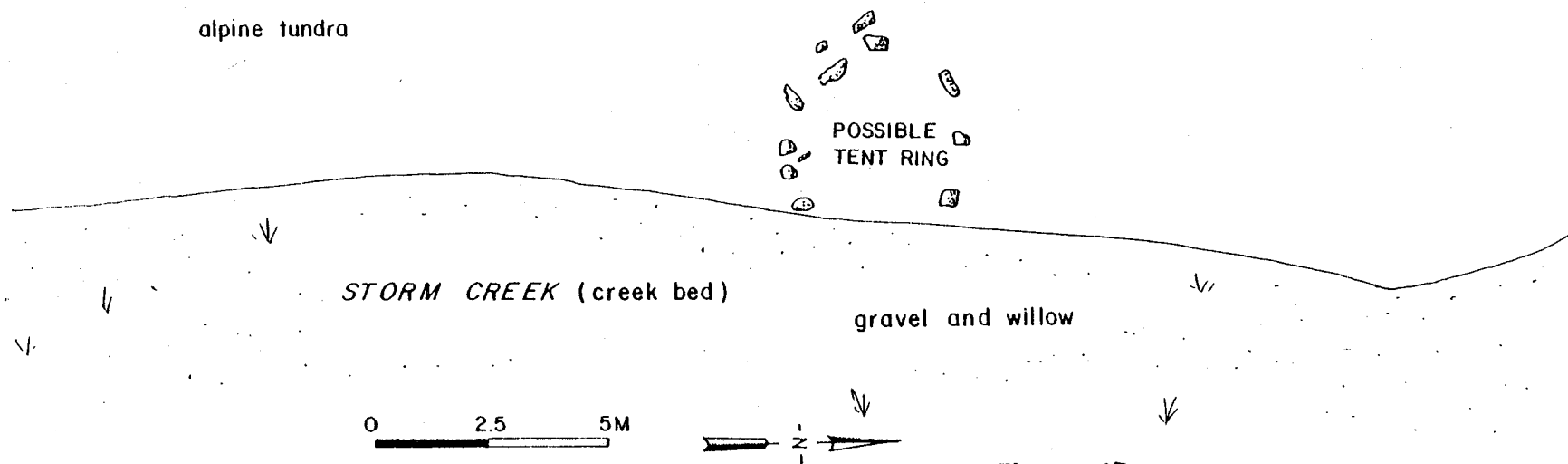
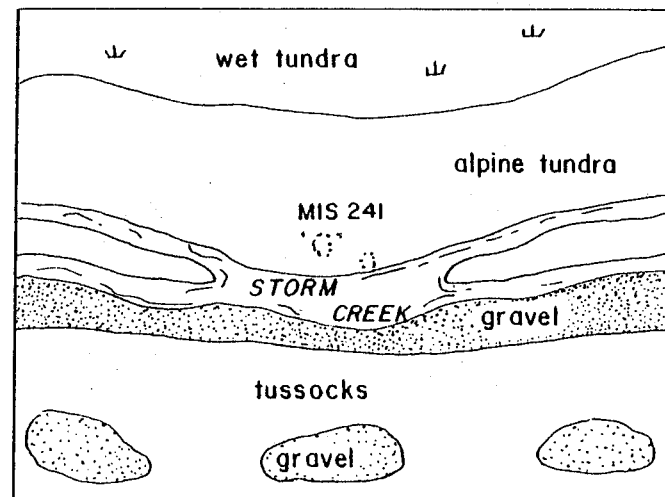
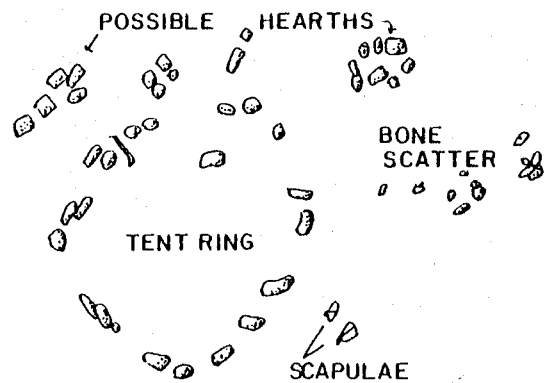
#### Location and Setting

MIS-241 is a habitation site found on the present floodplain of Storm Creek bordering the high water channel. There is some soil development here supporting a closed-mat alpine tundra vegetation and a growth of willows, none over 30 cm high.

#### Site Information

One or possibly two tent rings, a bone scatter, and some tin cans occupy an area 46 m by 10.5 m trending 15°-195° (Fig. 17). The whole tent ring is at the south end of the site and measures 5.5 m by 5 m. The other rock arrangement which appears to be a tent ring is partially eroded by the high water channel and approximately 4.9 m in diameter. Other

# MIS 24I



smaller rock piles and arrangements in the vicinity of the first tent could be exterior hearths, or some could be supports for meat drying racks. Also strewn about the area around the first tent are a number of caribou bones including four vertebrae, three scapula, one pelvic fragment, and a large antler branch with a sawn end. There is a minimum number of two individuals based on the presence of two right scapula. Bones were found under some rocks as well as on the surface. Two tin cans were found in the area as well. One can was found about 3.5 m south of the first tent ring. It measures 6.3 cm wide by 3.9 cm thick by 9.7 cm high and appears to be a gun powder container. The other can was found about 20 m northwest of the second tent ring. It measures 17 cm in diameter, is 9.5 cm high, and probably was a one-pound butter or coffee container.

In general, the site seems to be a single component, one-time use site, but a number of large cobbles in the area between the two rings might indicate cannibalized, older structures. More detailed work needs to be done to know. It was also impossible to say how much of the site has eroded away, but at least one meter, based on the condition of the second structure.

#### Discussion

This is the site of a summer hunting camp. Summer is the inferred season of occupation based on Corbin's (1975, 1976) ethnographic observations placing the use of this type of structure during summer months. The reason for this is the inability to find stones under snow cover or to extract them from frozen ground.

The presence of historic items as well as the sawn antler places this site in the historic period. It is probably somewhere between 50-100 years old and of Eskimo origin, possibly Utuquarmiut.

MIS-242

Location: Sec. 26, T.9S., R.36W., Umiat Meridian  
UTM 4/448020/7614800

Class: II/III

#### Location and Setting

A flake scatter is situated on a high terrace remnant near the headwaters of Storm Creek. MIS-242 is the farthest site upstream. Storm Creek takes a turn near here and flows ENE about 120 m north of the site. Open-mat alpine tundra vegetation grows on the terrace segment with tussock meadow surrounding it. The primary view is downstream for a kilometer until the creek bends to the north again.

#### Site Information

Three concentrations of grey and black CCS artifacts form the apexes of a triangle measuring 28 m, 22 m, and 24 m on a side. There are 80 flakes,

(29 of which are utilized), two biface fragments, a flake scraper, a side scraper (UA78-189-1; Pl. 19 9; v.4:108), and three possible microblades, one of which approaches a blade in proportions. Most of these tools are divided up among the three concentrations. The microblades are in one, the flake scraper and side scraper in another, and the biface fragments in the last.

#### Discussion

The site could have functioned as a lookout or a camp area. The variety of tools certainly addresses many activities that were performed here on at least three separate occasions. Cultural affiliations are unclear, but are hinted at by a couple of artifacts. The microblades can at least be limited to a time prior to 3700 B.P. The particular specimens are quite wide and most reminiscent of Northern Archaic tradition type microblades. The side scraper is of an unusual form that seems to have been hafted and subsequently broken. It is thick at the snapped end and tapers to an asymmetrical spatula shape at the other. This specimen superficially resembles a side scraper from a Kayuk assemblage found on the Noatak River (Anderson 1972:Pl. 4 8). This connection is tenuous at best.

<u>Catalog #</u>	<u>Description</u>
UA78-189-1	Side Scraper

MIS-243

Location: Sec. 7, T.9S., R.35W., Umiat Meridian  
UTM 4/451380/7618790

Class: I

#### Location and Setting

A flake scatter was found on a bluff edge on the west side of Storm Creek in the Brooks Range about 5 m above the water. It is just across the creek from MIS-239. Except for the area where the flakes were found along the edge of the bluff, closed-mat alpine tundra vegetation is present with tussock meadow to the east away from the bluff. The view is quite limited.

#### Site Information

Four grey chert flakes were found in a 70 cm by 30 cm area. The stream channel is actively undercutting the bank and this site will not be extant much longer.

#### Discussion

Not much can be said about this site on the basis of four flakes, especially when most of the site has probably eroded away. The location, however, fulfills more the criteria for a camp than a lookout. Because there were no diagnostic tools, this site cannot be fitted into a cultural sequence.

MIS-244

Location: Sec. 23, T.9S., R.36W., Umat Meridian  
UTM 4/449280/7616000

Class: II

#### Location and Setting

MIS-244 is a flake scatter. It is on a knoll of quartz-rich sandstone, making the site area stand out as bright white. Storm Creek is 75 m east. The site commands a moderate view of this portion of upper Storm Creek. The high relief and narrowness of the valley (in the Brooks Range) prevent all but the highest surrounding hills from getting an overall view. An open-mat alpine tundra covers the site area, which is near some ground squirrel burrows. Tussocks start at the knoll edges in all directions, but shortly come to riparian growth, including willow, toward the east near the creek.

#### Site Information

Nineteen flakes, two of which look like microblades, were found in a 7.0 m by .5 m area at the knoll top trending 20°-200°. Twenty meters east and downslope, a flake and biface fragment were also located. All pieces are grey CCS.

#### Discussion

This is a lookout site. The association with the biface and the rest of the scatter is unclear. The biface may be further downslope as a result of erosion or a second use. The microblades, if they represent the presence of a microblade culture and are not fortuitous, indicate usage of the site prior to 3700 B.P.

MIS-245

Location: Sec. 13, T.9S., R.36W., Umat Meridian  
UTM 4/449790/761590

Class: II

#### Location and Setting

A flake scatter is situated on the flanks of a knoll just east of the Storm Creek channel in the Brooks Range. A low bluff is actively being carved into the knoll by a side channel of Storm Creek. Open-mat alpine tundra vegetation occurs on the site. The knoll borders tussock meadow on three sides, with riparian growth on the west. The site commands a moderate view of this portion of Storm Creek, a greater view being limited by high relief and the narrowness of the valley.

### Site Information

Seven flakes were found strung out over a 15.5 m by 1.0 m area trending 140°-320°. Two pieces were utilized, one of which is a blade-like flake. Both grey and black CCS are present.

### Discussion

This is a lookout of unknown age and cultural affiliation. Without diagnostics, it cannot be placed in a cultural sequence.

MIS-246

Location: Sec. 36, T.7S., R.35W., Umat Meridian  
UTM 4/455020/7632110

Class: III

### Location and Setting

A flake scatter was found eroding down the face of a bluff at the edge of the active Storm Creek floodplain. It is in the area where Storm Creek comes out of the Southern Foothills physiographic section and begins to bend west through a wide flat trough. A well-drained tussock meadow covers the site area with some willow growing on the stream gravels below. The view is superb of this big bend of Storm Creek and the northern flanks of the Southern Foothills.

### Site Information

Twenty-five black and grey CCS artifacts were discovered on an actively eroding bluff face covering an area 52 m by 18 m. The 52 m represents the length of the site along the bluff edge; the 18 m is how far the material has slipped down the face. There is no way of knowing at this time how far back this site goes perpendicular to the bluff face. At one point flakes were observed in situ 12 cm below the surface. Amid the bluff slough, two flakes exhibited cobble cortex and none of the flakes were utilized. There were two microblades and a small burinated weapon side blade (UA78-190-1; Pl. 22 7; v.4:30) present, as well.

### Discussion

This site very likely functioned as a lookout and conceivably may have also been a camp. The condition at the site would certainly support the latter use. A Denbigh phase occupation is strongly indicated. The side blade does not have classic Denbigh flaking, but it is nonetheless of high quality. The shape and size seem to be more characteristic of the latter part of this phase as does the burin blow which seems to anticipate the burin-on-a-biface craze in the Choris phase (Giddings and Anderson n.d.:Pl. 158 6, 160 6, 165 10; Irving 1964:152, Pl. 1 9).

Catalog #

Description

UA78-190-1

Weapon Side Blade with Burin Blow

MIS-247

Location: Sec. 26, T.7S., R.34W., Umat Meridian  
UTM 4/463320/7633390

Class: II

Location and Setting

MIS-247 is a flake scatter found on the lower west end of Ridge 17 (Fig. 13). It is only 180 m south of the nearest water. The creek runs roughly west between Ridges 17 and 19 into the north end of Noluck Lake, a little over 2 km away. Open-mat alpine tundra vegetation occurs on the broken bedrock surface. This kind of vegetation persists to the east and a short way to the west. To the north and south there is tussock meadow. From here, one can view the entire Noluck Basin as well as a portion of the Pilly Fork.

Site Information

A total of 14 CCS flakes were found in two concentrations in an area 40 m by 15 m trending 80°-260°. Three medium to large black and grey flakes were found within 10 m of each other at the west end of the site. Two of these, one a blade-like flake, had been utilized. The second concentration of 11 flakes was found at the mouth of a ground squirrel burrow. All are of black CCS and fairly small. They were found about 35 m east of the other flakes.

Discussion

This is a lookout site that has seen two periods of use. It has been disturbed by rodent activity. Due to the absence of diagnostics, MIS-247 cannot be placed in a cultural sequence.

MIS-248

Location: Sec. 26, T.7S., R.34W., Umat Meridian  
UTM 4/463810/7633380

Class: III

Location and Setting

The site is a combination of flake scatters and other stone features. It is found in the middle of the western segment of Ridge 17 occurring in a saddle as well as on the crest (Fig. 13). The nearest water is in a small



unnamed creek 180 m north. The creek runs roughly west into the north end of Noluck Lake about 2.4 km away. Open-mat alpine tundra vegetation occurs on the broken bedrock surface of the ridge crest. Just off the crest to the north is a level, terrace-like area covered in closed-mat alpine tundra. This vegetation persists north and south of the site. Tussock meadow surrounds the ridge. From this vantage point one can view the entire Noluck Basin as well as a portion of the Pilly Fork.

#### Site Information

MIS-248 consists of four localities stretched out along the ridge for 238 m. It is approximately 10 m wide and is oriented ENE-WSW. Localities 1 through 3 are flake scatters of black and grey CCS. Starting at the western end of the site is a small scatter with two flakes and the base of a projectile point. The base is that of a contracting stemmed point. It is quite similar to Gidding's (1964) Type 6 projectile point from the Norton phase of the Arctic Small Tool tradition. Forty-five meters east is Locality 2. Six flakes were found here, three of which were utilized. Locality 3 is 55 m further down the line to the east. It contains 19 flakes, one of which is a microblade fragment. While microblades usually provide a limited date, it seems likely here that it could be a product of the Denbigh Flint phase of the Arctic Small Tool tradition. This inference is based on two other Denbigh phase sites, MIS-249 and MIS-251, found 80 m and 450 m respectively to the east along the same ridge. At the very least, the microblade shows usage of the ridge prior to 3700 B.P. Finally, within about 5 m to 10 m of this locality a bone scatter begins marking Locality 4. This locality consists of a wide scattering of bone representing several individual caribou (adults and juveniles), a built-up cache of stone, a tent platform of stone, and a bone processing area. The bones are widely scattered around the occupation area a good 40 m in each direction along the ridge and about 15 m north of the crest. All bone is somewhat weathered but in good shape.

The area of greatest use in Locality 4 is about 14.2 m NE-SW and 7.5 m NW-SE and contains the rest of the features. The cache is on the ridge crest and is roughly 75 cm square. It is excavated into the ground a few centimeters and has three sandstone slabs set vertically in the hole. Two of the slabs are at right angles to each other. The third is in the process of falling over. It is at a considerable angle to the other two and is leaning against them. Adjacent to the cache pit to the north is an area of many sandstone slabs under and around which are many caribou bones. It measures 4 m by 2.5 m corresponding quite well to a 10' by 12' commercially made tent. Also, it is only 2.5 m away from a bone processing area to the northeast. This second area is characterized by quite a bit of crushed bone under, around and on top of many rock slabs. Altogether this bone concentration exists in an area 3.75 m by 1.75 m.

Finally, there is the feature that appears to be a tent platform of sandstone slabs. The slabs were dragged off the outcropping ridge crest and arranged in a rough square on the closed-mat alpine tundra to the north of the crest. While many of the slabs seem to outline a square, suggesting they were used to hold a tent down, several slabs appear within the "interior" as well. The presence of two wooden tent stakes about 75 cm

north and aligned with the corners of the platform on each side also give credence to the interpretation of this as a habitation structure. The tent stakes were in excellent condition and made from milled lumber about 19 m square (3/4") with the buried ends cut and pointed by a metal knife. Some bone was found in and around the structure, but of great interest is a piece of bone cut off by a metal saw and subsequently shaped into an artifact of unknown type or function.

Based on the evidence from the tent size, tent stakes and cut bone, there is no doubt that this locality is from the historic period. Further evidence seems to indicate the late historic period, perhaps between the first and second quarter of this century. This can be inferred from the excellent condition of the wood which becomes quite friable in a short period. Also the shape of the platform is square, probably built to accommodate a commercial tent of the same shape. Early in the historic period the traditional round tent rings were still in use.

#### Discussion

This is a multicomponent, multifunctional site. At least three cultural periods are represented here, from microblade times through the historic period. This includes the Denbigh and Norton phases of the Arctic Small Tool tradition and use in the fairly recent past. Localities 1, 2 and 3 are very likely lookouts, as is, no doubt, Locality 4. Locality 4 however, is a hunting camp as well, with many associated activities having taken place. While there are some traits in this locality that indicate culturative changes in various hunting modes, the site location and the presence of various processing activities suggest the overall use pattern is close to the precontact ways. Ray Bane (Personal Communication), who has had much experience living and traveling in that area as well as working with the nearby natives at Wainwright, thought that the person who used that site came to hunt fetal or young caribou in the later spring. This verdict was based on the need to travel with a heavy 10' by 12' canvas tent. In late spring a party could dog sled from the Utukok wintering area, down Disappointment Creek across the Colville River, down Meridian Creek to this site near Noluck Lake in time to catch the spring movement to the calving grounds. Apparently this is a common activity at this time of year to obtain fine quality inner clothing for winter garments from the fetal or young caribou. Based on the lack of any prehistoric goods, and the use of the commercial tent, Bane felt that this may have been done in the 1920's or 1930's. Because of the excellent preservation here this would be a good location for testing various hypotheses concerning hunting sites such as Binford (1978a, b) has done in Anaktuvuk Pass.

MIS-249

Location: Sec. 25, T.7S., R.34W., Umiat Meridian  
UTM 4/463940/7633370

Class: III

#### Location and Setting

A flake scatter was located at the eastern end of the western segment of Ridge 17 (Fig. 13). The closest water is a small unnamed creek 225 m north running between Ridge 17 and 19. It flows roughly west into the north end of Noluck Lake 2.6 km away. Open-mat alpine tundra vegetation grows on the broken bedrock surface of the ridge crest. Just off the ridge crest to the north is a level terrace-like area that is covered with closed-mat alpine tundra. This vegetation occurs south of the site as well. Tussock meadow surrounds the ridge. From this vantage point one can view the entire Noluck Basin as well as a portion of the Pilly Fork.

#### Site Information

Eleven CCS artifacts were widely spread over an area 68 m by 8 m. The site area is transverse to the ridge crest. This indicates that a fair degree of erosion is carrying artifacts downslope from their original point of deposition. Two of the nine flakes were utilized and two had cortex. A nearly complete end blade with fine parallel oblique flaking (UA78-191-1; Pl. 1 7; v.4:5) was found with four flakes near the top of the ridge. A side blade fragment with parallel-oblique flaking on one face and none on the other was found halfway between the end blade and a cluster of four flakes down slope to the south. All but one of the artifacts is grey, the side blade was of a red brown CCS.

#### Discussion

This is a lookout site, but might also represent a kill site as witnessed by the two fragmented projectile insets. The bipoint and side blade indicate an early Arctic Small Tool tradition occupation. Finer distinction is difficult, for while the presence of microblades would act to separate Denbigh Flint from an early Choris phase, their absence does not necessarily mean the site is not Denbigh.

<u>Catalog #</u>	<u>Description</u>
UA78-191-1	Projectile Point

MIS-250

Location: Sec. 16, T.7S., R.34W., Umat Meridian  
UTM 4/459480/7636140

Class: II

#### Location and Setting

A flake scatter is located on the crest of the northern segment of Ridge 18 (Fig. 13). This ridge system is actually two parallel ridges on the west side of Storm Creek with two small unnamed streams draining the valley between the two. The nearest of these creeks is 360 m south. Meridian Creek, which drains Noluck Lake, is 1.4 km east. Open-mat alpine tundra vegetation grows in the site area as well as to the east and west on the graveled ridge top. Tussock meadow surrounds the entire segment. The view is ideal to the north and east including the Colville River on the horizon as well as the upper and middle course of Meridian Creek.

#### Site Information

Fourteen grey CCS flakes were found in a 9 m NE-SW by 3 m SE-NW area. All the flakes are rather large. Eleven of them show utilization, four have cobble cortex, and seven could be termed blade-like flakes.

#### Discussion

The location would suggest use of this site as a lookout, but the high percentage of utilized flakes indicates a great deal of time spent on a single activity. Perhaps it was both, given a certain sequence of events. It should be noted that this site is on travel Route #48 as listed by Burch (1976), suggesting that this could be a travel-related site. Some weary traveler may have stopped to enjoy the view and/or while away the time by repairing or manufacturing some items of his/her tool kit. Age and cultural affiliation is another issue and cannot be dealt with at this time due to the lack of diagnostics.

MIS-251

Location: Sec. 25, T.7S., R.34W., Umat Meridian  
UTM 4/464320/7633400

Class: III

#### Location and Setting

A flake scatter is situated at the eastern end of Ridge 17, 500 m ESE of an unnamed stream flowing roughly west into the north end of Noluck Lake 3.1 km away (Fig. 13). The site is just west of the edge of a 15 m drop to a seasonal drainage. Open-mat alpine tundra vegetation covers the entire top of the bedrock ridge. Tussock meadow grows around it. The view is excellent including the entire Noluck Basin and a good portion of the Pilly Fork valley. A glimpse of Storm Creek can be seen far west.

### Site Information

Twenty-six CCS artifacts occupy a 47 m by 36 m area trending NE-SW. Of the 24 flakes, seven were utilized and four had cobble cortex. Within a couple of meters of each other were a mitten-shaped burin (UA78-192-1; Pl. 21 12; v.4:123) and a delicately fashioned side blade (UA78-192-2; Pl. 4 3; v.4:30) with parallel-oblique flaking. About 10 m northeast was the medial segment of a microblade.

### Discussion

This is a lookout site associated with the Denbigh phase of the Arctic Small Tool tradition. The burin and side blade in conjunction with the microblade technology could indicate no other cultural group (Giddings 1964:Pl. 66, 71-b 16).

<u>Catalog #</u>	<u>Description</u>
UA78-192-1	Mitten-shaped Burin
UA78-192-2	Weapon Side Blade

MIS-252

Location: Sec. 21, T.7S., R.34W., Umiat Meridian  
UTM 4/460000/7634290

Class: I

### Location and Setting

A flake scatter was found on some solifluction lobes at the east end of the southern segment of Ridge 18 (Fig. 13). The nearest water is 500 m east in Meridian Creek. Open and closed-mat alpine tundra vegetation grows around the site area. There is a fair view of the eastern portion of the Noluck Basin and upper Meridian Creek.

### Site Information

The site consists of five small CCS flakes in a 21 m by 6 m area trending 170°-350°. Two of the flakes show utilization.

### Discussion

MIS-252 might be a lookout site. However, its presence on a known ethnographic travel route--Burch's (1976) route #48--might make it a travel-related site, a brief stopover for rest and possible repair of certain items. Heavy erosion is indicated here. The orientation of the flakes perpendicular to the downslope movement suggests their post-depositional rearrangement. This also suggests that more material may be buried in the subsurface matrix. A similar situation was seen at MIS-197.

MIS-253

Location: Sec. 17, T.8S., R.38W., Umiat Meridian  
UTM 4/419350/7628000

Class: II

#### Site Information

This site seems to be located on a large hill near the Utukok River. It is a large flake scatter reported to the National Park Service by a biologist with the Alaska Department of Fish and Game. Nothing else is known about this site.

<u>Catalog #</u>	<u>Description</u>
UA78-193-1	Utilized Flake
UA78-193-2	Scraper
UA78-193-3	Side Scraper
UA78-193-4	Nonutilized Cortical Flake

TES

Teshekpuk Lake

TES-002

Location: Sec. 16, T.8N., R.11W., Umiat Meridian  
UTM 5/437625/7772425

Class: III

#### Location and Setting

TES-002 was located by Richard Stern of the Alaska Division of Forest, Land and Water Management, on the highest of three river terraces along the right bank of the Ikpihpuk River, approximately 33 km south of the confluence of the Chipp and Ikpihpuk rivers. The upper terrace was approximately 7 m above water level (July 1978). The river bank is currently undergoing severe down cutting and slumping. The terraces are characterized by sandy blowouts and sparse, dry tundra vegetation (especially bearberry). Tussocks cover the upper section of the bank between the river and the first terrace. Willow thickets are located approximately 150 m west. Three small lakes are the northwest of the site; one is only 25 m away. A small sand hill, about 4 m in height, lies north northeast. This hill affords an excellent view of surrounding terrain in all directions. A small meander channel of the Ikpihpuk River veers due north just east of the site.

#### Site Information

The site, named "Paptaun" by Stern after an Inupiat word meaning 'net float', consists of small firepits scraped in the ground, numerous caribou bones (some cracked), bird feathers, canvas cloth, old tin cans, cut or sawn caribou antler, two flakes of CCS, a cork float fragment, and a caribou antler net sinker. What may be charred wood remains were located on the second terrace. A caribou antler net sinker (UA78-250-1, Pl. 45 6; v.4:230), was found with a hole drilled (?) in each corner of the piece. The specimen had been cut at each end (sawn ?) and along one lateral margin. The cork net float (UA78-250-3; Pl. 49 2; v.4:248) has been broken in half, bisecting a hole cut in the center. It had an estimated diameter of 7 cm. A piece of cut caribou antler (or bone) was sawn at both ends and along one lateral edge revealing the cancellous tissue. The piece (UA78-250-2, Pl. 45 4; v.4:240) appears to be a net weight preform.

The lithics included a light grey flake of CCS and a dark grey flake of CCS. The light grey flake is subrectangular in shape. Cortex is present on one surface, and a burin-like blow is present along one edge. The dark grey flake (UA78-250-5, Pl. 22 9; v.4:129) is rectangular in cross section. The piece terminates in a hinge fracture and exhibits unifacial use retouch at the distal end and along the right lateral margin. Two burin-like blows had been struck along the right lateral margin from the platform. There is some cortex on the platform.

#### Discussion

Site TES-002 is a fishing and hunting camp. The site evidences recent use, but it may also have a late prehistoric or early historic component



according to Stern. The site was given the field designation 'ROS-78-011'. The field map produced by Stern seems to indicate that two separate activity areas exist. The caribou bones and fragments of cut antler were found along the southern part of the upper terrace, while the net floats, tin cans and canvas cloth, were found along the northern section of the upper two terraces.

<u>Catalog #</u>	<u>Description</u>
UA78-250-1	Net Weight
UA78-250-2	Cut/Sawn Antler (Preform)
UA78-250-3	Cork Net Float
UA78-250-4	Utilized Cortical Flake Nodule
UA78-250-5	Burinated Flake

TES-003

Location: Sec. 26, T.16N., R.8W., Umiat Meridian  
UTM 5/468520/7845350

Class: III

#### Location and Setting

TES-003 is an abandoned boat located on the second strand of beach along the northwest shore of Teshekpuk Lake, approximately 25 m from the active shoreline. The boat was approximately 1 km southwest of the Naval Arctic Research cabin and 2 km southwest of VABM "Teshekpuk". The strand was one of approximately three beach ridges created by the successive piling of winter ice against the shore. Several other beach ridges could be identified further inland. The boat was located in an area of denuded beach sand showing evidence of "ice piling or pushing", although the activity did not appear to be recent. This activity was more pronounced several meters from the boat toward the active shoreline. The beach ridges further inland are sparsely vegetated with alpine tundra flora and assorted grasses, although tussock and sedge can be found in the low, wet interstices between major strands. A small lake lies approximately 200 m northwest. Beyond this small lake is the higher ground bordering Teshekpuk Lake proper. The boat was near the southeast end of the small inland lake.

#### Site Information

The boat was oriented northeast to southwest along the beach and lying on its starboard side with the deck facing the lake. The port gunnel and freeboard had collapsed and were lying along the ground except for a section still connected at the bow. It measured 3.5 m in length and 4.3 m in width (measured across the bottom middle section or beam). The stern measured 1 m in width. The boat is made of wood board laid longitudinally to form the deck and sides. These are tied together on the inside by cross-bracing and ribbing. The center section of the deck is reinforced for approximately 1 m by small boards laid perpendicular to the boat's

longitudinal axis. There is a trapezoidal shaped seat in the stern. The stern is square and has a transom for mounting a motor. In fact, the transom exhibits indentations made by motor mount clamps. The gunnel has a raised, reinforced section for mounting oars, but no oarlocks or oars were present. The flat bottom of the boat is reinforced with two wood strips running parallel to the wooden keel. Between each brace and the keel is a copper or aluminum strip nailed onto the bottom of the boat. These features apparently functioned as runners to drag the boat along the ground or over snow and ice. The wood braces had also been nailed to the bottom of the boat. A "Stanley" hand axe with a large triangular hatchet blade was found lying near the boat. The boat was apparently held together by screws and nails. The upper edge of the gunnel was painted yellow. A yellow painted partition was lying on the ground to the front of the boat. A 3/4" diameter rope was still attached to the bow.

#### Discussion

The boat appears to have been abandoned. It could have been pushed up on the shore and broken by ice action. It is not known whether the boat had a leak, or whether it had suffered damage after having been left at the lake in anticipation of future use. It was thought that the craft might be a boat used by Natives visiting the lake for subsistence activities. However, Michael Kunz of the Bureau of Land Management (personal communication; c.f. Kunz, 1977), has mentioned that the boat was associated with the Naval Arctic Research Laboratory, specifically with research teams working out of their cabin about 1 km northeast.

TES-004

Location: Sec. 26, T.16N., R.8W., Umiat Meridian  
UTM 5/468260/7845030

Class: I

#### Location and Setting

TES-004, an isolated flake of CCS, was found on top of a stable beach strand along the northwestern shore of Teshekpuk Lake. The site lies approximately 1.5 km southwest of the Naval Arctic Research cabin and 2.5 km southwest of VABM "Teshekpuk". The piece was located approximately 50 m inland from the active shoreline of the lake, roughly halfway between the shore and the southwestern end of a small inland lake. The flake was on the third (or middle) beach strand in from the shoreline. The strands or ridges are sparsely covered with alpine tundra vegetation and assorted grasses. Vegetation occurs primarily along the southern sides of these strands and in the low-lying interstices between strands. The strands were no more than .5 m to 1 m in height. The view from the beach is limited to the lake, beach, and low hills to the north.

### Site Information

The find consists of an isolated, noncortical flake of brown CCS. The specimen (UA78-214-1, Pl. 39 8) which has been snapped at the proximal end, exhibits continuous nibbling along the right and left lateral margins, with step-flaking along the distal margin. The majority of wear appears to be the result of use-retouch. The arris on the dorsal side of the flake and the flake scars along the lateral margins both show evidence of rounding due to water action or sand abrasion. It is apparent that some of what has been interpreted as use-retouch is the result of natural action, but natural action cannot account for all the wear.

### Discussion

The cultural affiliation of site TES-004 cannot be determined from the material at hand, and any speculation about the flake's presence on the beach strand would best be speculative. The flake could have been ice-rafted onto the beach strand during the formation of this section of beach or it could have been left by a person or persons engaged in certain activities at this location. In light of the way ice was observed to move toward the southwest and away from the shore during breakup (due to the prevailing northeast winds), it does not seem likely that the piece could have been ice-rafted from elsewhere around the lake. However, major changes in wind regime over time are not unlikely, and the possibility should not be discounted. It may be an important fact that the piece was found on top of a beach strand in an area of little disturbance other than wind erosion. Resources appear to be limited. The only animal noted in the immediate area was an occasional caribou. Grayling do not appear to be active in the lake until well after breakup, and there were no shrubs or pieces of driftwood in the immediate vicinity. However, there may have been substantial thickets of shrubs around the lake at one time (refer to the willow shrubs noted at site TES-014). It is possible that other cultural material will be located if the beach strand is extensively tested. Particular attention should be paid to the top of the strand, and to stable vegetated sections along the sides.

<u>Catalog #</u>	<u>Description</u>
UA78-214-1	Utilized Flake

TES-005

Location: Sec. 3, T.15N., R.8W., Umiat Meridian  
UTM 5/466680/7842430

Class: I

### Location and Setting

TES-005 consists of an isolated projectile point base located on the active beach of a sandy spit in the northwest section of Teshekpuk Lake. The site lies approximately 5.5 km southwest of VABM "Teshekpuk". The arti-

fact was found on the western side of the spit, about 1 km from its southern point. This side of the spit is currently in the process of buildup and stabilization, and was once the eastern shore of a large lake long since coalesced with Teshekpuk Lake. The specimen was about 3 m to 4 m from the water's edge among small plant remains and other flotsam or debris forming the high water mark. The beach did not show any evidence of ice action, only the gradual withdrawal of water away from the shore in several stages. About 5 m south of the find was the remnant of a small drainage, once the outlet for a small pond located toward the center of the spit. The upper ridge of the shore was no more than 2 m higher than water level. The beach is composed primarily of sand, small gravels and very sparse clumps of alpine tundra vegetation. This vegetative zone continues about 30 m inland toward the center of the spit where it gives way to a strip of dense grasses and tussocks. The view from the beach is limited to the immediate lakeshore and higher ground a few kilometers to the north.

#### Site Information

The point base (UA78-215-1, Pl. 1 23; v.4:11) is made of a lustrous black CCS. It has parallel, lightly expanding sides, and a concave base. The concavity is basically triangular in shape. The piece has distinct basal "ears". The distal end or tip of the point has been snapped off, and evidence of a hinge fracture is present. It is biconvex in both longitudinal and transverse section. Flaking is generally parallel, although irregular. Both lateral margins and one margin along the break display some step-flaking, crushing and rounding. The base also exhibits stepping, crushing, and rounding with wear more pronounced on the points or ears. The wear is judged to have resulted from the intentional grinding of lateral margins and the margins of the basal concavity. The specimen is obviously water or sand worn, but in no way is the evidence of this type of wear so severe that it can account for the intentional wear noted. It is granted that natural wear enhances the visual effect of intentional wear, and that the grinding may not have been as pronounced on the original piece. However, this does not negate the presence of edge grinding on the piece, presumably to facilitate hafting. The specimen also exhibits the removal of channel or thinning flakes from the base. These flakes were struck from the basal margin toward the center. Three flakes were removed from the obverse and at least one from the reverse. The flakes extend only about 1 cm onto the dorsal and ventral faces. Although the point may be affectionately referred to as an Arctic "fluted point," the piece is not truly fluted in the accepted sense. The base was merely thinned by the removal of small channel flakes.

#### Discussion

This isolated point is very similar to material reported for the Batza-Tena site (Clark and Clark 1975; also Clark 1972 and 1974), and the Putu site (Alexander 1974; Cook 1970). The implications of finding a point of this type near the Arctic Coast are discussed in detail in the section of this report dealing with the Teshekpuk Lake survey area. It is sufficient to say that the real distribution of this type of artifact has been expanded considerably. The nearest site with this type of material is the Putu site

near the Sagavanirktok River on the north side of the Brooks Range. The Batza-Tena site is south of the Brooks Range, on the Koyukuk River. Bob Gal (personal communication) has also located similar materials. The cultural affiliation and time range of this type of artifact is currently the subject of heated debate. Estimates of dates for the Batza-Tena and Putu site range somewhere between 8,000 and 11,000 B.P., or earlier. Alexander (personal communication) reports a date of approximately 11,450 for the Putu site derived from hearth charcoal. The Batza-Tena site has been dated primarily on typological grounds. It is a fact that the provenience of the point at site TES-005 leaves much to be desired. The isolate can contribute little to the debate beyond descriptive and distributional information. The beach area near where the point base was found and the higher ground further inland may warrant additional attention, especially if the artifact eroded out from there. Unfortunately, a small test pit on the beach and an intensive search of the surrounding area did not bring to light any other cultural materials. Ice-rafting cannot be ruled out in this case.

<u>Catalog #</u>	<u>Description</u>
UA78-215-1	Projectile Point

TES-006

Location: Sec. 24, T.16N., R.7W., Umiat Meridain  
UTM 5/479190/7846780

Class: III

#### Location and Setting

TES-006 is a historic campsite along the north shore of Teshekpuk Lake, approximately 10 km east of VABM "Teshekpuk". The site is on top of a remnant of high ground bordered on the north by an old, drained lake bed, on the south by Teshekpuk Lake, and on the west by a recently developed drainage (Fig. 18). This remnant measures approximately 80 m by 50 m with the longitudinal axis oriented to the lakeshore, or east to west. The banks toward the drainage cut and Teshekpuk Lake are subject to severe undercutting and slumping due to the effects of high water and ice. The ground remnant is approximately 2 m in height above the beach to the south, and about 1 m in height above the old lake bed to the north. The old lake appears to have originally drained to the east of site TES-006. Teshekpuk Lake has since cut off a major section of the old lake bank in this direction. The remaining portion of the old lake drained through a breach created in the bank to the west. All that remains is the seasonal drainage which channels any excess water from the low-lying areas of the old lake bed. Thus, the remnant was once part of a larger section of open tundra separating Teshekpuk Lake from a larger inland lake, long since captured. Judging from aerial photographs of the area, this lake was once very large. The site area is covered with assorted grasses and numerous small tundra plants, including mosses and very short willows. Few tussocks can be found. The lake bed to the north is primarily

TES 006

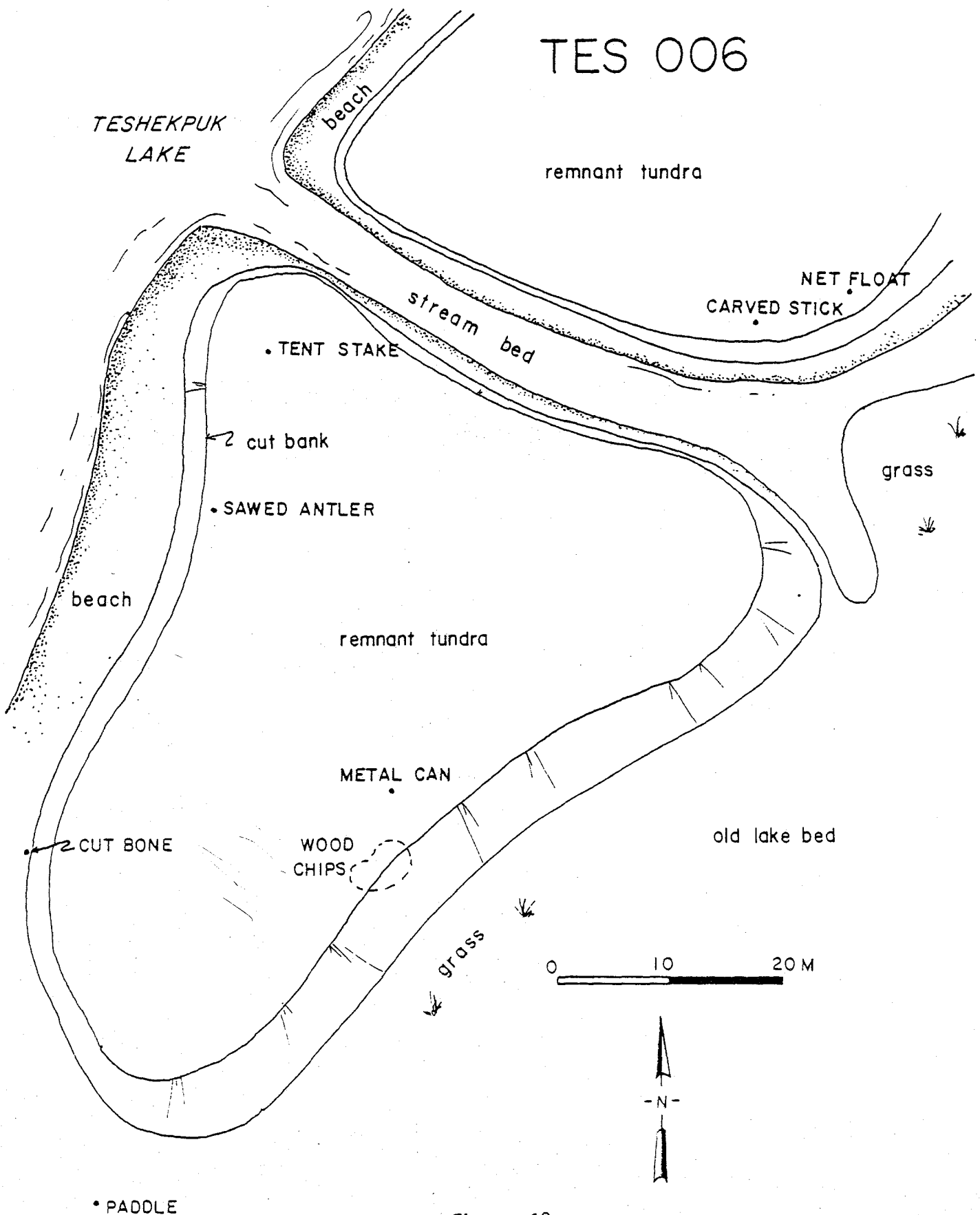


Figure 18

covered with grass. The site area is crisscrossed with several small frost cracks. The view from the site is limited to the old lake bed. A better vantage can be had from the high ground approximately .5 km to the east of the site--some of the highest ground on the north side of Teshekpuk Lake. During the survey caribou were observed grazing in the old lake bed.

#### Site Information

Cultural material consists of two carved tent pegs, a worked-wood object, sawn antler, a hammerstone, a tin can, a probable pottery paddle, and chopped or cut wood fragments (Fig. 18). A few caribou bones were scattered over the area. The hammerstone measures about 10 cm by 6 cm and evidenced battering at each end. The stone and an old, rusted, broken tin can were found on the site's north side near some cut wood fragments. These wood fragments covered an area measuring roughly 13 m by 6 m. The tent peg (UA78-216-1, Pl. 58 3; v.4:251) was found near the west corner of the site. It was driven vertically into the ground and only half was visible above the surface. The peg is roughly cylindrical in shape and exhibits several carved facets. Based upon the presence of this item, it is suspected that a tent was once set up in this corner of the site. An oval, plano-convex, worked-wood object (UA78-216-3, Pl. 49 1; v.4:247) with a pair of holes drilled or punched in each end was found approximately 50 m north of the site on the other side of the drainage cut. The edges are bevelled. Nails may have been used to create the holes. This piece may be a net float (Shinkwin 1977: Pl.34-6; and Campbell 1962: Fig. 7-a), or it may be some type of container cover, possibly to a harpoon box (Murdoch 1892). The specimen is thought to be a net float. A carved wooden stick (peg ?) was found about 10 m south of the oval piece, on the site side of the drainage. Another wooden object (UA78-216-2, Pl. 50 1; v.4:258), tentatively identified as a pottery paddle, was found approximately 32 m from the site's eastern end, in the old lake bed. It was approximately 6 m from the Teshekpuk Lake cutbank. The handle has been cut off for some reason. The specimen could also be a toy boat paddle. A small test pit a short distance east of the tent peg did not contribute any useful data.

#### Discussion

TES-006 appears to be a protohistoric or an historic Eskimo camp dating from the turn of the century. It is suspected that hunting and fishing were the major activities carried out, based upon the remains observed. It is not known whether trapping was an important pursuit. A recent Eskimo camp (TLUI 21, Nuiqsut), about 6.5 km west of site TES-006, showed evidence of these activities (fish bones, caribou bones, fox skull, snowmobile parts, etc.). It is not known whether site TES-006 contains an earlier cultural component. Further work at the site may lead to the identification of activity areas, or at the minimum, other refuse. This, of course, assumes that the camp was used for an extended period of time, say one season. It also assumes that a major portion of the site has not yet eroded into Teshekpuk Lake. If, in fact, specimen UA78-216-2 is a pottery paddle, interesting questions can be raised. Was pottery being made in the Teshekpuk Lake area? Were clay sources available on the lake

or in the immediate area? The answer to the first question is unknown. However, beds of quality clay for pottery production were observed along cutbanks in the northeast Teshekpuk Lake area, principally in Sections 14, 15 and 16 of Township 15N, Range 5W. This clay is a homogeneous grey, and is present in a lens varying between 10 cm and 20 cm thick at the base of the cutbanks. Further work is needed to delimit the extent of the deposit and to determine whether it was important to local groups. No wood is available in the lake area to fire the green ware, but perhaps the items were worked up and fired on the coast. This presents problems also, principally because of the rarity of driftwood. One can question whether a valuable resource such as driftwood would be used to produce pottery. Nevertheless, we know that pottery was present among coastal groups, and this begs the question as to whether it was produced locally or imported.

<u>Catalog #</u>	<u>Description</u>
UA78-216-1	Wood Tent Peg
UA78-216-2	Wood Pottery Paddle
UA78-216-3	Wooden Net Float

TES-007

Location: Sec. 15, T.15N., R.6W., Umiat Meridian  
UTM 5/485430/7839770

Class: I

#### Location and Setting

TES-007 is an isolated flake of CCS located on the north-central shore of Teshekpuk Lake. More specifically, the piece was found on the active beach of the west shore of the large point which juts into the center of the lake from the northern side. The site lies approximately 4 km north-west of the southern end of the point. The beach was only a few meters wide and consisted of sand and small gravels. The artifact was found approximately 2 m from the water's edge, and a short distance from the base of a cutbank. The cutbank, approximately 3 m high, abuts the beach. The bank is subject to undercutting during high lake levels. Sloughed segments of eroding turf cover the bank face. The area on top of the bank is covered with tundra meadow vegetation consisting mainly of grasses, short willows, four-angled cassiope, low bush cranberry, and a trace of pink plume. Few tussocks were observed. A large rock protrudes through the surface of the water a few meters offshore, and several other boulders were found elsewhere around the lake. The rocks may have been ice-rafted or river carried during an earlier geologic period or used as ballast for vehicles pulling seismic trains. They are quite unusual for the coastal plain area. An old lake bed lies to the east of the site. The view from the top of the bank is restricted to the old lake bed to the east, and the terrain to the north and south. Site TES-008 is located along the shore about 1 km south of TES-007.



### Site Information

The isolate is a noncortical, blade-like flake segment of a grey green CCS. The piece has been snapped at both ends. The specimen is slightly water-worn, and may have been altered by exposure to excessive heat. It has a lustrous appearance and a waxy feel. The piece exhibits nibbling on the lateral margins and on both faces but it is difficult to ascertain whether this wear is the result of intentional use, or is due to natural causes.

### Discussion

The cultural affiliation of the material cannot be determined. The piece may have been ice-rafted to this location or it may have eroded out from somewhere on top of the bank. It could also have been deposited somewhere along the open shoreline. The only important consideration at present is whether other materials exist in the area. No test was made. The piece could conceivably have come from a site located along the top of the bank, oriented to the old lake when it was active; that is before Teshekpuk Lake cut significantly back into this section, but this remains to be demonstrated.

<u>Catalog #</u>	<u>Description</u>
UA78-217-1	Utilized Flake

TES-008

Location: Sec. 15, T.15N., R.6W., Umiat Meridian  
UTM 5/485760/7839000

Class: I

### Location and Setting

TES-008 consists of an isolate lithic piece found on a sandy beach along the northern shore of Teshekpuk Lake. The piece was located in the middle of the beach. The beach was covered with sod clumps and loose peat eroded out from the cutbank abutting the beach. The cutbank is a little over 2m in height, and is subject to undercutting during periods of high lake water levels. The area on top of the bank is generally flat. Vegetation consists of grasses, four-angled cassiope, mosses, very short willows, and other small tundra plants. The bank has been breached, about 75 m northwest of the find, by water draining from a small tundra pond. The main body of this pond was roughly 25 m from Teshekpuk Lake and it had been completely drained. This pond appears to have been the remnant of an old lake once covering a large portion of the area to the east. The view from the top of the bank is limited.

### Site Information

Cultural material consists of a projectile point or end blade of black CCS (UA78-218-1; Pl. 3 9; v.4:21). The specimen is biconvex in both longi-

tudinal and transverse section. Facial flaking is generally parallel oblique. The blade is excurvate, terminating in weak shoulders. The piece has a slightly contracted stem. The stem base has been eliminated by a hinge fracture. The lateral edges of the stem exhibit heavy bifacial rounding. This wear may be the result of hafting or intentional grinding to facilitate hafting. The tip of the point has been removed by an impact fracture. The same blow also removed a portion of the lateral margin. The break does not appear to be an intentional burin-blow. The specimen is classified as an end blade of the Norton phase of the Arctic Small Tool tradition (Giddings 1964; Pl. 49 13). A similar point was found in the middens at Point Hope, but the piece may be intrusive--that is it may be a Norton specimen and not Ipiutak (Larsen and Rainey 1948; Pl. 84 27). Giddings (1964) states that stemmed points are characteristic of Norton culture. He adds that the edges of many of the stems have been ground. He found only one specimen at Iyatayet (Pl. 49 13) similar to specimen UA78-218-1 (i.e., black CCS with ground edges). The majority of Norton points at the Iyatayet site were made from local basalt or silicified slate. Perhaps the fact that this specimen is made of black CCS indicates some association with inland groups from the foothills or mountains. Either the point was made by people from these areas or the material for the point was traded to the coast. This has interesting implications for north slope prehistory. Carter (1966) reports that small beach cobbles of flint provide a ready source of flint in the Barrow area. Stanford (1971) notes that most of the material from sites he located in the same general area were derived from the Siksikpuk formation of the Brooks Range. The materials present in the Barrow area assemblages need to be studied more fully to determine their sources, and whether there have been any major changes in usage patterns between various cultural traditions as identified. One small, split cobble of CCS was found near the point. It does not appear to be of human manufacture.

#### Discussion

Aside from matters already discussed, site TES-008 is an enigma. It has not been determined whether a Norton camp exists in the Teshekpuk Lake area. It appears that a hunter or hunters of the Norton phase were using the area, but at present the extent of this use cannot be ascertained. Further work needs to be undertaken to resolve this issue. Norton sites have been identified in the Barrow area by Stanford (1971; 1976). Shields (personal communication) is also hypothesizing a Norton Phase complex for the Brooks Range, specifically in the Howard Pass area. The individual or group producing and utilizing types like specimen UA78-218-1 may derive from either area. Is seasonal use of Teshekpuk Lake by Norton Phase peoples the key? Were they from the coast or the foothills and mountains? Is there a Norton village or camp near Teshekpuk Lake, or is there one along the nearby coast? These questions are of manifest importance.

<u>Catalog #</u>	<u>Description</u>
UA78-218-1	Projectile Point
UA78-218-2	Rock

TES-009

Location: Sec. 16, T.15N., R.5W., Umiat Meridian  
UTM 5/493010/7837890

Class: I

#### Location and Setting

TES-009 consists of an isolated tool of CCS found along a sandy beach in the northeast Teshekpuk Lake area (Fig. 19). The piece was on a sand spit which is building to the lee side of a point of land jutting part way into the lake from the shore. The spit is approximately 100 m wide, east to west, and several hundred meters long. Moving from Teshekpuk Lake east, the spit consists of a sandy beach, a low-lying, water-filled area, more sandy beach, and three old beach strands, each a little higher in elevation than the one before. The last of these abuts a small area of turf which has been pushed up at sometime by ice-action. The ice-disturbed area is at the base of a slope several meters in height. Above the slope is flat, open tundra. This slope was formerly the bank of Teshekpuk Lake during an earlier period when the water level was considerably higher. The bank evidences considerable slumping, primarily due to the mechanics of solifluction. The lake level appears to have been receding, accounting in part for the building of the spit. The beach is denuded of vegetation, except for the older strands which are partially covered with mosses, assorted grasses and small tundra plants. The vegetative pattern becomes more broken toward the water-filled swale on the beach. The artifact was found about 1 m from the lake edge on top of a section of beach sand that had been slightly eroded by wave action. The view from on top of the low hill to the east of the beach is limited to shoreline, and contiguous hills to the northwest and east.

#### Site Information

The isolated artifact is a flake knife made of a very pale brown CCS. The piece (UA78-219-1, Pl. 17 2; v.4:96) is plano-convex in longitudinal and transverse section. It has been made on a blade-like flake. The piece may be slightly water worn. It is parallel-ovate in outline. Flaking is roughly parallel on both the right and left sides of the dorsal surface. Some cortex may also be present along the midsection of the dorsal surface. The left edge has an angle of approximately 57°, and the right edge has an angle of approximately 71°. The bulb on the ventral surface been thinned by blows directed at the right proximal dorsal margin. The piece exhibits continuous crushing, rounding and nibbling along both margins. The nibbling may be the result of natural forces. The wear suggests use in a transverse action on hard material.

#### Discussion

This item has been classified as a flake knife of the late Arctic Small Tool tradition. Based upon morphological similarities with the Iyatayet Norton assemblage, I am inclined to place it in the Norton phase (Giddings 1964: Pl. 45 2, 167). The specimen would not be out of place in the Point Hope

TES 009

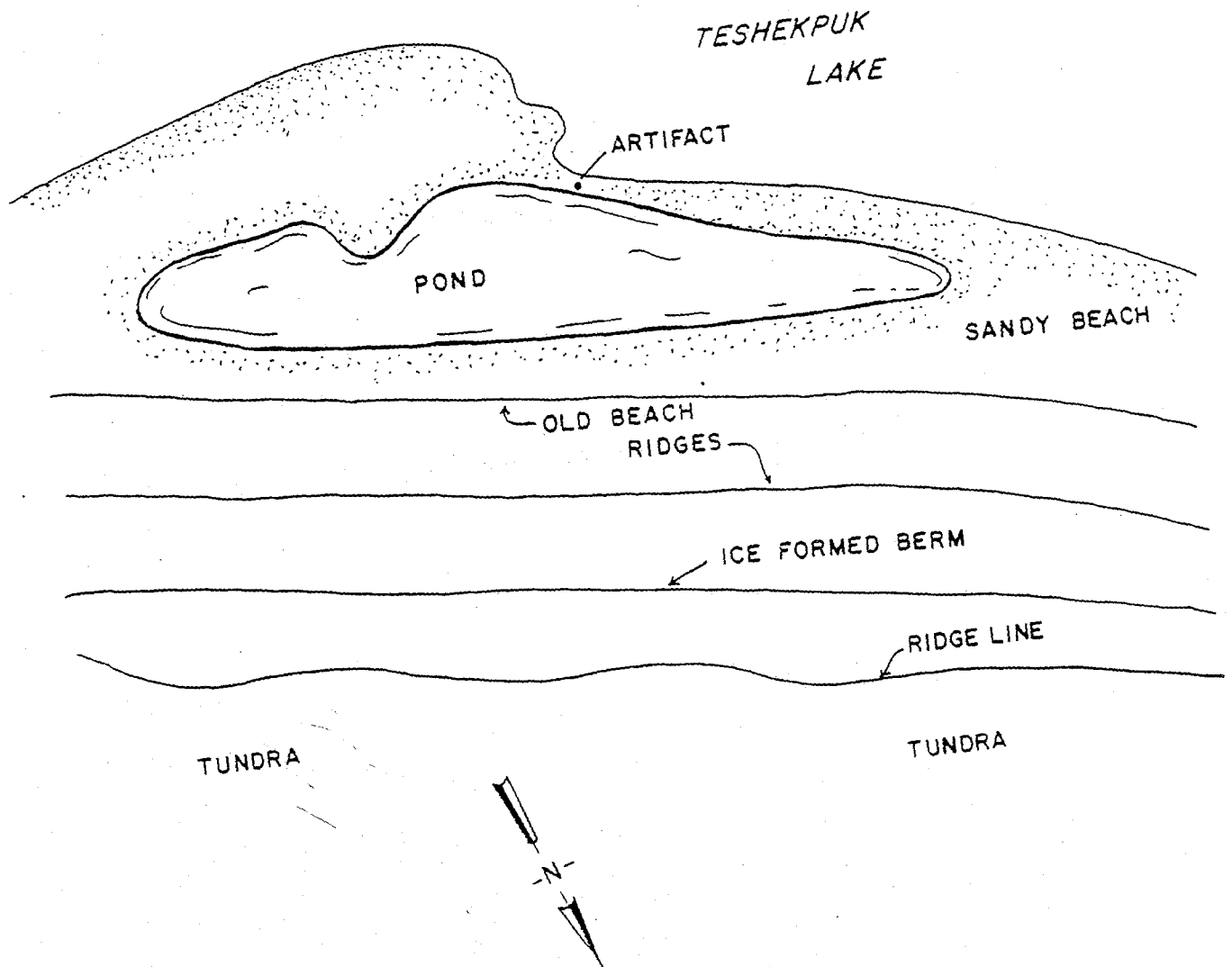


Figure 19

Ipiutak assemblage either (e.g., Larsen and Rainey 1948: Pl. 16 11), but the similarities are not as convincing. It is doubtful that the specimen could be a flake knife of the Denbigh phase. Although similar in many respects, the Denbigh examples were retouched at one end (Giddings 1964: 226; Pl. 69 2-4). Specimen UA78-219-1 lacks this characteristic. The typing at least indicates the piece belongs to an Arctic Small Tool tradition assemblage. Thus far, the only other element of the Norton Phase identified at Teshekpuk Lake is a projectile point located at site TES-008. A Norton component has also been identified near Barrow (Stanford 1976) and has been postulated for the Brooks Range (Shields 1979:personal communication). It is assumed that this specimen is either associated with butchering activities, or the working of hard materials such as bone, wood, antler or ivory. Taking the scenario further, a temporary activity area or, at best, a seasonal camp is suggested. It is not known whether the piece weathered out from somewhere inland, or was ice-rafted onto the spit. The fact that the bench is on the lee side of the point may be an important factor in making this determination.

<u>Catalog #</u>	<u>Description</u>
UA78-219-1	Flake Knife

TES-011

Location: Sec. 31, T.14N., R.5W., Umiat Meridian  
UTM 5/490260/7824440

Class: I

#### Location and Setting

TES-011, an isolated worked-wood object, was found along the south shore of Teshekpuk Lake, approximately 5 km west of the Kealok Creek delta. The piece was approximately 5 m from shore in an area of dense grass cover. A small lake is approximately 50 m inland from the site. Several caribou trails follow the edge of the lake in this vicinity. The area is quite flat, and the bank was no more than a meter above water level. Teshekpuk Lake appears to be gradually eroding the bank.

#### Site Information

The worked-wood object is a single-bladed kayak or boat paddle which had broken in two pieces. The pieces were partially covered with grass and lying next to one another. The complete paddle (UA78-221-1 and 2, Pl. 65 3, 5; v.4:252) is roughly ovate in outline with a bi-plano longitudinal section. One end of the paddle is notched.

#### Discussion

The paddle may be secondarily deposited, perhaps by water or ice. It could also have been broken and left in the general area where it was found. The proximity of the two sections supports the second explana-

tion, although it is conceivable that the piece could have been broken by ice action. The paddle may suggest the presence of a temporary camp or some other activity area in the vicinity, but no evidence was found to support this contention. No subsurface tests were made. The paddle is probably Eskimo. The site, based primarily upon the survival of the wood, is assigned to the proto historic or early historic period. Cantwell (1889:84-85, in Giddings 1952) notes that single-bladed paddles are used "exclusively in the large boats, but in the small canoes both single and double-bladed paddles are used. Murdoch (1892) states that for ordinary travel a single-bladed paddle is used. The kayak paddle is one of the few specimens found indicating boating on Teshekpuk Lake. Spencer (1959), clearly identifies Teshekpuk Lake as a major thoroughfare for travel east and west through the coastal area, allowing groups to stay clear of the ocean, which at times could be treacherous. The paucity of sites around Teshekpuk Lake suggests either (1) that the stopovers during travel were very brief and little evidence of camps remain, (2) that specific locales were consistently used year in and year out for stopovers, (3) that no stops were usually necessary during this leg of the trip, or (4) that the area was not a major travel route. Perhaps a thorough study of the sites in the lake area will help address this issue. However, the identification of travel routes and temporary stopovers (specifically) in the archeological record is a difficult task.

<u>Catalog #</u>	<u>Description</u>
UA78-221-1	Boat Paddle Blade
UA78-221-2	Boat Paddle Handle

TES-012

Location: Sec. 36, T.13N., R.7W., Umiat Meridian  
UTM 5/478720/7814430

Class: III

#### Location and Setting

TES-012 is a lithic scatter located along the southeast shore of a small lake draining northerly into the southcentral section of Teshekpuk Lake (Fig. 20). This lake is only several hundred meters from the south shore of Teshekpuk Lake. The lithics were found eroding out of the base of a large sand dune remnant bordering the lake. The dune is approximately 10 m to 12 m in height. The eroded face, particularly near its upper margin, is covered with small willow shrubs. Other small alpine tundra plants and grasses cover a major portion of the lower section of the dune, including a downslope remnant which juts approximately 30 m into the lake. The slope remnant is one of eight or nine fingers of land cut or "scaloped" along the east shore of the lake by the process of water erosion. A caribou trail cuts across the bottom of the dune parallel to the lake-shore. The trail may have been instrumental in facilitating the erosion of the dune face in the area where the majority of lithics were discovered. The face of the dune has been subjected to considerable wind erosion.

# TES 012

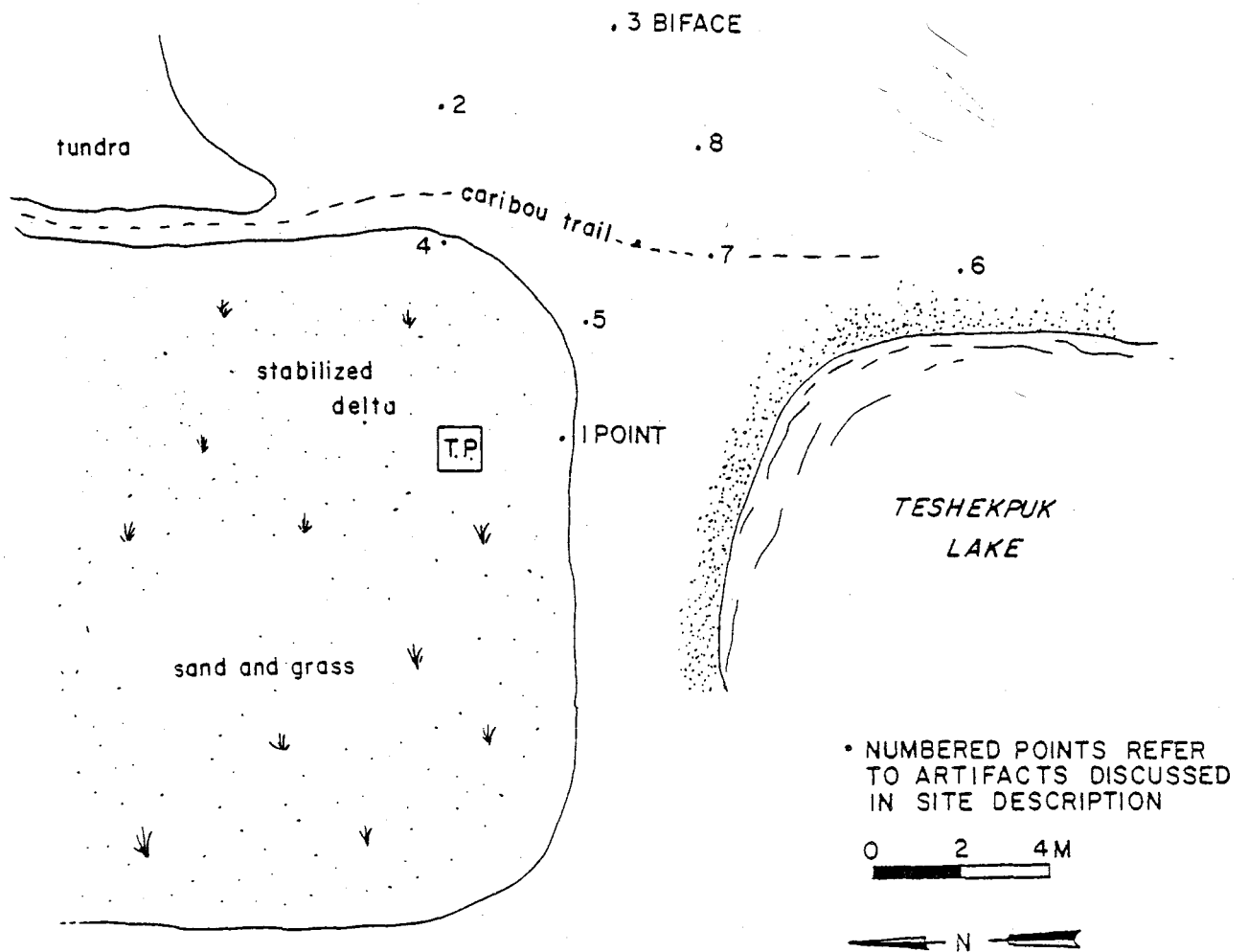


Figure 20

The sands that make up the dune were found to be crossbedded. There is evidence that the previous water level in the lake was a few meters higher than at present. Water could have once covered the area where the material was found. The lithics probably eroded out from near the top of the dune and consolidated in sands redeposited along the lake bottom. The water level in the lake then dropped, due perhaps to the partial draining of the lake, resulting in the exposure of a portion of lake bottom. The scalloped remnants along the lakeshore could therefore be sections of the old lake floor, having since developed a stable vegetative cover. These sections are now undergoing a new phase of erosion by the lake, and the material at the dune base is being uncovered through the combined effects of wind and water erosion. An alternative reconstruction could be that the scalloped areas are remnants of a dune slough the lake is just now cutting back into. This interpretation allows for people using the area at the base of the dune and leaving material behind. However, this scenario seems questionable. The view from on top of the dune is extensive in all directions, making it a good spot for a hunting lookout.

#### Site Information

The cultural material observed consists of seven flakes of a translucent grey CCS, three flakes of black CCS, two flakes of light brown CCS, a rough biface of light yellow red CCS, and a projectile point or knife of dark reddish brown CCS, distributed in an area measuring roughly 5 m in diameter (Fig. 21). The majority of pieces appear to be thinning flakes although pressure flakes may have been present. Extensive tool production is certainly suggested by the diversity of lithics. The rough biface (UA78-222-1, Pl. 10 12; v.4:72) and is bi-convex in both longitudinal and transverse section. The surface of one side may be mineral encrusted, although a portion of cortex also appears to be present. Facial flaking is generally parallel. The piece is ovate in outline. The right and left margins exhibit discontinuous bifacial crushing and rounding. The distal end appears to have been snapped. This specimen could have been utilized as a knife. Use wear does not support the contention that the piece was solely a blank. It is possible the specimen represents a botched attempt to produce a more refined bifacial implement that was subsequently utilized. The projectile point or knife (UA78-222-2, Pl. 1 22; v.4:13) is sub-parallel-ovate in outline, and exhibits parallel facial flaking. It has a slightly concave base and has been basally thinned by the removal of small pressure flakes. Facial flaking near the base appears to have taken place after this operation. The blade is generally excurvate. Slight shouldering is exhibited about halfway down the piece, more emphasized on one side than the other. The sides contract slightly toward the base. Otherwise, it is roughly pentagonal in shape. The margins below the "shoulders", and the basal margin have been ground to the point of being flattened. The basal margin is not as distinctively "flattened". The margins, especially near the tip, exhibit heavy stepflaking, crushing and slight rounding. Behavioral explanations would probably best account for the general shape of the specimen; that is, the shape of the blade was probably modified through resharpening operations, if the item was used as a knife. The specimen was located protruding from the side of the scalloped terrace in undifferentiated sand at a depth of approximately 22 cm below surface. The point was in situ, just below root level of the plants cover-



TES 012

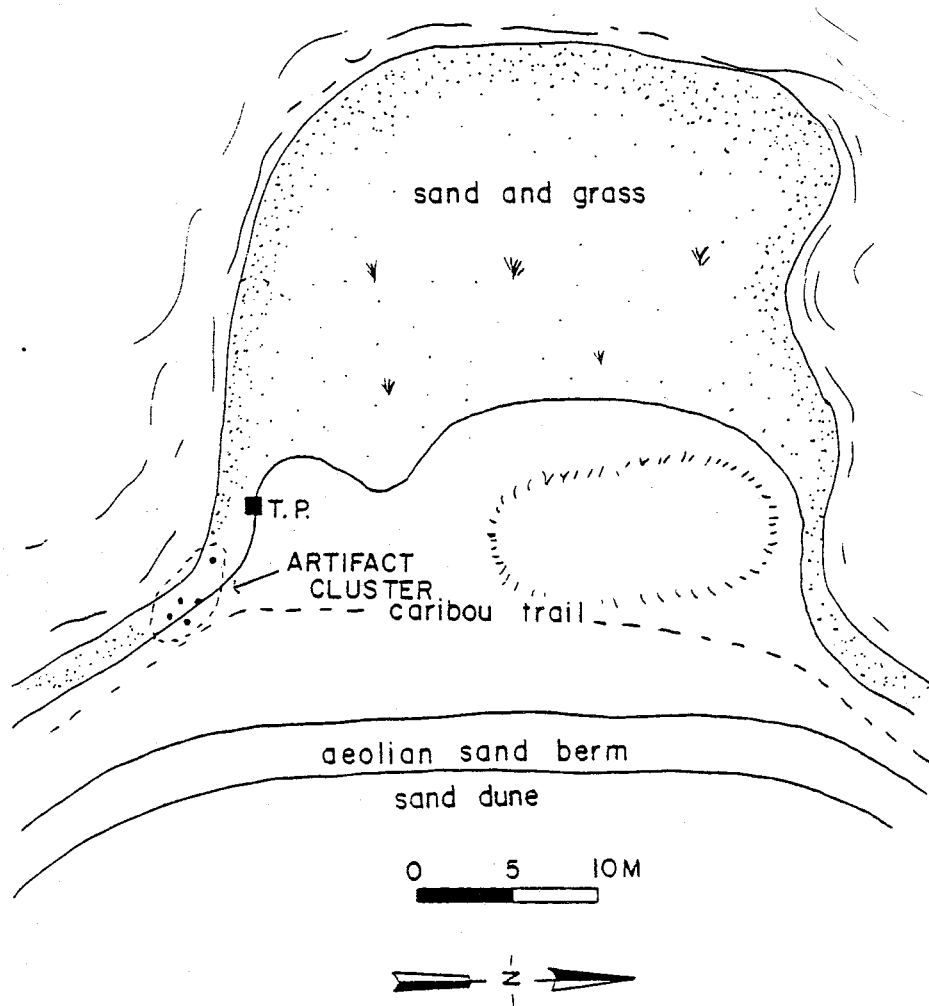


Figure 21

ing the terrace. Douglas Anderson (personal communication) has tentatively compared the piece to Choris specimens. This association is entirely likely. A very similar specimen, labeled a spear point, is illustrated by Giddings (1964:235) for the Denbigh Flint Complex. He states further that it resembles a specific plainview form. Similar specimens exist in the Norton complex at Iyatayet (Giddings 1964: Pl. 51 4, 8). "These are identified as "large, bifaced points, possibly hafted as knives...remarkably suggestive of similarly shaped points found repeatedly in sites of probable early age in the interior of Alaska and Northern Canada" (1964:165). The Denbigh specimen shows very close similarities to our specimen. Thus, the item is classified as an element of the Denbigh phase of the Arctic Small Tool tradition. The fact that both are edge ground, basally thinned, and made of "jasper" supports this decision. Nevertheless, it should be noted that this form could occur throughout the Arctic Small Tool tradition. The attributes of the type, if it does in fact occur in the Choris and Norton phases, are not as well defined as for the Denbigh phase. Further work is needed to clarify this issue. A test pit dug on top of the terrace in the vicinity of the piece did not reveal any other cultural material.

#### Discussion

TES-012 appears to be a hunting lookout and perhaps a game processing site. The nature of the material and its questionable provenience do not allow for expanding on this scenario. Further work is needed at the site to determine the distribution of material and to pin down cultural affiliation. The site is tentatively assigned to the Denbigh phase of the Arctic Small Tool tradition.

<u>Catalog #</u>	<u>Description</u>
UA78-222-1	Miscellaneous Knife
UA78-222-2	Projectile Point

#### TES-013

Location: Sec. 30, T.13N., R.6W., Umiat Meridian  
UTM 5/480220/7815600

Class: I

#### Location and Setting

TES-013 consists of an isolated worked bear tooth found in a blowout on top of a large sand dune bordering the south shore of Teshekpuk Lake. The dune lies along the shore of the large backset forming the southcentral section of the lake. It was approximately 10 m to 12 m in height above the lakeshore. The blowout on which the artifact was found was substantially lower in elevation, about 10 m above the Teshekpuk Lake shore. The dune was sparsely vegetated with clumps of willow and assorted grasses. The beach below the steep face is essentially a mud flat covered in places with small patches of grass-like vegetation (sedge?). The beach appears to be submerged to the dune base during high water

periods. It is possible that the area is also inundated when strong north-east winds blow water onto the beach. This condition, in fact, occurred when the survey team was at site TES-014, although the wind in that case was from the west.

#### Site Information

A sawn and drilled bear tooth (Fig. 22) was located on the surface of the blowout next to what has been tentatively identified as pieces of hematite or iron oxide. It is questionable whether the two are related, as other pieces of the mineral were found elsewhere over the dune. The material near the bear tooth seemed to be unusually concentrated, although perhaps dune erosion is responsible for the proximity of the pieces. The materials appear to be a lag deposit left after deflation of this portion of the dune. The tooth appears to be the maxillary canine of a grizzly bear. The sides of the root, parallel to the curvature of the tooth, have been sawn and ground flat. Two holes have been drilled into the tooth through the two planed sides. Another hole has been drilled at the top of the root, perpendicular to the other two holes. The tooth is approximately 5 cm in length. Several cracked caribou bones were found distributed along the blowout and at the base of the dune.

#### Discussion

The bear canine found at TES-013 can be assigned to the late prehistoric or early historic period and is likely an element of Eskimo affiliation. This is based primarily on the fact that the piece was apparently worked and sawn with metal tools. A bear tooth pendant has been illustrated by Giddings (1952:Pl. IV 13) for Ambler Island and Giddings and Anderson (n.d.:Pl. 85 2-3) for Western Thule beaches at Cape Krusenstern. Larsen and Rainey (1948, Pl. 95: No. 10) illustrate a perforated polar bear tooth for Tigara. Perforated fox canines are illustrated in Hall (1971:Pl. 7 11-12) for Kangiguksuk. As mentioned earlier, it is doubtful that the hematite is related to the tooth. If it is, perhaps the remains of a medicine or charm bag could be suggested. The cracked caribou bones may not be related to human activities in the area. The pieces were too few in number and too fragmentary to draw any inferences.

<u>Catalog #</u>	<u>Description</u>
UA78-223-1	Bear Tooth Pendant
UA78-223-2	Hematite Fragment

TES-014

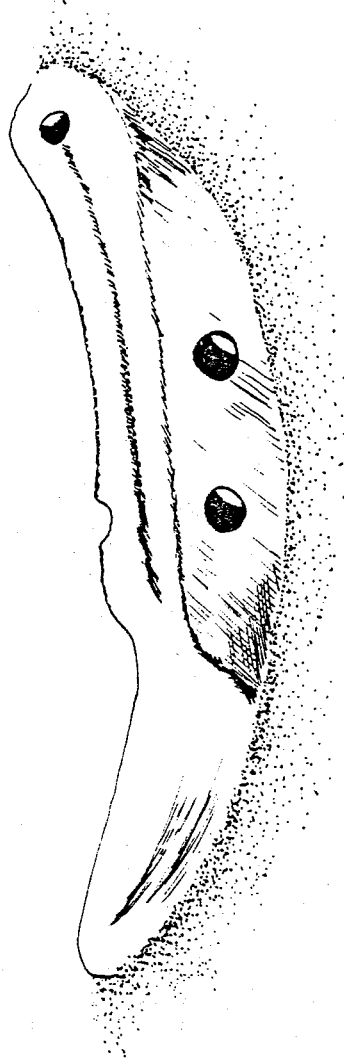
Location: Sec. 28, T.13N., R.6W., Umiat Meridian  
UTM 5/483180/7816950

Class: IV

#### Location and Setting

TES-014 is a large multicomponent site along the southern shore of Teshek-puk Lake. Cultural materials were found scattered over the surface of an

TES 013



0 1 2 CENTIMETERS

Figure 22

extensive beach or sand flat near the base of an eroding, northeast to southwest oriented dune. The site is located along the eastern side of the large backset forming the southcentral sector of the lake. The beach is about 75 m in width and several hundred meters in length. It is sparsely vegetated with assorted grasses. A large portion of the beach becomes inundated with water when strong winds blow from the west pushing waves over the beach surface. The beach is also temporarily covered during high water periods in the spring. The beach, near the base of the dune, is littered with large chunks of sod and peat which have fallen away from the upper margin of the dune. The sandy face of the dune is subjected to severe wind erosion. Westerly winds have a tendency to blow large amounts of sand onto the vegetated top. The vegetation on the flat top of the dune consists primarily of grasses, moss, lichens, a few tussocks, and other small, miscellaneous tundra plants. The dune face is approximately 10 m to 12 m in height. A small drainage enters Teshekpuk Lake approximately 0.5 km south of TES-014 after flowing just east of the site. It is not known whether the cultural materials were originally discarded or abandoned on the beach at the dune base or whether they eroded out from along the top of the dune.

#### Site Information

Cultural material observed at site TES-014 include microblades, an obsidian point base, a bullet, a biface segment, a possible projectile point fragment, several pieces of pottery, a possible arrow shaft base, quartzite hammerstone debitage, a section of walrus ivory, cracked caribou bone, and assorted flakes of brown, tan, grey, and black CCS. A 55-gallon drum, snowmobile parts and a No. 1 Victor animal trap were located in the area on top of the dune, indicating recent Eskimo use of the site. The materials observed on the beach were distributed in an area measuring roughly 80 m by 40 m oriented to the longitudinal axis of the dune face. Other materials, particularly bone fragments, could be found in the shallow water offshore. Two flakes, one of which was utilized, were collected from the beach by a USGS archeologist visiting the site, but their provenience is unknown. The microblades are both medial sections. Specimen UA78-224-8 (Pl. 34 78; v.4:198) is made of black CCS. No use wear was noted. Specimen UA78-224-7 (Pl. 34 69; v.4:198) is made of grey CCS. It exhibits discontinuous nibbling along both lateral margins, probably the result of contact with beach materials. The biface segment (UA78-224-10; Pl. 2 16; v.4:15) is a medial section of what may be a late prehistoric or early historic period knife or lance blade. It is made on a green grey piece of CCS. The piece has been snapped at both ends and is biconvex in transverse and longitudinal cross section. Facial flaking is generally random. Some sections of the surface had apparently presented problems in thinning and could have led to the discarding of the specimen. The sides are parallel. This piece may have broken during production.

A worked antler piece (UA78-224-4, Pl. 43 5; v.4:247), perhaps an arrow shaft base, was collected. It is subovate in transverse section. The proximal end is notched slightly. The distal end has been carved to form a point. The surface is polished and there is a groove cut longitudinally in one side. The piece may be the residue of a blank fashioned into a tool or implement. The pottery (UA78-224-11, 12; v.4:280) is made with a

fiber and gravel temper, probably by the paddle and anvil technique. The surface of the sherds is uneven, but the interior wall may have been smoothed. Specimen UA78-224-12 has a flat rim with an interior and exterior lip, looking in cross section like a modified "T". The gravel temper averages 2 mm to 3 mm in diameter, with the largest observed at 4 mm diameter. No decorative elements were noted. The combined attributes suggest this crude pottery is a late prehistoric or early historic type classifiable as "Barrow plainware" (Griffin and Wilmeth 1964:271-303; Stanford 1976:57; Ford 1959:201 and Giddings 1952:102).

A lead rifle bullet was also located on the site (UA78-224-6; Pl. 55 5; v.4:274). The shell was for use in a .44 caliber weapon. The bullet is solid. Two grooves (cannclures), which function to hold the bullet to the cartridge, encircle the base. The specimen is identical to bullets in Winchester .44 centerfire cartridges. The element dates from the mid-nineteenth century.

Specimen (UA78-224-9; Pl. 1 9; v.4:6) is the corner to a projectile point or a section to a weapon sideblade. It is made of dark grey CCS. The fragment has been snapped on one side. This piece evidences nibbling and crushing along the two intact margins and along a portion of the snapped edge. The piece is tentatively placed in the Arctic Small Tool tradition, although the exact phase is unknown. The specimen may be the corner of a Denbigh phase harpoon point (Giddings 1964:Pl. 71-a). The microblades were within several meters of this fragment, also suggesting a possible Denbigh affiliation.

The last item is a point base (UA78-224-1; Pl. 1 24; v.4:11) of translucent, smokey colored obsidian. The piece has been snapped toward the distal end. Facial flaking appears to be random, with secondary bifacial retouch of the lateral margins and portions of the base, i.e., bevelling. The sides of the base are parallel. The base is concave, with relatively straight margins, giving the concavity a triangular look. It also has distinct basal ears. The concavity and lateral margins are heavily ground, resulting in flattened edges. The base has been thinned by the removal, on each face, of large channel flakes ("flutes") struck from the basal margin. No "nipple" is present. The specimens are almost identical to Batza Tena types illustrated by Clark and Clark (1975:Fig. 1 and Fig. 2; also Clark 1972; 1974), and those described for the Putu site by Alexander (1974, Cook 1970). These sites are thought to date anywhere from 8,000 to over 10,000 B.P. (Clark and Clark 1975:33-34). Dr. Herbert Alexander (personal communication) has a date of approximately 11,450 B.P. on charcoal from a hearth at the Putu site, supplementing his earlier date of 8,450±130 B.P. based upon the soil surrounding the Paleo-Indian occupation (Clark and Clark 1975:34).

The quartzite pieces consist of relatively large sections of cobbles which had been cracked, presumably by being battered on bone, to extract the bone marrow. A number of these fragments were scattered around the north section of the beach. The biface fragment, several miscellaneous flakes, cracked caribou bones and a caribou skull fragment were in the same general area. Remains of an old willow thicket were close by. The microblades, point base fragments, pottery sherds, antler fragment, and

lead bullet were found in an area measuring roughly 30 m by 5 m in the site's southern section (as defined by the distribution of material on the beach). A few miscellaneous flakes and bone fragments were scattered in between. It should be added that there was evidence for three tent rings (based on the presence of several pegs stuck vertically in the ground) on the north bank at the mouth of the creek entering Teshekpuk Lake about .5 km south of site TES-014. This site is historic in nature and probably Traditional Land Use Site No. 33 listed for the Nuiqsut/Tasikpak Traditional Land Use Inventory (North Slope Borough 1976).

### Discussion

TES-014 is a multicomponent site showing evidence of use from Paleo-Arctic times to the present. It is postulated that elements of the American Paleo-Arctic tradition, Denbigh phase of the Arctic Small Tool tradition, the Northern Maritime tradition, and the modern Eskimo tradition are present. The site appears to have been used for a considerable period of time. The major difficulty is the lack of original provenience for the artifacts. Further testing is necessary at TES-014 to determine whether other material may exist on top of the dune, or whether a paleo-sol (and hopefully artifacts) can be isolated at the base. It is conceivable that the area at the base of the dune was used to advantage during some period, particularly since it is to the lee for northeasterly winds. It is also close to the water. The top of the dune also has its advantages, particularly as a lookout for game. Some of the earlier materials could have been associated with an activity area bordering the lake (?) before the area was covered with eolian sand. Carter and Robinson (1978) have dated willows from near the bottom of a similar dune on Kealok Creek, several kilometers to the east of TES-014, at about 11,000 years B.P. Tests need to be made at the bottom of the dune face, along the top of the dune, and along the beach. Hopefully materials can be isolated in a datable context. It is important to note that artifacts collected from the site, particularly the lithics, did not show any extensive wear due to water rounding. The material has apparently been very recently exposed on the beach. (Note: Extensive surface collections of materials and limited tests were made at site TES-014 during June 1979. Results of this research can be found in Hall (1979, Appendix E).

<u>Catalog #</u>	<u>Description</u>
UA78-224-1	Projectile Point
UA78-224-2	Utilized Flake
UA78-224-3	Nonutilized Flake
UA78-224-4	Antler Arrowshaft Fragment
UA78-224-5	Pottery Fragment
UA78-224-6	Bullet
UA78-224-7	Microblade
UA78-224-8	Microblade
UA78-224-9	Projectile Point
UA78-224-10	Projectile Point or Knife Fragment
UA78-224-11	Pottery Fragments
UA78-224-12	Pottery Fragments

TES-015

Location: Sec, 15, T.13N., R.7W., Umat Meridian  
UTM 5/475480/7812580

Class: I

#### Location and Setting

TES-015 consists of several dog sled parts located along the southcentral shore of Teshekpuk Lake. The pieces were found several centimeters below the surface on a stable terrace covered with sedge, willow and tussock vegetation. A sandy beach (a few meters wide) lies below the bank on which the materials were found. The bank is approximately 1 m in height above the beach and subject to water erosion. Several large segments of sod have slumped toward the beach. A small reclaimed pond lies about 20 m inland. To the west is a sand spit or point which is the remnant of an old lakeshore. The lake has been captured by Teshekpuk Lake. A major portion of the original lake is still distinguishable to the west. The view from the site is restricted to the low-lying lands to the south and west.

#### Site Information

The cultural materials were found when a worked, wooden kayak bow piece was discovered protruding from the vegetative cover. The area was subsequently excavated revealing three sled shoes of bone lying parallel to one another in an area measuring approximately 1 m by .30 m. The wood piece was lying on top of the sled shoes. The sled shoes are believed to be made of whale bone (rib?). They (UA78-225-1, 2, and 3; Pl. 67 2, 3, 4; v.4:217, 218, 211) are rectangular in cross section and outline. Specimen UA78-225-1 has a groove carved at one end and a V-shaped groove cut in the opposite end. A hole has been drilled from edge to edge near the grooved portion of the shoe. Five holes have been drilled bidirectionally along the longitudinal axis. Specimen UA78-225-2 has one squared off end. The other end is pointed or triangular. Seven holes have been drilled bidirectionally along the longitudinal axis. A hole has also been drilled bidirectionally through the side approximately 35 cm from the pointed tip. One surface is highly polished, presumably from use. Specimen UA78-225-3 is broken at one end. The opposite end has a V-shaped cut which can receive the pointed or "male" end of UA78-225-2. The runner has ten holes drilled along the longitudinal axis. The holes appear to be straight, that is, drilled from one direction. They are ovate in shape. The piece also exhibits an uneven surface polish presumably resulting from use.

The wooden piece (UA78-225-4, 5; Pl. 62 1; v.4:256, 254) is supposedly a sled platform piece or a kayak rib (Hall 1971:89; Pl. 6 2, 6; 33). It could also be a kayak bow piece (Nelson 1971, Pl. LXXVIII 22-25), although this remains to be demonstrated. The piece has been shaped by carving or cutting, and has five holes drilled in the side, one of which has a peg remnant stuck in it. Most of the holes are drilled along the medial line of the side, although one has been drilled close to one edge. The piece is



roughly L-shaped. A hole has also been drilled in the end of the shorter section of the "L", along the longitudinal axis. An interesting note is that Hall (1971) also found his sled specimens in a cache.

#### Discussion

The sled shoes and worked-wood item comprising site TES-015 can be interpreted in various ways. The lace may mark the remains of a sled repair operation. One sled shoe segment appeared to have been broken at one end, and a peg was present in the wooden brace section. Taken together, the pieces comprise a good portion of one runner to a sled. Two pieces seem to fit with one another. This explanation is quite reasonable. It assumes that spare parts, in this case shoes, and perhaps even a stanchion segment, were carried aboard the sled. Alternative explanations are that the materials represent either a cache of repair parts, or a bundle of parts lost from a sled. It should be remembered that two of the runners showed what has been interpreted as use wear. Also, the pieces were found stacked in situ. Both of these pieces of information tend to support the first explanation. Of course, the scenario would have to be modified somewhat if the wooden object was a rib or brace to a kayak. Hall (1971) discusses this problem in some detail, arriving at the conclusion that his specimens, similar to UA78-225-4, 5, are sled platform parts. As to cultural affiliation, the sled pieces are being assigned to the late prehistoric or early historic period based principally on the survival of the wood. Stone tools were apparently used to drill the holes in the pieces (i.e., the holes were bidirectional, generally irregular in shape, and varied slightly in diameter). Since the shoes are made of whale bone and were found in an area very close to the coast, a coastal Eskimo affiliation is posited. Interior Eskimos are more likely to build their runners of caribou antler, although this fact is in no way intended to be conclusive, (Campbell 1962). It is realized that materials used for sled shoes (could be) determined more by resources at hand, than solely by group preference. However, it is suspected that both preference and availability play an important role relative to the distribution of antler and whale bone sled shoes in Northern Alaska over time.

<u>Catalog #</u>	<u>Description</u>
UA78-225-1	Sled Runner
UA78-225-2	Sled Runner
UA78-225-3	Sled Runner
UA78-225-4	Wood Sled Part
UA78-225-5	Wood Sled Part

TES-016

Location: Sec. 15, T.13N., R.7W., Umiat Meridian  
UTM 5/475790/7819000

Class: I

#### Location and Setting

TES-016 consists of an isolated worked bone piece located on a sandy beach in the southwest Teshekpuk Lake area. The piece was found on the east-

ern shore of a captured lake just west of the large backset forming the southcentral sector of Teshekpuk Lake. The beach is approximately 10 m wide and ends abruptly at a tussock covered bank about 2 m in height, bordering the lake. A flat, low-lying tundra meadow with low-centered polygons, essentially the basin of an old lake, extends to the east beyond the bank. The bank has slumped in places due to the effects of water erosion. Several ponds still exist in this area. The beach is composed primarily of loose, small gravels with sparse patches and clumps of grass growing along two identifiable strand lines.

#### Site Information

The isolated artifact consists of a bone knife handle located on the beach surface, approximately 2 m from the active water line. The knife handle (UA78-226-1, Pl. 52 2; v.4:237) was made of antler. The handle is generally rectangular in outline, and bi-plano in transverse and longitudinal cross section. The piece tapers in thickness from the blade to the butt end. The butt of the handle has been crudely squared off and two small holes have been drilled bidirectionally through the top of the piece. The handle flares somewhat toward the other end and is slotted for receiving a metal blade. The slot is a thin, rectangular opening. The blade is also concave, with the margins slightly bevelled. The concavity is triangular in shape. The piece appears to have been manufactured by carving. All surfaces of the piece are smooth and polished. The holes opposite the blade end are presumably for the attachment of a carrying thong. The specimen is classified as an element of late prehistoric Eskimo material culture. Similar examples are illustrated by Giddings (1952:Pl. IV 2) for the Ambler Island period which dates between 1730 and 1760 A.D., and Giddings and Anderson (n.d.:Pl. 14 7) for a recent period house at Choris peninsula. No other knife handles reviewed in the literature show as close a correspondence.

#### Discussion

TES-016 could be related to site TES-017, a site with sod house structures, located several kilometers south at the far end of the captured lake. No evidence was found supporting the contention that an activity area once existed near where the knife handle was found, although this is not impossible. The piece may simply have been lost or discarded, or it may have been ice-rafted from among the numerous material remains scattered along the shore near site TES-017. Little else can be added.

<u>Catalog #</u>	<u>Description</u>
UA78-226-1	Antler Knife Handle

TES-017 (Horse Head Site)

Location: Sec. 27, T.13N., R.7W., Umiat Meridian  
UTM 5/472790/7816830

Class: IV

Location and Setting

TES-017 consists of several sod structure remains and assorted cultural materials located on top of a high cutbank bordering the southern shore of Teshekpuk Lake (Fig. 23). The site is at the southern end of a small captured lake just west of the large backset forming the southcentral section of Teshekpuk Lake. The site is just east of a small creek which drains northeasterly into the lake. The stream drains an inland lake located approximately 1 km south. The cut bank is roughly 2 m in height and is faced by large sod segments which have sloughed from the top edge. The area on top of the bank is characterized by large frost cracks crisscrossing a relatively flat meadow vegetated with tussocks, grasses, very small willows and other assorted tundra vegetation. The area appears to consist of low-centered and high-centered polygons. The area below the bank is an extensive mud or sand flat. The flat is partially vegetated with grass, particularly close to the bottom of the bank. Approximately 15 animal trails cut along the top of the bank in the site vicinity. Aerial photographs of the area reveal the site is located on a section of high ground bordering several old reclaimed lake beds. The lake beds have been filling for some time. It is not suggested that the site was oriented specifically to these land forms; although, given the rapid rate at which these tundra lakes fill, it is a possibility. The view from the site is not extensive.

Site Information

The site consists of the remains of two identifiable sod houses, a possible sod tent ring, and two possible storage cellars, (Fig. 23). The barrow pit for sod house construction is plainly visible as is the barrow pit for one of the suspected storage structures. Some of the structures are eroding into the lake. The remains of a collapsed wood structure (also sloughing down the cutbank) are located a few hundred meters southeast of the sod structures. The cut and hewn wood, some of which was mortised and tenoned, may be the remains of Jonah Leavitt's cabin (Traditional Land Use Inventory, North Slope Borough; Nuiqsut/Tasipak 1976).

The sandy beach or mud flat to the north is littered with numerous pieces of bone and cut antler. Tin cans and one muskox horn core were also noted. Cultural material found on top of the bank near the sod structures includes 5-gallon metal cans, a large porcelain pot or pail, metal fragments, tin cans, a canine skull, a Dietz No. 2 Blizzard (New York, U.S.A.) kerosene or oil lamp, and a number of cracked and cut caribou bones. The canine skull appears to belong to a dog and not a wolf. It was found about 1 m south of sod structure 1. The lamp was found next to sod structure 3. The mandible and skull of a horse lay on the beach, approximately 100 m east of the wooden structural remains. The bones

# TES 017 HORSEHEAD SITE

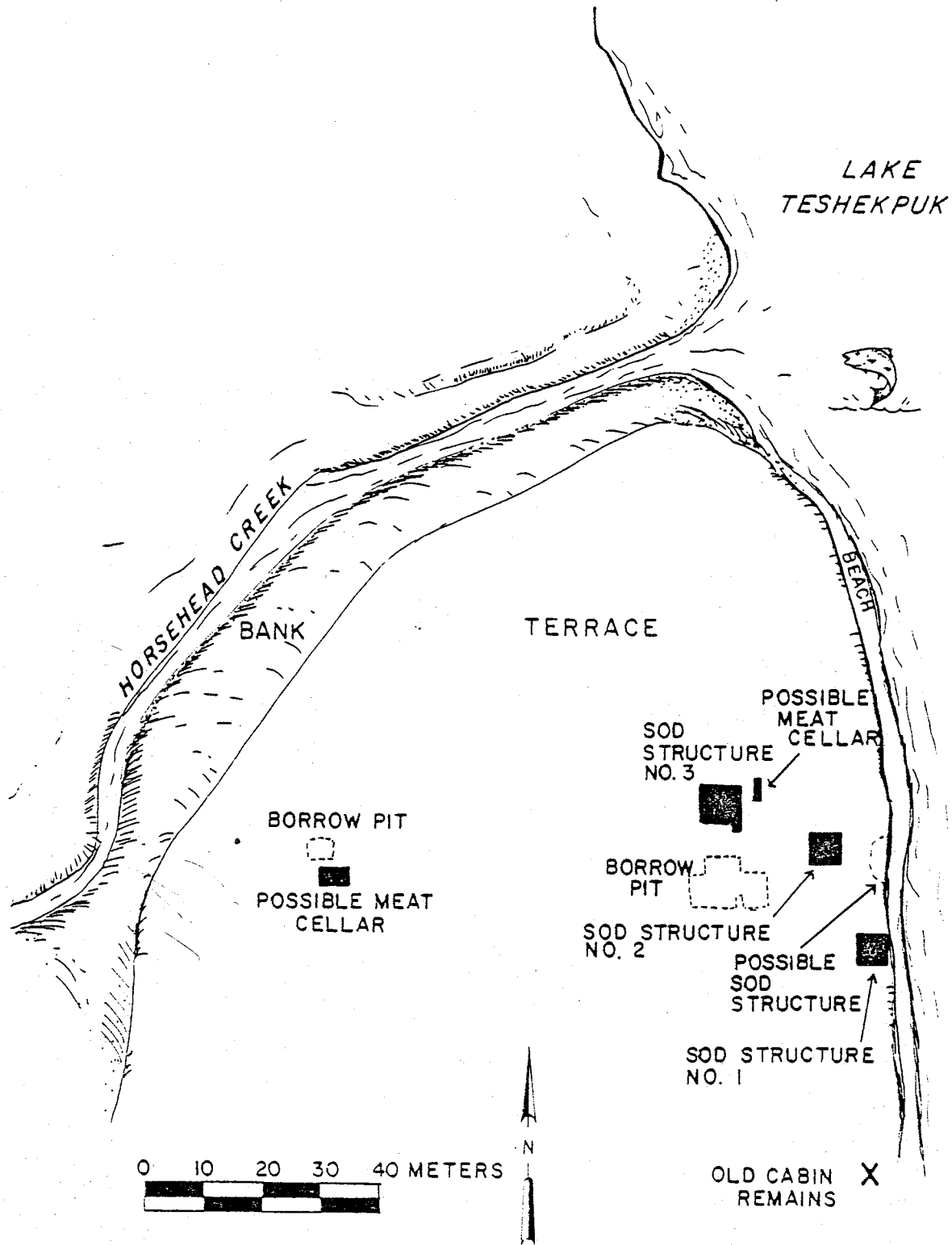


Figure 23

appear to be the remains of a Pleistocene horse (Dr. Dale Guthrie: personal communication). Sod structure 1, to the south, has partially eroded into the lake. The remains indicate that it was rectangular in shape and oriented roughly east-west. It is thought to have measured about 5 m in length and 4 m in width, given the sod block distribution. The feature is thought to be a sod house. The entrance may have been located at the structure's east end. A plank was lying near the west side of the feature. A wood pole, apparently all that remains of a corner post to the structure, was found set vertically in the ground in the southeast corner.

Sod structure 2 is an irregularly shaped group of sod blocks lying about 15 m west of sod structure 1. The blocks could represent the ruins of an old sod house, or they could be the remains of sod blocks used to anchor the sides of a skin or canvas tent. It is difficult to tell whether the sod pattern was originally circular or square, so the issue cannot be resolved. The sod clumps define an area roughly 3 m in diameter. The feature does not resemble sod structures 1 and 3. This may be an important difference. A worked wood object which could be a tent peg was found lying on the surface, just inside the area defined by the sod remains. Sod structure 3 appears to be the remains of another sod house. This feature was located about 10 m south and west of sod structure 2. It measured approximately 4 m on a side, and had what may be a sleeping bench area, measuring 1 m by 3 m, outlined along the western side. The likely remains of an entranceway are defined along the east side and extend for over a meter from the east wall. It is oriented generally to the southeast, as is the suspected entrance to sod structure 1. The remains of a wooden pole protrude from the ground in the southeastern corner. Another piece of wood, a wide board, rises vertically from the ground along the south wall about 1 m west of the pole segment. The Dietz lamp was found about a meter north of this structure. The remains of a small rectangular sod structure lie a few meters northeast of sod structure 3. Another similar structure is located roughly 60 m southwest of the main group of sod remains. These rectangular structures measure approximately 1 m by 2 m. One is oriented toward the southwest, the other toward the southeast. An upright pole remnant was found protruding from the northeast corner of the structure located 60 m distant. This structure also had a depression, or barrow pit, along its west side where sod had been cut to complete construction. These features may be "meat cellars." The remains of what may be another sod house were found eroding down the cutbank just east of sod structure 2. This structure is deformed and it is difficult to determine what it might have been. The majority of sod structures discussed were defined in outline by sod wall remains varying in height from 50 cm to 75 cm. The barrow pit for sod blocks used in the building of the main group of structures lies just southeast of sod structure 3.

#### Discussion

TES-017 is classified as an Eskimo camp of the protohistoric and/or the historic period. It is suspected that the camp was used just after the turn of the century, and perhaps as late as 1940. The site, based upon the presence of sod house remains was probably used year round. A tent camp was likely established during the summer and fall months for fishing and caribou hunting. The abundant caribou remains indicate the import-

ance of this resource. This site appears to be strategically located for intercepting herds of caribou as they move around the lake in a southerly or northerly direction. The trails running near the site were the most extensive seen during the summer's survey. It is realized that caribou movement patterns in the past are difficult if not impossible to document, nevertheless, the area near site TES-017 was an important route at some time in the recent past. It is possible that fishing was also a major focus, particularly with the small creek entering the lake about 100 m west of the site. Creeks of this type, especially those draining inland lakes, are good fishing areas for grayling. The lake is also reported to contain broad whitefish, lake trout, arctic char, chum salmon, grayling, and least cisco (Sloan 1976; Wilson et al. 1977). The carcasses of two large burbot were observed by the archeological field crew along stream banks in the southwestern sector of the lake. Whitefish would have been preferred by the Eskimo (Murdoch 1892; Wilson et al. 1977).

This site may be Site 32, "Uyagalik", listed in the Nuiqsut/Tasikpak Traditional Land Use Survey (North Slope Borough 1976). The listing states that this site contained the cabin of Jonah Leavitt and various cellar structures. It was also known as a fishing, hunting and camping area. The site would be an excellent candidate for the development and testing of ethnoarcheological models and hypothesis. Some of the individuals who used this camp are reported to be living in Barrow, Alaska, providing an exceptional resource base for these types of studies. The site may also offer important insights into Native adaptations during the early 1900's, perhaps resulting from the depopulation of the arctic caribou herd, and the influence of the American presence in Arctic Alaska (Amsden 1977; Ricciardelli 1953).

#### TES-018

Location: Sec. 30, T.13N., R.7W., Umiat Meridian  
UTM 5/471190/7816000

Class: III

#### Location and Setting

TES-018 is a historic period site which has eroded into Teshekpuk Lake. It was found at the southwestern end of what appears to be a large captured lake located in the southwestern sector of Teshekpuk Lake (Fig. 24). The lake in question is directly south of the southernmost point of the large island in the west side of Teshekpuk Lake. Cultural materials were found scattered over the sandy beach or mud flat which becomes exposed at this end of the lake just after breakup. A permanent beach does not appear to be established and the steep banks along the shore are still subjected to severe water erosion and undercutting. The materials occupying an area measuring roughly 150 m by 40 m, oriented to the base of the cutbank. A large quantity of material was found submerged offshore. Some bone fragments (caribou ?) were located on top of the cutbank, and in sloughed sod chunks at the base. The bone was not extensive, but if it was related to the site it suggests that a major portion of

# TES 018

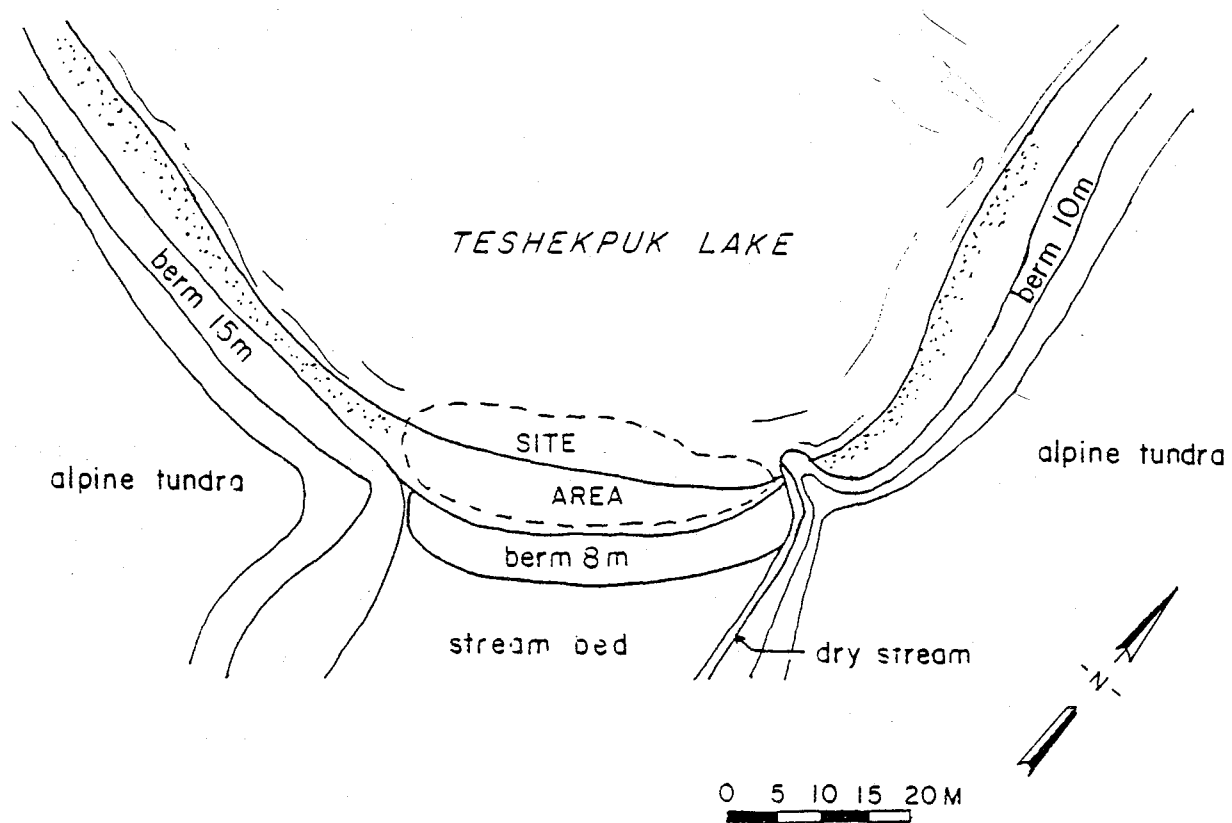


Figure 24

the site has been destroyed. It may be possible that testing on top of the bank may reveal cultural items in situ. The bank near the material distribution is over 3 m high and is actually the bed of a large inland lake which has partially drained into Teshekpuk Lake. Teshekpuk Lake has cut back partially into the northern section of the old lake. The outlet of the lake remnant passes through a small seasonal swale bisecting the cutbank just east of the major concentration of material. The higher ground bordering Teshekpuk Lake to either side of the old lake bed is the bank remnant of the northern shore of the old lake. These banks are 10 m to 15 m in height and afford a good view of surrounding terrain.

#### Site Information

Cultural materials were found scattered over the beach and include large quantities of sawn caribou bone, an iron barrel hoop, various caliber rifle shells, two undrilled whale bone sled runner blanks or preforms, a sea mammal humerus (seal), a  $\frac{1}{2}$ " diameter wood drill or auger bit, assorted tin cans, a green colored glass bottle fragment with applied top (the bottle was made in a two-piece mold), a lead bottle stopper, a bear tooth, two quartz rocks battered at each end, the cranium of either a large dog or a wolf, assorted worked wood, two flakes of CCS, and a metal belt buckle. Five 55-gallon drums were lying in the water or standing along the shore. A muskox skull fragment was also noted on the mud flat. The worked-wood artifact is about 1.2 m long and a few centimeters in width. It is rectangular in shape. The piece is grooved near each end and may be a seine stick. The sardine can is slightly larger than the types available today. It was lead soldered and was labeled (that part which was legible): "Verdeau...Co., Bordeaux, France: Usine de lag...; Produits de Choix; Sardines..., Portugal Superior." The center-fire rifle shells include three 44-70 Winchester cartridges, five .44 Winchester cartridges, one .44 Remington cartridge, and a .30 caliber Winchester cartridge. All shells had been spent. The lithic pieces include an unutilized flake of black CCS and a utilized flake of grey CCS. The grey flake has a small section of cortex along one margin. The piece exhibits continuous nibbling along the right lateral margin and along the left lateral margin of the point at the left distal corner. The piece may have been used as both a scraper and as a chisel or engraving tool.

#### Discussion

TES-018 is classified as an Eskimo Historic Period site, probably used during the early part of the twentieth century. It is not known whether the site was oriented to the draining inland lake, Teshekpuk Lake, or both. Hunting of large game was a focus as evidenced by the rifle shells and caribou bones, but fishing also appears to have been important. A reliance on prepared European foods is suggested. The presence of a seal femur may indicate that traditional foods were transported to the site. A summer and fall use of the locale is postulated for argument's sake. The flakes of CCS could represent a late prehistoric component, but the presence of lithics would not be inconsistent with other items in the assemblage or with the tentative temporal placement of TES-018. Further work in the site area may resolve this issue, although the prospect is doubtful of any material remaining in context. The site should be investigated, nonethe-



less. Its importance seems to be in the contribution it could make to the identification of changes occurring in Eskimo material culture during the early historic period. Granted, this orientation would be materialistic in focus, but this can be justified given the site's condition. The analysis of manufactured items present in the assemblage may lend insight into patterns of trade and the Eskimo response to available Euro-American material culture. This site, in conjunction with TES-017 and TES-019, may provide an excellent resource base for studying change in Eskimo settlement patterning and subsistence strategies (Amsden 1977). TES-018 may be the site of Alagii recorded in the Nuiqsut/Tasikpak Traditional Land Use Inventory (North Slope Borough 1976). This site was recorded as containing ruins or sod houses and was a hunting, fishing, and camping area.

#### TES-019

Location: Sec. 32, T.14N., R.8W., Umiat Meridian  
UTM 5/461740/7823990

Class: IV

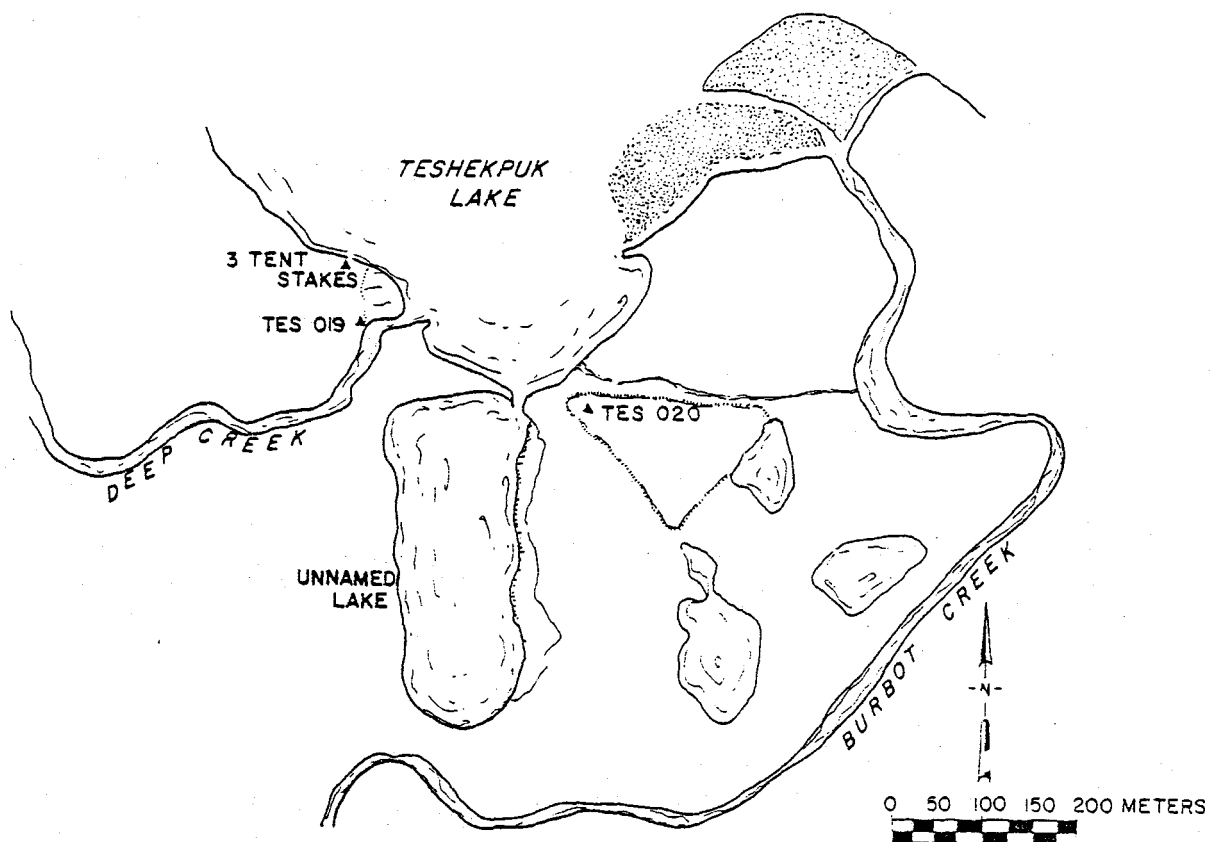
#### Location and Setting

TES-019 is historic period campsite located at the mouth of a small stream flowing north into the southwestern section of Teshekpuk Lake (Fig. 25). The stream is the westernmost of two major drainage channels entering the lake in this sector. The site is on the west bank of the stream. The bank is stable and well drained, although low-centered polygons, some water filled, can be found a few meters away from the stream bank. Vegetation consists primarily of sedge, grasses, and small willows. The area is crisscrossed occasionally with frost cracks which may be as much as 25 cm to 30 cm deep. The cultural features and materials are within several meters of the bank. This section was elevated about 2 m above the present water level, and was one of the highest sections of ground in the immediate area. A slight terrace, about 50 cm below the site level, exists just north of the site toward the mouth of the stream. The stream is partially blocked at its mouth by silt and water plant growth, evidence of the early stages of reclamation. The stream is very deep and would appear to offer excellent fishing possibilities. The skeleton of a burbot measuring almost 76 cm in length was found near the mouth of the stream. The view of the surrounding terrain is not extensive. TES-020 lies approximately 1 km southeast.

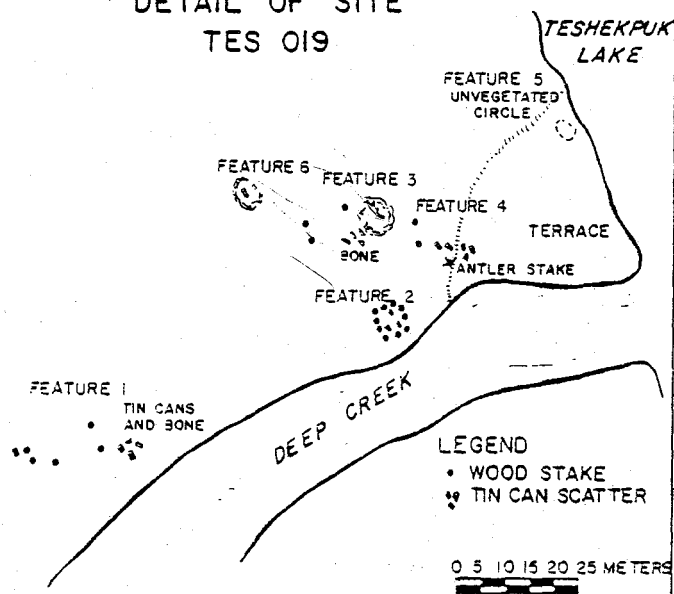
#### Site Information

The site consists of the remains of three or more tent ring structures and assorted cultural litter, including tin cans and cracked and cut caribou bones. (Fig. 25) The sod appears to have overgrown many items. A 5-gallon can labeled "Associated Oil Company," and a small tobacco tin labeled "Granger Rough Cut Tobacco, Myer's Tobacco Company," were seen. A number of cans looked like old coffee tins. Another predominate type was of the shape and size suggesting a condensed milk can. Most of the cans were heavily rusted. A bear mandible was also found. The tip of

# TES 019 and TES 020



## DETAIL OF SITE TES 019



## DETAIL OF SITE TES 020

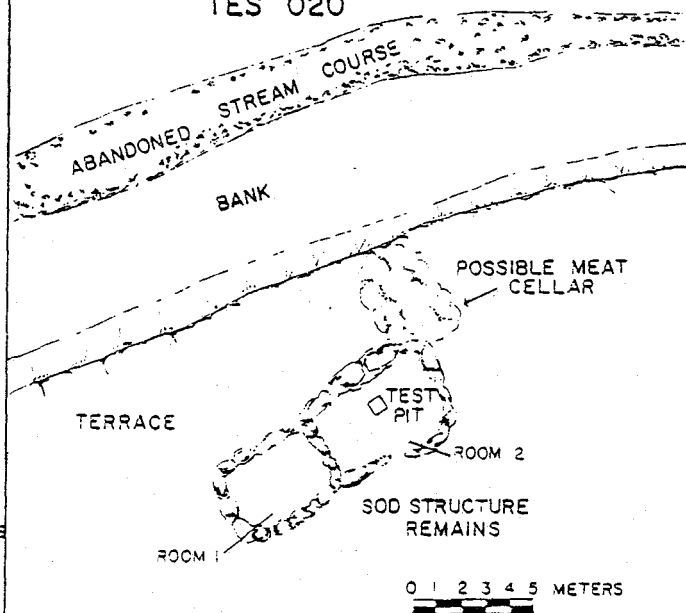


Figure 25

the canine had been intentionally chopped, although a good portion of the tooth still remained. The tent ring structures were identified by observing the patterned arrangement of carved, wooden stakes set vertically in the ground, and, in one case, the circular arrangement of sod blocks. Some stakes did not reflect any pattern and it was difficult to tell whether they could be associated with tent structures, or if they were dog tie-downs, braces to drying racks, or something else. The remains occupied an area measuring roughly 100 m north-south by 30 m east-west.

Feature 1, about 50 m south of the major group, consists of wooden stakes occupying an area about 10 m in diameter. The stakes only roughly approximate a semicircle. The Granger tobacco can was near the stakes. Just north of the stakes was a concentration, measuring about 3 m in diameter, containing cut and cracked caribou bones and tin cans. The caribou bone did not appear to have been cut with a saw. Approximately 50 m northwest of Feature 1 is Feature 2. Both Features 1 and 2 are along the bank of the stream. Feature 2 consists of a rectangle of wooden stakes defining an area measuring approximately 2 m by 3 m. Many cans were located inside this defined area including the "condensed milk can" type and square cans resembling meat tins. There were also a few rectangular cans about 1 pint in size. The cans had a cap near one end of the top and may be oil cans. The 5-gallon gas can was found just northwest of Feature 2. Feature 3 is about 10 m to 15 m west of Feature 2 is a well-defined, raised sod ring measuring approximately 2.5 m in diameter. A section of caribou antler was found inside this ring, and assorted tin cans and bones surround it. Just north of Features 2 and 3, along the margin of the stream bank and the small terrace, is a scatter of tin cans and three stakes set vertically in the ground, Feature 4. One of the stakes is made out of a section of caribou antler. This feature may not have been associated with a tent ring structure. Another possible archaeological feature, Feature 5, exists on the lower terrace about 30 m to the north of Feature 4. This feature is nothing more than a relatively unvegetated circle measuring about 5 m in diameter. Feature 6 is approximately 20 m west of Feature 3 consists of a possible ring of sod associated with several wooden stakes. A tin can was located near the side of the ring; the stakes are to the north. It is questionable whether a structure was set up here. Another possible tent ring structure was found along the shore of Teshekpuk Lake, over 200 m northwest of the mouth of the creek. Three carved pegs were found set vertically in the ground about 2 m apart, and a caribou rib bone was found protruding from the cutbank within 2 m of the stakes. The relationship of this feature with the others along the creek is not known.

#### Discussion

TES-019 is classified as a seasonal Eskimo camp of the historic period and most probably dates to the early 1900's. The wooden stakes set vertically in the ground and the rings of raised sod are interpreted to represent the remains of skin or canvas tents. These structures may correspond to a variation of the Eskimo icelik ("itcellik") discussed by Corbin (1975; 1976). Of course, as mentioned above, some of the stakes may have other functions. The gas cans and other debris seem to place this site securely in the twentieth century, although it is conceivable that it could have been

frequented before then. Only extensive testing can resolve this issue. It is postulated, however, based upon two different ring forms (stakes and sod), that the site was occupied at least two different times. The variation may also reflect a seasonal difference (or lack of wooden tent stakes). It is probably a summer and early fall fishing and hunting site. This speculation is supported both by the site's location and setting, and by recognized Eskimo land use patterns as reflected in the Traditional Land Use Inventory (North Slope Borough 1976). Refer also to reports for sites TES-017, TES-018, TES-020, and TES-021. This site may provide excellent data relating to Eskimo subsistence practices and settlement patterns. An ethnoarcheological approach to the site, tied to the testing of hypothesis generated through the development of behavioral models, might prove worthwhile.

#### TES-020

Location: Sec. 32, T.14N., R.8W., Umiat Meridian  
UTM 5/462590/7823390

Class: IV

#### Location and Setting

TES-020 consists of several sod structures located on top of a well-drained, raised point of land in the southwest Teshekpuk Lake area. It is near the northeast end of a small inland lake which has been captured by Teshekpuk Lake (Fig. 25). The small lake has drained through a breach in its northern bank and is in the process of reclamation. The point of land in question appears to be a terrace remnant or old river levee, roughly triangular in shape and about .5 km in the longest dimension. The landform is approximately 2 m higher than surrounding terrain. A slope of about 45° forms the northern border. The terrain slopes more gently to the south and west. The area is bounded on the west by low-centered polygons and marsh and the unnamed lake mentioned above. It is bordered on the south by two small tundra ponds, and on the north by the old channel of an unnamed drainage now actively flowing about 1 km to the east. This area is principally sedge marsh and tussock meadow. Teshekpuk Lake is roughly .5 km due north. The old channel has silted in, and although it still contains water in places, it is no longer active. The site was at the northwest point of the landform. The area in which the structures are located is vegetated with a variety of tundra plants, including grasses, small willows, moss, and lichens. Some tall grasses are growing in and around the structures. There are a few large frost cracks in the site vicinity, and the area is subject to frost boil activity. The site area commands a good view of surrounding terrain. The view to the southeast is blocked by the relatively higher ground of the terrace. It is believed that the old meander channel to the east was active at the time the site was occupied. Site TES-019 lies a few kilometers to the northwest.

### Site Information

The site consists of the remains of what appear to be two rectangular sod house/rooms lying side by side, and a large meat cellar or storage facility (Fig. 25). No cultural materials were observed on the surface except for a caribou antler protruding from the corner of one sod structure. The structures were well defined by a raised perimeter of sod block remains, averaging about 20 cm in height.

The westernmost room (we will consider the total structure as one unit to simplify description) measures approximately 3.5 m by 5 m, and the easternmost room (room 2) measures approximately 4 m by 6 m. The rooms are oriented longitudinally in an east-west direction, and appear to be directly connected by a common wall. Part of a caribou rack was found protruding from the southeastern corner of room 1. A ground squirrel hole was next to the antler. Room 2 exhibits an opening in the middle of its southern wall which may indicate the location of an entrance. The remains of a passageway were not present. No break could be discerned in the wall connecting the two rooms or houses. A buildup of sod about 50 cm in height exists just to the northeast of room 2. This feature does not appear to be naturally formed and measures roughly 4 m by 3 m in maximum extent. It is suspected that this feature is another sod structure, perhaps a meat cellar or storage facility of some type.

A test pit in the center of room 2 revealed a caribou sacrum and a bird long bone at a depth of approximately 5 cm, and two battered stones at a depth of approximately 20 cm. The test pit hit permafrost at this depth, and what appeared to be sterile soil. The soil at this level exhibited concentric multicolored rings of sand which seem to be evidence of frost boil activity. Just above this level were two dark organic layers, each a few centimeters thick, separated by a thin layer of sandy loam. These layers may represent the living floor and the remains of the roof. If this is the case, enough time has passed to allow a good amount of compaction of the remains to take place. A relatively thick sandy layer lies on top of the upper organic level. This may represent the deposition of loess derived from the sand bar of the old drainage when it was active. The next level, the upper organic horizon, is essentially an intermixture of sand, loam, and roots. If this sequence is correctly interpreted, it supports the investigator's belief that the structures could date as early as the late prehistoric period. Two significant facts support this contention: 1) The barrow pit for construction of the features is no longer visible, and 2) No metal or other debris was visible on the surface. Other Eskimo sites in the area (TES-017 through TES-019) are littered with tin cans and other garbage, and these sites are believed to date to the early 1900's.

### Discussion

The site has been tentatively classified as an Eskimo camp or residence of the late prehistoric or proto-historic period. It is well situated for fishing, taking water fowl or hunting caribou. TES-020 could represent the earliest Eskimo habitation site in the immediate lake area. It is not known whether the structure represents one sod house with two rooms and an associated meat cellar, or two sod houses with a storage facility or out-

building. Whatever the structure, this site offers endless possibilities for archeological study and should receive full protection under the letter of applicable cultural resource laws. Site TES-020 may be associated with Traditional Land Use area No. 29 for the Nuiqsut/Tasikpak area (North Slope Borough 1976). This area is listed on the inventory as a fishing, hunting and camping spot with "cellars".

<u>Catalog #</u>	<u>Description</u>
UA78-227-1	Two Small Cobbles
UA78-227-2	Bone Fragments
UA78-277-3	Sea Mammal Bone Fragments
UA78-277-4	Caribou Vertebrae

#### TES-021

Location: Sec. 32, T.14N., R.8W., Umiat Meridian  
UTM 5/463550/7823780

Class: IV

#### Location and Setting

TES-021 consists of five hearths located along the bank of a large stream draining northeasterly into the southwestern sector of Teshekpuk Lake (Fig. 26). These hearths are within several meters of the eastern bank of the stream. The bank is approximately 1.5 m above the current water level, and is firm and well-drained, vegetated primarily with sedge, moss, lichens, and other small tundra plants. The area is part of a large expanse of low-lying, flat terrain near the mouth of an unnamed drainage. The stream has a deep channel in places and should provide excellent fishing. Grayling were observed in the creek, and a large burbot skeleton was found on the bank about 1 km upstream. The stream has been named Burbot Creek by the survey team. The view is limited in all directions to the relatively flat floodplain of the stream. The site is approximately .5 km from the mouth of the stream. Old meander scars, now nothing more than swales, can be seen to the east. TES-020 is about 1.5 km west.

#### Site Information

The site consists of five identifiable fire pits defined by semirectangular or semicircular piles of sod about 30 cm high (Fig. 26). These sod piles acted at one time as windbreaks for the hearths. The fire pits are spread along the riverbank for a distance of approximately 80 m and are varying distances from one another. Several of the hearths seem to be clustered toward the north end of the site. It should be added that the hearths are generally distributed linearly along the stream bank. Most of the windbreaks face the southwest, although two are slightly oriented SSW. Another windbreak is nothing more than a small pile of sod, which may indicate that the fire pit was at one time completely encircled by sod blocks. Cores taken from the area just to the front of some of the features re-

TES 021

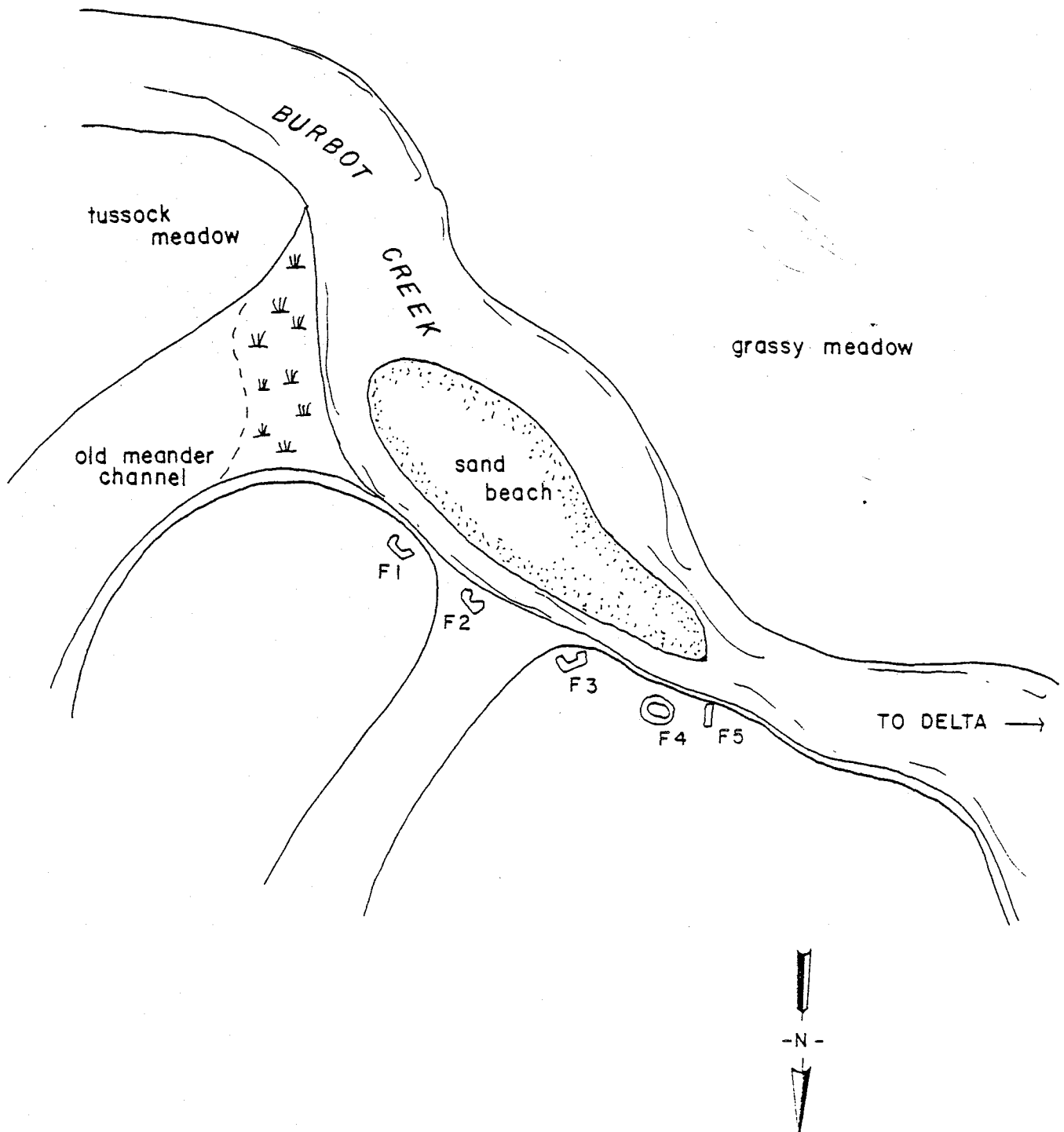


Figure 26

vealed fragments of close-knit sailcloth or canvas, charred willow or alder, and fragments of charred caribou bone. The ash lens in the pits tested measures several centimeters in thickness. No material was collected for dating and the test cores were carefully replaced after they were inspected.

#### Discussion

TES-021 is classified as historic Eskimo hunting camp (caribou bone fragments were observed) and probably also as a fishing camp. Waterfowl may also have been sought. The historic period designation is based upon the presence of the canvas cloth in one of the ash lens. The fire pit windbreaks are oriented in such a way that they effectively block the prevailing northeast winds blowing in the area. The various orientations of the windbreaks could indicate separate episodes of occupation. The fire pits could have served to smoke fish or game, particularly if wooden tripods covered with skins or canvas were constructed over them. The prepared animal parts would be placed inside these structures on racks (Brian Waitkus: personal communication). One major problem with this scenario is the lack of wood in the area. However, the wood could easily have been imported. Ethnographic data will need to be checked to find out if this activity was practiced at fishing and hunting camps in the area. The site is thought to have been used primarily in the summer or early fall.

TES-021 may be related to Traditional Land Use Area No. 29, "Pinguruk," recorded for this area in the Nuiqsut/Tasikpak cultural resource inventory (North Slope Borough 1976). A Traditional Land Use site, near the delta, is recorded as a traditional fishing, hunting and camping spot. Evidence for this traditional Eskimo land use site was located within several hundred meters of site TES-021, near the mouth of the stream. This site consists of several wooden pegs driven vertically into the ground and the remains of at least two caribou (based on observable antler racks). The stakes were set in a rectangular pattern as if used to anchor or tie down a tent. The structure, based upon the pattern of the stakes, would probably have been a wall tent. Several rifle shells were observed on the sandy river delta about .5 km north. The southwestern Teshekpuk Lake area evidences considerable use over extended periods of time. The area is important for its archeological record and as a focus for current Native subsistence practices.



UMI

Umiat

UMI-001

Location: Sec. 5, T.1S., R.1W., Umiat Meridian  
UTM 5/531100/7696500

Class: I

#### Location and Setting

UMI-001 is a small lithic scatter on a pronounced bench or knoll along the southern slope of a hill approximately 3 km northwest of Umiat, Alaska, and 1 km east of Seabee Creek. The bench is approximately 30 m up the hillside from the Colville River floodplain. The sands and stones of this section of the hill appear to have a high iron oxide (?) content giving the face a red cast. The feature can be clearly seen from Umiat, where it looks like a large red knob. The site is above the western edge of the reddish colored area. The upper portion of the hill measures roughly 55 m east-west by 35 m north-south. The bench top is relatively level and denuded of vegetation, although sparse patches of alpine tundra and a few clumps of low shrub willow occur in places. The bench is primarily composed of extremely soft sand and dusty shale and shale stone. A slight swale exists to the rear of the bench before the hill slopes up to the north. Thickets of alder can be found in this low-lying area, with tussocks and assorted willow and alder shrubs covering the slope of the hill. The slope to the south, downhill from the bench, consists of severely eroded, unconsolidated sands and silt. This slope is cut by erosional gullies in which dense thickets of alder and willow are growing. The face of the hill is very irregular, showing evidence of considerable slumping, most likely due to the mechanics of solifluction and erosion resulting in a convoluted and distorted surface. The site commands an excellent view of the Colville River floodplain and contiguous hills to the west, south, and east. The hill blocks the view to the north. Meandering channels of the Colville River once cut quite close to the base of the hill on which this site is located. Site UMI-006 is approximately 4.5 km east.

#### Site Information

The site consists of a widely dispersed lithic scatter containing approximately 10 to 15 flakes of dark grey and black CCS. Some cortical flakes were observed. No utilized flakes or pressure flakes were noted. The material was found eroding down the sandy slope which forms the south face of the bench. Solecki located the site in 1949 (Solecki 1950) at which time he recovered four flakes of black CCS. Two other flakes were removed from the site by Dr. Edwin S. Hall, Jr. and Robert Gal during the summer of 1977. It is quite clear that a good quantity of material once existed at this location. It is suspected that the flakes were at one time situated on top of the bench and have since weathered downslope due to the severe erosion of the feature. Other material can be expected to be found along the downslope section of the hill. No analysis of the lithic debris was conducted by the National Park Service survey team.

## Discussion

The cultural affiliation of site UMI-001 is unascertainable at the present time. The site appears to be prehistoric. Further work at the site and the examination of material collected by Solecki, Hal, and Gal may yet provide some information concerning the site's function or classification. Site UMI-001 corresponds to Site No. 26 as recorded by Ralph S. Solecki in 1949 as noted above. Salient portions of his 1950 article are included below in support of this contention:

"One site (No. 26) was found by the writer during a brief stay at Umiat." (1950:149).

From the Appendix - The sites (1950:153):

"26. Four black chert flakes were recovered on Red Hill, a good lookout station two miles to the northwest of Umiat." (Emphasis added).

We can certainly agree with Solecki that site UMI-001 is a good lookout station. The reduction of lithic material apparently occurred here, but the exact extent and nature of all of the activities taking place is unknown.

### UMI-002

Location: Sec. 26, T.6N., R.2E., Umiat Meridian  
UTM 5/554500/7749200

Class: II

### Location and Setting

UMI-002 is a small flake scatter on the northern end of Sentinel Hill, a large, flat-topped knoll on the Colville River floodplain. Sentinel Hill is approximately 2 km west of the Colville River, about 10 km south of its confluence with the Kogosukruk River. VABM "Sentinel" [51.2m (168') elevation] is on this landform. The hill is primarily covered with tussock vegetation, however, the northern end differs somewhat, being characterized by several large, bare areas of sand and small gravels and relatively sparse patches of alpine tundra vegetation (avens, felt-leaf willows, lupine, etc.). The lithics were scattered along a low bench or terrace remnant at the northern end of the hill. The site commands a good view of the surrounding terrain to the west, north and east, including sections of the Kogosukruk River to the west and the Colville River to the east.

### Site Information

The site consists of 20 or more flakes, primarily of black CCS, distributed upon the surface of the northern end of Sentinel Hill in an area measuring approximately 8 m east-west by 2 m north-south. Some flakes of a medium grey and flakes of a dark green CCS were also observed, as were some pieces of quartz which may have been intentionally broken. Some river

cobbles of poor quality had apparently been tested for knapping at this site. A crescentic-shaped piece of black CCS, measuring approximately 7 cm or 8 cm by 4 cm, was among the debitage. It is reminiscent of an ulu, or side blade for a knife. No apparent utilization was evident on the piece. Small blade-like flake sections were also present, one of which measured approximately 1.30 cm by .70 cm. These flakes may be sections of microblades. One exhibited a distinct platform. No medial segments were observed. Three pieces of weathered, broken bone were located in the general area, the largest being 4 cm in length.

#### Discussion

This site would have functioned as a hunting lookout or a temporary camp for groups traveling upon or along the Colville River. The exact function and cultural affiliation cannot be determined at present. The presence of actual microblades has yet to be demonstrated. Only further work at this site can aid in resolving these issues. The site is likely prehistoric.

UMI-003

Location: Sec. 16, T.1N., R.2E., Umat Meridian  
UTM 5/553250/7705000

Class: I

#### Location and Setting

UMI-003 consists of an isolated lithic specimen found in an area of frost boil activity along the upper margin of a hill west of the Colville River and north of Shivugak Bluff. Vegetation in the area of the find consists of tussocks, mountain avens, bearberry, lupine, small willows, four-angled cassiope, and blueberry. Tussock meadow covers the hill to the north. The site commands a view of the Colville River basin from the northeast to the south, including the confluence of the Chandler and Colville rivers. The top of Umat Mountain can be seen quite clearly to the west. The site overlooks the small bowl just north of Shivugak Bluff. UMI-004 is located on a bench or terrace approximately 200 m below the hill margin where the isolate was found.

#### Site Information

Lithic specimen UA77-252-1 (Pl. 4 7; v.4:32) is typed as a side blade of the Arctic Small Tool tradition. The regular flaking on the piece suggests that it could belong to the Iputak Phase of this tradition, although definite classification is at best tenuous. The piece is made of a dark grey CCS. The proximal end has been snapped. The piece is triangular in shape and asymmetric in outline. Facial flaking is generally parallel, although two oblique scars are evident. Fine retouch exists primarily along the left side. The opposite side exhibits slight step flaking of the margin, perhaps the result of its placement in the side of a bone point.

## Discussion

This artifact could either have been broken during manufacture or have been lost or broken in a hunt. The piece was found alone so the latter possibility seems reasonable. Of course, the hill margin is an excellent location for a hunting lookout and it is very possible that other material exists under the sod. The site could be a lookout station at which some tool or weapon working took place. No test of the area was made so the issue remains unresolved. The specimen may be related to activities undertaken from site UMI-004 nearby.

<u>Catalog #</u>	<u>Description</u>
UA77-252-1	Weapon Side Blade

UMI-004

Location: Sec. 16, T.1N., R.2E., Umiat Meridian  
UTM 5/553500/7704900

Class: II

## Location and Setting

UMI-004 is a small lithic scatter found on the slope of a hill located west of the Colville River and north of Shivugak Bluff. The site is just below the second bench of the hill. The material was found on an eroded area of sand and small gravels about 5 m below the crest of the bench. The area is vegetated primarily with tussocks and assorted tundra plants, including small willows and a few larger stands of alder shrubs. The site overlooks the Colville River floodplain in the vicinity of the Colville's confluence with the Chandler River. The view includes, primarily, the area north of Shivugak Bluff and the basin of the Colville River to the east. UMI-003 is located along the upper margins of the hill, about 200 m north.

## Site Information

The site consists of six flakes of CCS, including three cortical pieces, scattered over an area measuring roughly 2 m in diameter. The flakes were primarily of black CCS, although two are of a greenish color (one is cortical). None of the flakes is retouched or appears to have been utilized. They appear to be percussion flakes. No test pit was dug.

## Discussion

The site is best classified as a hunting lookout station where some lithic work took place. It is excellently situated for observing the movement of game in the area of the Colville, Chandler, and Anaktuvuk rivers. The cultural affiliation of the site is unknown.

UMI-005

Location: Sec. 2, T.1N., R.2E., Umiat Meridian  
UTM 5/555550/7707000

Class: IV

#### Location and Setting

UMI-005 consists of a possible cairn and a large flake scatter located along the upper southwest margin of a steep bluff west of the Colville River between Shivugak Bluff and Uluksrak Bluff. The site is approximately 4 km northwest of the Chandler and Colville rivers confluence. The bluff is located at the point of a southerly trending spur of a hill. The eroded face of the bluff and bluff margin contrast markedly with the vegetated areas surrounding it, giving the landform high visibility. The eastern face of the bluff presents a steep face over 50 m in height. The base of the bluff abuts a gentle slope ( $2^{\circ}$  to  $5^{\circ}$ ) which continues for roughly 100 m until it meets the Colville River plain. To the west, the sandstone bluff gives way to a hillside vegetated primarily with alder, willow and tussocks. The site is characterized by a large expanse of denuded gravel pavement including pieces of sandstone or shale. This area varies in width from 8 m to 20 m and extends over 300 m along the hill margin. Vegetation occurring along the margin consists of sparse patches of bearberry, dwarf willow, blackberry, grasses, and a few alders. Tundra meadow covers the majority of the hill. The site commands an excellent view of the Colville River valley and the confluence of the Colville and Chandler rivers. The Anaktuvuk River can be seen to the east. Sites UMI-003 and UMI-004 are roughly 3 km southwest.

#### Site Information

The lithics comprising this site are distributed in several identifiable concentrations along the margin of the hill. The first scatter begins about 25 m west of the tip of the bluff along the bluff margin. The lithics then continue for approximately 330 m, with concentrations at 155 m, 180 m, and 260 m, from east to west. The possible collapsed cairn consisting of about 25 shale slabs (each measuring approximately 20 cm to 38 cm in length and 3 cm to 8 cm in thickness) is near the bluff's eastern tip in an area measuring roughly 2 m in diameter. No particular form or shape was noted. The slabs making up the cairn are different from materials available in the immediate area (i.e., the small chunks of shale and small pebbles of quartz and flint). The feature is suspected, on this basis, to be of human manufacture. No tests were made. The lithics consist of over 500 flakes of CCS, exhibiting the full range of material colors, but not tool categories. Black flakes of CCS predominate, but pieces of reddish brown, light grey, dark grey, grey with black veins, and a few green and brown were observed. No obsidian was noted. Flakes varied in size from small to large with large flakes predominating. Cortical flakes were noted in most color categories. Pressure flakes of black, reddish brown and grey were present. A few snapped sections of blade-like flakes, about 1 cm wide, could possibly be microblade segments. The presence of microblades at the site could not be indisputably demonstrated based upon

these remains. The few utilized flakes observed did not exhibit extensive use wear. Most use appeared to be along the longer sides of the pieces, as one would expect with knives or scrapers. No end scrapers, burins or graters were seen. Some large bifaces (preforms ?) and biface fragments were present. The pieces did not have a finished appearance, although one looked very much like a knife. This piece is triangular in shape, measuring approximately 7 cm by 4 cm, and averaging 8 cm in thickness. Two finished items were collected.

Specimen UA77-253-1 (Pl. 2 22; v.4:16) is a finished biface of grey CCS. The base has been snapped. The tip displays an impact fracture or break which originates at the tip and extends onto one face. A "burin blow" has been struck along the right lateral margin from the right distal edge. The blow appears to have preceded the impact fracture. Perhaps they are consecutive results of the same event. The question raised is whether or not the "burin blow" was intentionally struck. The piece could have been burinated and then suffered the impact fracture or snap during use as a burin-like tool. Facial modification consists of delicate parallel diagonal-oblique flaking. The piece is biconvex in longitudinal and transverse section, and the outline is generally symmetric with straight sided triangular form. It does not exhibit any real evidence of intentional use. The tip may have been the only functional part of the tool. The piece is tentatively classified as a knife blade or a (questionable) projectile point. The specimen appears to be much too long and thick to fit into Ipiutak phase collections and the flaking is too fine to be classified as Norton. Thus the specimen is typed tentatively as an element of the Denbigh phase of the Arctic Small Tool tradition. Choris affinities are being ruled out at present, even in light of a suspected burin blow, on the basis of the thin shallow parallel oblique facial flaking. Perhaps a better classification of these materials can be made at a later date after the entire assemblage at the site is systematically collected and analyzed. Specimen UA77-253-1 (Pl. 6 11; v.4:52) is a bifacially flaked tool of dark grey CCS. Continuous use-retouch was observed along both lateral margins and wear was also evident at the tip. The tool was probably used to scrape, cut and pierce.

#### Discussion

UMI-005 is classified as a hunting lookout and flint knapping station with Arctic Small Tool tradition affinities. At least one Denbigh phase element is present. The Denbigh assignment may be supported in part by the possible presence of microblade fragments. There may also be elements of the late Arctic Small Tool tradition present. In a site containing so many flakes, it would not be unusual to identify other cultural components. The site is excellently situated for observing game moving to and from the Chandler, Colville, and Anaktuvuk river corridors. These are well-known migration routes for caribou (Hemming 1971). The site seems to have been a major locale for the reduction of lithic materials and for the fashioning of stone tools and weapons. This activity is suspected to have occurred while awaiting the arrival of game. This is one location along the Colville River where access is not restricted by steep cliffs and bluffs, and is probably a major reason for the location of this site (and UMI-003 and UMI-004), besides its strategic location as a lookout. Shrubs of a size suitable for use as fuel are also present along the slope of the hill. Site

UMI-005 may offer important data for studying Denbigh phase subsistence pursuits and practices in an area other than the coast or the mountains.

<u>Catalog #</u>	<u>Description</u>
UA77-253-1	Knife End Blade
UA77-253-2	Burinated Projectile Point

UMI-006

Location: Sec. 3, T.1S., R.1W., Umiat Meridian  
UTM 5/535500/7697700

Class: II

#### Location and Setting

UMI-006 is a small lithic scatter along the edge of a ridge approximately 3 km northeast of Umiat, Alaska, and .5 km west of Bearpaw Creek. The ridge is relatively free of vegetation except for small clumps of grass covering about 10 percent of the site area. The site is marked by a large sand blowout measuring roughly 50 m by 20 m. Small sandstone rocks occur in the area. Willow thickets predominate in the erosional cuts bisecting the slope below the site, while a tussock meadow covers the ridge top to the north. The site commands a view of the Colville River valley and contiguous hills to the west, south and east. A vehicle trail runs along the ridge approximately 20 m to 100 m north of the ridge margin.

#### Site Information

The lithics are distributed in an area measuring approximately 25 m by 10 m in the vicinity of a large blowout. More than 25 flakes of black CCS were noted. Some of the pieces were cortical flakes. Approximately 50% of these flakes showed evidence of possible use-retouch. One blade-like flake of black CCS was observed. One slightly rusted 30.06 shell and a caribou rack were present in the area. Two flakes of black CCS were about 100 m west of the main lithic concentration along the edge of the ridge. These materials were approximately 5 m east of a short north-south "dozer scoop". The remains of a well drilling operation are located about 100 m east of the lithic scatter. Materials include a plugged off wellhead, 6" diameter pipes, a 24 hour meter mounted on wood, rubber conduit material, and a wooden stake set vertically in the ground. An illegible sign, which had been knocked over, lies 5 m east of the blowout.

#### Discussion

The prehistoric or early historic lithic component appears to be the debitage left by a hunter or hunting party utilizing the ridge as a game lookout. The site is certainly well placed for this type of activity. It is likely that lithic reduction and some type of processing activities took place here. It is questionable whether the 30.06 shell is related to the lithics. The more recent materials are related to exploratory oil drilling



operations in the Umiat area during the middle 1900's (Department of the Navy 1977). The cultural affiliation of the lithic materials is unknown.

UMI-006 was discovered by Richard Stern of the Alaska Division of Forest, Land and Water Management and was given field designation ROS 78-003. Stern mentions in his field notes that site UMI-006 could be site #26 located by Ralph Solecki in 1949 (Solecki 1950:153). However, site No. 26, recorded as UMI-001 by a National Park Service survey team in 1977, is located approximately 4.5 km west of site UMI-006, and 3 km northwest of Umiat, Alaska. Refer to the site report on UMI-001 for details.

XHP

Howard Pass

XHP-036

Location: Sec. 35, T.33N., R8E., Kateel River Meridian  
UTM 4/584600/7567700

Class: III

### Location and Setting

XHP-036 is a habitation site found on the northeast shore of Kiingyak Lake. Portions of the site occur on a graveled beach ridge and a small knoll slightly eroded by the lake. Stratigraphy on the beach ridge area consists of an organic loess-gravel mix overlying sterile pea gravel. The other area is removed from the beach ridge formation and presents a different, somewhat more typical gravel-loess profile for Howard Pass, except the underlying gravels are much more rounded, indicating a fluvial origin. Vegetation over the site, when it occurs, is of the closed-mat alpine tundra type.

### Site Information

Several cultural features were noted on the lakeshore in two areas, together measuring 200 m by 5 m (Fig. 27). The northeasternmost area contained 14 cache pits, a scattering of modern garbage, a number of small square holes that appear to be archeological tests, and a possible house pit. The cache pits occur in two groups on either side of the depression thought to be a house. Roughly 25 m southwest of the depression is a group of three cache pits in a line along the lakeshore. The cache pit nearest the depression contained an old archeological test pit. Approximately 40 m northeast of the depression lie the other 11 cache pits also strung out along the beach ridge. Three of these pits, as well as a couple of areas outside the pits had archeological tests. Most of the modern garbage, including a full jerrican of fuel in a cache pit, occurred in this grouping. The NPS survey crew tested one of the cache pits and found only a single caribou metatarsal. The possible house pit consists of a depression measuring 5 m by 2 m. A test pit in the depression revealed no evidence of cultural material.

Some 49 m southwest is the second area. It is noteworthy because of the discovery of a late prehistoric antler projectile point (UA77-110-1, Pl. 42 6; v.4:221) and a bone layer exposed in a lake-eroded bluff face. Lying near the bottom of the organic layer, the bone level is about 10 cm thick and not terribly dense. The bluff is about 1 m high and is cut into a small knoll, probably by wave and ice-action. The knoll itself is at least 3 m above lake level and contains a number of rocks sticking through the vegetation mat. It is possible that these rocks represent the remains of a structure associated with the deposition of the bones. Besides collecting the point from its position on the beach, a small slump block, 20 cm by 30 cm, was dissected and 113 caribou bone fragments were removed.

### Discussion

Edwin S. Hall, Jr. (1975:15) discovered this site in his 1967 survey of interior northwest Alaska. However, at that time he noted only the cache

XHP 036

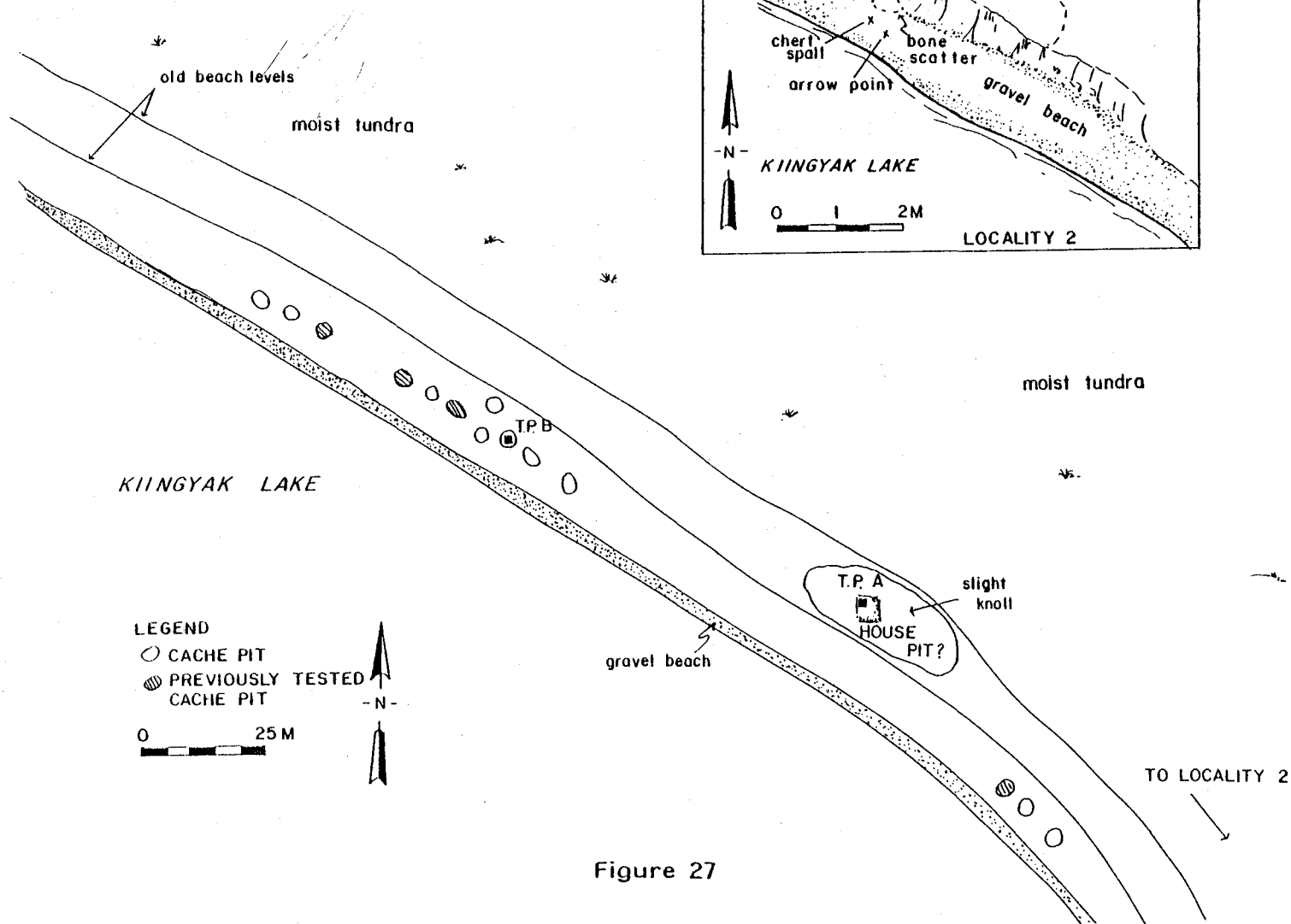


Figure 27

pits, and no doubt the test excavations observed are his. The southwesternmost area described above was not mentioned in his report and was presumably not noticed. With the addition of these new finds and possibilities, what may have been interpreted as a temporary caching area is now a possible seasonal campsite where large numbers of caribou were butchered. The negative test pit in the possible house depression does not necessarily indicate that it was not a residence. More testing would be necessary to determine the origin of the depression.

The bone projectile point, although found on the beach, seems to have very likely eroded out of the bone layer in the bluff above. Its sharp shoulders and conical base place it in the later portion of the late prehistoric period. The lashing collar and blade shape is only noted in two places: The Tigara period from Point Hope (Larsen and Rainey 1948: Fig. 41 d); and the Ambler Island site on the Kobuk River dating from A.D. 1730 to 1760 (Giddings 1952:43). Lashing collars seem to be fairly restrictive with knobs on the tang being more popular. Other occurrences of similar square-shouldered bases can be seen at Cape Krusenstern (Giddings and Anderson n.d.) and Kangaguksuk (Hall 1971) with the earliest at Cape Krusenstern in the latest Western Thule period, A. D. 1350 to 1400. Because of the close match in blade and base features, this arrow point likely belongs to an early eighteenth century period related somehow to the Ambler Island people.

<u>Catalog #</u>	<u>Description</u>
UA77-110-1	Unilaterally Barbed Antler Projectile Point
UA77-110-2	Utilized Pebble
UA77-110-3	113 Bone Fragments
UA77-110-4	Cut Bone Fragment
UA77-110-5	Flaked Nodule
UA77-110-6	Bone Fragment

XHP-044

Location: Sec. 3, T.31N., R.9E., Kateel River Meridian  
UTM 4/592100/755760

Class: II

#### Location and Setting

XHP-044, a flake scatter, lies on the south side of Rough Mountain Creek Valley. It is on a stream terrace about 5 m above the floodplain, 100 m southwest of the confluence of the creek and an unnamed smaller drainage. The terrace surface is composed of frost boils that consist of angular gravels in a silty matrix. The terrace is thinly covered with open-mat alpine tundra vegetation. The terrace segment upon which the site exists has tussock meadow on three sides. To the east and north this changes to willow growth along the stream banks and gravel bars. To the west there is a strip of tussocks that parallels the stream for several hundred meters. To the south is higher ground and more sparse alpine tundra.

### Site Information

The site contains a surficial scattering of CCS flakes and one crudely worked, but utilized, grey CCS biface. There were about 30 flakes noted in three concentrations in an area 20 m E-W by 12 m N-S, with a primary orientation of 40° - 220° (true north). The two concentrations, about 5 m apart, are of grey CCS. The one concentration 5 m west of these is of heavily patinated CCS. Four 50 cm square test pits were placed in the vicinity of the two grey CCS concentrations. Only one grey flake was discovered at a depth of 1 cm.

### Discussion

The positioning of XHP-044 near the creek and an adequate supply of willow suggests that it could have been a campsite. The material left indicates limited, periodic use of this spot. It is possible that this occurred in three separate events, and certainly two, given the patinated and unpatinated CCS concentrations. Unfortunately, the lack of diagnostic material prevents the assignment of this site to any specific culture or period.

<u>Catalog #</u>	<u>Description</u>
UA77-85-1	Utilized Flake

XHP-045

Location: Sec. 1, T.31N., R.9E., Kateel River Meridian  
UTM 4/594400/7557800

Class: III

### Location and Setting

This site, primarily consisting of CCS flakes, is on the south side of Rough Mountain Creek valley. It is on a stream terrace 180 m southwest of the confluence of Rough Mountain Creek and an unnamed smaller drainage. The terrace surface is fairly even and composed of angular gravels in a silty matrix with the percentage of gravels increasing with depth. The terrace area is thinly covered with open-mat alpine tundra vegetation grading into tussock meadow on the south and west of the terrace edge. To the north and east, the terrace drops to the modern floodplain which is covered with willow growth in this area.

### Site Information

XHP-045 is predominantly a surface scatter of CCS flakes of both black and grey, although grey is by far the more common. In addition, there was a stemmed projectile point (UA77-86-4, Pl. 3 11; v.4:22) of black CCS. An unusual feature about this point is a burin blow that has removed the right edge. The site measures 15 m along its primary orientation of 20° -200° and about 3 m perpendicular.

Of the three 50 cm square test pits excavated, only one revealed any cultural material. Fifteen of the 17 flakes recovered from this test pit came from the 1 cm to 5 cm level, only 2 flakes came from the 5 cm to 10 cm level. All flakes were grey, but some were patinated. The site appears to be eroding at the bluff face of the terrace, and this was where the artifacts were first noticed. It is impossible to estimate how much damage has been done, as this once was an active bluff. The bluff may be stabilizing, since vegetation seems to be growing over the face from the upper edge and base. In its present condition, it is difficult to definitely assign either erosional or stabilizing processes.

#### Discussion

In light of its position near water and fuel and the lack of a good view, it seems that XHP-045 was a camping location. The concentration of material, however, does not point to anything more than a single occupation of unknown duration. The presence of patinated flakes in the upper level, as well as depth of deposit, does not do any harm to the above interpretation, for it is likely that only those flakes exposed for long periods on the surface would develop a patina, while those that have been buried would look fairly fresh. Also, any depth of cultural material is probably due more to cryoturbations than any other factor.

Cultural affiliation can be addressed by the single projectile point. The closest match is with Giddings (1964:164) Type 7 arrowpoint from the Iyatayet site. Vague morphological similarities are also noted with certain end blades from the Ipiutak site, but they are much larger (Larson and Rainey 1948:Pl. 14 13, 14). In general, this artifact seems to fall within the Norton phase of the Arctic Small Tool tradition.

<u>Catalog #</u>	<u>Description</u>
UA77-86-1	2 Nonutilized Cortical Flakes
UA77-86-2	13 Nonutilized Flakes
UA77-86-3	2 Nonutilized Flakes
UA77-86-4	Projectile Point

XHP-046

Location: Sec. 35, T.32N., R.9E., Kateel River Meridian  
UTM 4/594300/7557900

Class: I

#### Location and Setting

This site is located on the south side of the Rough Mountain Creek valley. It is on a stream terrace about 2 m above the floodplain, 180 m southwest of the confluence of Rough Mountain Creek and an unnamed smaller drainage. The terrace surface is fairly even and composed of angular gravels in a silty matrix, the percentage of gravels increasing with depth. The terrace area is thinly covered with open-mat alpine tundra vegetation,

grading into tussock meadow on the south and west from the terrace edge. To the north and east the terrace edge drops to the modern floodplain, which in this area is covered with willow growth.

#### Site Information

XHP-046 consisted of two reddish brown CCS flakes 2.75 m apart on a northwest-southeast axis. Two 50 cm square test pits were excavated in the vicinity of the cultural material. No further cultural material was uncovered. A portion of the bluff face appears to be eroding, however, it is not possible to tell how much damage has been done as this was once an actively eroding feature. The bluff may be stabilizing, as vegetation seems to be growing over the face from the upper edge and the base. In its present condition, it is difficult to assign either erosional or stabilizing processes.

#### Discussion

With only two flakes present, site function and cultural affinity is extremely difficult to determine. XHP-046's position on dry level ground near water and fuel makes it an excellent campsite. The amount of cultural material, however, suggests more ephemeral activities.

<u>Catalog #</u>	<u>Description</u>
UA77-87-1	Possible Utilized Flake

XHP-047

Location: Sec. 35, T.32N., R.9E., Kateel River Meridian  
UTM 4/594200/7558000

Class: II

#### Location and Setting

This site, a surface scatter, is on the south side of the valley containing Rough Mountain Creek. It is on a stream terrace directly above the floodplain and 60 m south of the creek. The terrace surface is fairly even and is composed of angular gravels in a silty matrix, the percentage of gravels increasing with depth. The terrace area is thinly covered with open-mat alpine tundra vegetation that grades into tussock meadow on the south and west from the terrace edge. To the north and east the terrace edge drops to the modern floodplain that has a fairly dense cover of willow growth.

#### Site Information

XHP-047 consists of a surface scatter of 12 grey CCS flakes. It measures 5.9 m by 2.5 m. The long axis, 100° - 280° is oriented along the bluff edge. Two 50 cm square test pits were excavated in the vicinity of the cultural material. No further artifactual material was found. A portion of the bluff face appears to be eroding; however, it is not possible to tell



how much damage has been done at the time this was actively eroding. It seems that the bluff may be stabilizing because vegetation appears to be spreading and covering the bluff face. In its present state, it is difficult to assign either erosional or stabilizing processes.

#### Discussion

Not enough information is available to assign site function or cultural affinity. XHP-047's location near water and fuel and being on dry level ground make it an excellent candidate for a campsite. The amount of material, however, suggests more ephemeral activities.

XHP-048

Location: Sec. 33, T.32N., R.9E., Kateel River Meridian  
UTM 4/590100/7557300

Class: I

#### Location and Setting

On the south side of Rough Maintain Creek valley, XHP-048 is on a stream terrace. This particular terrace segment is directly above the floodplain and 150 m southeast of the creek. The terrace surface is composed of frost boils that consist of angular gravels in a silty matrix with the percentage of gravel increasing with depth. The terrace is covered with open-mat alpine tundra vegetation interspersed with bare areas of varying dimensions. To the north, this vegetational format leads down to the floodplain and to a tussock meadow that grades into willow growth along the banks of the creek. To the south there is another strip of tussock meadow paralleling the creek and preceding a rapid rise in elevation.

#### Site Information

SHP-048 contains three CCS flakes in an area roughly 2 m in diameter. Two flakes are patinated and one is grey. A single 50 cm square test pit was excavated at the location of one of the patinated flakes. Only the one flake was recovered.

#### Discussion

It is virtually impossible to assess site function and cultural affinity based on the data at this site. The location of XHP-048 near the creek, with an adequate supply of willows, and on a dry, fairly level spot, suggests that it could be a campsite. The amount of cultural material, however, seems to indicate more ephemeral activities.

<u>Catalog #</u>	<u>Description</u>
UAA77-88-1	Retouched Flake

XHP-049

Location: Sec. 3, T.31N., R.9E., Kateel River Meridian  
UTM 4/592200/7557300

Class: I

#### Location and Setting

Two flakes were found on a bench at the north end of a ridge coming off of Ikhkluk Mountain. The site is 390 m southwest of XHP-044, 210 m west of an unnamed tributary of Rough Mountain Creek, and 510 m south of Rough Mountain Creek. Open-mat alpine tundra vegetation covers this site area and surrounds it as well. The ridge is surrounded by tussock meadow. One 50 cm square test pit revealed a profile consisting of angular gravels in a silty or loess matrix. The view from the site is good of the middle portion of this leg of Rough Mountain Creek. It is, however, somewhat limited because of local high relief.

#### Site Information

Of the two flakes found, one is the medial section of a blade or blade-like flake of grey CCS and the other is a black CCS flake. Both were utilized. They were found 3.5 m apart trending NW-SE and appear to have eroded off the highest point of the ridge.

#### Discussion

Although it is difficult to say much on the basis of two artifacts, the location of the site suggests it functioned as a lookout; possibly for campers from XHP-044. The two different color CCS's indicate two flaking episodes, whether by two individuals at the same event or at different times is impossible to say. It is really impossible at this time to place this site in a cultural sequence.

XHP-050

Location: Sec. 5., T.31N., R.9E., Kateel River Meridian  
UTM 4/589800/7556700

Class: II

#### Location and Setting

A flake and rifle cartridge scatter was on a knoll on the south side of a high ridge in Rough Mountain Creek valley, 850 m northwest of the headwaters of two unnamed tributaries of Rough Mountain Creek. The three drainages practically encircle the ridge, which trends at an angle to the general orientation of the valley. Open-mat alpine tundra vegetation covers the knoll and tussock meadow surrounds it. Broken bits of shale lie on the surface; a single test revealed a loess-gravel mix. The view is quite expansive to the west, including a portion of Howard Pass. To the

south and east the view is slightly less panoramic, but extremely good, of the area, including small ravines between the ridge and Ikhkluk Mountain.

#### Site Information

A small CCS flake scatter and a scatter of rifle cartridges were found in separate localities in a 17 m by 2 m area trending NE-SW. The flake scatter consists of a biface fragment and two utilized flakes in a 1.9 m by .5 m area trending NNE-SSW. The biface possesses a white patina and appears to have been used as a knife. Two clusters of .30 caliber rifle shells lay about 10 m northeast of the flakes. The clusters occurred in a 9 m by 1 m area trending NE-SW. All nine shells--eight spent, one whole--of the southwesternmost cluster were collected. The other cluster had 19 shells of the same type. On the back of each bullet was "W.R.A. Co. .30 W.C.F." standing for Winchester Repeating Arms Company, .30 caliber, Winchester Center Fire (UA77-89-1, 2; Pl. 41 5-8, 10-14; v.4:268). The whole cartridge had a copper-nickel head, a kind used before lead heads came into use for this type of bullet. A head of this type helped reduce residue in the barrel until a more efficient powder was developed. This model cartridge was introduced in 1895 and discontinued around 1928 (Barnes 1972; Joe Montalbano 1979: personal communication). Given a couple of years to sell out the latest batch of rounds, a limiting date of around 1930 is suggested. At this time the Kuuvangmiit of the Kobuk River were using the area for summer to early September hunting, and the area had no year-round residents (Anderson et al. 1977; Ray Bane 1979: personal communication).

#### Discussion

XHP-050 is a summer lookout and hunting site, the most interesting feature of which is the juxtaposition of late historic and possibly prehistoric artifacts, indicating a persistence of hunting strategies through time. The conjecture about Kobuk River hunters is based on two lines of reasoning. One factor is the abandonment by the area's local people and the ethnographic data verifying Kuuvangmiit usage of Howard Pass (Anderson et al. 1977). It should be noted that during the early twentieth century, peoples from the east in Anaktuvuk Pass were not ranging this far west, as they now do. The second factor concerns the fact that the shells were left behind, including a whole one, indicating the hunters had fairly easy access to more ammunition. Around this period, other interior Eskimos were reloading shells and were very careful about retrieving spent ones. The Kuuvangmiit had a trading post at the village now known as Kobuk, making it relatively easy to obtain ammunition (Ray Bane 1979: personal communication). They were not as careful about recovering the shells and rarely reloaded cartridges. The shells exhibit some signs that they were possibly reloaded, such as popped primer caps and cracked casings at the distal end. These features would be the result of the numerous times (up to four) they would have been shot. The repeated stress on the shell would slightly expand the cap receptacle and weaken the distal end of the casing. This is in part due to the resizing, which would cause cracks in the casing on the final shot. However, these same features could be obtained from a single shot out of an old rifle such as an older model Winchester or Marlin, which accepted these cartridges. Constant, long-term

use of a rifle could cause changes in the chamber of a large enough degree to cause the cap popping and shell cracking the first time a cartridge was used. The use of an old rifle is somewhat supported by the cluster of eight spent cartridges, which corresponds exactly to the number held by some older models.

The scenario would then be somewhat as follows: Two or more Kuuvangmiit hunters (there were two clusters of shells), on their summer hunting trip to caribou country at Howard Pass, stationed themselves overlooking the small valley between the ridge and the mountain. A small herd of caribou came back around the ridge seeking some high point to avoid mosquitos. Once within range the hunters opened fire killing 20-25 animals. Killing this many caribou would be easy, for these people are excellent shots and their strategy placed them in the path of fleeing caribou; caribou flee uphill when frightened.

<u>Catalog #</u>	<u>Description</u>
UA77-89-1	8 Incomplete .30 Cal. Shells
UA77-89-2	1 Complete .30 Cal. Shell

XHP-051

Location: Sec. 32, T.32N., R.9E., Kateel River Meridian  
UTM 4/589200/7558600

Class: II

#### Location and Setting

A possible CCS quarry site is on a stream terrace about 300 m south of Rough Mountain Creek. It occurs at the bluff edge of the terrace and at the back edge of the terrace where a CCS outcrop appears to plunge beneath the ground. There are numerous CCS nodules at the bluff edge. They may be mixed in with the terrace sediments. However, they seem more to have washed along the top from the CCS source, probably not far south. To support this, there seems to be no CCS on this bluff edge except directly north and downslope from the outcrop, and in the test pits the CCS nodules decrease with depth. The predominant site cover is tussock meadow with some open-mat alpine tundra vegetation where the terrace contacts the outcrop at the base of a high ridge. To the north is a sedge meadow floodplain leading to willows on the banks of the creek. Bare areas at the bluff's edge led to the site's discovery. Two 50 cm square test pits revealed an atypical stratigraphy dominated by loess to at least 40 cm, where permafrost occurs. There is a moderately good view of this portion of the valley before it breaks out into Howard Pass.

#### Site Information

This site presents something of a problem. Both at the bluff's edge and at the outcrop only flaked nodules exist. All smaller pieces noted were frost fractured; there appear to be no flakes. Most of the nodules were

only retouched; there was no emphasis on shaping. The site area is 140 m by 120 m. The terrace orientation is 60° -240°.

#### Discussion

The investigator has many doubts about the validity of this site. "Caribou retouch" or some other natural process may be responsible for most, if not all, the flaking here. Further work need only be done if research is planned concerning Brooks Range quarries. It could be included for comparison with known quarries at XHP-055 and XHP-103. It should be noted that material was collected from this site, but at a later date; upon further examination, all but one piece (UA 77-90-3) were declared frost fractured.

<u>Catalog #</u>	<u>Description</u>
UA77-90-1	Retouched Nodule

XHP-052

Location: Sec. 31, T.32N., R.9E., Kateel River Meridian  
UTM 4/587000/7558200

Class: III

#### Location and Setting

A flake scatter is on a stream terrace 600 m from the confluence of an unnamed stream and Rough Mountain Creek. The site virtually borders the stream. The terrace's surface is covered with sorted stone circles which support open-mat alpine tundra vegetation. To the south and east is tussock meadow; north is sedge meadow followed by riparian growth along Rough Mountain Creek; directly west is fairly dense willow growth along the stream. One 50 cm square test pit revealed a typical profile consisting of a loess and angular gravel mix. The view is moderately good, if low level, of that portion of the creek where it breaks out into Howard Pass.

#### Site Information

This is a small, moderately dense scatter of CCS flakes, 33 m by 8 m, trending NW-SE. The major concentration is roughly 8 m in diameter. A test pit was excavated at the west edge of the concentration and produced 11 tiny pressure flakes. Flakes came from as deep as 5 cm. The flakes show a gradation in color from white through grey, a brownish grey, and a dark grey. Given the mottling that occurs in some CCS, they all could have come from the same tool. Within 3 m of the test pit are two tools. One is a unifacially, retouched, squarish flake that could be a side scraper or perhaps even a crude flake knife. The other piece is a projectile point base of light grey CCS (1.1 cm by 1.1 cm by 1.2 cm). It has a straight base and a hint of shouldering at the snap. Resemblance is seen with forms from the Cape Krusenstern, Iyatatyet, and Ipiutak sites. Approximately 25 m northwest of this concentration is a single blade-like flake.

## Discussion

Because of its location near water, fuel, and fish, as well as the kind and distribution of artifacts, XHP-052 seems to have been a camp. The site is likely of a post-Denbigh phase of the Arctic Small Tool tradition. The tool found at this site has features that can be seen in similar tools of Choris, Norton, and Ipiutak phases (Giddings 1964, Giddings and Anderson n.d.; Larsen and Rainey 1948).

<u>Catalog #</u>	<u>Description</u>
UA77-91-1	11 Nonutilized Flakes

XHP-053

Location: Sec. 35, T.32N., R.9E., Kateel River Meridian  
UTM 4/593000/7558400

Class: II/III

## Location and Setting

XHP-053 is a flake scatter discovered in two localities on a dissected stream terrace directly above the Rough Mountain Creek floodplain. The terrace is cut by a short rivulet originating in the low, swampy ground behind the terrace. This rivulet also acts to separate Localities 1 and 2. The site is only 50 m west of the creek at the base of a large meander, and is on the lee side of a large saddle separating Flora Creek from Rough Mountain Creek, offering a modicum of protection from the prevailing northeast wind. Closed-mat alpine tundra vegetation covers the surface of the site. North is a tussock meadow; south is the riparian growth on the floodplain, including a willow thicket. Willow also occurs in the rivulet dividing the site. The stratigraphic profile, as revealed in the 11 test pits, is quite typical. Angular to rounded pebbles and cobbles are mixed with loess. One test pit in a depression, however, revealed a clean loess profile to at least 70 cm. A moderately good view of the upper portion of this leg of Rough Mountain Creek is afforded from this location. Locally high relief prevents being able to see much more than a kilometer or so.

## Site Information

The site as a whole takes in an area of 78 m by 10 m to 1 m. It follows the orientation of the terrace which is 72° -252°. Locality 1 contained only a single artifact. This artifact is a flake core on an angular nodule of white banded, grey CCS (UA77-92-1). Although the material is quite poor, it appears that the maker was trying to remove blade-like flakes from two opposing platforms. Six test pits were dug in the depressions at this locality, besides a test pit in the vicinity of the flake core. One of these six produced the deep loess section; no additional material was located.

Locality 2 is on the other side of the rivulet. It contains a number of flakes associated with a possible structure. The structure is delineated by a slight depression as well as a grouping of half-buried rocks. These rocks only occur in this vicinity and seem to form a line along one side of the depression. A couple of other rocks, however, do appear on the periphery of the depression. Also, of the two 50 cm square test pits placed in this area, only the one in the depression produced cultural material. A third 50 cm square test, placed about 12 m northeast, yielded no cultural material.

Of the 15 pieces collected from the test pit, only one is a finished artifact. It is a biface trimming flake from what was probably a knife. The rest of the material consists of 11 flakes, two utilized flakes, and a flaked nodule similar to, but smaller than, the one found at Locality 1. All material is a grey CCS and, along with the piece from the other locality, probably came from the nearby quarry to the west, XHP-055.

### Discussion

XHP-053 is very likely a campsite. The location near water and fuel as well as the structure seem to point to this. The relationship between the two localities is uncertain and will remain so until further work can be done. The artifacts at Locality 2 seem to indicate dependence on crudely worked nodules where any sharp edge would do. Perhaps this is a consequence of being so close to the raw material and waste was not punished by want. The problem of seasonality is somewhat confused here. Since material is only found in the interior of the structure, this indicates a winter occupation where many activities were performed inside (Corbin 1975, 1976). However, the stones also associated with the structure indicate a summer usage. This is based on ethnographic observations in which stones could not be gathered during winter to hold down tent skins because they would be frozen into their matrix or simply covered by snow (Corbin 1975, 1976). Perhaps we could compromise and make it a fall site, when it would be too cold to go out, but stones could still be gathered. The lack of diagnostics prevents the assignment of this site to any place in a cultural sequence.

<u>Catalog #</u>	<u>Description</u>
UA77-92-1	Flake Core
UA77-92-2	2 Nonutilized Cortical Flakes
UA77-92-3	4 Nonutilized Flakes
UA77-92-4	Biface Trimming Flake
UA77-92-5	Utilized & Flaked Cortical Nodule
UA77-92-6	Retouched Cortical Flake
UA77-92-8	Nonutilized Cortical Flake
UA77-92-9	Nonutilized Shatter Fragment
UA77-92-10	Flake Core

XHP-054

Location: Sec. 1, T.31N., R.9E., Kateel River Meridian  
UTM 4/595600/7557400

Class: II

#### Location and Setting

A flake scatter is on the side of a mountain ridge 60 m above and 650 m east of Rough Mountain Creek. What little vegetation occurs on the site is open-mat alpine tundra. The same vegetation surrounds the site as well. The stratigraphic profile is typical, consisting of angular to subangular pebbles and cobbles in a loess matrix. The gravel increases in size and percentage with depth. The view is excellent of the surveyed portion of Rough Mountain Creek.

#### Site Information

Roughly five grey CCS flakes were found in a 4.3 m by 1 m area trending NE-SW. The site is on a slope of a limestone outcrop and appears to have been washed down from higher up. No further material was found up-slope. Only two flakes were recovered from the surface of the single 50 cm square test pit.

#### Discussion

This is a lookout site. An absence of diagnostic artifacts precludes assignment of age and cultural affiliation.

<u>Catalog #</u>	<u>Description</u>
UA77-93-1	Utilized Cortical Flake
UA77-93-2	Utilized Flake

XHP-055 (Kelly's Quarry)

Location: Sec. 34, T.32N., R.9E., Kateel River Meridian  
UTM 4/592000/7558500

Class: IV

#### Location and Setting

This is a quarry site located on a grey CCS outcrop on top of a hill near a bluff 240 m north of Rough Mountain Creek and 1.2 km west of XHP-053 (Fig. 28). The outcrop is quite noticeable as one of three stripes running over the hill, and is part of a sequence of rocks from north to south as follows: limestone; a low heavily vegetated swale (probably sandstone); shale, CCS, shale (all appearing in a single outcrop on which the site lies); another low heavily vegetated swale (probably sandstone); finally limestone. This succession of rocks suggests the presence of some under-



# KELLY'S QUARRY

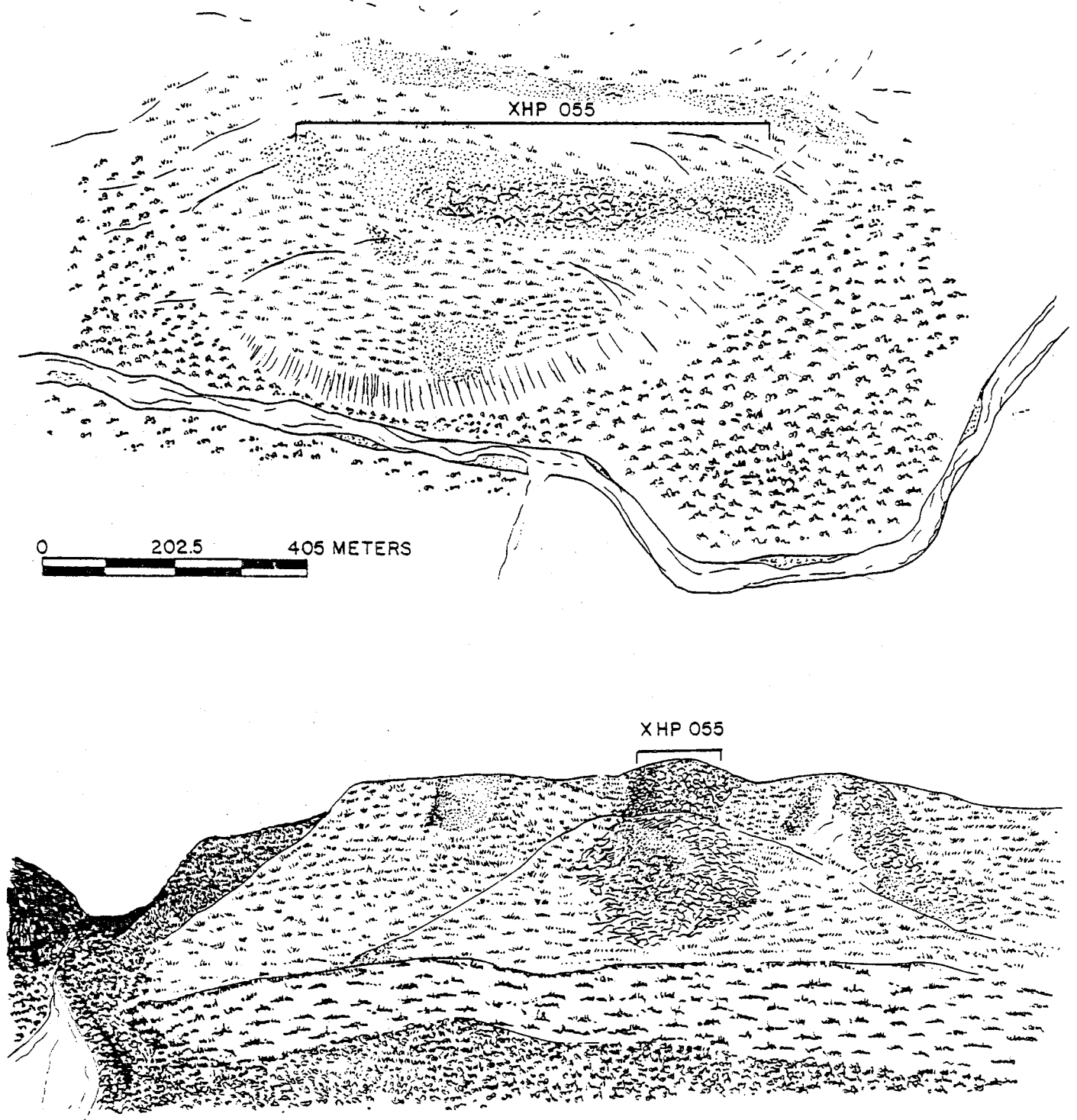


Figure 28

lying structure such as a fold. Presumably the same CCS stratum is seen through the valley to the east at XHP-054 and to the west at XHP-051. The surface of the outcrop, while predominantly covered with frost-fractured fist-sized nodules of CCS, is also lightly overlain with rounded cobbles and boulders of a foreign material. These cobbles and boulders could have gotten there by one of two ways--as leftover deposits of an earlier glacial episode, or by man bringing stones up from the stream. The former means seems most likely, since it is at least 75 m to 100 m straight down to the stream and at least a one-half kilometer walk. This seems a bit far to carry rocks. There is virtually no vegetation on the site except lichens and what is present is open-mat alpine tundra vegetation. Tussock meadow is in the swales on either side of the outcrop to the north and south, and east and west. The stratigraphic profile from a test pit consists almost entirely of either artifacts or frost fractured bedrock; 10 cm to 30 cm below surface there is some loess, but it decreases with depth. From the site as a whole the entire surveyed portion of Rough Mountain Creek can be seen. A little walking must be done, however, to accomplish this panoramic view.

#### Site Information

An estimated several million artifacts are to be found in an area 700 m by 110 m at the east end and 75 m at the west end. It trends roughly E-W. Upon first walking over the site, one only notices the naturally fractured cobbles. In fact, over most of the site, that is all that is seen. However, when these nodules are picked up, the flakes and other artifacts become observable. Almost everywhere the surface nodules are removed, cultural material lies beneath to a depth of around 15 cm. No doubt natural process have caused the flakes to percolate down through the larger nodules and sort themselves out according to size. Other features found at the site include a cache of worked nodules under one of the boulders and a series of quarry pits on the top and east flank of the outcrop. Three 50 cm square test pits were excavated over a 30 m long area near the top of the outcrop, but still on the east side. All were in the vicinity of, but at varying distances to, the quarry pits.

Approximately 700 artifacts were recovered from the three test pits. A profile of what was found in the three test pits is available in Table 1, which indicates many things about the site and its potential. A quick glance shows that different kinds of activities are reflected in each pit. This can be seen in the differing flake densities, the differing utilized flake to waste flake ratios, the differing kind of artifacts present in differing numbers, and the differing number of occurrences of traits indicative of certain technologies.

Let us look more specifically at some of the most interesting aspects of the test pits, as well as make comparisons between them. TP-A is the sole possessor of an interesting technological feature which the investigator refers to as the edge-faceted flake. Although far from being a wedge-shaped microblade core, this artifact does bear a resemblance. On each of the five pieces, two scars bear witness to the removal of microblade-like flakes from a narrow edge of the flake from the same platform (UA77-94-21, 25, 26, 32, 33; Pl. 35 1, 2, 4-6; v.4:194). One of the pieces, however,

is a small nodule rather than a flake. These artifacts suggest a technological relationship with the Paleo-Arctic tradition. Other traits found do not seem to hurt this interpretation. This includes the burinated flakes, some resembling Donnelly Burins, the unifaces and the flake core. The lack of any bifacial flaking speaks toward a possible relationship with Locality 1, Gallagher Flint Station 320 km (200 miles) to the east (Dixon 1975). One more interesting feature is a flake that looks like a remnant of what is called the Setouchi technique (Kamaki 1965, In Morlan 1971). It is a side-struck flake of rectangular cross section that is larger in the dimension perpendicular to direction of force than it is with the force of the blow. This relates to an elongate flake technology found most commonly in the late pleistocene cultures of southern Japan (Morlan 1971). The intention here is to simply note the similarity and draw attention to a technique not previously reported in the American Arctic which may have early affiliations. The problems of reaching to east Asia for genetic ties are fully understood, especially when no known relatives of the technique are known outside this restricted area in Japan.

TP-B had the most waste flakes, but the lowest ratio to utilized flakes. Also it had the least in the way of distinctive technological features that helped to distinguish the material from TP-A. One trait it does have is a Setouchi-type flake such as was found in TP-A. Perhaps this suggests early affiliations as well. It must be remembered that the presence of only two of these flakes in all that was collected is hardly grounds for getting carried away, but it could be indicative. However, considering the small sample taken, even two pieces may be significant.

Finally, TP-C has the highest ratio of waste to utilized flakes. This pit also has the greatest percentage of bifaces, as well as a large percentage, relatively, of burinated flakes. It also contains the largest number of flake cores. These flake cores, unlike amorphously flaked nodules, which abound, generally have patterned flake removal. One piece (UA77-94-109; Pl. 31 4; v.4:191) resembles some of the flake cores found in the Storm Creek area (UA78-172-2; Pl. 30 8; v.4:192). It is rectangular and bears scars of both end- and side-struck flakes. Finally, one piece that stands out is a possible blade core (UA77-94-203; Pl. 26 3; v.4:174). However, it is hard to judge its validity and meaning when no others were found or are known. Perhaps in the future this artifact would have more meaning in a broader technological framework. While there is no indication of what cultural phase this material belongs to, its profile indicates a different technology than found in TP-A or B, hence a different cultural period.

#### Discussion

Not to be confused with the Kelly River Quarry reported by Hall and Mull (1976), this site is one of the most significant found in the Howard Pass survey area. Its sheer size indicates its importance to local inhabitants through time. As seen at TP-A, this may go back as far as the Paleo-Arctic tradition. Given the glacial history of the area, this site could be even earlier, although no direct evidence to this effect has been gathered (Hamilton and Porter, 1975). Also, as seen in TP-C, other technologies are represented here. The predominant use of the site is as a quarry, but there is little doubt that it also functioned as a lookout. While the

numbers of utilized flakes are low, they do indicate maintenance activities for tools made from something other than stone. The site's real significance lies in the wealth of information it holds about local lithic technology through time. There is probably very little in the way of finished products at XHP-055, but there are very likely many stages of the tool production process for many cultural phases. This site would provide a fuller understanding of cultural adaptation to the Brooks Range and the people inhabiting the area. It would provide much the same information as foundries and industrial plants would about our culture.

Table 1

<u>Test Pit</u>	<u>A</u>	<u>B</u>	<u>C</u>
Flakes	155	279	167
Utilized Flakes	16	24	31
Burinated Flakes	5	1	4
Burin Spalls	0	1	0
Edge Faceted Flakes	5	0	0
Setouchi Flakes	1	1	0
Bifacially Flaked Artifacts	0	1	5
Unifacially Flaked Artifacts	3	0	2
Flake Cores	1	0	3
Blade Core ?	0	0	1

<u>Catalog #</u>	<u>Description</u>
UA77-94-1	54 Nonutilized Flakes
UA77-94-2	Utilized Flake
UA77-94-3	Utilized Cortical Flake
UA77-94-5	Biface Trimming Flake
UA77-94-6	Utilized Cortical Shatter
UA77-94-7	Utilized Cortical Flake
UA77-94-8	Possible Burinated Flake
UA77-94-9	Unifacially Retouched Flake
UA77-94-10	Utilized Flake
UA77-94-11	Burinated Flake
UA77-94-12	Utilized Flake
UA77-94-13	Utilized Flake
UA77-94-14	81 Nonutilized Flakes
UA77-94-15	Utilized Cortical Flake
UA77-94-16	Flake Core
UA77-94-17	Utilized Cortical Flake
UA77-94-18	Utilized Cortical Flake
UA77-94-19	Retouched Cortical Flake
UA77-94-20	Utilized Flaked Nodule
UA77-94-21	Edge Faceted Flake
UA77-94-22	Burinated Nodule
UA77-94-23	Utilized Nodule
UA77-94-24	Utilized Cortical Flake
UA77-94-25	Edge Faceted Flake
UA77-94-26	Edge Faceted Flake

<u>Catalog #</u>	<u>Description</u>
UA77-94-27	Utilized Cortical Nodule
UA77-94-28	Flaked Nodule
UA77-94-29	Utilized Cortical Flake
UA77-94-30	Utilized Cortical Flake
UA77-94-31	Utilized Flake
UA77-94-32	Edge Faceted Flake
UA77-94-33	Edge Faceted Flake
UA77-94-34	10 Nonutilized Cortical Flakes
UA77-94-35	10 Nonutilized Flakes
UA77-94-36	Utilized Flake
UA77-94-37	2 Nonutilized Cortical Flakes
UA77-94-38	5 Nonutilized Flakes
UA77-94-39	Utilized Flake
UA77-94-40	Setouchi-type Flake
UA77-94-41	Utilized Flake
UA77-94-42	Utilized Flake
UA77-94-44	Utilized Cortical Flake
UA77-94-45	Utilized Cortical Flake
UA77-94-46	Flaked Nodule
UA77-94-47	66 Nonutilized Cortical Flakes
UA77-94-48	148 Nonutilized Flakes
UA77-94-49	Utilized Flake
UA77-94-50	Amorphous Biface Fragment
UA77-94-51	Utilized Flake
UA77-94-52	Utilized Flake
UA77-94-53	Utilized Flake
UA77-94-54	Utilized Flake
UA77-94-55	Burin Spall
UA77-94-56	Utilized Flake
UA77-94-57	Utilized Flake
UA77-94-58	Utilized Flake
UA77-94-59	Utilized Flake
UA77-94-60	Utilized Flake
UA77-94-61	Utilized Flake
UA77-94-65	Utilized Flake
UA77-94-77	Utilized Cortical Flake
UA77-94-78	Utilized Cortical Flake
UA77-94-82	Utilized Cortical Flake
UA77-94-83	Burinated Cortical Flake
UA77-94-84	Utilized Cortical Flake
UA77-94-87	26 Nonutilized Cortical Flakes
UA77-94-88	32 Nonutilized Flakes
UA77-94-89	Utilized Cortical Flakes
UA77-94-91	Utilized Cortical Flake
UA77-94-92	Utilized Cortical Flake
UA77-94-95	Utilized Flake
UA77-94-97	Utilized & Burinated Flake
UA77-94-98	Utilized Flake
UA77-94-102	56 Nonutil. Cortical Flakes/Nodules
UA77-94-103	79 Nonutilized Flakes/Nodules
UA77-94-104	Burinated Flake

<u>Catalog #</u>	<u>Description</u>
UA77-94-109	Flake Core
UA77-94-110	Utilized Cortical Flake
UA77-94-113	Flake Core
UA77-94-120	Flaked Nodule
UA77-94-121	Utilized Nodule
UA77-94-122	Utilized Nodule
UA77-94-124	Utilized Cortical Flake
UA77-94-131	Utilized Cortical Flake
UA77-94-137	Utilized Flake
UA77-94-139	Utilized Flake
UA77-94-141	Utilized Flake
UA77-94-143	Utilized Flake
UA77-94-144	Utilized Flake
UA77-94-149	Burinated Flake
UA77-94-150	Utilized Flake
UA77-94-152	Utilized Flake
UA77-94-153	Utilized Flake
UA77-94-154	Burinated Flake
UA77-94-155	Utilized Flake
UA77-94-159	Utilized Flake
UA77-94-166	Utilized Flake
UA77-94-167	Utilized Flake
UA77-94-170	Utilized Flake
UA77-94-172	Utilized Flake
UA77-94-175	Utilized Flake
UA77-94-176	Utilized Flake
UA77-94-178	Flake Core Nodule
UA77-94-179	12 Nonutil. Cortical Flakes/Nodules
UA77-94-180	20 Nonutilized Flakes/Nodules
UA77-94-181	Utilized Cortical Flake
UA77-94-183	Utilized Cortical Flake
UA77-94-184	Utilized Cortical Flake
UA77-94-185	Utilized Cortical Flake
UA77-94-187	Utilized Cortical Flake
UA77-94-189	Utilized Cortical Flake
UA77-94-190	Utilized Flake
UA77-94-191	Flake Core
UA77-94-192	Crude Biface Trimming Flake
UA77-94-194	Utilized Flake
UA77-94-195	Amorphous Biface Fragment
UA77-94-196	Utilized Flake
UA77-94-198	Utilized Flake
UA77-94-199	Utilized Flake
UA77-94-202	Preform
UA77-94-203	Blade Core

XHP-056

Location: Sec. 32, T.32N., R.9E., Kateel River Meridian  
UTM 4/588600/7558800

Class: II

#### Location and Setting

XHP-056 is a flake scatter on a stream terrace 50 m north of Rough Mountain Creek across from the creek's confluence with a smaller unnamed drainage. The presence of three quartzite boulders on the site seems to mark its location. It is likely that these boulders could have been brought up to the terrace from the creek bed by man. They occur quite infrequently on the terraces, usually seeming to be associated with a site, and do not seem to be a part of the terrace matrix. The surface has open-mat alpine tundra vegetation with tussocks north, east, and west of the gravelled terrace segment. Sedge meadow mixes with willows as one moves south from the site toward the creek. Stratigraphy, as seen in the single test pit, consists of a top layer of gravel pavement followed by a gravel-loess mix, with the gravel increasing in size and percentage with depth. While not terribly expansive, the view is quite good of this portion of the valley just before it breaks into Howard Pass.

#### Site information

Approximately 15 CCS flakes were noted in a small scatter measuring 5 m E-W by 4 m N-S. A single test pit, placed where no cultural material was evident on the surface, yielded an additional 48 CCS artifacts from as deep as 8 cm. Thirty-six were waste flakes and 12 were utilized. All flakes had a heavy, chalk white patina.

#### Discussion

This site has the potential for having been a lookout and/or camp site. The placement and physical remains could apply to either. Whatever the site function, the fairly tight clustering of material seems to indicate a single component, as does the fact that all flakes possess the same degree of patination. XHP-055, Kelly's Quarry, was very likely the source for the material here. The grey color so prevalent at the quarry can be seen on broken fragments of cultural material from the site. While certainly not being conclusive, the patination on the material does indicate a degree of age. This site does not belong to the most recent cultural tradition and may in fact be considerably older. It should be noted that some material found on XHP-055 and XHP-062, hypothesized as having an antiquity of 8,000+ year, has no patination. Perhaps this could be indicative of a greater age for the material at this site, or perhaps it is simply indicative of a microenvironmental zone in which the local grade CCS patinates much faster. No doubt more work at this site would help solve this problem.

<u>Catalog #</u>	<u>Description</u>
UA77-95-1	30 Nonutilized Flakes
UA77-95-2	6 Nonutilized Cortical Flakes
UA77-95-3	Utilized Cortical Flake
UA77-95-4	Utilized Flake
UA77-95-6	Utilized Flake
UA77-95-7	Utilized Flake
UA77-95-8	Utilized Burinated Flake

XHP-057

Location: Sec. 32, T.32N., R.9E., Kateel River Meridian  
UTM 4/587900/7558900

Class: II

#### Location and Setting

A flake scatter is on a stream terrace within 3 m of the edge of an actively eroding bluff along Rough Mountain Creek at the point where the creek breaks out into Howard Pass. The site area lies between the bluff and the base of a large shale outcrop. XHP-062 is 75 m north of XHP-057 on top of this outcrop which has been called Red Rock Hill. An excellent grayling hole exists in the creek below the site. Open and closed-mat alpine tundra vegetation occurs at the site; tussocks are to the east and west. North is the steep, bare face of the rock outcrop, and south is the stream and its riparian growth. Two 50 cm square test pits revealed two different stratigraphies. TP-A on the terrace yielded an interesting profile, with at least two kinds of loess horizons below the usual gravel-loess mix. The upper loess layer appeared to be a buried A horizon. TP-B at the base of the outcrop, revealed the expected loess-shale mix of a transitional talus slope and level ground. The view is best to the west and south, revealing the Rough Mountain Creek floodplain; it is adequate but not expansive.

#### Site Information

A light-density flake scatter and a stone seal oil lamp (UA77-96-1; Pl. 68 2; v.4:207) were found in a 40 m by 5 m area trending NE-SW. Approximately 10 grey CCS flakes were found on the terrace. The northeastmost piece is a flaked nodule located at the base of the "hill." It appears to be an amorphous flake core. The stone lamp is made of sandstone and was found within 3 m of the bluff edge. It corresponds very closely to Murdoch's (1892) description of a traveling lamp used during the historic period.

#### Discussion

The location of this site is ideal for a campsite and very possibly functioned as such for brief periods, given the scattering of material. In the opinion of the investigator, the lamp is not associated with the flakes.



This seems to be the case for two reasons. The lamp was not found resting on bare ground or even slightly imbedded; it was located on top of some recently decomposed vegetation. Also, about half the lip of the lamp has been recently broken. It seems to have been lost or discarded within the last few years, probably by some person or persons who scavenged a site somewhere in the general vicinity.

<u>Catalog #</u>	<u>Description</u>
UA77-96-1	Stone Lamp

XHP-058

Location: Sec. 32, T.32N., R.9E., Kateel River Meridian  
UTM 4/589500/7559300

Class: I

#### Location and Setting

A flake scatter is located on a stream terrace 150 m northwest of the confluence of Rough Mountain Creek with an unnamed stream, and 90 m south of XHP-059. Open-mat alpine tundra vegetation covers the terrace. To the north is a tussock meadow between the terrace and the mountain, to the south is the sedge meadow of the floodplain followed by willow and other riparian growth near the creek. There is a typical stratigraphic profile of angular to subangular gravels mixed with loess. A moderately good view exists of the valley where it breaks out into the pass.

#### Site Information

Three widely dispersed CCS flakes were found in a 70 m by 5 m area. One piece is a flaked CCS nodule that may be a flake core; another is a flake; the last may not even be a flake. A 50 cm square test pit revealed no further cultural material.

#### Discussion

It is quite difficult to determine site function on the basis of three artifacts. The distance between each piece suggests three separate casual uses of this area. Due to the lack of diagnostics, this site cannot now be placed in a cultural sequence.

XHP-059

Location: Sec. 32, T.32N., R.9E., Kateel River Meridian  
UTM 4/589500/7559350

Class: I

### Location and Setting

An isolated artifact was found on a high rock outcrop forming a bench on the side of a ridge which is the northern boundary of Rough Mountain Creek valley, 300 m northwest of the creek. The site has open-mat alpine tundra vegetation. The same growth exists to the north, and tussock meadow is in the south. A stratigraphic soil profile consists of angular to subangular gravels in a loess matrix. It has an excellent view of the portion of the valley that breaks out into Howard Pass.

### Site Information

A single, lightly patinated, grey CCS biface fragment was found here. It appears to be a preform or possibly a flake core.

### Discussion

It is difficult to say much about this site on the basis of a single artifact. The location speaks favorably for it being a lookout. Because this artifact is not diagnostic, the site cannot be placed in a cultural sequence, although the patination does indicate a certain degree of age (at least prior to the late prehistoric period).

XHP-060

Location: Sec. 32, T.32N., R.9E., Kateel River Meridian  
UTM 4/589500/7559300

Class: I

### Location and Setting

An isolated artifact was found on a high rock outcrop that forms a bench on a side of a ridge forming the northern boundary of Rough Mountain Creek valley 260 m northwest of the creek. The site has open mat alpine tundra vegetation. The same growth exists to the north with tussock meadow to the south. A stratigraphic profile consists of gravels in a loess matrix. It has an excellent view of the portion of the valley that breaks out into Howard Pass.

### Site Information

A grey CCS biface fragment was found here. It appears to be a preform. This artifact is only about 30 m to 40 m south and downslope of XHP-059. They both seem to represent different events and time periods, given the distance between the two and that one is patinated.

### Discussion

It is difficult to say much about this site on the basis of a single artifact. The location speaks favorably for it being a lookout. Because this artifact is not diagnostic, the site cannot be placed in a cultural sequence.

XHP-061

Location: Sec. 31, T.32N., R.9E., Kateel River Meridian  
UTM 4/587400/7558800

Class: II

#### Location and Setting

A flake scatter was found at the edge of a bluff on a high stream terrace 15 m above the Rough Mountain Creek floodplain and 150 m northeast of the creek. The site is 1.8 km east of a ridge cut by the creek, but 840 m out of the protected portion of Rough Mountain Creek. The gravelled surface is covered with open-mat alpine tundra vegetation. This is true east and west, where a strip of gravelly but fairly level ground extends 5 m to 10 m back from the bluff edge. To the south on the floodplain there is riparian growth, including sedge and willow in a very wet area with many ponds; to the north beyond the strip is tussock meadow. The view between the mountains and the above-mentioned ridge is quite good.

#### Site Information

Roughly 20 CCS flakes were observed on the surface of the site. The site measures 4.5 m by 2 m and is oriented NE-SW. A single 50 cm square test pit, having only a couple of flakes on the surface, yielded 199 flakes from as deep as 5 cm. Only three small shattered nodules were of black CCS; the rest were all of grey CCS, such as could be found a short way up the valley at XHP-055 or XHP-051. Only one out of all the flakes recovered had been utilized, and of the rest, seven were biface trimming flakes. For the most part the flakes are quite small, being less than 2 cm in any dimension.

#### Discussion

This site is very likely a lookout at which a single knapping event took place. While it is a little high off the floodplain for easy access to water, it is certainly not impossible to obtain the water and fuel from the area below the site, making XHP-061 a possible campsite as well. Whether the primary intention was looking out for game or staying the night, the event represented by the flakes points toward the shaping of bifacial blanks or preforms into finished tools. Because no diagnostics were found, nothing can be said at this time about the site's placement in a cultural sequence.

<u>Catalog #</u>	<u>Description</u>
UA77-97-1	37 Nonutilized Cortical Flakes
UA77-97-2	154 Nonutilized Flakes
UA77-97-3	Biface Trimming Flake
UA77-97-4	Biface Trimming Flake
UA77-97-5	Biface Trimming Flake
UA77-97-6	Biface Trimming Flake
UA77-97-7	Biface Trimming Flake

<u>Catalog #</u>	<u>Description</u>
UA77-97-8	Biface Trimming Flake
UA77-97-9	Biface Trimming Flake
UA77-97-10	Utilized Flake

XHP-062

Location: Sec. 32, T.32N., R.9E., Kateel River Meridian  
UTM 4/588000/7559100

Class: III

#### Location and Setting

A flake scatter is on a prominent, red shale outcrop 150 m north of Rough Mountain Creek, at the point where the creek breaks out into Howard Pass. The outcrop forms a large knoll that can be seen for 2 km to 4 km up or down the valley. Its top is fairly even and slopes gently to the northwest, leading eventually to XHP-066. The site area has an open-mat alpine vegetation cover growing on a very thin soil profile over the bed-rock. Tussock meadow exists downslope to the northwest, and to the northeast, willows are growing down a gully to the terrace overlooking Rough Mountain Creek. This location possesses the most commanding view in this portion of the drainage.

#### Site Information

A dense flake scatter occupies a 35 m by 18 m area trending the same direction as the slope. Cultural material consisting solely of flaked CCS was found all over the site area. Present on the site is black, grey and red CCS. Some of the grey looks like it is from local sources, such as XHP-055. The rest of the material is quite fine grained, of a different color, and seems to be from other sources. Cobble cortex found on a few of the pieces (UA77-98-1,13,50) indicates that the river and stream beds were their origin. Most artifacts, including microblades, seem to be made of this variety of CCS. In addition, there are some white, patinated flakes.

Of particular note is the presence of two concentrations of microblades. In the northwesternmost concentration, a rather large, wedge-shaped microblade core (UA77-98-49; Pl. 24 6; v.4:145) of black CCS was found. An interesting scar on the obverse face shows the removal of a microblade perpendicular to the fluted edge. A view of the last several flakes taken from the platform edge reveals the presence of a major flaw that prevented the continued removal of microblades. The above-mentioned microblade scar may have been either an attempt at rejuvenating the core or a rotation, using the rather flattish wedge element as a platform. The unifacial preparation of the wedge element (possible platform) is reminiscent of platform preparation seen on many wedge-shaped cores in the Arctic. A burin spall was found in the vicinity of the microcore, as was a finely, intentionally retouched flake scraper (UA77-98-50; Pl. 20 3; v.4:111).

A 50 cm square test pit was placed in the southern concentration to obtain more detailed information on stratigraphy and artifact density. No material was found deeper than 5 cm. In that level, there were 202 waste flakes, 16 utilized flakes, and 21 microblades. Of the 21 microblades, only one was whole; of the rest, five were proximal sections, 13 were medial sections, and two were distal sections. More medial sections possessed utilization than proximal sections. However, a higher percentage of the proximal sections showed utilization. All cultural material is composed of CCS, but from various sources. Much of the grey CCS looks like it is from local sources such as XHP-055; other CCS, of black, red, and grey, is of a much finer quality and appears to be coming from river cobbles. Unfortunately, Rough Mountain Creek, as well as the other streams in the survey area, were not checked for CCS cobbles, although they are very likely there. The patinated flakes could be from either source and represent a type that patinates faster, or could possibly belong to an older occupation.

### Discussion

This is a lookout site. Its commanding view and negative camping features, such as exposure to winds and distance to water suggest no other function. An American Paleo-Arctic tradition occupation is inferred on the basis of the wedge-shaped microblade core (Anderson 1970a).

<u>Catalog #</u>	<u>Description</u>
UA77-98-1	11 Nonutilized Cortical Flakes
UA77-98-2	191 Nonutilized Flakes
UA77-98-3	Utilized Cortical Flake
UA77-98-4	Utilized Flake
UA77-98-5	Utilized Flake
UA77-98-6	Utilized Flake
UA77-98-7	Utilized Flake
UA77-98-8	Utilized Flake
UA77-98-9	Utilized, Possibly Burinated Flake
UA77-98-10	Utilized Flake
UA77-98-11	Biface Trimming Flake
UA77-98-12	Utilized Flake
UA77-98-13	Utilized Cortical Flake
UA77-98-14	Biface Trimming Flake
UA77-98-15	Utilized & Burinated Flake
UA77-98-16	Utilized Flake
UA77-98-17	Utilized Flake
UA77-98-18	Utilized Flake
UA77-98-19	Microblade
UA77-98-20	Utilized Flake
UA77-98-21	Utilized Flake
UA77-98-22	Utilized Flake
UA77-98-27	Utilized Flake
UA77-98-29	Utilized Flake
UA77-98-30	Utilized Flake
UA77-98-31	Microblade
UA77-98-32	Microblade

<u>Catalog #</u>	<u>Description</u>
UA77-98-33	Microblade
UA77-98-34	Microblade
UA77-98-35	Microblade
UA77-98-36	Microblade
UA77-98-37	Microblade
UA77-98-38	Microblade
UA77-98-39	Microblade
UA77-98-40	Microblade
UA77-98-41	Microblade
UA77-98-42	Microblade
UA77-98-43	Microblade
UA77-98-44	Microblade
UA77-98-45	Microblade
UA77-98-46	Microblade
UA77-98-47	Microblade
UA77-98-48	Microblade
UA77-98-49	Microblade Core
UA77-98-50	Flake Scraper
UA77-98-51	Microblade
UA77-98-52	Microblade
UA77-98-53	Blade Core Tablet

XHP-063

Location: Sec. 31, T.32N., R.9E., Kateel River Meridian  
UTM 4/586400/7558600

Class: II

#### Location and Setting

A flake scatter was found at the bluff edge of a high stream terrace 15 m above the Rough Mountain Creek floodplain and 300 m northeast of the channel. It is 1.2 km east of a ridge cut by the creek, 690 m west of XHP-061 and 1.5 km out of the protected portion of Rough Mountain Creek. The graveled surface is covered with open-mat alpine tundra vegetation. This is the case to the east and west where a strip of gravelly but fairly level ground extends 5 m to 10 m back from the bluff edge. To the south on the floodplain there is riparian growth, including sedge and willow in a very wet area with many ponds; to the north is tussock meadow. The view between the mountains and the above-mentioned ridge is quite good, if rather angled.

#### Site Information

This is a light density flake scatter occupying an area 5 m by 4 m and trending roughly N-S. Six artifacts were recovered from the first 5 cm of the 50 cm square test pit. A biface fragment (UA77-99-1; Pl. 15 2; v.4:85) that appears to be a preform was collected from the surface. Two utilized flakes and three waste flakes came from the test pit as well.

## Discussion

The positioning of this site, as well as the material found, speak favorably toward it being a lookout and/or a camp. While water and fuel is located at the bottom of the bluff, it is not so far as to make the place an unrealistic campsite, especially for a short stay. The tight clustering of material makes this a single use area. Due to the absence of diagnostic artifacts, it is impossible at this time to assign an age or cultural affiliation for this site.

<u>Catalog #</u>	<u>Description</u>
UA77-99-1	Preform
UA77-99-4	5 Nonutilized Flakes

XHP-064

Location: Sec. 32, T.32N., R.9E., Kateel River Meridian  
UTM 4/587800/7559200

Class: II

## Location and Setting

A flake scatter was found on a ridge bench or a very high stream terrace about 100 m above Rough Mountain Creek, right where the creek breaks out into Howard Pass. The site is 180 m north of the river and 150 m northwest of XHP-062. The area is covered with a closed-mat alpine tundra vegetation and is bounded by tussock meadow. The flakes appeared in areas of erosion where there is no plant cover. A short distance to the south and southeast of the site is a small but very noticeable shale outcrop. Not much further away, at XHP-062, is a combination outcrop of shale and phyllite. Both test pits excavated here revealed an unusually well-developed soil profile quite free from the large amounts of gravel so typically found. After a 4 cm-thick layer of humus there is about 20 cm of a dark brown clayey soil, which in turn is followed by an unusual deposit of grey clay mixed with pea gravel. At the very bottom of one pit, before permafrost was reached, another layer of brown colored soil started to appear. Since the pits were 10 m to 15 m apart, the clay cannot be considered a localized phenomenon, at least in terms of the site. The exact nature and meaning of the deposit is unknown at this time. The site possesses an excellent vantage point for views south and west of the area between a small N-S trending ridge cut by Rough Mountain Creek and XHP-062.

## Site Information

A small flake scatter of light density is located in an area 28 m E-W by 14 m N-S. Both grey and black CCS were found in small concentrations around the site. Two 50 cm square test pits were excavated, but only one yielded cultural material. It should be noted that there were no artifacts on the surface, and cultural material was encountered 10 cm to 20 cm

below surface. Nine flaked nodules or cores of local, tabular CCS were recovered, as well as one utilized nodule and two utilized flakes. The material here was unlike that found elsewhere on the site because nodules were dominant instead of flakes.

#### Discussion

The available evidence seems to point toward XHP-064 being a lookout site that was probably used several times. Due to the absence of diagnostics, this site cannot be placed in a cultural sequence at this time.

<u>Catalog #</u>	<u>Description</u>
UA77-100-1	Nonutilized Flaked Nodule
UA77-100-2	Nonutilized Flaked Nodule
UA77-100-3	Nonutilized Flaked Nodule
UA77-100-4	Nonutilized Flaked Nodule
UA77-100-5	Nonutilized Flaked Nodule
UA77-100-6	Nonutilized Flaked Nodule
UA77-100-7	Nonutilized Flaked Nodule
UA77-100-8	Nonutilized Flaked Nodule
UA77-100-9	Nonutilized Flaked Nodule
UA77-100-10	Utilized Cortical Flake
UA77-100-11	Utilized Cortical Flake
UA77-100-12	Utilized Flaked Nodule

XHP-065

Location: Sec. 36, T.32N., R.9E., Kateel River Meridian  
UTM 4/586100/7558500

Class: II

#### Location and Setting

A flake scatter was found about 10 m back from the bluff edge of a high stream terrace 15 m above the Rough Mountain Creek floodplain and 300 m northwest of the creek bed. It is 480 m east of a ridge cut by the creek, 780 m southwest of XHP-063 and 2.2 km out of the protected portion of Rough Mountain Creek. This terrace is part of a long continuous terrace along the creek that is partially dissected in this vicinity. The graveled surface of this terrace segment is covered with open-mat alpine tundra vegetation. This is generally the case east and west where a strip of gravelly but fairly level ground extends 5 m to 10 m back from the bluff edge. The exception are the small ravines in the bluff edge where tussocks grow. To the north is tussock meadow; south and 17 m below the terrace is the floodplain supporting riparian growth including sedge and willow. It is a very wet area with many ponds and an oxbow lake at the bottom of the bluff. There is a good view east of Rough Mountain Creek.



### Site Information

A moderately dense flake scatter of grey CCS was found in a 10 m E-W by 7 m N-S area. One 50 cm square test pit was excavated and yielded only three waste flakes. A biface, probably a preform, and a flaked nodule were found in the area as well. All material at the site seems to have been locally derived from any one of four known outcrops further up Rough Mountain Creek.

### Discussion

The location and cultural material present at this site could make this a camp and/or lookout site. Water and fuel are directly below the site on the floodplain, making camping on the terrace fairly convenient. Because of the lack of diagnostic material, it is not possible at this time to place this site in a cultural sequence.

<u>Catalog #</u>	<u>Description</u>
UA77-101-1	3 Nonutilized Flakes

XHP-066

Location: Sec. 32, T.32N., R.9E., Kateel River Meridian  
UTM 4/588200/7559300

Class: II

### Location and Setting

This flake scatter is on a saddle or small ridge between a high knoll, on which XHP-062 lies, and a high ridge 300 m north of Rough Mountain Creek where the creek breaks out into Howard Pass. The site area occupies the crest of the saddle and a small bench west of the crest. Open-mat alpine tundra vegetation covers the site and occurs to the north and south. Tussock meadow occupies the area to the west, while willows occur in a steep drainage to the east. The stratigraphic profile revealed loess mixed with frost fractured CCS bedrock, with the percentage of rock increasing with depth. The view is blocked north and south, but east and west it is excellent of Rough Mountain Creek. This spot is also protected from the north winds, as well as being somewhat sheltered from southerly breezes.

### Site Information

A light scattering of grey green and patinated, grey CCS flakes was found in a 23 m by 21 m area trending E-W. It is possible, however, that downhill erosion has exaggerated the actual area that was once used. Two 50 cm square test pits were excavated, one on the crest and one on the bench. Only the one on the crest yielded any subsurface cultural material. Seven waste and two utilized flakes came from the 1 cm to 5 cm level, and one waste and three utilized flakes came from the 10 cm to 15 cm level.

## Discussion

Although XHP-066 is a well-positioned lookout, it is also in a location with some favorable attributes for camping, such as shelter from wind and fuel for fire. The material found there could be expected in either instance. In fact, it could have functioned as both. A hiatus in the 5 cm to 10 cm level is not felt to be indicative of natural stratigraphy, but rather due to the vagaries of cryoturbations. However, the presence of patinated and unpatinated flakes might be indicative of two components, especially since they both are of the same local material and would therefore experience roughly the same rate of patination. Because there were no diagnostics found, this site cannot be placed in a cultural sequence.

<u>Catalog #</u>	<u>Description</u>
UA77-102-1	3 Nonutilized Cortical Flakes
UA77-102-2	4 Nonutilized Flakes
UA77-102-4	Utilized Cortical Flake
UA77-102-6	Utilized Flake
UA77-102-7	Nonutilized Cortical Flake
UA77-102-8	2 Utilized Flakes
UA77-102-9	Utilized Flake

### XHP-067

Location: Sec. 36, T.32N., R.8E., Kateel River Meridian  
UTM 4/585200/7557900

Class: II

### Location and Setting

XHP-067, a flake scatter, was near the bluff edge where Rough Mountain Creek cuts the crest of a gentle ridge. It is 180 m north of the creek, 30 m above the floodplain and 600 m southwest of XHP-065. This point, that also appears to have been worked over and leveled by stream action, is 2.7 km west of the protected portion of Rough Mountain Creek. The site area is covered with open-mat alpine tundra vegetation, as is the 20 m to 40 m strip to the east and west. To the north, beyond the strip, is both sedge and tussock meadow; south is the floodplain with many ponds and riparian growth including wetland sedge and willows. The whole site area, as well as the site material, was found in and around frost boils and small sorted stone circles consisting of gravel in a silty matrix. This location allows for a reasonably good view of Howard Pass proper, as well as the area between this ridge and the protected portion of Rough Mountain Creek.

### Site Information

Approximately 10 white, patinated CCS flakes were found in a 10 m by 6 m area trending NE-SW. One 50 cm square test pit yielded five waste flakes, two from the surface and three from about a depth of 3 cm.

## Discussion

This site was likely a lookout, although its having been used as a campsite as well is a possibility, given the relative nearness of water and fuel some 30 m below. The patination, as well as the incorporation of material into the frost boils, seems to indicate some degree of age, at least earlier than the late prehistoric period. Since only the one type of material was found in a relatively confined area, a single use of this site is hypothesized. Without diagnostics, though, this site cannot be placed in a cultural sequence.

<u>Catalog #</u>	<u>Description</u>
UA77-63-1	5 Nonutilized Cortical Flakes

XHP-068

Location: Sec. 36, T.32N., R.8E., Kateel River Meridian  
UTM 4/585200/7558900

Class: I

## Location and Setting

XHP-068 consists of a single artifact found at the south end of a high ridge on the east side of Howard Pass. It is 1.3 km north of Rough Mountain Creek and 600 m west of a small pond just off the east side of the ridge. Open-mat alpine tundra vegetation occurs on the ridge top, with tussocks showing up further down and surrounding the ridge. The view is an excellent one of Howard Pass and Rough Mountain Creek for several kilometers in all directions.

## Site Information

A finished biface fragment was found and collected (UA77-104-1, Pl. 2 3; v.4:24). It is made from grey CCS with chalcedony veins running through it. Also, it is lightly patinated on one side and more so on the other. It is likely the midsection of a late prehistoric projectile point.

## Discussion

The setting of this site suggests it was a lookout, but the presence of the projectile point fragment indicates a kill site, or maybe more appropriately a near-kill site. Although microwear analysis shows use of this piece as a knife, the investigator feels it does not conflict with the artifact interpretation. Projectile points in general are known to have served many purposes for the hunter (Ahler 1970). Admittedly a midsection is not much on which to base an identification, but this artifact most closely resembles a type of late prehistoric projectile point discussed in Murdoch (1892:183). The dimensions are at the upper end of the range of variation for this type. This type of point has straight parallel sides for most of its length, ending in a sharp-shouldered, stemmed base. Other points of this type

are described by Ford (1959:135, Fig. 64) as his Class I; Giddings (1952: Fig. 26 3, Pl. 1 15) as belonging to his Ambler Island period, A. D. 1730-1760; Hall (1971) as his Type 1 from Kangiguksuk; and Larsen and Rainey (1948: Pl. 90 1-3, Pl. 94 4) as being from a modern Pingu burial and the Tigara middens of late prehistoric times. While this piece morphologically fits into this category of a late prehistoric projectile point, the presence of patination brings this interpretation into some question. To bring these two points into agreement, one would have to suggest that the microenvironment of the site acted to accelerate patination. As detailed studies of the patination process in this area are lacking, one can only point out the problem.

<u>Catalog #</u>	<u>Description</u>
UA77-104-1	Projectile Point

XHP-069

Location: Sec. 19/30, T.32N., R.9E.; Sec.13, T.32N., R.8E., Kateel River Meridian  
UTM 4/585900/7562600 - 4/587300/7559700 - 4/587200/7562100

Class: II

#### Location and Setting

XHP-069, a caribou fence, covers a large area on the eastern side of Howard Pass between Rough Mountain Creek and Flora Creek. The discontinuous but related features occur on two ridge tops and on an old lake terrace, referred to as Localities 1, 2 and 3, respectively. From south to north, Localities 1 and 2 are on two bedrock, ridge-like spurs of a small mountain. These areas are respectively 960 m and 840 m east of two small lakes. Both spurs are covered with very sparse open-mat alpine tundra vegetation. Locality 3 is on a terrace-like feature that could be associated with the nearby lake cluster. It is about 180 m north of the nearest body of water. Tussock meadow occurs between all three areas.

#### Site Information

This site appears to be the remains of a single caribou fence. Portions of the fence are found stretching for 3 km into Howard Pass and consist of 138 inuksuks. Locality 1 contains 16 inuksuks trending N-S. One and a half kilometers to the north is Locality 2. The 80 inuksuks at this location trend N-S for most of their extent but take a turn northwest toward the end. Locality 3 is 1.4 km northwest of this and contains 42 inuksuks trending roughly E-W. The average distance between inuksuks is 6 m to 8 m. Each inuksuk is presently .4 m to .5 m high, but looks to have originally been close to a meter high.

#### Discussion

Despite their great separation, these areas seem to belong to the same fence system. This inference is based on the orientation and alignment of

the fence sections. The gap between Localities 1 and 2 borders a natural amphitheater to the east which would certainly aid in directing and containing a caribou drive. Locality 3, to the north, seems to be placed to prevent movement of a drive from going further north. Connecting these areas could possibly have been accomplished through the building of inuksuks out of tussocks, which have long since "melted" back into the ground (Ray Bane 1979: personal communication). Either end of this system directs a potential drive toward classic trap areas (Spencer 1959). The northern end (Locality 3) leads toward a lake where the caribou could have been killed from kayaks or by men stationed on the opposite shore. The southern (Locality 1) end leads toward a bluff over which the caribou could have been driven and killed.

Age and cultural affiliation are difficult to assign. However, based on the condition of the fence and ethnographic analogy, it seems to be of Nunamiut origin and from late prehistoric to early historic times.

XHP-070

Location: Sec. 25, T.32N., R.8E., Kateel River Meridian  
UTM 4/585200/7559600

Class: II

#### Location and Setting

This site is a flake scatter, found at the north end of a ridge on the east side of Howard Pass about 540 m west of a small pond. The ridge is essentially the northern, higher segment of the ridge cut by Rough Mountain Creek, where XHP-067 and XHP-068 are located. Cultural material is within 2 m of a moderately sized rock outcrop. The site surface is primarily bare gravel with patches of open-mat alpine tundra vegetation. This alpine tundra extends down around the ridge which is surrounded by tussock meadow. Stratigraphically, these gravels are mixed with loess and the gravels increase in size and percentage with depth. There is an excellent view of Howard Pass to the north, east and west.

#### Site Information

Roughly 50 white, patinated CCS flakes were observed in a 19 m by 15 m area trending E-W. These seemed to occur in two concentrations, but with many more isolated flakes around and in between. Broken sections of some flakes reveal the original color to be a grey green. Two 50 cm square test pits were excavated. TP-A was placed near a concentration, and TP-B was placed where there was no surface indication of cultural material. Both yielded artifacts, but only from the 0 cm to 5 cm level. TP-A contained 11 waste flakes and two utilized flakes, one of which was burinated. TP-B had only two waste flakes. Even buried flakes were patinated. A few bits of broken bone were found in the site area.

## Discussion

This is a lookout site of unknown age and cultural affiliation. The two concentrations indicate at least two flaking episodes. A similar degree of patination on flakes in each group indicates that they are roughly from the same time period. The patination indicates a degree of age that is at least somewhat older than the late prehistoric period. The bone fragments are felt not to be associated with the human use of the site because of the flake scatter's suspected age and the condition of the fragments.

<u>Catalog #</u>	<u>Description</u>
UA77-105-1	11 Nonutilized Flakes
UA77-105-3	Utilized & Burinated Flake
UA77-105-4	Utilized Flake
UA77-105-5	2 Nonutilized Cortical Flakes

XHP-071

Location: Sec. 12, T.32N., R.8E., Kateel River Meridian  
UTM 4/585100/7564800

Class: II/III

### Location and Setting

XHP-071 is a flake scatter on a small knoll on a lake terrace 1 km south of the confluence of the Aniuk River and Flora Creek, and 125 m from the shore of a small lake on the floor of Howard Pass. Open-mat alpine tundra vegetation covers the site, as well as the entire graveled terrace top. To the north and south of the terrace and knoll is tussock meadow. Test pits reveal a gravel-loess mix with the percentage of gravel increasing with depth. The knoll is relatively low, being only 15 m to 20 m above river level, yet it is the highest point on the valley floor proper for several kilometers north. Local relief is a little higher and more uneven to the southeast.

### Site Information

Three small but dense CCS flake concentrations are found in an area 6 m by 3.5 m trending NE-SW; another is 18 m ENE of this area and 1.5 m in diameter. Two 50 cm square test pits were excavated. TP-A was placed in one of the concentrations in the main area. A total of 638 grey waste flakes, 14 utilized flakes, two microblade-like flakes, one possible burin spall, and one burinated flake were collected from the first 5 cm level. Nothing was found deeper. Many more flakes were present, but were too small to be easily gathered and were left. These were less than 2 mm in any dimension. Most of the recovered flakes were less than 5 mm in any dimension and without cortex. Those flakes with cortex indicate a bedrock source. TP-B was placed at the periphery of the other grouping and only yielded two flakes, also from the top 5 cm.

## Discussion

This is likely a lookout site, although its location near water could lend itself to camping as well during the time when winds are mild. The number of loci indicates at least two uses of this site area, the number of concentrations indicating a maximum use of four times. Based on the ratio of utilized to nonutilized flakes, tool manufacture seems to have been the primary activity. Because of the small size of the flakes, this most likely involved the final shaping and finishing of tools, although no finished products were found. Since such a small number of the large number of pieces collected related to burin and microblade technology, it can be inferred that these look-alike pieces were fortuitous. A lack of diagnostics makes it impossible at this time to place this site in a cultural sequence. Perhaps further work here could rectify this deficiency.

<u>Catalog #</u>	<u>Description</u>
UA77-106-1	571 Nonutilized Flakes
UA77-106-2	67 Nonutilized Cortical Flakes
UA77-106-3	Microblade-like Flake
UA77-106-4	Microblade-like Flake
UA77-106-5	Nonutilized Possible Burin Spall
UA77-106-6	Utilized Flake
UA77-106-7	Utilized Flake
UA77-106-8	Burinated Flake
UA77-106-9	Utilized Flake
UA77-106-10	Utilized Flake
UA77-106-11	Utilized Flake
UA77-106-12	Utilized Flake
UA77-106-13	Utilized Flake
UA77-106-14	Biface Trimming Flake
UA77-106-15	Utilized Flake
UA77-106-16	Utilized Flake
UA77-106-17	Utilized Flake
UA77-106-18	Utilized Flake
UA77-106-19	Utilized Flake
UA77-106-20	Utilized Cortical Flake
UA77-106-22	Utilized Flake
UA77-106-28	Utilized Cortical Flake
UA77-106-29	2 Nonutilized Flakes
UA77-106-30	Utilized Cortical Biface Trimming Flake

XHP-072

Location: Sec. 36, T.33N., R.8E., Kateel River Meridian  
UTM 4/585500/7568000

Class: I

#### Location and Setting

Two flakes were found on a stream terrace 50 m south of the Aniuk River near Kiingyak Lake. Open-mat alpine tundra vegetation covers the site, with tussocks surrounding the graveled terrace remnant. A little further north lies the floodplain of the Aniuk and some sedge meadow and willow growth. The view is rather extensive to the north and east across the pass, but is rather low-angled, obscuring much in the way of micro-relief at any great distance.

#### Site Information

A yellow brown CCS flake and a grey blue CCS flake were found 3 m E-W of each other. The yellow brown flake is lightly utilized and is from a bedrock source.

#### Discussion

Not much can be said about this site on the basis of two flakes. Its location indicates that it may have been a camp, a lookout, or both. Because of the dearth of diagnostics, this site cannot be placed in a cultural sequence at this time.

<u>Catalog #</u>	<u>Description</u>
UA77-107-1	Utilized Flake

XHP-073

Location: Sec. 1, T.32N., R.8E., Kateel River Meridian  
UTM 4/585400/7566200

Class: II

#### Location and Setting

A flake scatter was found at the southern end of a ridge called "Frosty Top Hill." This limestone and shale outcrop is a highly visible, bright-white ridge in Howard Pass on the west side of the Aniuk River. The site is 570 m northwest of the confluence of the Aniuk River and Flora Creek and 960 m southeast of Kiingyak Lake. There is a sparse growth of open-mat alpine tundra vegetation on the site, as well as on the whole ridge. Tussock meadow surrounds the ridge with willows and sedge meadow growing along the streams. The stratigraphy consists of a shale-gravel pavement underlain by a gravel-loess mix. At about 15 cm, there is bedrock



of frost-fractured shale. There is a fairly good view of the Howard Pass-Kiingyak Lake area from the northeast through the southwest. The view north is blocked by the rest of the ridge.

#### Site Information

XHP-073 consists of three localities spread out over a 150 m by 50 m area, trending roughly NW-SE. Locality 1 consists of a well utilized, blade-like flake and a waste flake, both of grey CCS. Locality 2 is roughly 20 m north; and contained two more waste flakes, one of grey and one of black CCS. Locality 3 is about 150 m southeast of Locality 2 and consists of a flake scatter 5 m by 3 m. A 50 cm square test pit was excavated in the middle of this locality. The test pit yielded only five waste flakes, three utilized flakes, and a biface in the first 5 cm level. The biface (UA77-108-10; Pl.10 7; v.4:70) appears to be a side blade preform. This is inferred from its asymmetrical shape. For the purposes of this report, it is classified as a miscellaneous knife. About 5 m north of the test pit are a couple of caribou bone fragments; association is uncertain.

#### Discussion

This is a lookout site that has undergone at least three periods of use. Since some of the material was found in frost boils and material came from as deep as 4 cm from the test pit, it is likely that there would be more material in the vicinity of the three loci. Because of the absence of diagnostic artifacts, it is impossible at this time to place this site in a cultural sequence.

<u>Catalog #</u>	<u>Description</u>
UA77-108-1	Utilized Blade-like Flake
UA77-108-2	Caribou Bone - Ulna Fragment
UA77-108-3	2 Nonutilized Flakes
UA77-108-4	3 Nonutilized Cortical Flakes
UA77-108-5	Utilized Flake
UA77-108-7	Utilized Cortical Flake
UA77-108-9	Utilized Cortical Flake
UA77-108-10	Miscellaneous Knife

XHP-074

Location: Sec. 32, T.33N., R.8E., Kateel River Meridian  
UTM 4/579200/7567400

Class: III

#### Location and Setting

XHP-074 is a multifeature site on a stream terrace carved on a CCS outcrop 270 m east of an unnamed tributary of Fauna Creek and 1.1 km north of Fauna Creek (Fig. 29). Open-mat alpine tundra vegetation covers the whole graveled terrace segment, including the site. Tussock meadow sur-

XHP 074

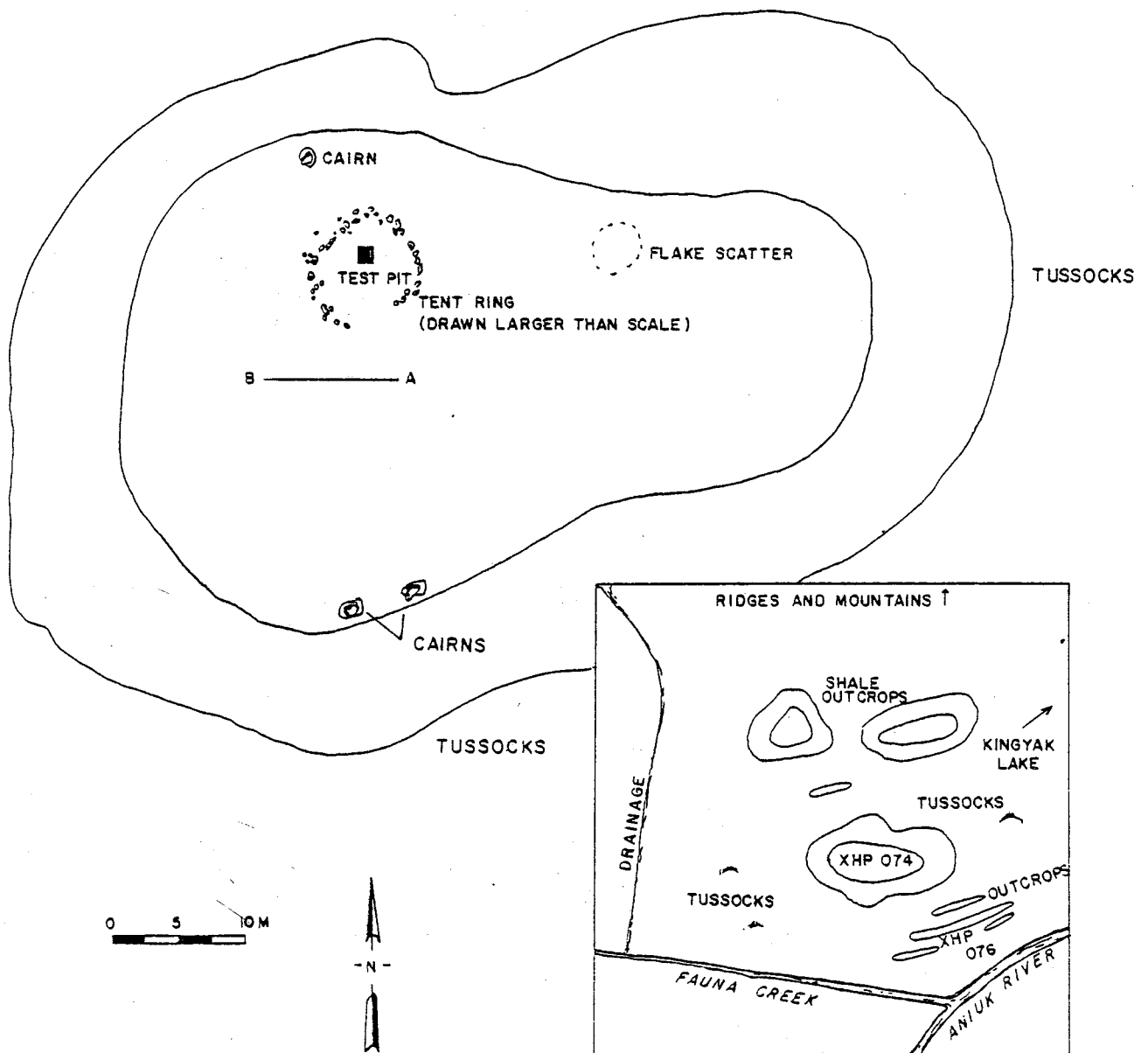


Figure 29

rounds the terrace area and even borders the streams. The stratigraphic profile as seen in one test contains nothing but frost-fractured bedrock of CCS. There is a fair view of the lower Fauna Creek area to the south and west.

#### Site Information

One or possibly two tent rings, three cairns, and a flake scatter of CCS were found in a 50 m by 40 m area trending E-W (Fig. 29). The one well-defined tent ring is oval in shape and measures 3 m EW by 2.5 m N-S (Fig. 29). CCS cobbles, fist-sized and slightly larger, define the boundaries except for a small portion on the northwest side where flat grey shale rocks were used. What seems to be the entrance is facing south. A test pit inside the structure produced no artifacts. Five to ten meters north of the tent ring is a single cairn. Two more cairns were downslope about 15 m to 20 m south and are about 2 m apart. Approximately 30 m to 40 m east of the tent ring is a scatter of possible flaked CCS nodules. This area contains some local CCS that may be flaked. In this case, it was difficult to tell natural fractures from those intentionally delivered by man. Finally, between the possible flake scatter and the tent ring is a collection of larger rocks in a relatively small area. This, perhaps, could represent a cannibalized, older tent ring.

#### Discussion

Although there is no way to associate all the features on this site, the presence of the tent ring and cairns seem to suggest primarily a late prehistoric to early historic Nunamiut occupation. The features present suggest this terrace's overall use as a campsite, lookout, hunting site, and quarry. A Nunamiut affiliation is inferred on the basis of the excellent state of preservation of the tent ring and its correspondence to structures used ethnographically for summer use. Summer use is hypothesized from criteria set forth by Corbin (1975, 1976) and derived from ethnographic analogy. In his statement, Corbin says that stones for use in a tent ring are only capable of being gathered in snow-free months from unfrozen ground surfaces. Stones large enough for a tent ring would neither be visible nor easily removed from the ground in winter months, hence a summer occupation.

XHP-075

Location: Sec. 11, T.33N., R.9E., Kateel River Meridian  
UTM 4/593900/7574500

Class: II

#### Location and Setting

This isolated cairn is located on a high E-W trending ridge 2.9 km north-east of Akuliak Lake and .85 km southwest of a drainage named Disappointment Creek by the survey party. The ridge top supports an open-mat alpine tundra cover. The outcrop that supports this ridge is entirely surrounded by tussock meadow.

### Site Information

The cairn measures 91 cm by 66 cm and is 18 cm high. It consists of a large rock slab placed on smaller rocks with another rock on top.

### Discussion

XHP-075 is part of a series of isolated cairns found in the Howard Pass survey area. It probably served as a marker of some sort for a hunter. As with any feature of this sort, age and cultural affiliation are difficult to assign, however, based on the condition of the cairn, a Nunamiut origin and a late prehistoric to early historic time period seems likely.

### XHP-076

Location: Sec. 32, T.33N., R.8E., Kateel River Meridian  
UTM 4/579200/7567200

Class: III

### Location and Setting

A stone structure is on a stream terrace 1 km north of Fauna Creek, 300 m east of an unnamed tributary, and 200 m southeast of XHP-074. The graveled terrace surface supports a cover of open-mat alpine tundra vegetation and is surrounded by tussock meadow. One test pit revealed a grass-loess mix below a shaley pavement. There is a good view to the south and west, including the confluence of Fauna Creek and the Aniuk River.

### Site Information

A stone structure, that could be called a tent ring, measures roughly 3 m by 2 m in extent, and trends E-W (Fig. 30). The interior dimensions are 2 m by .9 m. Large rocks now mark the boundaries with a significant amount of rubble lying outside the structure. There seems little doubt that the exterior rocks were once all piled up to form a wall around the interior about .5 m to .75 m high. Only fine-grained flakes and a biface, probably a knife, were found under a 40 cm by 30 cm rock in the center of the structure. One other flake was found near one of the walls on the inside and a flake and crude biface (UA77-111-1; Pl. 14 10; v.4:85) were found just outside the structure. In addition, some decaying willow was found along the eastern portion of the north wall. A single 50 cm square test pit outside the structure produced no additional cultural material.

### Discussion

This structure is rather unusual when compared to other tent rings in the area such as XHP-074. It is unlike any ethnographically known Eskimo tent ring, consequently bringing up the possibility of it being evidence of the proto-historic Athapaskan occupation of this area (Hall 1969, Shields 1978). While there is nothing particularly diagnostic here, the structure's

XHP 076  
STONE STRUCTURE

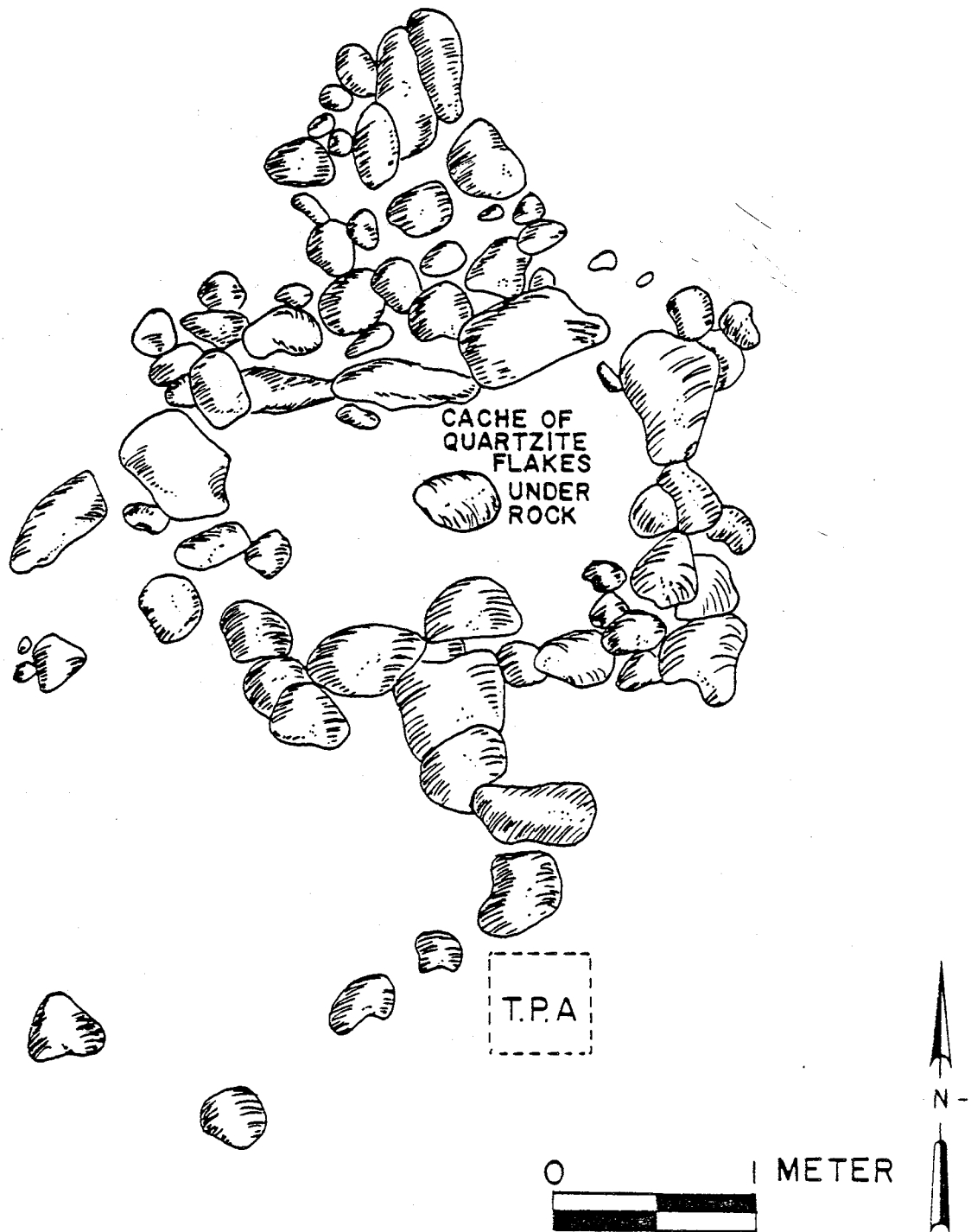


Figure 30

coherency suggests a late prehistoric to early historic time frame, making an Athapaskan occupation possible. The argument is primarily based on house type and is elaborated on elsewhere (see XHP-115). This feature bears resemblance to those at sites, such as XHP-087, 141, or 291, where other stacked wall structures occur. Another point of difference between this site and others in the area is that this is the only site in the Howard Pass survey area where quartzite is found. Since quartzite boulders can be found in the glacial till and stream deposits locally, this indicates a material preference by the people using this site that is different from what people used at other sites; or perhaps this is indicative of a foreign people first coming into an area and not being aware of local sources of better material. Whoever occupied this site probably did so in the summer. Even if Athapaskans did build this structure, the same constraints of material availability affecting Eskimos would affect them as well. Ethnographic data on the Eskimo states that rocks for tent rings are only capable of being gathered in the snow-free months from unfrozen ground surfaces (Corbin 1975, 1976). Stones large enough for a tent ring would neither be visible nor easily removed from the ground in winter months, hence a summer occupation.

<u>Catalog #</u>	<u>Description</u>
UA77-111-1	Preform

XHP-077

Location: Sec. 10, T.32N., R.8E., Kateel River Meridian  
UTM 4/582400/7565200

Class: II

#### Location and Setting

This hearth is located on the west side of Howard Pass. It is at the south end of an unnamed lake on a terrace not more than 15 m south of the water's edge. The terrace is mostly bare with some alpine tundra present. Tussock meadow is to be found off the terrace to the south and east. Open-mat alpine tundra vegetation continues on the terrace for a few hundred meters west. The terrace surface is composed of angular and subangular gravels in a silty matrix with the percentage of gravels increasing with depth.

#### Site Information

XHP-077 is a single hearth measuring about .75 m in diameter (outside dimension). This small stone ring was found unassociated with any other artifact or feature. A 50 cm square test pit was excavated nearby with negative results.

#### Discussion

The major questions to address are if this feature is indeed cultural, since there were no artifacts present, and if it is cultural, why a hearth? It is

considered cultural because of its configuration and the fact that small stone circles of this sort do not appear to be a natural, reoccurring phenomenon in the Howard Pass area. The sorted stone circles observed are usually larger and consist of a piled rock ring of many stones that seem to emerge out of the ground to a variety of heights above surface. This was unlike the present feature which is a single ring of rocks set on the ground surface. The idea of this being a hearth is derived from its shape and size; unfortunately no charcoal was found inside.

Determining site function and cultural affiliation is quite difficult. Hypothetically, the isolated hearth could represent the remains of a brief summer encampment belonging to the Nunamiut. An encampment because of the hearth, access to water and willow at nearby Flora Creek and its location on dry level ground; summer, because of its nasty winter reputation and nobody in their right mind would camp there then (Ray Bane 1979: Personal Communication; Burch 1976). Contradictory evidence, however, is presented by James Corbin (1975, 1976). Corbin's study of Nunamuit houses indicates a hearth alone would signify winter occupation, since snow block would be used to hold the tent skins down. For the time being, seasonality must remain an open question. The hearth is hypothesized to be late prehistoric Nunamiut because of its fairly good state of preservation. It would seem likely that a feature such as this more than 500 years old would be so disrupted by local frost heaving as to be unrecognizable.

XHP-078

Location: Sec. 4, T.32N., R.9E., Kateel River Meridian  
UTM 4/589700/7566000

Class: III

#### Location and Setting

XHP-078 is a tent ring on a knoll on the east side of Howard Pass. It is 1.2 km north of Flora Creek and has an excellent view of Flora Creek valley and Howard Pass. The nearest water is .5 km south in a small lake. Open-mat alpine tundra vegetation grows on what is primarily a bedrock exposure. Tussock meadow abuts the knoll to the northwest and southeast. Northeast and southwest are bedrock continuations of the unnamed mountain of which the site is a part. The ground surface is predominately angular gravels that form a pavement. Below the surface small gravels are in a silty matrix with gravel size and percentage increasing with depth.

#### Site Information

This site consists solely of an oblong shaped tent ring of locally available material. The structure has an interior measurement of 3.6 m by 1.1 m (Fig. 31). Its outside dimensions are 4.0 m by 2.3 m. The width measure includes what appears to be an entrance on the east side. The long dimension of the tent ring is oriented to magnetic N-S. Two 50 cm square

XHP 078  
TENT RING

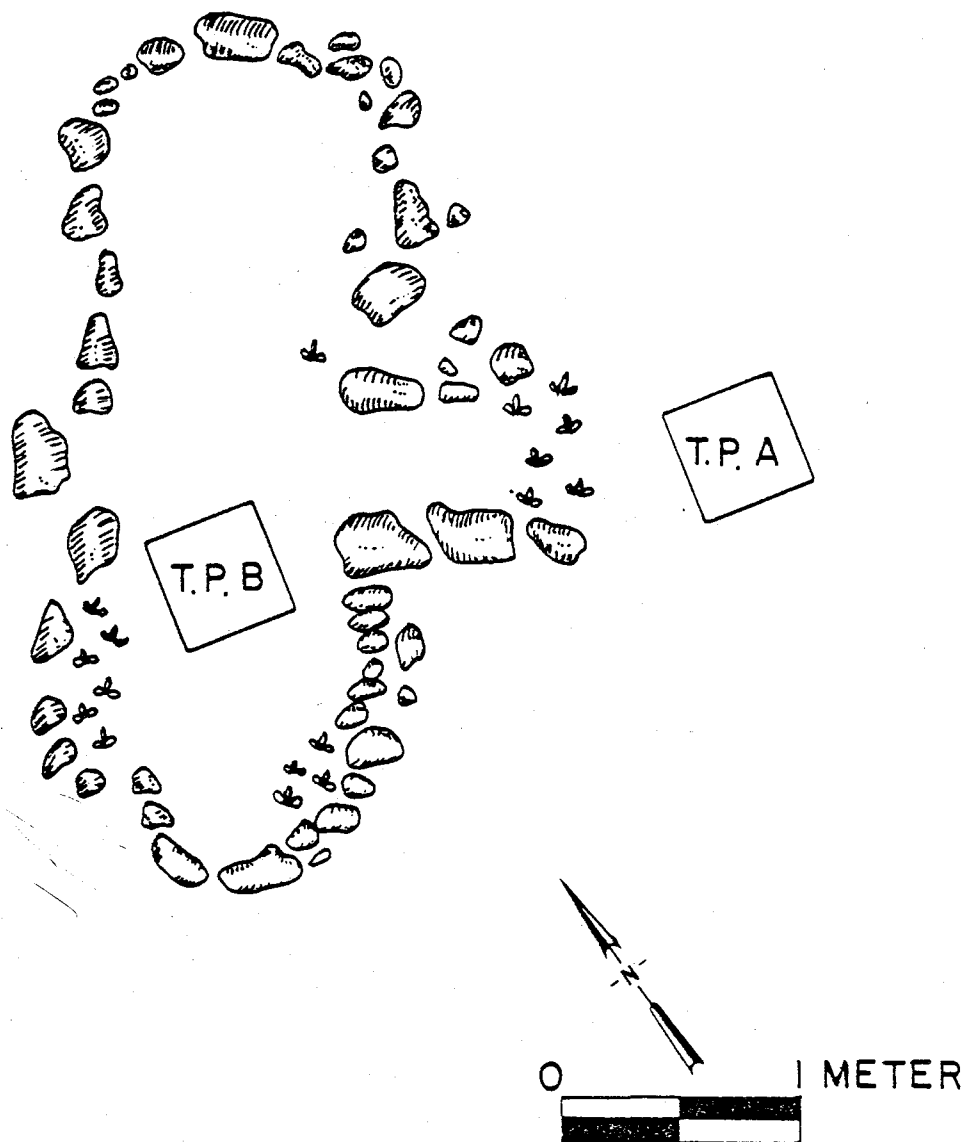


Figure 31



test pits, one inside and one outside the entrance, produced no cultural material.

#### Discussion

This structure is probably a Nunamiut tent ring used during the summer. Although its shape is a bit unusual, it does seem to fit within the range of variation for a structure of this type. Its good state of preservation in such an exposed locale speaks toward no more than a late prehistoric/early historic age. Summer use is hypothesized from criteria set forth by Corbin (1975, 1976) and derived from ethnographic analogy. In his statement, Corbin says that stones for use in a tent ring are only capable of being gathered in the snow free months from the unfrozen ground surface. Stones large enough for a tent ring would neither be visible nor easily removed from the ground in the winter months, hence a summer occupation.

XHP-079

Location: Sec. 8, T.32N., R.9E., Kateel River Meridian  
UTM 4/589000/7565600

Class: II/III

#### Location and Setting

A possible tent ring was found on a stream terrace at the base of a high hill 1.3 km north of Flora Creek and 150 m southwest of XHP-078. Open-mat alpine tundra vegetation covers the terrace surface as well as the hill to the north and east. As one proceeds west and south into the lowlands, tussock and sedge meadow appear depending on the degree of moisture. Willows are located at a distance along Flora Creek. Two test pits reveal a typical stratigraphy of mixed gravel and loess underlying a gravel pavement. There is a good view of Howard Pass south and west including lower Flora Creek. The hill blocks the view north and east.

#### Site Information

A clustering of large atypical rocks on the terrace surface occurs in a 4 m by 3.5 m area along with a scattering of caribou bone. The rocks make a sub-circular pattern suggesting the outline of a tent ring (Fig. 32). Two 50 cm square test pits, one inside and one outside, yielded bone fragments from the surface.

#### Discussion

The presence of bone fragments with the rock pattern strengthens the possibility of this being a campsite with a tent ring. The manner of construction, the single layer spaced rocks, and the condition of the ring suggest a late prehistoric Nunamiut occupation, probably during the summer. Seasonality and cultural affiliation are based on ethnographic comparisons. Summer use is hypothesized from criteria set forth by Corbin (1975, 1976). In his statement, Corbin says that stones for use in a tent

XHP 079

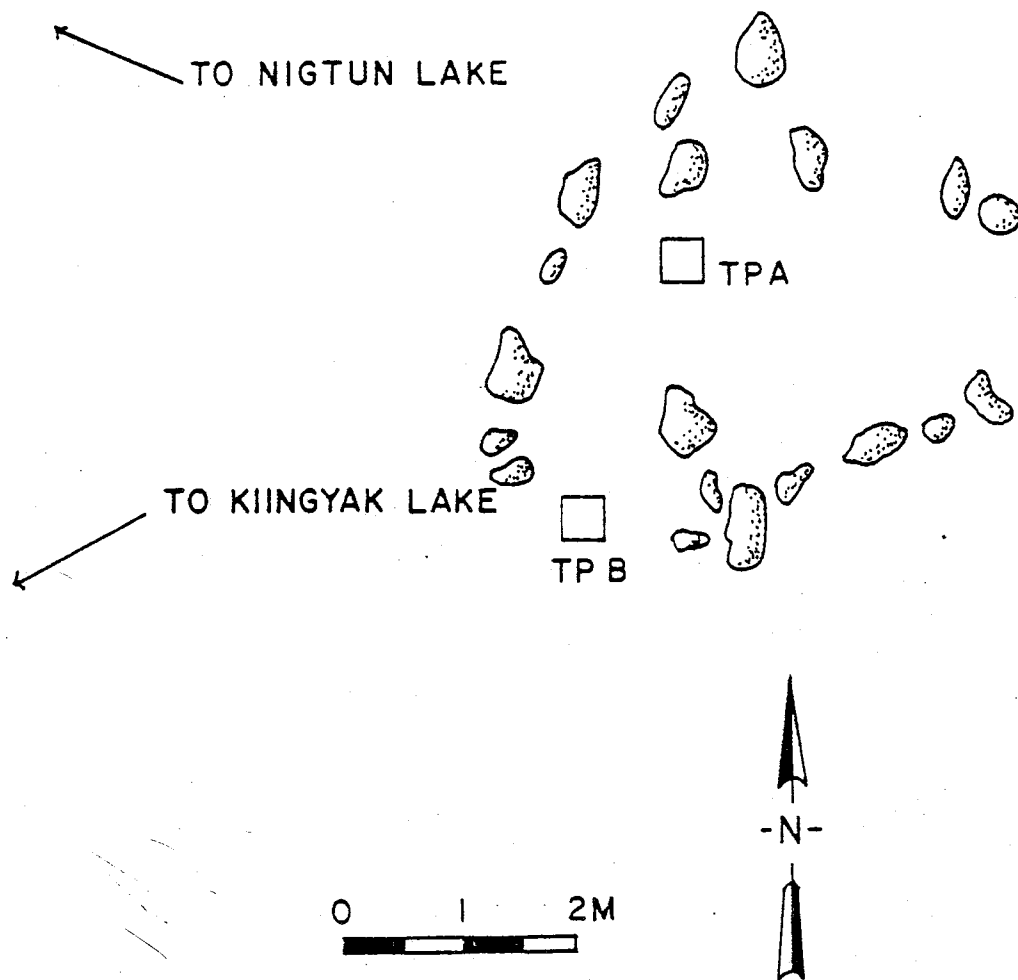


Figure 32

ring are only capable of being gathered in the snow-free months from the unfrozen ground. Stones large enough for a tent ring would neither be visible nor easily removed from the ground in winter months, hence a summer occupation.

<u>Catalog #</u>	<u>Description</u>
UA77-112-1	4 Bone Fragments
UA77-112-2	Bone Fragment

XHP-080

Location: Sec. 21, T.33N., R.9E., Kateel River Meridian  
UTM 4/591400/7571400

Class: II

#### Location and Setting

The site, consisting of a large rectangular rock pile, is on a bedrock outcrop at the south end of Akuliak Lake. The nearest body of water is the lake itself some 300 m northwest. Vegetation is almost nonexistent on the surface of the hill, which consists primarily of angular gravels and cobbles. Some dwarf birch is found growing around the dominant feature of the site. Tussock meadow predominates in the lands surrounding the outcrop.

#### Site Information

The large rectangular pile of rocks has its long axis trending E-W. The angular cobbles and boulders comprising the feature are from the local surface and range from 20 cm by 20 cm to as large as 60 cm by 40 cm. This rock pile or cairn measures 2.5 m by 1 m and is somewhat less than a meter in height.

#### Discussion

The exact nature of this feature is unknown, however, two possibilities come to mind: a burial cairn or a collapsed wall. Based on evidence in the Anaktuvuk Pass area, where some historic period burials have been found inside large rock piles, the possibility of the cairn containing, or having once contained a burial is not unreasonable (Alexander 1969). A bit of testing in which a few of the rocks were removed, did not substantiate nor disprove this hypothesis. The rocks were replaced as they were found. The investigators were reluctant to dismantle the cairn to discover its possible contents, due to the sensitive nature of such finds. Further testing is needed to verify the burial hypothesis.

Another possibility for the origin of this feature is that it served as a hunting site, and represents a collapsed windbreak/hunting blind. Similar features were found all over the study area, but were usually of narrower width. However, this could just be a variation on a theme. In either

case, evidence based on work further east, in the Atigun Canyon and Anaktuvuk Pass area, Alexander (1969) suggest a Nunamiut origin for this feature. An Athapaskan origin should not be ignored, however, because of the proximity to a suspected Athapaskan village, XHP-087. Either interpretation would place the age no earlier than the late prehistoric period.

XHP-081

Location: Sec. 18, T.33N., R.9E., Kateel River Meridian  
UTM 4/587600/7572600

Class: III

#### Location and Setting

A number of cultural features are located on a terrace-like feature on the west side of Howard Pass. The site is 3 km west of Etivluk River and 1.1 km northeast of XHP-083. Open-mat alpine tundra vegetation covers the graveled expanse that is probably a low-lying rock outcrop of some sort. A gravel-loess mix lies below a gravel pavement, with the percentage of gravel increasing with depth. There is a good view of Howard Pass from here.

#### Site Information

A seven inuksuk caribou fence, a semicircular stone hearth, and a stone lamp were found in a 160 m by 30 m area trending 160° - 340°. The fence is oriented the same way as the site and runs for 45 m. The inuksuks average 8 m apart and the highest is 50 cm. About 30 m southeast of the fence was found a stone oil lamp, or perhaps more properly, an oil lamp preform (UA77-113-1; Pl. 68 1; v.4:207). Two portions of the edge of a naturally concave rock are ground smooth; other parts of the edge have been hammered to shape the outline of the piece. A rather lengthy break along the lip occurs adjacent to one of the ground sections. This break seems to have been the probable cause for discarding the piece, as a whole new edge or lip would have to have been created. Finally, there is the stone hearth which lies 30 m southeast of the lamp. It measures 52 cm by 36 cm on the inside, 1 m by .62 m on the outside, and is made of bedrock slabs. Charcoal was found inside. A 50 cm square test pit revealed nothing more than the charcoal.

#### Discussion

It is uncertain whether any of the features are associated. The hearth and lamp support the idea that this was a camp; the caribou fence indicates that this was a hunting site. A late prehistoric to early historic age is hypothesized on the basis of the good condition of the fence and hearth. The presence of charcoal in the hearth may indicate an even later use of the site, since carbon seems to disappear quickly from the surface. The lamp itself, corroborates this interpretation in that it matches what Murdoch (1892) refers to as a type of traveling lamp from late nineteenth century Point Barrow. It seems that lamps can be made at the moment

from local materials. Such lamps would not be expected to conform to the exacting standards known for house lamps. The specimen found seems to fit this crude type. The site no doubt belongs to one of the Nunamiut bands occupying this area during that period.

<u>Catalog #</u>	<u>Description</u>
UA77-113-1	Stone Lamp
UA77-113-2	Charcoal Sample from Hearth

XHP-082

Location: Sec. 10, T.33N., R.9E., Kateel River Meridian  
UTM 4/592800/7574800

Class: I

#### Location and Setting

A single artifact was found at the west end of a ridge near the north end of Howard Pass. It is about 1 km east of Etivluk River and 1.2 km north of a small unnamed tributary of the Etivluk. The graveled bedrock surface supports an open-mat alpine tundra vegetation with tussock meadow surrounding the ridge. There is an excellent view of the north end of Howard Pass from this location.

#### Site Information

XHP-082 consists of what appears to be a broken arrow shaft (UA77-114-1; Pl. 50 4; v.4:244). Although the diameter is a bit small for an arrow shaft, as reported by Murdoch (1892), the cross section and size of the piece seem to address no other possibility. In addition, this piece seems to possess the breakage pattern expected from an arrow shaft. The split end would be toward the distal end of the shaft where the projectile point would be hafted. An impact with a hard material such as bone or rock would cause the stem or base of a point to split the shaft. The proximal end of this piece seems to have splintered, possibly due to a wobbly flight path causing a skewed hit. Since it is doubtful that a skewed hit to an animal would cause a shock great enough to split and splinter a shaft, it is suggested here that this piece represents a miss and a frustrated moment in a day's hunt.

#### Discussion

This is a hunting site of late prehistoric to early historic Nunamiuts. Age assignment is based on the unlikelihood of a wood fragment surviving more than a couple of hundred years on the surface.

<u>Catalog #</u>	<u>Description</u>
UA77-114-1	Arrow Shaft

XHP-083

Location: Sec. 19, T.33N., R.9E., Kateel River Meridian  
UTM 4/587400/7570900

Class: II

#### Location and Setting

XHP-083, a caribou fence, can be found on a graveled terrace, probably of fluvial origin, on the west side of Howard Pass. It is approximately 360 m north of a small unnamed lake. The terrace is covered with open-mat alpine vegetation and surrounded by tussock meadow.

#### Site Information

This is a single caribou fence made up of 56 inuksuks, extending for 500 m to 600 m on an 80° - 260° orientation. The inuksuks are fairly regularly placed at 10 m intervals. While the rock piles making up the inuksuks are in a state of disrepair, there appears to be a tendency for them to be higher on the eastern end. The inuksuks extend out into the tussocks toward the east.

#### Discussion

XHP-083 is a hunting site associated with a caribou drive. It is the fence that acts to guide the caribou in the desired direction. Its orientation leads to two possible areas of entrapment. Approximately 2.7 km east is the series of meander scars and bogs associated with the Etivluk River, as well as the river itself. One kilometer further east is Akulika Lake. Each of these features offers its own advantages. In either the oxbow lakes off the river or in the big lake, men in kayaks could have been in a position to spear the animals while they were in the water. The oxbow lakes and bogs of the river are closer but Akuliak Lake would afford more room to maneuver the water craft, plus give the hunters more time to kill game. The fact that no inuksuks were found connecting the inuksuks on the terrace with these features does not negate the hypotheses. Inuksuks could have been built out of tussocks, which have long since decomposed from the time of their last usage (Ray Bane 1979: Personal Communication). Based on the condition of the fence and ethnographic analogy, it seems to be of Nunamiut origin, from late prehistoric to early historic times.

XHP-084

Location: Sec. 10, T.33N., R.9E., Umiat Meridian  
UTM 4/593300/7574200

Class: I

### Location and Setting

Three fragments of worked wood were found on a ridge near the north end of Howard Pass about 1.5 km east of the Etivluk River, 480 m southeast of XHP-082 and 900 m north of a small unnamed tributary. The graveled bedrock surface has a cover of open-mat alpine tundra vegetation, the ridge is surrounded by tussocks. There is a good view of the north end of Howard Pass from this spot.

### Site Information

Three worked pieces of wood were located in a cluster; two of the pieces fit together (UA77-115-2; Pl. 52 4; v.4:243). The oval to circular cross section of the pieces in the .9 cm to 1 cm size range suggest its function as an arrow shaft.

### Discussion

This is a late prehistoric to early historic hunting site. The broken arrow shaft probably tells the story of a missed shot. A rather late time period is suggested by the wood, which probably could not survive more than a couple of hundred years on the surface, if that.

<u>Catalog #</u>	<u>Description</u>
UA77-115-1	Arrow Shaft
UA77-115-2	Arrow Shaft in Two Pieces

XHP-085

Location: Sec. 21, T.33N., R.9E., Kateel River Meridian  
UTM 4/591300/7571300

Class: III

### Location and Setting

XHP-085 is a camp situated on a beach ridge or terrace along the south-east short of Akuliak Lake beneath a large bedrock outcrop. The profiles from two 50 cm square test pits revealed loess mixed with large bedrock slabs. Areas near the site exist where bedrock is bared and no vegetation other than lichen grows. The soil on the site supports closed-mat alpine tundra vegetation. The lake contains grayling and possibly other fish species as well.

### Site Information

Three tent rings, an assortment of Caribou bones, modern trash, and a chipped stone knife delineate a campsite in this location (Fig. 33). It measures 65 m by 25 m and is oriented with the NE-SW direction of the lakeshore. Tent rings 1 and 2 are rectangular and suggest the outline of commercial canvas tents. The third tent ring is less distinct, but sug-

# XHP 085

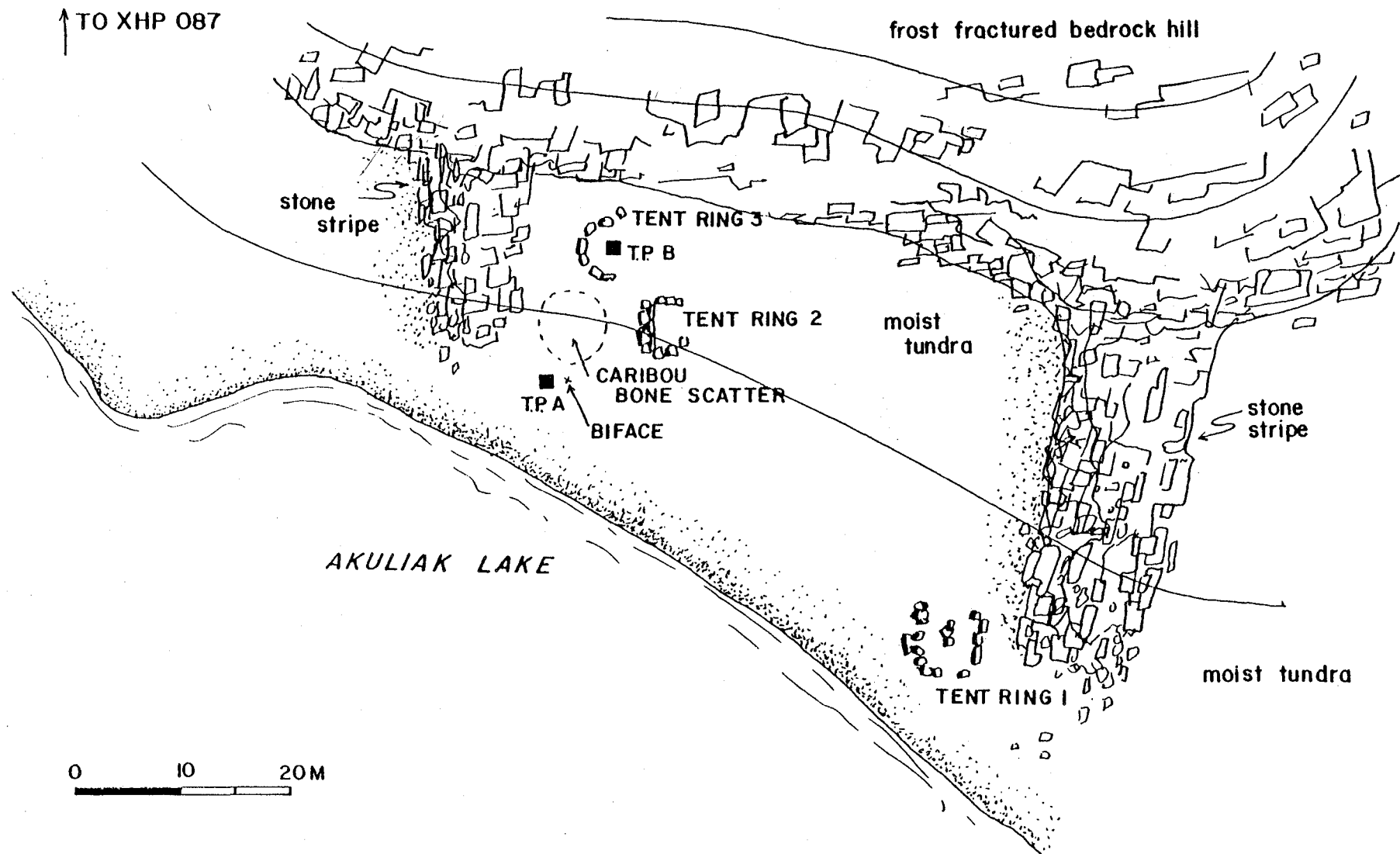


Figure 33



gests the more traditional curvilinear shape used for skin tents or iceliks. A scattering of caribou bones was found to the north and west of Tent rings 2 and 3. From this area came a bifacially chipped stone knife (UA77-116-1; Pl. 7 6; v.4:55). Finally, superimposed over these stone and bone features is an array of modern trash including a Coleman stove, glass bottles and jars, food cans, AV gas cans, wooden gasoline boxes in varying states of decay, and even some underwear. Of the two test pits, only Test Pit B in Tent Ring 3 produced any cultural material. This was six strips of milled wood that appear to be from a broken gas box.

#### Discussion

This site is a two component hunting camp. The two rectangular tent rings and the modern trash suggest a mid-twentieth century occupation. Since the lake provides excellent float plane access, this location could be a base of operations for Eskimo or white hunters using the area. The presence of the chipped stone tool and less distinct Tent Ring 3 suggest an earlier late prehistoric or early historic, traditional Eskimo occupation.

<u>Catalog #</u>	<u>Description</u>
UA77-116-1	Knife End Blade
UA77-116-2	6 Wood Strips, Some Milled
UA77-116-3	Chrome-like Metal Fragment

XHP-086

Location: Sec. 24, T.32N., R.11E., Kateel River Meridian  
UTM 4/611100/7564000

Class: II

#### Location and Setting

XHP-086, a single cairn, is situated on a high WNW-ESE trending ridge 1.6 km south of what the survey party called Inyorurak Pass Creek, and 5.7 km east of the middle of Inyorurak Pass. It is also 300 m east of XHP-145. The ridge top is primarily bare rock, but does support open-mat alpine tundra vegetation. Immediately off the crest, north and south, tussock meadow begins, whereas the tussocks east and west of the site do not show up for at least 1.5 km east or 2.4 km west.

#### Site Information

This cairn measures 40 cm by 50 cm by 50 cm in height. It is constructed of three slabs of rock leaning up against a chunkier support rock. All stones are of local origin.

#### Discussion

XHP-086 is one of a series of isolated cairns found in the Howard Pass survey area. Based on the condition of the cairn, a Nunamiut origin and a late prehistoric to early historic period seem likely.

XHP-087

Location: Sec. 21, T.33N., R.9E., Kateel River Meridian  
UTM 4/591300/7571300

Class: IV

#### Location and Setting

A village site is located on a bench, on top of a large rock outcrop or hill at the southeastern end of Akuliak Lake. The site is about 20 m above the lake and presents an excellent view of this north central portion of Howard Pass. A jumble of frost fractured, heavily lichenated bedrock makes up the ground surface. Small patches of alpine tundra vegetation grow where some wind blown silts have collected.

#### Site Information

Four localities occur at two different elevations on the northwest face of this hill (Fig. 34). Locality 1 is on the lower bench and Localities 2, 3, and 4 are on the upper bench. Features found here include a cairn, a windbreak/hunting blind, and several residence structures. All together the site measures 200 m by 70 m and is oriented NE-SW. Locality 1 contains eight dwellings composed of large bedrock slabs and angular rock lying in a circle or oval often with a depressed center and a collapsed wall in the interior. They range in size from 2.2 m by 2.2 m to 7 m by 4.5 m. One structure seems to have an entrance through the rock wall and another seems to have had a constructed entryway. In many cases it appears that there were rock walls surrounding the depressions and that these have sloughed into the center of the house. Bones were scattered inside and outside the structures as were CCS flakes. Two test pits were dug in this locality, TP-A was placed in a house structure and TP-B was placed outside the same structure. Excavation was more a matter of rock removal than moving dirt. TP-A produced material as deep as 25 cm. This included two waste flakes, 20 bone fragments and three pieces of organic matter (maybe bark). The impression during excavation was that this material had filtered down through the cracks from the surface. TP-B contained more soil than TP-A but was still very rocky. Here, cultural material was only found in the first 5 cm. Eight waste flakes and one utilized flake were all that was recovered. The windbreak/hunting blind was located downslope off the bench 16 m from the edge. It is 1 m high and about 2.5 m long and oriented N-S. The entire locality measures 40 m, N-S, by 25 m, E-W.

Locality 2, about 75 m north of Locality 3, consists of three house structures and a windbreak/hunting blind. These dwellings are very similar in construction to those in Locality 1, except no artifactual or faunal material was found in their vicinity. They range from 1 m to 2 m in diameter and are about 1 m deep. The investigators feel the houses may have been larger and deeper, but that wall collapse may have obfuscated this fact. Twenty-six meters south of the southern most dwelling is the windbreak/hunting blind. It is about 1 m long, .25 m wide, about .5 m tall and oriented E-W.

# XHP 087

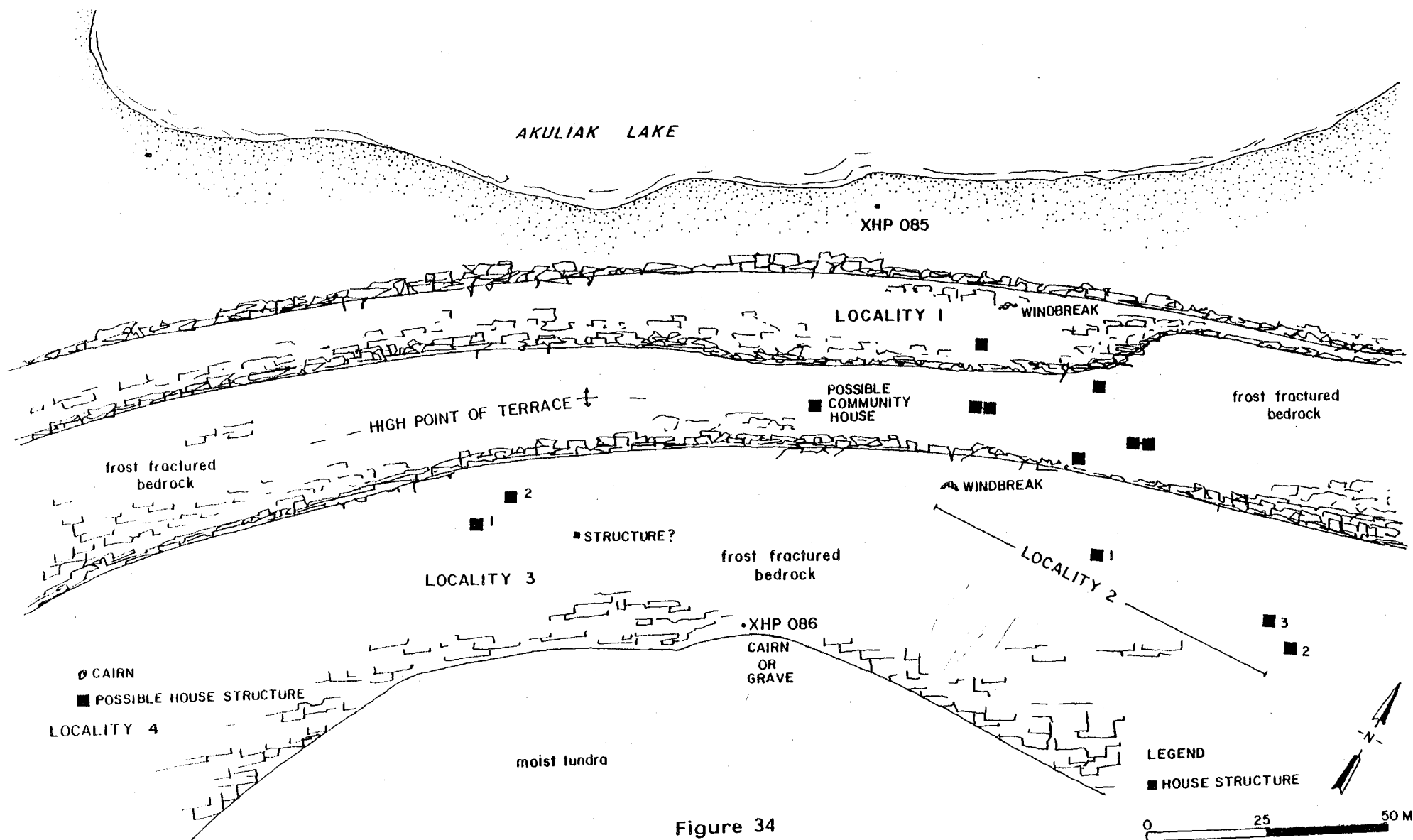


Figure 34

Locality 3 consists of two house structures and a probable cache pit. One circular dwelling is 1.5 m by 1.5 m, the other one is somewhat elliptical and open at one end. It measures 2.5 m in length and about 1.5 m wide on the inside. Also in this cluster is a small circular pit 1 m in diameter. This could be a cache pit. Caribou bone, some of it cut, was found in the immediate area. The only artifact noted was a steel knife blade (UA77-117-16; Pl.57 2; v.4:270) that resembles a kitchen knife. It has been sharpened with a file on one side only and is somewhat rusted and pitted. It is, however, in excellent condition.

Locality 4 consists of a cairn and possible house structure 95 m south southwest of Locality 3. The cairn consists of two unlichenated, local rocks with a smaller one on top of a larger one. It stands out against the other rocks which have a heavy growth of black lichen. Less than a meter west is a shaped oval of stone measuring 4 m by 2.8 m with some caribou bone under a large rock slab in the interior. It is suggestive of those houses found in other localities.

### Discussion

The presence of numerous house structures suggest that this site is a village. In overall morphology, these houses could be called house pits. This term is avoided here, however, to prevent confusion with more classic house pits, such as those at XHP-115 and tent rings. These are two types of structures with which these dwellings share traits. The substantial nature of most of the houses also suggests that they were possibly built to withstand a winter, but because of the problem of gathering rocks during the winter months it is suggested that the houses were constructed in late summer and early fall. This would coincide with the fall caribou migration. For purposes of exploiting that migration, the site is in an excellent location. It is high enough that game watching could be done directly from home. In addition, its position close to the lake gives it easy access to the animals slaughtered as a result of a caribou drive into the lake, the lake being an excellent goal for a caribou driver (Spencer 1959). A rather esoteric point brought up by Ray Bane (Personal Communication) concerns the positioning of the site relative to prevailing wind. Given a strategy of killing the caribou from kayaks in the lake, the hunters would allow the prevailing northeast wind to push the carcasses up onto the south shore. This arrangement makes the location of the village quite advantageous. The presence of two windbreak/hunting blinds seems to indicate more casual use of this as a hunting site. Whether they were used contemporaneously with the village is uncertain. Finally, the cairn may or may not be associated with the village. It is of unknown function at this time.

Cultural affiliation presents something of a problem. There is no artifact on the site that is diagnostic per se, but the steel knife indicates historic occupation. The houses, however, are of unusual type and lend themselves toward at least two interpretations. They could be Eskimo houses of a heretofore unreported type, or they could be representative of a different cultural group in the area. Ethnohistoric sources suggest that these intrusive people could be the Dinai Kutchen (Hall 1969). This group is thought to have entered the area around the turn of the nineteenth

century and lived there for about 50 years. In any case, either hypotheses is worth testing should more work be done at this site.

<u>Catalog #</u>	<u>Description</u>
UA77-117-1	2 Nonutilized Flakes
UA77-117-3	8 Bone Fragments
UA77-117-4	3 Organic Fragments
UA77-117-6	3 Weathered Bone Fragments
UA77-117-7	6 Weathered Bone Fragments
UA77-117-8	Bone Fragments
UA77-117-9	Bone Fragments
UA77-117-10	Wood Fragment
UA77-117-11	8 Nonutilized Flakes
UA77-117-14	Utilized Fragment
UA77-117-16	Steel Knife Blade

XHP-088

Location: Sec. 21, T.33N., R.9E., Kateel River Meridian  
UTM 4/591600/7571200

Class: III

#### Location and Setting

A flake scatter and three inuksuks were found on a high bedrock outcrop about 100 m south of the outcrop upon which XHP-087 is located, and 660 m south of Akuliak Lake. The graveled bedrock surface had a cover of open-mat alpine tundra vegetation. Beneath the gravel pavement is a gravel-loess mix which at this site showed more soil development than was usual. There is a good view of this north central portion of Howard Pass.

#### Site Information

Three localities were defined in a 70 m by 30 m area trending N-W. Locality 1 measures 10 m by 5 m and trends N-S. This is a fairly dense CCS flake scatter seemingly associated with fragments of caribou bone. A 50 cm square test pit was placed here and yielded 92 waste flakes, most of which are less than a centimeter in any dimension, and five utilized flakes which included a burin spall, a burinated flake and a biface trimming flake. A knife side blade having Arctic Small Tool tradition affinities was also collected from the surface in this locality (UA77-118-2; Pl. 5 6; v.4:48). A possible inuksuk was also recorded from this area and it may relate to Locality 2 about 15 m east. Locality 2 had two inuksuks about 20 m apart and two CCS flakes. Finally, Locality 3 is a light flake scatter measuring 10 m by 2 m and trending N-S. It is roughly 50 m southeast of Locality 2. A mitten-shaped burin (UA77-118-1; Pl. 21 16; v.4:122) like the Type 1a, burin at Iyatayet, was collected from this locality (Giddings 1964:Fig. 49 1).

## Discussion

This site seems to be a combination lookout-hunting locale used during at least two different periods of time. The mitten-shaped burin would seemingly point to the Denbigh phase occupation, but the lack of microblades could indicate that this is an early Choris phase site such as found on the early beaches at Cape Krusenstern (Giddings and Anderson n.d.). However, because it is such a low density scatter, the lack of microblades could be absent because of special use not requiring their manufacture. Specific placement of Locality 3 will have to remain open for the time being.

The inuksuks in Localities 1 and 2 are probably associated with a caribou drive, although these three are admittedly skewed in their alignment. They could be part of the same fence system seen through XHP-090, XHP-092 and XHP-094. The condition of the inuksuks suggest a late prehistoric to early historic time period. The cultural association of the inuksuks here are a problem because of the possible association with Athapaskan use of the village site at XHP-087. Athapaskans also used the caribou drive as a hunting technique and there would be no way to distinguish one culture's fence from the next, at least on the basis of present information.

The flake scatter at Locality 1 is somewhat of a problem. It seems to be associated with the surface fragments of a caribou bone, but the presence of the knife side blade fragment, burinated flake and burin spall suggest a Choris phase occupation. A Choris phase occupation seems possible because of the lack of Denbigh phase artifacts, the occurrence of a post-Denbigh Arctic Small Tool tradition knife side blade, and the presence of a burin technology which seems to blossom in Choris times.

<u>Catalog #</u>	<u>Description</u>
UA77-118-1	Mitten-shaped Burin
UA77-118-2	Knife Side Blade
UA77-118-3	9 Nonutilized Cortical Flakes
UA77-118-4	83 Nonutilized Flakes
UA77-118-5	Utilized Flake
UA77-118-6	Utilized Flake
UA77-118-7	Utilized Flake
UA77-118-8	Microblade-like Flake
UA77-118-9	Biface Trimming Flake
UA77-118-14	Burin Spall Tool
UA77-118-15	Utilized Biface Trimming Flake
UA77-118-17	Biface Trimming Flake
UA77-118-21	Utilized Flake
UA77-118-22	Burinated Cortical Flake

XHP-089

Location: Sec. 25 (36), T.12S., R.21W., Umat Meridian  
UTM 4/594400/7585800

Class: III/IV

#### Location and Setting

A variety of cultural features including residences and a flake scatter was found on a high terrace remnant about 700 m southwest of the confluence of Fay Creek and the Etivluk River. The graveled terrace surface supports open and closed-mat alpine tundra vegetation; tussocks surround the terrace segment, as well as occurring in some interior portions. A typical gravel-loess mix occurs below a gravel pavement, with the percentage of gravel increasing with depth. These gravels are well rounded. This is the most prominent topographic feature in this part of the Etivluk valley; it provides a good view as well as a good camp spot.

#### Site Information

Four localities are scattered over a 250 m by 150 m area trending NNE-SSW. Locality 1 consists of two tent rings about 3.5 m apart (Fig. 35). One ring is 3.5 m in diameter and the other is 3.2 m by 3.1 m. A 50 cm square test pit was placed both inside and outside the larger ring. A single, small flake of obsidian came from the test pit within the ring, and nothing from the one outside. The rocks comprising the tent rings are somewhat buried in the surrounding soil, perhaps indicating a degree of age greater than those tent rings whose rocks are sitting on the surface. Locality 2 is roughly 250 m south of Locality 1 and consists of a scatter of CCS flakes. A single 50 cm square test pit was excavated. Fifty-eight waste flakes (all medium and dark grey), nine utilized flakes, a biface fragment, and a possible microblade midsection were recovered. Also collected from the site was an interesting flake burin (UA77-119-1; Pl. 22 21; v.4:134). It is a thick, .8 cm rectangular flake, which has five burin blows on one margin in the manner of a classic Denbigh phase, mitten-shaped burin. This artifact is somewhat hard to place in a time, since this burin could either be anticipating the Denbigh-style burin or be a degradation of that form. Locality 3 is 144 m west of Locality 1 and consists of a house pit. The structure measures 2 m by 1.7 m by .7 m deep at the deepest spot. Large cobbles are placed on and outside a berm that rings the structure. There is a possible entrance on the northwest side where there is a dip in the berm and a protrusion in the rock ring. Decomposing caribou bone is scattered about the pit for about 10 m in all direction. In addition, there are nine willow sticks found in and on the north side of the pit. Several smaller pits are located near the presumed structure. These could be natural, but are not considered so by the investigator. A single 50 cm square test pit placed outside the structure produced no cultural material. Finally, Locality 4 was found about 85 m south of Locality 3. It consists of an overgrown, somewhat indistinct tent ring with the interior hearth measuring 2.4 m by 2 m. Some interior pavement leading through a possible entrance was also noted. Black and grey CCS flakes were seen in the hearth. No testing was done in the

XHP 089

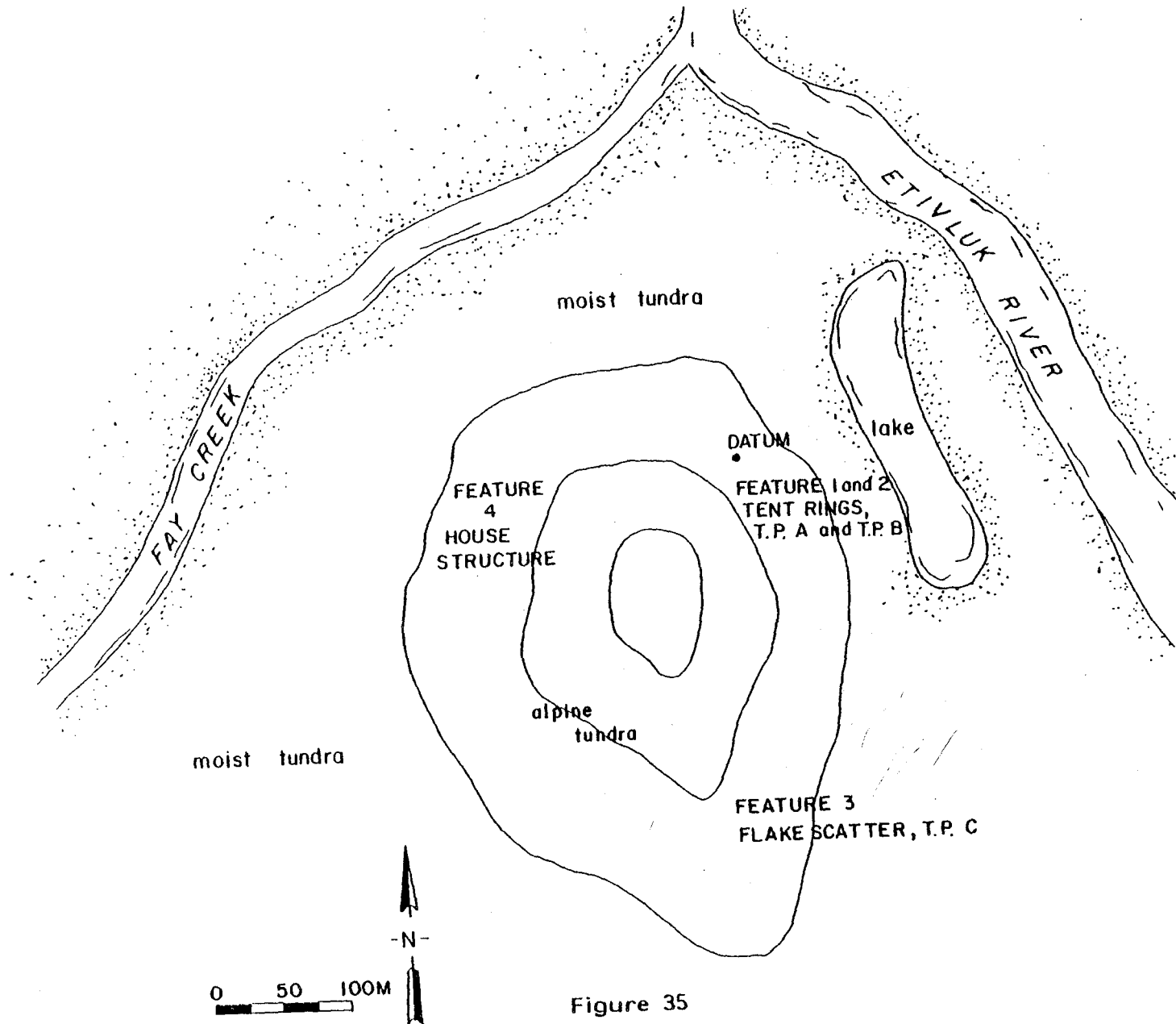


Figure 35



area. Fragments of what were probably gasoline boxes were found over most of the site area, but primarily in Locality 2.

### Discussion

This site seems to be a seasonal campsite used during the summer. Summer use is hypothesized from criteria set forth by Corbin (1975, 1976) and derived from ethnographic analogy. In his statement, Corbin says that stones for use in a tent ring are only capable of being gathered in the snow-free months from the unfrozen ground. Stones large enough for a tent ring would neither be visible nor easily removed from the ground in the winter months.

In terms of time depth and cultural affiliation, the site seems to have at least two components. The tent rings suggest the presence of late prehistoric use, and their condition, including the buried nature of the rocks and the amount of vegetation obscuring some of the rings, indicates that they belong to the earlier end of this period. The house pit with the willow and bone still in evidence suggests the latter part of that late prehistoric period. Finally, the enigmatic burin, while suggesting Denbigh phase affinities, is either before or after that period of time. More work is certainly indicated to clarify this issue.

<u>Catalog #</u>	<u>Description</u>
UA77-119-1	Burin on a Flake
UA77-119-2	Utilized Obsidian Flake
UA77-119-3	52 Nonutilized Flakes
UA77-119-4	6 Nonutilized Cortical Flakes
UA77-119-6	Utilized Flake
UA77-119-7	Utilized Flake
UA77-119-8	Utilized Flake
UA77-119-9	Utilized Flake
UA77-119-10	Utilized Flake
UA77-119-11	Utilized Flake
UA77-119-12	Utilized Flake
UA77-119-15	Utilized Flake
UA77-119-19	Utilized Flake
UA77-119-22	Possible Microblade
UA77-119-24	Preform

XHP-090

Location: Sec. 33, T.33N., R.9E., Kateel River Meridian  
UTM 4/591100/7568700

Class: II

### Location and Setting

A caribou fence is situated on a high, graveled terrace, probably of fluvial origin, on the east side of Howard Pass, approximately 120 m east of a

small unnamed drainage at the headwaters of the Etivluk River, 2.4 km south of Akuliak Lake, and 1 km south of XHP-092. The terrace is covered with open-mat alpine tundra vegetation with tussock meadow to the north and west. The creek mentioned above is seen to the east and south.

#### Site Information

XHP-090 is a caribou fence made up of five inuksuks trending N-S over a distance of 55 m. The distance between inuksuks is 17 m from No. 1 to No. 2, 10 m from No. 2 to No. 3, 10 m from No. 3 to No. 4, and 18 m from No. 4 to No. 5. Only numbers 1 and 3 are still in good condition; the rest have fallen.

#### Discussion

This is a hunting site associated with a caribou drive. The fence acts to guide the caribou in the desired direction. It is possible that this fence is associated with three other sites containing inuksuks, XHP-092, XHP-094 and XHP-088. These other three fences also trend N-S leading to Akuliak Lake. The lake is a classic trap where the animals could be killed from kayaks or by men stationed on the opposite shore (Spencer 1959). Gaps between these sites are considerable, but could have been filled by the building of inuksuks out of tussocks, which have long since "melted" back into the ground (Ray Bane 1979: Personal Communication).

Age and cultural affiliation are difficult to assign. However, based on the condition of the fence, it seems to be from late prehistoric to early historic times. Cultural affiliation becomes a real problem considering the projected time period for this feature. Current thought places Athapaskan people in the Howard Pass area around the beginning of the nineteenth century (Hall 1969). The complex of sites at the south end of Akuliak Lake is considered to contain structures that might represent their houses (Shields 1978). Because Athapaskans built wooden caribou fences south of the Continental Divide, there is reason to believe they would build fences north of the Divide with stones, such as the Eskimos would have used. So, given the probable orientation of the fence toward the lake and a possible association of the fence and the structures, it is impossible to assign a cultural association.

XHP-091

Location: Sec. 16 (21), T.34N., R.10E., Kateel River Meridian  
UTM 4/600500/7581600

Class: III

#### Location and Setting

XHP-091 is a habitation site situated on top of a large bedrock outcrop called Spud Mountain by the survey party. This hill is at the northern entrance to Howard Pass and is approximately halfway between the Etivluk

and Nigu Rivers. It is some 250 m to 300 m above the valley floor, as well as being just east of XHP-278. The jumbled bedrock surface is primarily lichen-covered with the hill itself surrounded by tussock meadow. Moss and some other types of alpine vegetation occur in and near some of the structural features.

#### Site Information

This habitation/lookout site is comprised of four features (Fig. 36). Features 1 and 3 are fallen rock cairns and are barely distinguishable from the surrounding bedrock. Feature 2 is a windbreak/hunting blind constructed to block southern winds or to shield an individual from game coming from the south. It is U-shaped and measures 1.7 m across the top of the "U" and 1.2 m perpendicularly (Fig. 36). Finally, Feature 4 is a stone ring with an interior depression. It is 3 m in diameter and .70 m below the surface at its greatest depth (Fig. 36). Unlike the others, this feature is located as a break for the north winds. No cultural material other than the structures was found within the site area which measures 70 m by 35 m. No below surface testing was done because of the lack of soil and the difficulties of keeping provenience.

#### Discussion

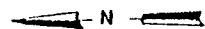
Because of the distance separating each feature and the lack of any continuous distribution of cultural material, the researcher feels that the features may not be associated. The cairns at this site are probably related to what has been termed isolated cairns. The windbreak/hunting blind more strongly reinforces the idea that hunting took place up there. The presence of a habitation structure seems a bit unusual because of the elevation and distance to water. However, its location here is not totally unreasonable given the tremendous view afforded from this hill and its advantages during hot, mosquitoey summer days. Summer use seems likely given the rigors of winter and the simple difficulty of constructing these features when rocks are frozen into the ground and to each other. At the risk of sounding contradictory, however, other data could be used to support winter use of the site. The water problem is solved with snow in relatively nearby drifts. Although drifting could be a problem at the site itself, this could not be certain without direct winter observation. The site is protected from north winds and its height could be of benefit in taking advantage of temperature inversions. Finally, given a snow free bedrock surface, fairly loose rock slabs may be relatively easy to gather. In general, the type of features present seem to point to the use of this area as a hunting and lookout locale with occasional stayovers for indeterminate periods of time.

Age and cultural affiliation are difficult to assign. Based on a single factor, the whole site appears to be from the late prehistoric to early historic times. This seems likely when the state of each structure is considered. The disturbance was not enough to indicate more than a few hundred years of age. It is conceivable for structures like Features 2 and 4 to last for thousands of years, but unlikely, given various periglacial processes and potential disturbance by animals. It is also unlikely that a single structure would be kept up for extremely long periods of time from

A hand-drawn map of an archaeological site. The site is enclosed by several concentric, irregular contour lines. Inside the site, there are four labeled features:
 

- F1 CAIRN**: Located on the left side, marked with a small circle containing a cross.
- F2 WINDBREAK**: Located at the top center, marked with a small, irregular shape.
- F3 CAIRN**: Located on the right side, marked with a small circle containing a cross.
- F4 HEARTH**: Located at the bottom right, marked with a small, irregular shape.

 The text "rocky ground" is written in three locations: once in the upper right, once in the center, and once in the lower right. At the bottom center, there is a label "CAIRN 2755'" next to a small circle with a cross.



one culture to the next. This would indicate a continuity that does not exist in the record. In the opinion of the investigator, the cairns, Features 1 and 3, represent single events and were never maintained. Any more time than the above estimate would obscure these features so badly as to render them unrecognizable.

Cultural affiliation becomes a real problem considering the projected time period for the site and the range of features present. Current thought places Athapaskan people in the Howard Pass area around the beginning of the nineteenth century (Hall 1969). Feature 4 at this site compares well with habitations at XHP-087 on the south shore of Akuliak Lake as well as the two structures at XHP-291 in Inyorurak Pass. The structures at XHP-087 and XHP-141 are hypothesized to be those of the Athapaskan people at that time. Similarity of structure types would imply a similar interpretation for Feature 4 on the site. However, the windbreak/hunting blind, Feature 3, seems to have primarily a Nunamiut Eskimo association as seen in other surveys such as the ones in Anaktuvuk Pass and the Atigun Canyon (Alexander 1969). The cairns, Features 1 and 3, could conceivably belong to either, given this particular situation. All the above lead to the possibility of there being two cultural components at this location: one Indian and the other Eskimo.

Spud Mountain is admittedly outside the stated range of the survey, being considerably above the 606 m (2000') contour line, but its commanding position at the north entrance to Howard Pass demanded examination. To have found this site, as well as XHP-278, proves that, at least under the physiographic conditions of this hill, this elevation is not an unreasonable one at which to find hunting or habitation sites. It is likely that similar conditions, despite elevation, would produce sites as well.

XHP-092

Location: Sec. 28, T.33N., R.9E., Kateel River Meridian  
UTM 4/591300/7569600

Class: II

#### Location and Setting

A caribou fence is on a high graveled terrace or knoll on a rock outcrop on the east side of Howard Pass, approximately 1 km northeast of a small unnamed drainage at the headwaters of the Etivluk River, 1.4 km south of Akuliak Lake, and 1 km north of XHP-090. The terrace is covered with open-mat alpine tundra vegetation with tussock meadow surrounding the entire outcrop/terrace.

#### Site Information

XHP-092 is a caribou fence made up of 10 inuksuks. It trends N-S with roughly 20 m between each stone pile. The fence extends for 225 m.

## Discussion

This is a hunting site associated with a caribou drive. The fence guides the caribou in the desired direction. It is possible that this fence is associated with three other sites containing inuksuks, XHP-090, XHP-094, and XHP-088. These other three fences also trend N-S leading to Akuliak Lake. The lake is a classic trap from which animals could be killed from kayaks or by men stationed on the opposite shore (Spencer 1959). Gaps between these sites are considerable but could have been filled by inuksuks made of tussocks, which have long since "melted" back into the ground (Ray Bane 1979: Personal Communication).

Age and cultural affiliation are difficult to assign. However, based on the condition of the fence it seems to be from late prehistoric to early historic times. Cultural affiliation becomes a real problem considering the projected time period for this feature. Current thought places Athapaskan people in the Howard Pass area around the beginning of the nineteenth century (Hall 1969). The complex of sites at the southern end of Akuliak Lake is considered to contain structures that might represent their houses (Shields 1978). Because Athapaskans built wooden caribou fences south of the Continental Divide, there is reason to believe they would build fences north of the Divide with the same stone material that the Eskimos would have used. So, given the probable orientation of the fence toward the lake, and a possible association of the fence and the structures, it is impossible to assign a cultural association.

### XHP-093

Location: Sec. 25(36), T.34N., R.11E., Kateel River Meridian  
UTM 4/595000/7577600

Class: II

### Location and Setting

Two caribou fences are on a bedrock ridge at the northeastern end of Howard Pass, at the western edge of Kivliktort Mountain. The site is approximately 600 m west of a small unnamed tributary creek of the Etivluk River and 2.8 km east of Etivluk River itself. Open-mat alpine tundra vegetation occupies the graveled surface of the site area. This vegetation pattern continues north, while directly south lie tussock meadows.

### Site Information

A line of six inuksuks and three possible inuksuks make up this site. Six piles of local rock, one of which has a cut willow stick in it, form the remnant of a caribou fence trending 62° - 242° from 34 m. The first inuksuk is .7 m from the second, the second is 5.2 m from the third, the third is 8 m from the fourth, the fourth is 8 m from the fifth, and the fifth is 10 m from the sixth. One hundred meters east are three cairns in a line oriented 110° - 290° and spaced 15 m apart. The total distance covering both areas is roughly 170 m.

## Discussion

This site presents two problems of interpretation. First, there is no apparent association between the two areas discussed. A strip of tussock tundra acts to separate the two localities, but the ground between the two is still primarily rock. This factor makes association unlikely because if the two areas were associated, the connecting materials should still have been there. In addition, they are not even trending in the same direction. Second, it is not known if the three cairns standing alone represent a caribou fence or simply three cairns. However, given their alignment, the fence hypothesis is not an unreasonable one.

In the opinion of the investigator, Localities 1 and 2 represent two caribou fences. These are hunting sites associated with a caribou drive in which the fence guides the caribou in the desired direction. In either case, at this site the intended direction of a drive would have been along the steep-sided drainage to the east and south, with portions of fence seeming to act to prevent the caribou from running out of the ravine. As to the exact destination the animals were being driven, we do not know. Possibly they were being directed toward the bogs and oxbow lakes bordering the Etivluk River.

Age and cultural affiliation are difficult to assign. However, based on a couple of factors, both fences seem to be of Nunamiut origin and from a proto-historic to early historic period. First, the fences, as they were found, fit what has been traditionally used by indigenous people in historic times. Second, while they are in a state of disrepair, they did not seem disturbed enough to be more than a couple of hundred years old. Also, the presence of the willow stick in one of the inuksuks indicates a more recent use of the fence. Wood could not last too long exposed in that manner. Of course, the above hypothesis assumes that the stick is part of the cairn construction and not jammed in later by a passerby.

XHP-094

Location: Sec. 28, T.33N., R.9E., Kateel River Meridian  
UTM 4/591700/7570400

Class: II

## Location and Setting

XHP-094 is a multi-featured site located on a high, bedrock knoll, or terrace, on the east side of Howard Pass approximately 550 m south of Akuliak Lake and 1 km northwest of XHP-092. The broken bedrock surface is primarily lichen covered with sporadic occurrence of open-mat alpine tundra vegetation.

## Site Information

This site contains a windbreak/hunting blind, a small stone ring with an interior depression and a caribou fence. A long, low pile of rocks mea-

suring 4 m by 1 m is classified as a windbreak/hunting blind. The stone ring is 1.5 m in diameter and is some 7 m northwest of the blind. The caribou fence, about 20 m west of the above two features, has eight inuksuks in all--five of them trend N-S for about 40 m, and three more continue for an additional 20 m after a gap of 20 m of tussock tundra. The inuksuks are all about 10 m apart.

#### Discussion

As a whole, this site appears to have been a locus of activities. In some grand scenario, it is possible to associate all the features of this site. The fence acts to guide caribou in the desired direction. It is possible that this site could be associated with three other sites containing inuksuks, XHP-088, XHP-090, and XHP-092. These other three fences trend N-S leading to Akuliak Lake. The lake is a classic trap in which animals could be killed from kayaks or by men stationed on the opposite shore (Spencer 1959). Gaps between these sites are considerable, but could have been filled by the building of tussock inuksuks, which could have long since "melted" back into the ground (Ray Bane 1979: Personal Communication). Hunters could have been stationed behind the hunting blind to shoot passing game or to make sure a driven herd would continue toward the lake. The stone ring may have been used as a hearth for the waiting hunters. It is, of course, just as possible for the three features to have been used at different times by different groups.

Age and cultural affiliation are difficult to assign. However, based on the condition of the features, they all seem to be from late prehistoric to early historic times. Cultural affiliation becomes a real problem considering the projected time period for this feature. Current constructs place Athapaskan people in the Howard Pass area around the beginning of the nineteenth century (Hall 1969). The complex of sites at the south end of Akuliak Lake contains structures that might represent Indian houses (Shields 1978). Because Athapaskans built wooden caribou fences south of the Continental Divide, there is reason to believe they would build fences north of the Divide with the same stone material that the Eskimos would have used. So, given the probable orientation of the fence toward the lake and a possible association of the fence and the structures, it is impossible to assign a cultural association.

XHP-095

Location: Sec. 28(21), T.34., R.9E., Kateel River Meridian  
UTM 4/591400/7579600

Class: II

#### Location and Setting

A caribou fence is situated on the downsloping crest of a ridge at the northeastern edge of Kavaksurak Mountain, 1.6 km west of the Etivluk River. Open-mat alpine tundra vegetation very sparsely covers the graveled surface of the bedrock ridge. Tussock meadow begins at the



edge of the outcrop to the north and east. A truly excellent view exists of Howard Pass to the south and the beginning of the foothills to the north.

#### Site Information

A 48 inuksuk caribou fence trends E-W for about 345 m and appears to be in two parts. There is one continuous string of cairns that can be traced the entire length, and one that seems to break off a third of the way downslope, then cross over the main line, forming an "X" toward the end of the fence. The average spacing between inuksuks is 10 m to 15 m. Two bone fragments were found at the downslope end of the fence.

#### Discussion

This is a hunting site associated with a caribou drive. The fence appears to have been designed for a single drive with the crisscross at the downslope end being a trap or corral of some sort. This site seems to be of late prehistoric to early historic age and of Nunamiut origin.

XHP-096

Location: Sec. 24, T.32N., R.9E., Kateel River Meridian  
UTM 4/595400/7562100

Class: I

#### Discussion

Two artifacts were found on a high terrace remnant about 750 m southwest of Flora Creek and 50 m northeast of the westernmost of two nearby lakes. The graveled terrace surface has open-mat alpine tundra vegetation and is surrounded by tussocks. The stratigraphic profile consists of a gravel-loess mix below a gravel pavement, with percentage and size of gravel increasing with depth. There is a good view of Flora Creek valley from this point.

#### Site Information

A black CCS end scraper (UA77-121-1; Pl.18 12; v.4:103) and a CCS flake constitute the site.

#### Discussion

It is hard to say much about this site on the basis of so few artifacts. The location is good for both camping and looking for game. This question must remain open until more work can be done. A search through literature shows this scraper to be of a general sort that can be seen readily in almost any collection after the Denbigh phase, where the range of variation in this type could easily include this artifact. (Giddings 1964; Giddings and Anderson n.d.; Larsen and Rainey 1948).

XHP-097 (Flora Creek Fish Fry Site)

Location: Sec. 26, T.32N., R.10E., Kateel River Meridian  
UTM 4/602300/7561300

Class: II

#### Location and Setting

A campsite is situated on a graveled terrace remnant 70 m southeast of Flora Creek. Open-mat alpine tundra vegetation covers the terrace, which is surrounded by tussock meadow. Willows line the creek bank. A single test pit revealed a gravel-loess mix beneath a gravel pavement. There is a reasonably good view of Flora Creek valley to the north and west.

#### Site Information

A hearth in probable association with a concentration of fish bones was found in a 1 m by 1 m area. The hearth consists of about 30 cobbles of varying size, some of which are fire-cracked and fire-stained. The rocks are underlain by charcoal in some areas. Some fish vertebrae, ribs and a head bone were found just east of the hearth in a 50 cm by 50 cm area. A 50 cm square test pit was placed over the bone scatter, but nothing else was located. The bones are not charred, but bleached white, and do not show any signs of decay.

#### Discussion

While the association between the hearth and bones is not certain, it seems a likely possibility given their proximity. In light of the possible association the site's age must be fairly recent. This is based on the brittle and delicate nature of the fish bones which would decompose before very long. Since the site may be no more than a few years old, it could belong to Eskimo people or Whites who were in the area for purposes of recreational or subsistence hunting and fishing or oil exploration.

<u>Catalog #</u>	<u>Description</u>
UA77-122-1	12 Fish Bones

XHP-098

Location: Sec. 20, T.32N., R.10E., Kateel River Meridian  
UTM 4/598400/7562200

Class: II/III

#### Location and Setting

A habitation site is on a graveled terrace 50 m south of Flora Creek and 13 km east of the confluence of Flora Creek and the Aniuk River. Just west is what appears to be an old stream bed that is now covered with

sedge grasses and mosses. The terrace itself is covered with open-mat alpine tundra vegetation. To the south of the terrace is tussock meadow leading to the mountains and more alpine vegetation growth along the creek's banks and gravel bars. The ground surface is predominately angular gravels that form a pavement. Below surface gravels are in a silty matrix, with gravel size and percentage increasing with depth.

This site is made up of two tent rings (Fig. 37). Tent Ring No. 1 is fairly complete and measures about 3 m in diameter. Some "extra" rocks on the northeast edge of the tents along with a small depression give the impression of being a hearth. Testing, however, did not substantiate this. Tent Ring No. 2 is not as complete. This tent ring is smaller and roughly 2.5 m in diameter. Both structures are made by a single ring of cobbles. No other cultural material was noted on the surface, and a 50 cm square test pit inside and outside Tent Ring No. 1 yielded no below surface remains. The whole site covers a 10 m by 5 m area.

#### Discussion

These tent rings are probably a Nunamiut origin and were used during the summer. The state of preservation speaks toward the late prehistoric occupation and the construction style is like ethnographic examples of the Eskimo people from the interior of the Reserve (Spencer 1959). Summer use is hypothesized from a set of criteria set forth by Corbin (1975, 1976) and derived from ethnographic analogy. In his statement, Corbin says that stones for use in a tent ring are only capable of being gathered in the snow-free months from the unfrozen ground surface. Stones large enough for a tent ring would be neither visible nor easily removed from the ground in the winter months. In addition, exterior hearths are a summer time feature of dwellings.

XHP-099

Location: Sec. 21, T.32N., R.10E., Kateel River Meridian  
UTM 4/600300/7561700

Class: I

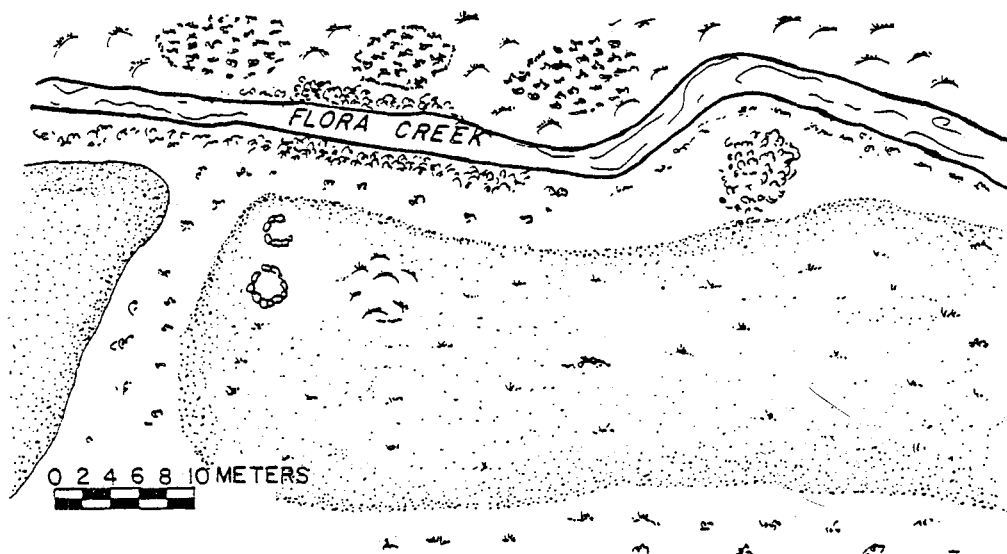
#### Location and Setting

An isolated artifact was on a stream terrace remnant 480 m south of Flora Creek and 120 m west of an unnamed tributary of the creek. The gravelled terrace surface is covered with open-mat alpine tundra vegetation. Beneath the gravel pavement is a gravel-loess mix with the percentage of gravel increasing with depth.

#### Site Information

A single fragment of a grey CCS end or side blade was found (UA77-123 -1; Pl. 4 9; v.4:33).

XHP 098



FEATURE DETAIL  
XHP 098

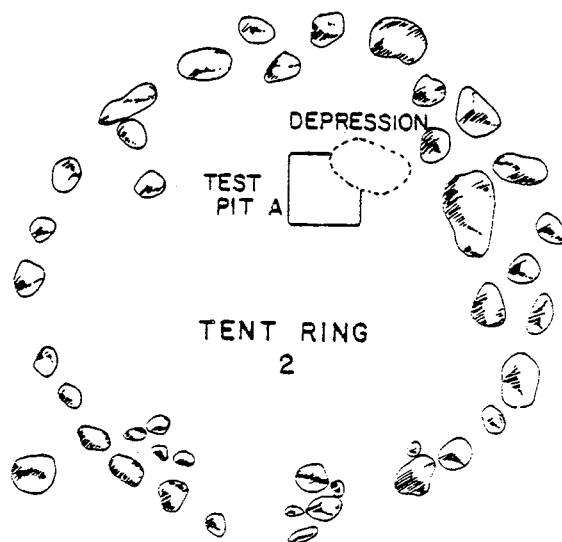
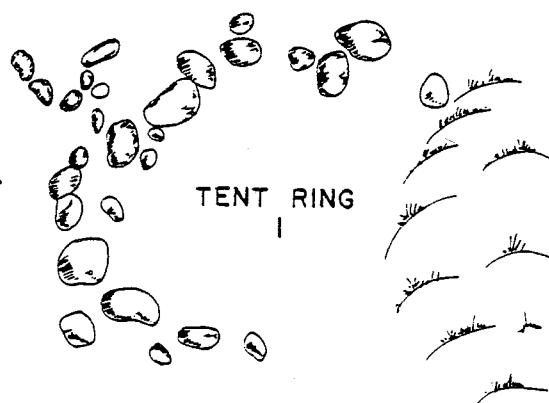


Figure 37

### Discussion

It is difficult to discuss site function on the basis of a single artifact. However, since this is part of a composite projectile of some sort, the site could be the remains of a kill or near miss. The broad, shallow, parallel oblique flaking strongly suggests a Choris phase affiliation.

<u>Catalog #</u>	<u>Description</u>
UA77-123-1	Weapon Side Blade

XHP-100

Location: Sec.24, T.32N., R.9E., Kateel River Meridian  
UTM 4/594400/7562100

Class: I

### Location and Setting

Two flakes were found on a high stream terrace or bench 300 m to 500 m south of Flora Creek and at least 30 m above the floodplain. Open-mat alpine tundra covers the graveled area and tussock meadow surrounds it. A single test pit revealed a typical stratigraphic profile of mixed gravel and loess beneath a gravel pavement. The size and percentage of gravel increases with depth. This location has a good view of Flora Creek valley to the west and east as far as the Inyorurak Lakes.

### Site Information

Two white, patinated CCS flakes were found 4.8 m apart along a SSE-NNW axis. The flakes were originally of grey CCS. A 50 cm square test pit was placed over one of the flakes, but nothing else was found except one utilized flake.

### Discussion

Not much can be said about this site on the basis of two flakes. The patination, however, indicates some degree of age, at least prior to the late prehistoric period. Because of an absence of diagnostics, this site cannot be placed in a cultural sequence at this time.

<u>Catalog #</u>	<u>Description</u>
UA77-124-77	Utilized Cortical Flake

XHP-101

Location: Sec. 21, T.32N., R.10E., Kateel River Meridian  
UTM 4/600100/7562000

Class: II

#### Location and Setting

XHP-101 is a flake scatter on a stream terrace 60 m south of Flora Creek. The graveled terrace surface is covered with open-mat alpine tundra which is surrounded by tussock meadow. To the north along the creek bank is some sparse willow growth. A typical gravel-loess mixture was revealed in the test pit profile. There is a fairly good view of the Flora Creek valley from this location.

#### Site Information

Approximately 50 flakes were noted on the surface of a 16 m by 4 m area trending E-W. There were large flaked nodules with thinning and finishing flakes of grey CCS. The material is similar to that found in a major quarry site, XHP-055, to the southwest in Rough Mountain Creek valley. A single 50 cm square test pit yielded nine waste flakes and one utilized flake from as deep as 5 cm. All flakes in the test pit were quite small, less than 5 mm in any dimension.

#### Discussion

XHP-101 could be both a campsite and a lookout as its location could service both functions. The cultural material present could belong to either type site. Due to the lack of diagnostics it is impossible to place this site in a cultural sequence at the present time.

<u>Catalog #</u>	<u>Description</u>
UA77-125-1	5 Nonutilized Cortical Flakes
UA77-125-2	4 Nonutilized Flakes
UA77-125-3	Utilized Flake

XHP-102

Location: Sec. 31, T.33N., R.11E., Kateel River Meridian  
UTM 4/606800/7568700

Class: II

#### Location and Setting

A flake, bone, and wood scatter is situated on a stream terrace 50 m southeast of the confluence of Inyorurak Pass Creek and an unnamed drainage. It is located on the second terrace up from the larger creek. Open-mat alpine tundra vegetation covers the graveled terrace surface.

Tussock meadow occurs off the graveled area to the south, across the small drainage to the west, and to the north until it meets the riparian growth along the creek. Below surface is a gravel-loess mix with the percentage of gravel increasing with depth. The view is not very extensive.

#### Site Information

This diffuse site occupies an area 110 m by 25 m trending NW-SE. On the basis of a single surface waste flake, a 50 cm square test pit was put in and four more flakes were recovered. All the flakes are small, less than 1 cm in any dimension, and of CCS. There are, however, three different colors of CCS out of the five flakes: red brown, grey, and dark grey to black. Out of the five flakes, one is a fragment of a larger retouch tool, one is a utilized flake, and the remaining three are waste flakes. Since the majority of these were found below the surface it is highly likely that there are more flakes in the area. About 6 m north of the test pit is a caribou bone scatter; it is difficult to tell if it is a natural occurrence or is manmade. About 30 m east of the test pit is a fragmentary piece of worked wood. It has the appearance of a bow fragment, but it is so decomposed and broken one cannot be certain of that interpretation (UA77-126-1; Pl. 61 3; v.4:259). 85 m southeast, seven willow wood fragments were found. Four of these could be worked, but these pieces are also quite weathered. They could also be natural and simply be the remains of a dead bush. Finally, an unusual feature was noted roughly 25 m north-east of the test pit close to the small drainage. It is a small rectangular trench 4.5 m by 1 m, taken down to a layer of well-rounded gravel and large cobbles. There were no sod or dirt piles in the immediate or general area. Also, there was no charcoal evident from its possible use as a barbeque pit, although being so close to the stream, high water could easily wash such evidence away. The cut looked very recent. Its function is unknown, but it is very likely man-made.

#### Discussion

This is very likely a short-term camping area used during the late pre-historic period. Its location is best suited to that function. The possible bow fragment suggests a Nunamiut affiliation.

<u>Catalog #</u>	<u>Description</u>
UA77-126-1	Possible Bow Fragment
UA77-126-2	Possibly Worked Wood
UA77-126-3	Possibly Worked Wood
UA77-126-4	Possibly Worked Willow Fragment
UA77-126-5	Possibly Worked Willow Fragment
UA77-126-6	Possibly Worked Willow Fragment
UA77-126-7	Possibly Worked Wood Fragment
UA77-126-8	Possibly Worked Wood Fragment
UA77-126-9	Utilized Flake
UA77-126-12	3 Nonutilized Flakes
UA77-126-13	Tool Edge Remnant

XHP-103 (Meg's Quarry)

Location: Sec. 11, T.32N., R.9E., Kateel River Meridian  
UTM 4/595900/7564100

Class: II

#### Location and Setting

A quarry site is on an outcrop of CCS forming a knoll 1 km north of Flora Creek. What little vegetation occurs is the open-mat alpine tundra variety; the knoll is surrounded by tussock meadow. A single test pit revealed a typical stratigraphic profile of gravel mixed with loess. There is a fairly extensive view of the Flora Creek valley.

#### Site Information

A larger, moderately dense scatter of black and dark grey CCS was found, measuring 80 m by 75 m. A single 50 cm square test pit produced artifacts from as deep as 20 cm. The test pit yielded 55 waste flakes, 37 utilized, three flake cores, and one burin spall. Each of the flake cores has at least two platforms from which amorphous flakes have been struck.

#### Discussion

All flakes here are from the bedrock outcrop, which makes this a quarry site. However, the large number of utilized flakes indicate other tool maintenance activities took place as well, but on organic raw materials. Since the users spent time quarrying and fixing or making other tools, they were probably watching out for game as well. Because no diagnostic artifacts were found, this site cannot be placed in a cultural sequence at this time. The single burin spall is hardly indicative of a burin technology, and until more evidence is found it will be considered fortuitous. The site's size and artifact density, however, indicates a long-term use.

<u>Catalog #</u>	<u>Description</u>
UA77-127-1	44 Nonutilized Flakes
UA77-127-2	11 Nonutilized Cortical Flakes
UA77-127-4	Burin Spall
UA77-127-5	Utilized Flake
UA77-127-6	Utilized Flake
UA77-127-7	Utilized Flake
UA77-127-8	Utilized Flake
UA77-127-10	Utilized Flake
UA77-127-11	Utilized Flake
UA77-127-13	Utilized Flake
UA77-127-15	Utilized Flake
UA77-127-17	Utilized Flake
UA77-127-18	Utilized Flake
UA77-127-19	Utilized Flake
UA77-127-20	Utilized Flake
UA77-127-21	Utilized Flake



<u>Catalog #</u>	<u>Description</u>
UA77-127-23	Utilized Flake
UA77-127-24	Utilized Cortical Flake
UA77-127-25	Utilized Cortical Flake
UA77-127-26	Utilized Cortical Flake
UA77-127-27	Utilized Cortical Flake
UA77-127-29	Utilized Cortical Flake
UA77-127-30	Utilized Cortical Flake
UA77-127-32	Utilized Cortical Flake
UA77-127-33	Utilized Cortical Flake
UA77-127-34	Utilized Cortical Flake
UA77-127-35	Utilized Cortical Flake
UA77-127-37	Utilized Cortical Flake
UA77-127-38	Utilized Cortical Flake
UA77-127-39	Utilized Cortical Flake
UA77-127-40	Utilized Cortical Flake
UA77-127-42	Utilized Cortical Flake
UA77-127-43	Utilized Cortical Flake
UA77-127-44	Utilized Flaked Nodule
UA77-127-45	Utilized Cortical Flake
UA77-127-46	Flake Core
UA77-127-47	4 Nonutilized Flakes
UA77-127-48	3 Nonutilized Cortical Flakes
UA77-127-49	Utilized Flake
UA77-127-50	Utilized Cortical Flake
UA77-127-51	Utilized Cortical Flake
UA77-127-52	Utilized Cortical Flake
UA77-127-53	Utilized Cortical Flake
UA77-127-54	Flaked Nodule

XHP-104

Location: Sec. 18, T.32N., R.11E., Kateel River Meridian  
UTM 4/605500/7564100

Class: I

#### Location and Setting

A single artifact was found on a small E-W trending ridge at the south end of Inyorurak Pass on the west side. It is 800 m from the center of the pass and 1.9 km north of Flora Creek. Open-mat alpine tundra vegetation covers the ridge; tussock meadow surrounds it. There is a fairly good view of Inyorurak Pass and part of the Inyorurak Lakes.

#### Site Information

A single, grey, burinated CCS flake constitutes this site (UA77-128-1; Pl. 22 22; v.4:134). Peculiar to this piece is a unifacially prepared notch that acted as the platform for the burin blow.

## Discussion

While it is hard to determine anything about the site on the basis of one artifact, its position suggests use as a lookout. The notched burin seems to be present in two different cultural phases in Alaska. It is noted for the Choris phase and the Denali complex, an interior representation of the American Paleo-Arctic tradition (Giddings and Anderson n.d.; Mauger 1970). Because nothing else was found with this piece, the question of cultural affiliation will have to be left open.

<u>Catalog #</u>	<u>Description</u>
UA77-128-1	Burin on a Flake

XHP-105

Location: Sec. 8, T.32N., R.11E., Kateel River Meridian  
UTM 4/606800/7565700

Class: II/III

## Location and Setting

A habitation site is situated on a gently sloping stream terrace on the east side of Inyorurak Pass, 180 m from a nearby lake and the center of the pass. Open-mat alpine tundra vegetation covers the graveled terrace surface. Two test pits revealed stratigraphy dominated by mixed gravel and loess with gravel increasing in size and percentage with depth. There is a decent view of the lower part of the pass to the north and south. Because of the low elevation here, the microrelief blocks many landscape details after even a few hundred meters.

## Site Information

A tent ring, a hearth, an anomalous rock, and a test pit occupy a 40 m by 5 m area oriented N-S (Fig. 38). The tent ring is a slight oval of rocks spaced at 10 cm intervals outlining a 3.5 m by 3.2 m area (Fig. 39). A possible entrance faces west. Two meters southwest of the tent ring is a hearth, probably associated with the tent ring. Three large rocks, two of which are tabular, effectively act as a small shelter protecting a fire from the prevailing northeast wind (Fig. 39). Four smaller, more rounded rocks line the southwest side and access point to the hearth. The interior dimensions are 50 cm by 45 cm; the exterior dimensions including all probably associated rocks are about 1.9 by 1.2 m. When the heavy vegetation mat (blueberries, low bush cranberry, grasses, and moss) growing inside was peeled back, it revealed many fragments of charcoal and partially burnt willow. About 36 m upslope to the north is a large, unlichenated rock. It is reported here because it would have to have been intentionally exhumed. Its significance at this time is unknown. Finally, about 8 m southeast of the rock is a 20 cm square "test pit". It is a squared-up, fresh looking excavation with no vegetation in the pit or on the back dirt around the pit. The neatness and size of the hole suggest

# XHP 105 SITE MAP

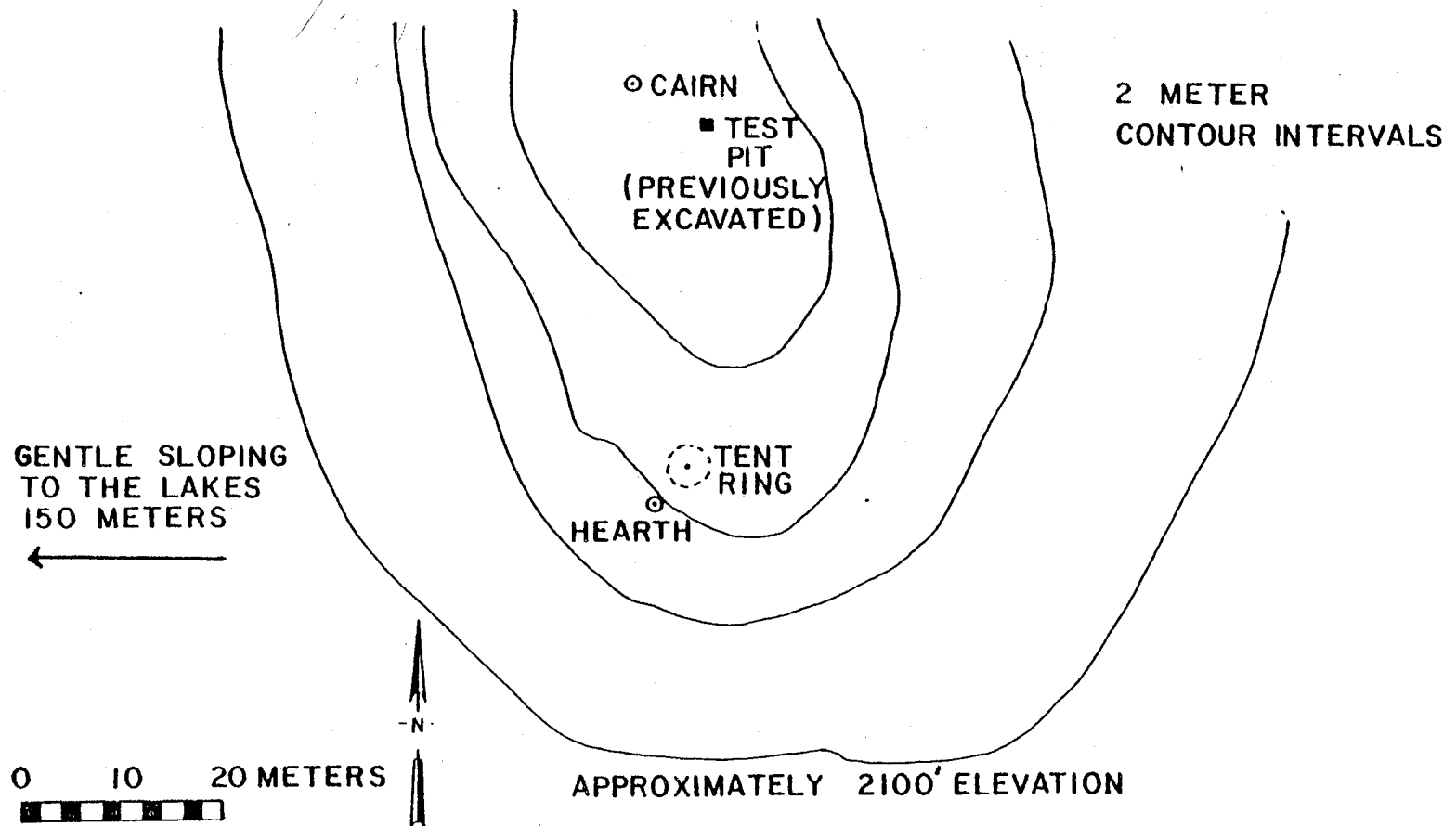


Figure 38

XHP 105  
TENT RING AND HEARTH

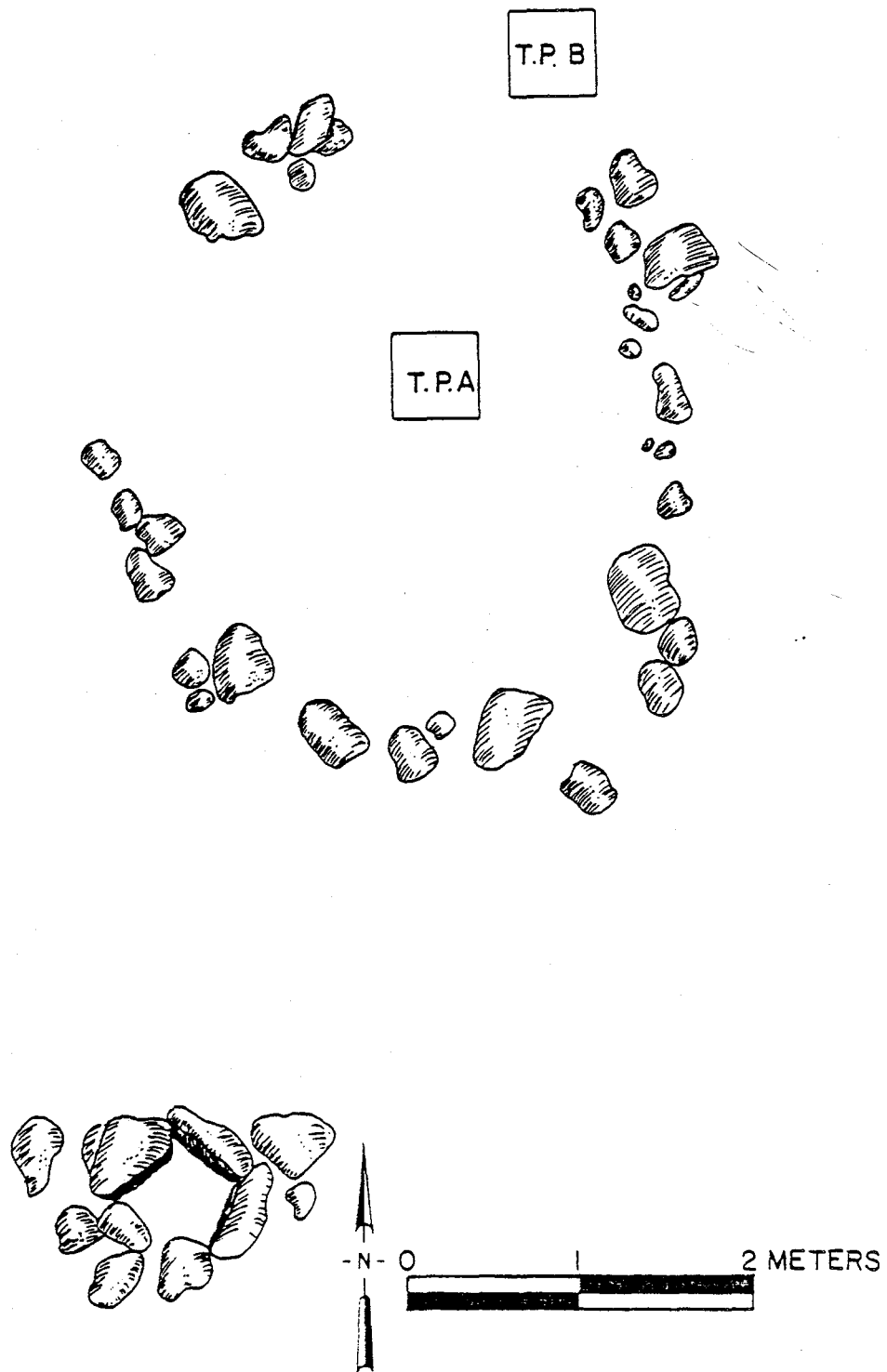


Figure 39

it was done by an archeologist. It should be noted that no artifacts of any sort were found in the site area and certainly not in the two 50 cm square test pits placed inside and outside the structure.

#### Discussion

The tent ring and hearth represent a campsite. The other two features reported are anomalous and probably not associated with the primary function of the site. The large rock could be a marker cairn of some sort, but a single rock is hardly adequate evidence of this, since there are many single large rocks on the surface all over the survey area; however, its unlichenated nakedness attracts attention. The "test pit" is another problem. Edwin Hall is the only archeologist that has been in the survey area in recent years; that was in 1973, and he did not report a site at this location (Hall 1974). William Irving was in the general area in the early 1960's, but after almost twenty years, his old test pits have started revegetating as seen in some specimens at Kinyiksukvik Lake, XHP-115. There is always the possibility it could have been made by a neat pot-hunter, but this is not likely. The meaning and origin of this little pit will just have to remain a mystery for the time being.

The tent ring and hearth are no doubt a late prehistoric to early historic Nunamiut summer camp. Cultural identification is based on a comparison with ethnographic analogs and the excellent state of preservation of both features (Corbin 1975, 1976). Seasonality is based on the arrangement of features as well as the presence of a rock tent ring. An exterior hearth is very typical of a summer camp. Ethnographic work by James Corbin (1975, 1976) shows that stones for a tent ring are usually gathered during the snow free months from unfrozen ground. Stones large enough for a tent ring would neither be visible nor easily removed from ground in winter.

<u>Catalog #</u>	<u>Description</u>
UA77-129-1	13 Wood Fragments

XHP-106

Location: Sec. 26, T.32N., R.10E., Kateel River Meridian  
UTM 4/606800/7561300

Class: II

#### Location and Setting

This flake scatter was found on a lake terrace 50 m north of the western-most lake of the Inyorurak Lakes and 240 m south of Flora Creek. There is a good view of the area to the east, west, and south. There is a cover of open-mat alpine tundra vegetation on the terrace, which is an island in a sea of tussocks. The ground surface is predominately angular gravels forming a pavement. Below surface gravels are in a silty matrix with the percentage of gravel increasing with depth.

### Site Information

XHP-106 is a small flake scatter in two localities covering an area 40 m by 3 m. Locality 1 had five CCS flakes in a fairly tight cluster. A 50 cm square test pit yielded two black CCS flakes from the surface and two grey CCS flakes from about 4 cm below surface. Locality 2 contains only one black CCS flake and is 37 m northeast of Locality 1. All flakes are noncortical and some are utilized.

### Discussion

Site function is difficult to determine due to the lack of cultural material. The position of the site seems to make it a good camping spot, close to what might be a good fishing lake, with an advantageous view for spotting any larger game was well. It might also represent a brief stopover on a journey to points unknown. The two localities suggest two episodes of use, with the utilized flakes indicating activities other than stone tool manufacturing. Unfortunately, the paucity of diagnostic material prevents assigning XHP-106 to any specific culture or period.

<u>Catalog #</u>	<u>Description</u>
UA77-120-1	3 Nonutilized Flakes
UA77-120-4	Burinated Flake

### XHP-107

Location: Sec. 17, T.32N., R.11E., Kateel River Meridian  
UTM 4/608000/7563600

Class: II

### Location and Setting

This site is a caribou fence situated on a ridge at the southeastern corner of Inyorurak Pass 660 m east of a nearby lake in the pass and 2.1 km north of Flora Creek. The broken bedrock surface is covered with open-mat alpine tundra vegetation, lichens are on the rocks. The ridge is surrounded by tussock meadows.

### Site Information

XHP-107 is a caribou fence of six inuksuks that run for 84 m at an orientation of 105° - 285°. The inuksuks are irregularly spaced and constructed. The first is about 1 m tall and composed of four stacked rock slabs, with one slab leaning against the stack. The others are all single rocks that are distinguished from the surrounding bedrock by being placed on the surface and being in line with the others. One possible inuksuk is 8 m north. It does not appear to be part of the line. Cairn 1 is 27.5 m from Cairn 2; Cairn 2 is 10 m from Cairn 3; Cairn 3 is 27 m from Cairn 4, and Cairn 4 is 15 m from Cairn 5.

## Discussion

This is a hunting site associated with a caribou drive. The fence guides the caribou in the desired direction. The alignment of this fence seems to lead toward the nearby lake. This lake would make a classic trap on which hunters in kayaks could spear caribou in the water, or be stationed on the opposite shore to spear the animals as they come out (Spencer 1959). The fact that no inuksuks exist between the end of the ridge and the lake does not negate this hypothesis. Inuksuks can be built of tussocks, which could have decomposed since their last usage (Ray Bane 1979: Personal Communication).

Based on ethnographic analogy and its condition, the fence seems to be of Nunamiut origin and from late prehistoric to early historic times.

XHP-108

Location: Sec. 4, T.32N., R.11E., Kateel River Meridian  
UTM 4/609100/7563000

Class: I

## Location and Setting

A single flake is situated above the present stream channel on a graveled stream terrace 50 m south of what the crew called Inyorurak Pass Creek and 12 km east of the center of Inyorurak Pass. The terrace has bare spots interspersed with patches of open-mat alpine tundra vegetation; it is surrounded by tussock meadow except to the north where the tussock growth quickly meets willow growth along the stream banks and gravel bars.

## Site Information

XHP-108 is an isolated CCS flake. It is heavily patinated, however, a broken edge shows the original color to be a light grey. There is use retouch along one edge. A nearby cracked caribou bone could be associated.

## Discussion

It is very difficult to determine much of anything about this site on the basis of a single flake. If nothing else it represents usage of this part of the survey area. Determination of culture and associated time period is impossible at this time, although patination does indicate a certain degree of age, at least prior to the late prehistoric period.

XHP-109

Location: Sec. 9, T.32N., R.11E., Kateel River Meridian  
UTM 4/609100/7564800

Class: II

#### Location and Setting

This hunting site is at the west end of a ridge on the east side of Inyorurak Pass, about 3 km from the center of the Pass and right on the Continental Divide. The site area is made up of broken bedrock with lichen as the predominant vegetation type. Tussock meadows occur to the north, west, and south, and the bare rock ridge stretches out to the east. This area affords a good view of the pass to the west and the Inyorurak Lakes to the south.

#### Site Information

XHP-109 consists of three features occurring in two localities. Locality 1 has a windbreak/hunting blind comprised of three courses of local bedrock. It may have been somewhat semicircular in shape with the interior perhaps floored by a thin rock slab. This thin slab, however, may have been a portion of the interior wall and has now fallen. Adjacent to the standing portion of the structure are two large tabular rocks that could have constituted the western wall. Locality 2 is 120 m southeast and is made up of two cairns 10 m apart. Both cairns are rocks piles about 60 cm in diameter. These might have been part of a caribou fence. The whole site area is about 120 m by 10 m.

#### Discussion

The two localities do not seem to be associated because of the great distance separating them. Locality 1 seems to have been used as a shelter, waiting place, and blind to hunt caribou. Its location would seem to suggest usage when caribou seek high places to avoid the mosquitos (Campbell 1962). Such a setup would allow the caribou to come into close range without being frightened away.

The two cairns at Locality 2 probably represent two separate uses of the area by possibly two hunters marking items that may have been cached there. With no other cairns in the area, it seems unlikely that they would be the remnants, of a caribou fence.

As with any feature of this sort, age and cultural affiliation are difficult to assign. However, based on one factor, a Nunamiut origin and late prehistoric to early historic time period seems likely. This has to do with the condition of the cairns, which if they were much more than 500 years old, would probably be unrecognizeable, given the various periglacial processes as well as potential animal disturbance. Also since these are seen as representing single events rather than long term usage, it is likely that this feature was not maintained.



In terms of age, the same argument is true for the windbreak/hunting blind. However, there is no known ethnographic counterpart, and it is thus difficult to assign a cultural affiliation with both Athapaskan and Eskimo people postulated to have used this area concurrently (Shields 1978).

Given the short time postulated for the Athapaskan occupation, ca. 50 years, and the much longer Eskimo occupation, ca. 500 years, it is likely to be Nunamiut.

XHP-110

Location: Sec. 31, T.33N., R.11E., Kateel River Meridian  
UTM 4/608000/7568200

Class: I

#### Location and Setting

This site was found on a stream terrace 60 m east of what the survey party called Inyorurak Pass Creek and 1.4 km ESE of where the creek bends north. The surface is a gravel pavement, below which lie more angular gravels in a silty matrix. The percentage of gravel increases with depth. Alpine tundra occurs on the periphery of what is primarily a bare, gravel area. To the south lies tussock meadow leading into some willow growth along the stream banks and gravel bars. To the north, east, and west there is more alpine tundra vegetation on an extensive terrace and outcrop system.

#### Site Information

XHP-110 consisted of two flakes 70 cm apart. A white patinated, possibly burinated, CCS flake was collected. The other was of grey CCS. A single 50 cm square test indicated no depth to the site.

#### Discussion

Site function is difficult to assess due to the lack of cultural material. This might be rectified by further testing in the nearby dense vegetative mat. The difference in weathering between the two flakes could indicate two different events. Cultural affiliation and period are impossible to determine at this time, although patination on the one flake indicates a certain degree of age at least prior to the late prehistoric period.

XHP-111

Location: Sec. 18, T.33N., R.11E., Kateel River Meridian  
UTM 4/607200/7562700

Class: II

#### Location and Setting

XHP-111 is located on an ESE-WNW trending, bedrock ridge at the base of Kivliktort Mountain, 720 m west of what the survey party called Inyorurak Pass Creek. The ridge itself is sparsely covered with alpine tundra, with tussocks starting at the end of the outcrop to the ESE, later changing to willow growth along the stream's banks. Tussocks occur on either side of the ridge, but alpine vegetation persists upslope to the WNW.

#### Site Information

This site consists of three caribou fences on this single outcrop. The first and southernmost fence is 106 m long and zigzags downslope. At the southwestern end of this fence is a windbreak/hunting blind oriented E-W. This fence has seven inuksuks. The second fence is 100 m north at its closest point. It, too, zigzags downslope from some 92 m and has six inuksuks. Ninety-five meters further north is the third fence, running for 198 m. Unlike the others, this one seems to zigzag downslope and then turn NNW following the base of the slope to its closest point with the second fence.

#### Discussion

This is a hunting site associated with a caribou drive. The fences guide the caribou in the desired direction. Fences 1 and 2 generally seem to be directed downslope toward the stream and the willows along its banks, within which snares could be set to catch caribou. The trapped caribou would be dispatched by men stationed near the snare site with spears (Spencer 1959). Fence 3 seems to act to guide the animals towards Fence 2. As stated earlier, there is a considerable gap between fences; and they may, in fact, not even be associated. However, between the fences and the places of entrapment do not necessarily negate the hypothesis of association. Inuksuks can be built out of tussocks which could have decomposed since their last usage (Ray Bane 1979: Personal Communication).

The windbreak/hunting blind at the head of Fence 1 may be associated and have acted as a point behind which additional hunters may have been stationed to kill driven game and make sure the rest of the caribou continued on through the fence upstream. However, it may not be associated, but rather represent another event in which a hunter would be positioned to kill caribou in the summer months when caribou would be at higher elevations to escape the mosquito hordes. A similar association between a fence and a windbreak/hunting blind at nearby XHP-116 lends credence to the first hypothesis.

Age and cultural affiliation are difficult to assign. However, based on two factors, the site seems to be of Nunamiut origin and from late prehistoric or early historic times. First, the fences, as they were found, fit what has been traditionally used by indigenous people in early historic times. Second, while it is in a state of disrepair, it did not seem disturbed enough to be more than a few hundred years old. It is conceivable, but unlikely, for alignments of stone piles to last for thousands of years. It also seems unlikely that a single fence would be kept up for extremely long periods of time from one culture to the next. This would indicate a continuity that does not exist in the archeological record. Despite the lack of substantial evidence that the fence is of Nunamiut origin, it is believed that this is an hypothesis worth testing.

In terms of age, the same argument is true for the windbreak/hunting blind. However, there is no known ethnographic counterpart, and thus it is difficult to assign a cultural affiliation, as both Athapaskan and Eskimo people are proposed as having been in this area in this time period (Shields 1978). Given the short time of the proposed Athapaskan occupation--circa 50 years--and the much longer Eskimo occupation--circa 500 years--it is likely to be Nunamiut.

XHP-112

Location: Sec. 14. T.32N., R.10E., Kateel River Meridian  
UTM 4/603000/7563600

Class: I

#### Location and Setting

An isolate is situated at the south end of a ridge forming the western boundary of Inyorurak Pass. It is 1.6 km north of Flora Creek and 300 m west of an unnamed tributary. This location affords an excellent view of Flora Creek and the Inyorurak Lakes. The exposure is covered by open-mat alpine tundra vegetation and lichenated gravels and is surrounded by tussock meadow.

#### Site Information

This site is composed of a single, heavily patinated CCS flake.

#### Discussion

It is very difficult to determine much about this site on the basis of a single flake. If nothing else, it represents usage of this part of the survey area. Determination of culture and associated time period is impossible at this time, although patination does indicate a certain degree of age at least prior to the late prehistoric period.

XHP-113

Location: Sec. 30, T.33N., R.11E., Kateel River Meridian  
UTM 4/607200/7570500

Class: III

#### Location and Setting

A campsite is situated on a river terrace 150 m east of Inyorurak Pass Creek and 60 m southwest of an unnamed stream running into the creek (Fig. 40). The large graveled terrace segment where the site lies has open-mat alpine tundra vegetation and is surrounded by tussock meadow which, toward the west, leads to willow along the creek banks. The stratigraphic profile reveals a typical gravel-loess mix below a black organic, where there is vegetation. The view is not very expansive with many details obscured by the microrelief and the low-level position of the site.

#### Site Information

The site consists of one oval tent ring 4.9 m by 3 m and two, maybe three, exterior hearths in an area measuring 12 m by 5 m and trending NW-SE (Fig. 40). One hearth is just outside the "entrance" and consists of a small depression about 50 cm across. Four meters north of the tent ring is a small rock ring with an interior diameter of 50 cm; it is presumed to be a hearth. Finally, a probable hearth was found 5 m southwest of the tent ring. While no flaked material was found, two fragments of worked wood were located. One (UA77-131-1; Pl. 58 6; v.4:262) looks like a fragment of some planking or possibly a brace of some sort for a dog sled. The other piece (UA77-131-2; Pl. 52 6; v.4:246), based on its oval cross section, seems to be part of an arrow shaft. A test pit in the depressed hearth just outside the entrance revealed a charcoal lens 12 cm to 19 cm below the surface. Fragments of wood and bone were found from the first level to a depth of 25 cm. Fire cracked rock was encountered at a depth of 10 cm to about 28 cm below the surface.

#### Discussion

This site is a summer camp occupied during the late prehistoric to early historic period. Summer use is inferred on the basis of the exposed location, the use of a tent ring as a living structure and the presence of an exterior hearth. Criteria set forth by Corbin (1975, 1976) and ethnographic analogy allow for this inference. In his statement, Corbin says that stones for use in a tent ring can only be gathered in the snow-free months from the unfrozen ground. Stones large enough for a tent ring would neither be visible nor easily removed from the ground in the winter months. The good condition of the ring as well as the presence of bone and wood suggests the time period (very likely the latter end of this period).

XHP 113

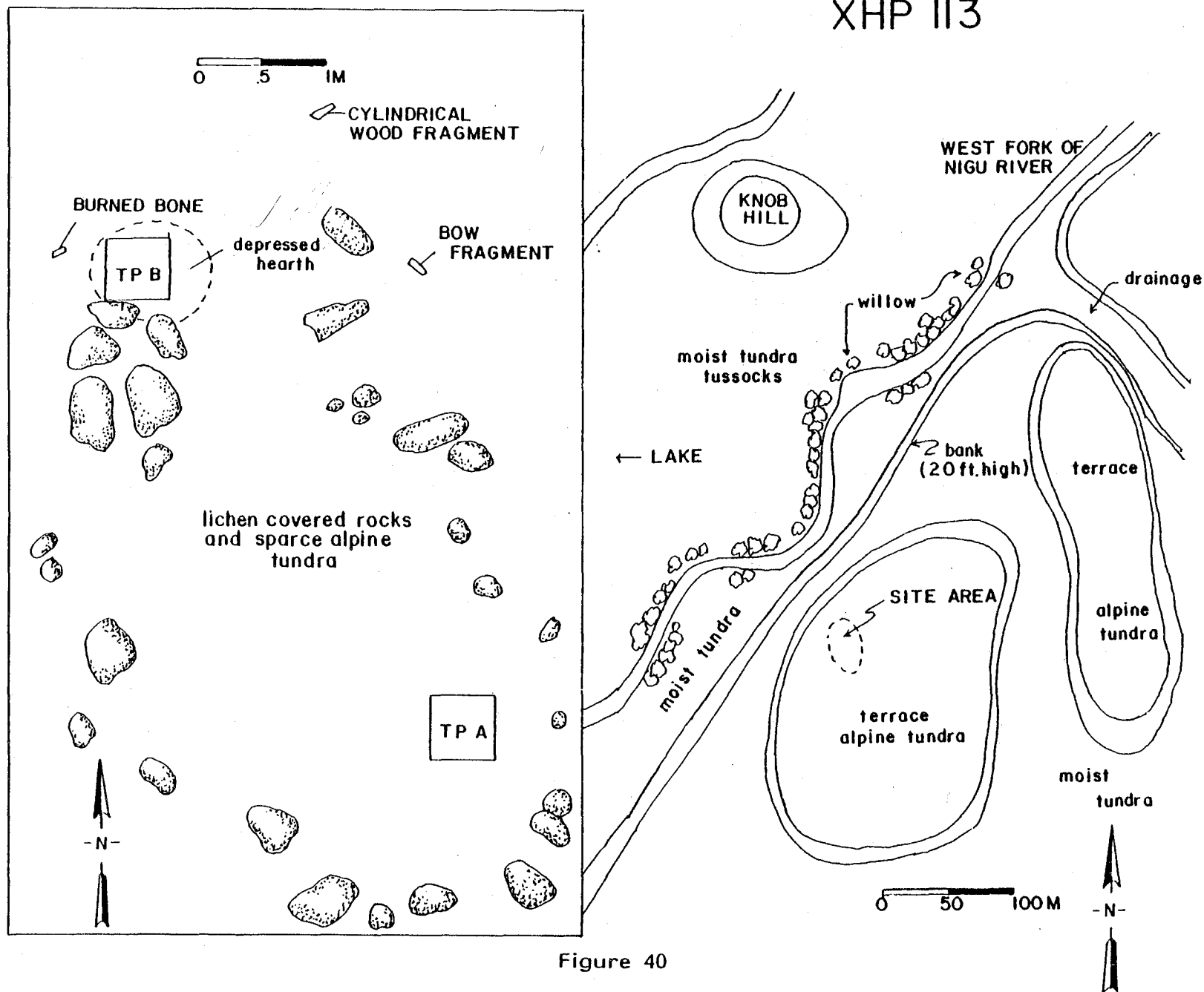


Figure 40

<u>Catalog #</u>	<u>Description</u>
UA77-131-1	Possible Plank Fragment
UA77-131-2	Possible Arrow Shaft Fragment
UA77-131-3	Bone Fragment
UA77-131-4	Caribou Tooth
UA77-131-5	Wood Fragment
UA77-131-7	Bone Fragment
UA77-131-8	6 Caribou Teeth and Bone Fragments
UA77-131-10	Caribou Tooth Fragment

XHP-114

Location: Sec. 35, T.33N., R.10E., Kateel River Meridian  
UTM 4/604500/7568800

Class: II

#### Location and Setting

This site, a caribou fence, was found on top of a large hill 1.9 km west of the center of Inyorurak Pass and Inyorurak Pass Creek and 1.8 km south of the headwaters of, what the crew called, Disappointment Creek. The surface is primarily exposed broken bedrock covered with lichen and occasional patches of alpine tundra. Tussock meadow surrounds the hill.

#### Site Information

XHP-114 consists of four cairns, possibly inuksuks, trending WNW-ESE for 170 m. Starting from the east, Cairn 1 is 78 m from Cairn 2 at 140°; Cairn 2 is 6.65 m from Cairn 3 at 120°; Cairn 3 is 86 m from Cairn 4 at 115°. All but one is constructed of a tall, rectilinear rock propped up by stones along the base, and the cairn that was not, appeared to be like the others, only toppled over.

#### Discussion

It is difficult to ascertain the nature of this site because of its diffuse nature. If the cairns were closer there would be no problem in interpreting them as sections of a caribou fence. Yet the feeling upon recording was that they belonged together in some way, possibly as a fence. A caribou fence is associated with a caribou drive and guides the animals in the desired direction. A puzzling fact in this interpretation is that there is plenty of material at either end of the "fence" to extend it further if this, indeed, was its function. Most fences end at the contact between the rock exposure on which they lie and the tussocks. Also, the state of the cairns was such that if there had been more associated cairns, they would have been found.

Another working hypothesis is that these are individual cairns marking some single event.

Based on the condition of the cairns, a Nunamiut origin and a late prehistoric to early historic time period seems likely.

XHP-115

Location: Sec. 4/9, T.33N., R.11E., Kateel River Meridian

UTM a. 4/609600/7576850

b. 4/609600/7576800

c. 4/609350/7575600

d. 4/610100/7576000

Class: IV

#### Location and Setting

This is the largest and most complex site found in the Howard Pass survey area. It contains every type of cultural feature found in the survey area as a whole. These features are confined to 10 localities around a single geographic feature, Kinyiksukvik Lake. The lake is irregularly shaped but generally trends NW-SE. It measures 1 km in its longest dimension and is .6 km at its greatest width. It is situated on a high, large terrace or plateau on the east side of Inyorurak Pass, 1 km east of the Nigu River. This high terrace, is composed of glacial drift deposited by Itkillik I glaciation (Hamilton 1978: Personal Communication, field map). The lake seems to have developed in a depression or low spot in the drift that may be an extremely large kettle. In the vicinity of the lake are a number of knolls and ridges that possibly represent more resistant hummocks and zones of drift that have not been as severely eroded since the glaciers left some 16,000 or 17,000 years ago (Hamilton and Porter 1975). There is some indication, as seen in nearby terraces and benches cut in some of the knolls and ridges, that the lake level was higher at one time, although this may have been at a time prior to any human use of the area. Each of the localities mentioned above occurs on a separate and distinct geographic feature. In fact, they could be considered as separate sites. However, they all seem to be oriented to the lake, and in most cases the lake is the probable reason for camping or hunting there. The localities are labeled in a counterclockwise fashion around the lake starting with the northeasternmost locale.

Locality 1 is quite small and consists of the top of a knoll that drops steeply off to the west of the lake shore. To the north is a small drainage that acts to separate it from Locality 2. It is a well-developed stream and heavily willowed. The site area is partially covered by closed-mat alpine tundra vegetation, but grasses predominate. Three 50 cm square test pits revealed a highly varied stratigraphic profile, suggesting that various cultural activities occurred at the site. The one test pit that bottomed-out did so in sterile gravels, no doubt of glacial origin.

Locality 2 is 100 m northwest and consists of a large graveled expanse of irregular topography, several meters above the lake level. Cultural materials occur on various features of this expanse including benches, slopes, and ridges, as well as generally occurring along the lake shore. Open-mat

alpine tundra vegetation covers the graveled portion of this locus, with grass willow and dwarf birch occurring on the lakeward slope and shore. As with Locality 1, test pits revealed highly varied stratigraphic profile. Glacial gravels predominate in a loess-organic matrix with cultural material and features at varying levels.

Locality 3 is a hill-like feature rising several meters above the lake level with a fairly steep slope down to the shore. It is separated from Locality 2 by a low 60 m to 90 m wide area of combined gravels and tussocks. Vegetation is open-mat alpine tundra with tussocks on all sides other than the lake side. This area lacks the intense residential use of the other two areas and as a result has a more typical gravel-loess profile.

Localities 4, 5, and 6 are low-lying, irregularly-shaped lake terraces not too far above the present lake level. They are separated from each other by 20 m of tussock strips. Locality 4 is about 100 m west of Locality 3. Open-mat alpine tundra vegetation covers the graveled terrace surface; tussocks occur on all sides except the side bordering the lake. No test pits were excavated.

Locality 7 is composed of a ridge segment associated with a series of knolls. It is 150 m southwest of Locality 6 and is 120 m from the lake-shore, and thus the locality farthest from the lake. The vegetation is open-mat alpine tundra on the graveled surfaces, with tussock meadow surrounding it and occurring in some of the lower areas between knolls. No test pits were excavated here.

Locality 8 is one of the richest in cultural material. It occurs on a large knoll near the lake outlet. The surface of the knoll is undulating. One particular undulation or swale, on the lake side of the knoll, is a well used occupation area. A walk down from the top of the knoll immediately reveals the advantage of this location, as winds are drastically diminished in the swale. Both northerly and southerly winds are effectively reduced in this small area. Unlike the open-mat alpine tundra over the rest of the locality, grass grows profusely here. It should be noted that cultural features were also found on the slope and plain at the bottom of the knoll. These areas were as grassy as the swale. The stratigraphy in the swale as seen in two test pits, is quite varied and suggests a diversity of cultural activity; it shows an organic-rich loess with gravel and rock placement taking on cultural meaning. Outside this area the stratigraphy is more a typical gravel-loess mix.

Locality 9 is a small terrace segment on the other side of the outlet 150 m ESE of Locality 8. The material was exposed on the surface in frost boils. Alpine tundra vegetation was present on the site. No test pits were excavated. Finally, Locality 10 consisted of a single artifact found on a solifluction lobe 400 m ESE of Locality 8 at the base of Bogata Peak.

#### Site Information

A complex of hunting and living sites from almost every known period of Alaskan prehistory occurs along the shore of Kinyiksukvik Lake, a site first discovered by Irving (1962) in 1961. This report will focus on the



site as we found it. The reader is referred to Irving's 1962 article for his viewpoint. The lake has no doubt been a focus of activity in this area for a long time. Taken together, the 10 localities contain 47 housepits, 16 tent rings, 89 cache pits, nine caribou fences, a scattering of six cairns, and at least four flake scatters.

Before proceeding to a discussion of each locality, there must be a better understanding of the types of structures that occur on the site as a whole in order to better understand the distribution of these different kinds of features and their possible meanings. Features such as caribou fences, windbreak/hunting blinds, and cairns are pretty straight forward. Dwellings and residence associated features are, however, another matter. These include housepits, cache pits, and hearths. Cache pits are primarily distinguished on the basis of size, generally being less than a meter to a meter-and-a-half in any dimension. Features indistinguishable from cache pits, except for their larger size, were called housepits. In fact, these features may just be king-sized cache pits. Similarly, features indicated as isolated hearths may in fact be remnants of tent structures, where something other than rocks were used to hold down the skin cover, rather than open air camps (Corbin 1975, 1976).

Locality 1 is the smallest area containing dwellings (Fig. 41). There are six housepits and seven cache pits in a triangular-shaped area about 30 m to 35 m on a side. Most of the features occur near the edge of the bluff leading down to the lakeshore.

The housepits range in size from 5.9 m by 3.9 m to 2.75 m in diameter and seem to be of three sorts: 1) without an entrance, 2) with an entrance in the long side, and 3) with an entrance extending from one corner. Three 50 cm square test pits were excavated in the vicinity of a single housepit: outside the entrance, inside, and in a cache pit behind the house.

TP-A, outside the entrance, is the deepest test in the entire site. It went down 1 m and was still producing material when it was abandoned. Excavation was discontinued because it would have necessitated enlarging the pit. To expand it would have gone beyond simple testing, plus it had already been established that this locale exhibited exceptional depth of deposit. A yellow brown loess dominates the profile where there appears to be three major occupation levels. The first two in the top 20 cm seem to be associated with the house. From these levels came caribou bones and fragments, willow fragments, charcoal, 20 gravel-tempered pottery fragments, (three with drilled holes), one utilized flake, and one waste flake. Large rocks predominated in the upper level; only a dark brown loess layer comprised the second level. At about 60 cm below the surface another layer of dark brown loess sloped through the profile, on and under which are more large rocks. Willow and bone were found under these rocks. As a whole, organic preservation was excellent. Being at the edge of the bluff outside the house entrance, the depth of deposit is probably due to dumping of trash outside and over the edge. Based on this reasoning deposition was relatively rapid.

TP-B, inside the structure, was much more shallow. In this case a brown loess or soil predominated to 15 cm where a black organic rich soil was en-

alpine tundra vegetation covers the graveled portion of this locus, with grass willow and dwarf birch occurring on the lakeward slope and shore. As with Locality 1, test pits revealed highly varied stratigraphic profile. Glacial gravels predominate in a loess-organic matrix with cultural material and features at varying levels.

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TP-B, inside the structure, was much more shallow. In this case a brown loess or soil predominated to 15 cm where a black organic rich soil was en-

# XHP 115 LOCALITY 1

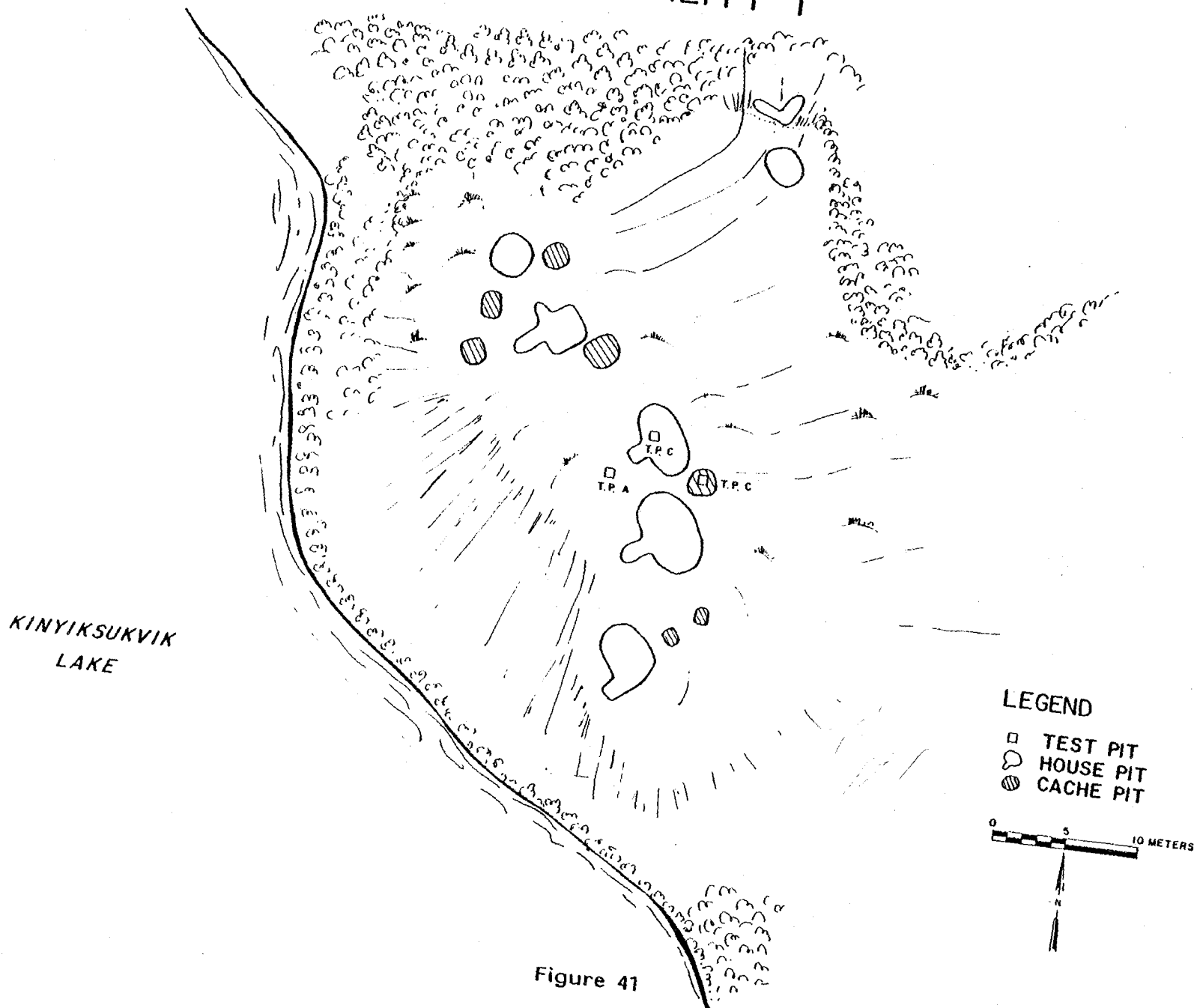


Figure 41

countered from which CCS flakes, bone and willow were removed. A floor level was identified at the 20 cm to 25 cm level. Among the debris found at this level is a slate flake with one side scratched and polished indicating use of polished slate at the site. Slightly below floor level at 28 cm, a hand drill (UA77-132-51; Pl. 11 13; v.4:78) was found. Interestingly enough it fits the holes drilled in some of the pot sherds found in TP-A.

Finally, TP-C was excavated in a cache pit behind the same house where TP-B was located. It was excavated to a depth of 80 cm and had to be abandoned because of permafrost. There was no indication of the cultural material giving out even at this level. The soil matrix consisted of a yellow brown loess mixed with organic material such as charcoal, bone and willow, related to the site's occupation. A possibly living surface or floor was indicated by a charcoal layer at about 30 cm, but this is cut by the cache pit excavation. Another possible living surface was noted at 50 cm to 60 cm below surface. A highly significant if somewhat enigmatic artifact was found 20 cm below the surface. It is a delicately made, stemmed, barbed projectile point (UA77-132-62; Pl.3 8; v.4:27) with a chevron flaking pattern on one side.

Locality 1 seems to represent a well-used residence area. Evidence from TP-A and TP-C indicates more housepits or at least living surfaces lie buried under spoilage from the recent occupation. The features and artifacts seem to wholly represent a late prehistoric component, probably prior to the nineteenth century. The house styles and graveled tempered pottery seem to confirm this interpretation (Dumond 1969; Griffin and Wilmeth 1964; Hall 1976). The drill, while not tying down this interpretation, certainly fits into the range of late prehistoric types (Giddings 1952:Fig. 36 5-7). A problem exists, however, in interpreting the projectile point. Its context is most surely late prehistoric, but it exhibits several morphological traits that present a confusing picture. The pattern of facial flaking and the quality of workmanship is reminiscent of the Denbigh phase, whereas the stemming suggests possible Kavik relations. Overall shape, including barbing, is closest to points from the Brooks River Falls phase, a late Arctic Small Tool tradition manifestation in southwest Alaska (Dumond 1971:Fig. 6, c-f). But those artifacts are significantly smaller than this specimen. Despite its context, this point seems to belong to some other culture than that of the residents of Locality 1. The stemming in combination with the facial flaking could indicate an early Choris phase when the Denbigh phase chipping techniques were still evident and experimentation with stemming and new hafting elements was in progress. However, its close correspondence with the late Brooks River period projectile points from the Alaska Peninsula suggests much later cultural affiliation, but still within the Arctic Small Tool tradition. It should be kept in mind, however, that comparisons over these distances (1100 kilometers or more) with specific artifact types present their own problems, especially when there are no known similar types in between. As a best guess, this artifact belongs somewhere in the Choris or Norton phases.

Locality 2, is the largest, containing a diversity of cultural features (Fig. 42). Ten house pits, 12 tent rings, 35 cache pits, six isolated hearths, and two flake scatters were found, primarily on the south and east sides of this irregularly shaped ridge. The house pits range in size from 2.7 m

# XHP 115 LOCALITY 2



## LEGEND

- DATUM POINT
- HEARTH
- HOUSE PIT
- CACHE PIT
- TENT RING
- ▲ TEST PIT
- ⊙ TEST PIT WITHIN  
TENT RING
- ◆ COLLECTED  
ARTIFACT
- \* INUKSUK

0 10 20 30 40 50 METERS

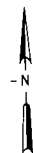


Figure 42

by 1.7 m, to 4.4 m by 3.0 m, and the tent rings range from 2.3 m by 1.8 m, to 4.3 m by 2.9 m, with the ring of large stones measuring 2.9 m by 2.6 m. A series of 11 inuksuks was found on the crest of the ridge to the north and west of the two residential areas. Altogether this locality measures some 315 m, N-S, by 130 m E-W.

The southern portion of the ridge that faces the lake contains the majority of the cultural features. Near the shore of the lake is a large stone-lined pit 2.4 m by 1.8 m. It was presumably used as a cache since living on such a rocky floor would be quite uncomfortable. Nearby is a house pit with an entrance possibly coming off one corner. Back and west on the slope of the ridge face is a series of 10 cache pits forming a bench. Roughly 15 m east of this on the same slope are 11 more cache pits above which are two house pits. These dwellings both have entrances coming straight off one of the corners. A 50 cm square test pit, (TP-A), was placed between these two houses. Cultural material was found in all levels to a depth of 25 cm with the majority of the occupation between 10 cm and 20 cm below surface. The excavator felt that the upper 5 cm represented debris associated with the houses, and that lower down the major occupation represented in another time period. Within the 10 cm to 15 cm level two projectile point tips were found (UA77-132-105, 106; Pl. 3 23, 22). Although quite fragmentary their thin cross sections suggest affinities to the Arctic Small Tool tradition, but this inference is tenuous at best. Altogether, this major living floor contained 109 waste flakes, 18 utilized flakes, two burinated flakes, two rough bifaces, and one biface trimming flake. Some burned bone and a caribou tooth were found as well.

Other less densely utilized areas occur north and just uphill from the above area. This next level has 10 cache pits, one house pit and an isolated hearth scattered about a 55 m by 10 m area. Farther upslope on various level or near-level areas are an isolated hearth and two widely separated tent rings. One of these stone rings is made of particularly large rocks, and while the stones are not as big as the ones making up the big structure in Locality 8, their size approaches that type more than those of the other tent rings. About 40 m east of the large stone tent ring is a cluster of dwellings consisting of five house pits, a tent ring, and a cluster of three cache pits.

Approximately 50 m north of the last grouping is another grouping of structures, mostly tent rings. There is a total of seven tent rings, (most with exterior hearths), four isolated hearths and one house pit. Two 50 cm square test pits were placed in the vicinity of the northernmost tent ring, one inside and one outside. No cultural material was found in either pit, but TP-C inside the structure revealed 36 cm of black, greasy, midden-like soil indicating a high organic content. A great deal of bone was found scattered over this area, much of it was cut by a metal saw.

West of this cluster up on the highest parts of the ridge are two flake scatters, both containing microblades. The southernmost one, about due west of the southernmost tent rings, contained a facial rejuvenation flake from a wedge-shaped core (not collected). The northernmost scatter yielded a microcore tablet (UA77-132-142; Pl. 23 22; v.4:167) the location of which became the locus of a 50 cm by 50 cm test pit, TP-D. Artifacts

were found to a depth of 10 cm. It should be noted that all observed material in this immediate area was found in rivulets between higher gravel spots, indicating that these may have eroded from their original deposition. Besides the core tablet, the pit had six waste flakes, two microblade fragments, a burin spall, and a utilized flake. In addition to these two microblade scatters, an interesting blade-like flake with two opposing burin blows on the distal end was found 50 cm southwest of TP-D (UA77-132-80; Pl. 36 7; v.4:206).

The last feature noted for this locality includes 11 inuksuks generally trending northwest on the highest parts of the ridge away from the other use areas at this locality. This grouping of inuksuks while clearly evident suggests no tight pattern as do other caribou fences at the site. Near the northwest end of the fence is a windbreak/hunting blind about 4.6 m long by 1 m to 1.5 m wide. It trends NNE-SSW. Finally, at the farthest end of the ridge, down off the top about 160 m northwest of the windbreak/hunting blind was a wooden food tray (UA77-132-79; Pl. 60 2; v.4:260).

Locality 2 is a very significant locality, representing at least three time periods as well as providing a wide variety of cultural features. The house pits and associated cache pits seem to represent a late prehistoric Nunamiut usage when life was a bit more sedentary than is known for later times.

The historic period seems represented by the tent ring noted in the area on the east side of the ridge and the associated metal saw-cut bone. The lack of Euro-American manufactured items, however, could indicate an early historic or perhaps proto-historic placement. The tent ring of large stones is dissimilar enough from the others to posit a different affiliation. Ideas expanded on later place this in the proto-historic time period and make it of Athapaskan instead of Eskimo origin. Next, there is a Paleo-Arctic tradition component present. This affiliation is most surely seen in the microcore tablet recovered from TP-D. The tablet is not a complete representation of the original platform but contains remnants of the front and left sides of the core with the tablet having feathered off before reaching the right side. An original oval platform seems to be indicated in this case. It is interesting to note that the width of one blade scar is 1.6 cm larger than the 1.3 cm limit used for distinguishing blades from microblades (v.4:300). The other six scars are well below the limit. This indicates the problem with using other people's limits and the need for use of internal site data, as well as the grey area in differentiating blades and microblades. Somewhat more tenuous, but just as pertinent is the blade-like flake found in that general area. It is reminiscent of the blades known from Locality 1, Gallagher Flint Station, 240 km east (Dixon 1975: Fig. 2). Finally, a Denbigh phase occupation is a possibility. While the other lithic scatter contained microblades, it had no other tools to help delineate the cultural affiliation. In this case, a limiting date of 3700 B.P. must be used, which includes the Denbigh phase.

There is every indication that people lived and used this locality during every season of the year, although maybe not continually. The house pits assuredly address winter occupation, probably fall and winter, since they had to have excavated the houses prior to freeze up. The stone tent



rings are summer structures. This inference is based on Corbins (1975, 1976) study of houses in the Anaktuvuk Pass area. The same study also indicates that the isolated hearths may be what is left of winter tents where snow blocks instead of stones were used to hold tent skins down. A fall use of this area is also indicated by the stone inuksuks that would have to have been built during warmer weather in anticipation of the fall movement of caribou south. A spring occupation is not directly seen in the date but may be implied in the winter habitations which may have been lived in until spring thaw and the caribou migration north.

Locality 3 is somewhat less intensively used than the other two. It contains one house pit, two tent rings, eight cache pits, 16 inuksuks, and a light density flake scatter (Fig. 43). The dwellings are widely separated and seem to indicate three separate occupations. The house pit, roughly 3.5 m by 2.5 m, is rectangular with no entrance. A 50 cm square test pit (TP-C) was excavated inside and produced a total of 59 waste flakes, a crude biface and a fragment of a finished tool, possibly a projectile point fragment used as a graver (UA77-132-177; Pl. 3 21; v.4:viii). The floor occurred between 6 cm and 12 cm and contained most of the charcoal and bone fragments found in the pit. Two large fire-burned rocks also appeared in the profile at the top of the floor indicating the possibility of a central hearth. All the flakes were quite small indicating that intentional retouch was the primary flaking activity in the house, probably for the sharpening of tools already manufactured. The tent ring to the northwest of the house pit, measuring 5.2 m by 4.6 m, contained two obsidian flakes. A 50 cm square test pit (TP-B), also revealed material to a depth of 10 cm, including 25 waste flakes, a burin spall, and a utilized flake. A third test pit (TP-A), was excavated near the northwesternmost tent ring which measured 4.7 m by 4.1 m. Material was found to 8 cm but was quite sparse, containing only four waste flakes and one utilized flake. The cache pits here are in a similar situation to those at Locality 2. They are on the slope itself and facing south. They seem to have been constructed for the same purpose, probably by the same cultural group. The caribou fence is about 145 m long trending NW-SE, and it seems to form a "V" pointing southeast. Given the juxtaposition of the houses and the fence, they were probably not used simultaneously. While nothing diagnostic was found in the test pits, surface collections revealed three artifacts reflecting two major periods. First, within 15 m of the northwesternmost tent ring a side-notched projectile point was found (UA77-132-150; Pl. 3 14; v.4:23) falling into the range of points from the Palisades of Cape Krusenstern (Giddings and Anderson n.d.: Pl.169). About 20 m northwest of this, a projectile point (UA77-132-151; Pl.2 7; v.4:10) base was found that is very close to forms from the Ipiutak, Near-Ipiutak, and Iyatayet sites (Giddings 1964:162, Pl. 47 5; Larsen and Rainey 1948:Pl. 2 1-6, Pl. 35 1-20, Pl. 84 19-22). Finally, about 10 m east of the side-notched point a side scraper (UA77-132-152; Pl. 20 2) was found that is an exact duplicate of a specimen from the Norton levels at the Iyatayet site (Giddings 1964:Pl. 55 13).

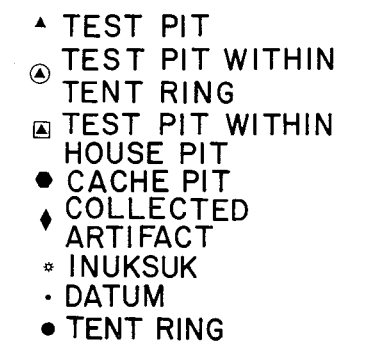
At least three periods are present at this locality. The earliest is the Norton Archaic tradition represented by the side-notched point. The latter half of the Arctic Small Tool tradition, the Norton/Ipiutak phases, is represented by the scraper and point fragment. It should also be recog-

A detailed map of Kinyiksukvik Lake, showing its shoreline and various archaeological sites. The lake is labeled "KINYIKSUKVIK LAKE" in the lower left. The map includes several labeled sites: "PROJECTILE" (marked with a diamond), "SIDE-NOTCHED POINT" (marked with a diamond), "T.P.A" (marked with a triangle), "T.P.B" (marked with a triangle), and "T.P.C" (marked with a triangle). There are also points labeled "A", "B", and "C". The map features a large area of water, a shoreline with a dense forest of trees, and a road or path running along the shore. The map is oriented with North at the top.

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- ▲ TEST PIT
- ⊙▲ TEST PIT WITHIN TENT RING
- ▣ TEST PIT WITHIN HOUSE PIT
- CACHE PIT
- ◆ COLLECTED ARTIFACT
- \* INUKSUK
- DATUM
- TENT RING



nized that the stones making up both tent rings are quite settled into the ground matrix, thus indicating a degree of age that could be commensurate with the artifacts mentioned above. Finally, the house pit and the caribou fence suggest late prehistoric usage.

The evidence at hand points to a summer to fall to winter occupation of this locality. Based on Corbin's (1975,1976) ideas, the tent rings probably indicate summer occupation. The inuksuks suggest use during the fall migration south and the housepit suggests use during the winter.

Locality 4 consists of six cairns in a 100 m by 85 m area. They are irregularly arranged making it difficult to declare them as part of a caribou fence, although the feeling is that they are remnants of such a system. The best line consists of cairns 1, 2 and 3 as well as a hump of tussocks off the terrace which could be an inuksuk. As with all features of this sort, a late prehistoric age is surmised.

On the west side of the lake, at Locality 5, are two, maybe three, caribou fences in an area 130 m by 40 m trending due E-W and perpendicular to the lake shore. The first fence consists of 122 very closely spaced inuksuks. Forty meters west is the second fence made up of 18 cairns, running 120 m with a 45 m break in the middle. The west end of this fence curves toward and almost connects with the first fence. The third fence lies between the first and second and consists of only four inuksuks over 45 m. It roughly corresponds to the gap in the second fence but is 10 m south. A cluster of rocks between the two outside fences had a piece of wood in it and could have been a hearth. A late prehistoric to historic time period is suggested for this locality, with use during the fall migration.

Locality 6 contains no prehistoric material at all and is one of the least used localities. Broken bones and late historic artifacts (very late), including cans and a pair of men's underwear, appear in this area. A possible hearth containing a piece of wood is in the approximate center of the locality. This locality seems to have been used only in the most recent times.

Four features comprise Locality 7, the most prominent, of which is a double tent ring. Two concentric rock rings occur with what looks like an interior hearth. The feature measures to the outside ring, 5.2 m by 3.4 m. Outside the structure are two stone piles that could have been supports for racks, possibly for hanging meat or skins to dry. No artifacts were found anywhere in the vicinity. About 250 m east of the tent ring is another possible structure. It looks to be the remnants of a very temporary shelter with four well spaced rocks defining one side and three willow sticks marking the other. It measures 1.7 m in diameter. Finally, there are the remnants of at least two caribou fences. One very clear fence runs for about 150 m E-W, perpendicular to the lake shore. There are 28 inuksuks in this fence, some of which are rather closely spaced. South of this fence is a series of 17 cairns that speculatively form four possibilities: they could be parts of three other converging fences and possibly a portion representing a hook on the tail of the first fence. This picture, however, is confused at best. All together this locality repre-

sents a late prehistoric usage. The double tent ring is unique in the reserve. It does represent, though, what one would expect for a winter tent of double wall construction. The interior hearth near the entrance tends to represent this. However, because Corbin's (1975, 1976) documentation of complete stone rings being constructed for summer use, it is probable that this dwelling was built in the summer or early fall for intended habitation through all or part of the winter.

Locality 8, near the outlet, is one of the more densely occupied areas (Fig. 44). In a 145 m square there are 28 housepits, 41 cache pits, one regular tent ring, one tent ring of large stones (with a nearby flake scatter), and three (maybe four) caribou fences. Also there is a lot of cut and broken bone scattered about, especially in the housepit area. The housepits range in size from 2.1 m by 1.4 m to as large as 6.0 m by 3.6 m, including houses with and without entrances. The smaller, ordinary tent ring measures 3 m by 2 m and the tent ring of large stones measures 5 m in diameter with an attached cache or "living room" 3 m in diameter.

There are three major areas in this locality. The first area is on top of the hill. This contains the large stone tent ring which is the most dramatic feature at the entire site. To the southwest is a small flake scatter in which a 50 cm square test pit was excavated, TP-A. Flakes were found to a depth of 8 cm. A total of 283 waste flakes, seven utilized flakes, and one biface trimming flake were recovered. It is difficult to associate the activities of the scatter with the inhabitants of the nearby structure despite the presence of chipped stone inside the dwelling. Between 5 m and 15 m to the north are three cache pits. They are on the same general level as the stone ring. South, down off the hill is the second area containing two house pits and four cache pits which are cut into the slope of the hill. These structures down off the hill are more related to the features found in the swale up on the hill.

The third area, the swale, is a well protected location on the lake side of the hill. It exhibits the most intense usage in the locality. Here there are 25 of the house pits, 26 of the cache pits and the vast majority of broken and cut bone. Three features stand out as being unusual. One is a double house pit that appears to be one house pit with an entrance leading into the back of another. Rather than indicating an extremely large two room house, it could be the result of a subsequent house excavation being placed adjacent to a previously abandoned house. The other two features are two shaped sandstone pillars. One lies near a house pit at the north end of the swale and one, about a meter long, is still vertical up against the inside wall of another house pit. Their function is unknown but they could be earlier stone versions of carved wooden lamp supports such as seen in houses in southwest Alaska (Nelson 1971). One of the other two 50 cm square test pits, TP-B, was placed in this house. This pit produced little in the way of cultural material, but did reveal a well-defined house floor of grass up to 5 cm thick, 20 cm to 30 cm below surface. Just outside the entrance of this house TP-C was excavated. At 10 cm to 20 cm below surface there was a living surface of some sort. Its relationship with the house is uncertain, but it might represent an outside activity area. In the 10 cm to 15 cm level a small chipping station of small

# XHP 115 LOCALITY 8



Figure 44

retouch flakes was found. It was only 8 cm in diameter but contained over 80 very small flakes. Altogether 89 waste flakes, 59 caribou bone fragments and one utilized flake were recovered to a depth of 15 cm. It should be noted, that northwest of the swale eight cache pits, a house pit and a tent ring with a cache pit occurred. On the surface of this area outside the swale two worked pieces of wood were observed. One appears to be a handle fragment (UA77-132-185; Pl. 48 5; v.4:257) and the other although somewhat enigmatic, appears to be a portion of a dog sled, perhaps, a crosspiece (UA77-132-187; Pl.61 4; v.4:251).

Finally, at the far northwestern end of the locality is a system of caribou fences that might all relate to each other. These three very noticeable lines all run east and northeast into the lake. The two northwesternmost fences seem to converge in this direction. Eighteen inuksuks comprise the northwesternmost fence, 14 make up the second fence, and 15 make up the third fence. Continuing to the southwest is a series of six cairns that seem somewhat randomly placed. They could represent the remains of older "cannibalized" fences.

This entire locality seems to have been occupied in the late prehistoric times. The large stone tent ring, however, is somewhat of a problem and is subject to two interpretations, each entered into in detail elsewhere in the report. It could either be a late prehistoric Eskimo kariqi of local peculiarity and significance or a proto-historic Athapaskan dwelling (Irving 1961; Shields 1978). The question of seasonality is addressed by the structures present. Winter and fall are the primary times for occupation, as seen in the substantial semisubterranean houses and the stone caribou fences. The excavation of the houses and the gathering of stones for the fences would have to have been done before the ground froze. The one ordinary stone tent ring indicates a summer occupation, but obviously not an extensive one (Corbin 1975, 1976). Because of its unusual qualities, it is hard to use the large stone ring to make any statements pertaining to seasonality.

The last two localities are quite small compared to the others, but nonetheless help flesh out a picture of life at this lake through time. Locality 9 is a small scatter of CCS and obsidian flakes including a small number of microblade fragments. There is the possibility of more material being obscured by the nearby vegetation mat. Since no other artifacts were found beyond the microblades it is impossible to state which culture was responsible. The best we can do at this time is to say it is no older than 3700 B.P., when the last microblades are noted in this area (Kunz 1976). Finally, Locality 10 contained the nearly complete remains of a wooden paddle (UA77-132-246; Pl. 65 1; v.4:253) and some worked willow. It is difficult to exactly place the paddle in time, but it appears to be the sort used by Eskimos during the late prehistoric/early historic period (Murdoch 1892). Its presence so far from the lake is somewhat enigmatic, but not so in the lake context, as it aids in the inference of boats being present at the site. Boats that not only would have been used to paddle down the river but as a platform to kill caribou driven into the lake.

## Discussion

Kinyiksukvik Lake, XHP-115, is one of the most significant sites found on the NPR-A archeological survey. It contains a wide variety of cultural features and a number of different cultural traditions. The arrangement of these aspects makes this site comparable to sites in the reserve, such as at Etivluk Lake or Tukuto Lake, as well as being unique.

Perhaps the most prominent features at the site are its dwellings, which can be divided into five types. The following house typology is based on a combination of house types presented by Corbin (1975, 1976) and Hall (1976), as well as one new type found here. This combination is not done to muddle the issue, but to clarify it in light of ethnographic work (Corbin 1975, 1976) and a large sample of archeological examples (Hall 1976). In relating these two, however, some might recognize a problem in applying Corbin's ethnographic model to prehistoric features, because in the former case one is dealing with essentially surface moss houses and in the latter with semisubterranean houses. The investigator sees no problem with this since there is every indication that the makers of the former are descendants of the latter, thus making comparisons possible. Type 1 houses are circular to rectangular depressions with no noticeable entryway or hearth. This does not seem to correspond to any houses in Corbin's scheme, although it does represent Hall's Type 1 house "semisubterranean tent rings without hearths." Type 2 houses are rectangular depressions with a cold-trap entryway extending from one of the long walls. Corbin refers to this type as an akilliri, a type of moss house or ivrulik. This type of structure is associated with the extended family. This type also refers to Hall's Type 2, typical semisubterranean. Type 3 houses are small, square to rectangular depressions with an entryway, cold-trap extending out from one corner. Iglupiaktaqlik is the term Corbin uses for this type of house, which he feels accommodated a single nuclear family. This corresponds to Hall's Type 3, half house. Type 4 houses are tent rings with cobble-sized rocks outlining the space occupied by the tent. Corbin uses the term itchelik or skin tent for this type of structure. Hall does not report any structures of this sort. Finally, Type 5 is not referred to by either investigator in their typology. It is a large stone tent ring where boulder-size rocks are used to outline the dwelling area. Two of these are noted from Kinyiksukvik lake, with one spectacular example.

Seasonality is reflected in three of the five types. Type 2 and 3 very likely reflect long term winter occupation. Type 1 may also reflect cold weather occupation on the basis of it being semisubterranean, but the lack of ethnographic analogy and detailed excavation makes it impossible to say at this time. Based on Corbin's work, Type 4 houses are probably summer structures. Stones used to define the perimeter would be difficult to gather from frozen ground in the winter, or even locate under the snow cover. Incomplete stone rings or isolated hearths might represent winter dwellings, although this would be hard to differentiate without full excavation. As with Type 1 structures, Type 5 houses are somewhat enigmatic as to seasonality. More work is necessary with the Type 5 house to discern the time of year they were occupied. These types are found on localities 1, 2, 3, 7 and 8 in varying frequencies and, except for Type 5, are quite comparable to houses found at Tukuto and Etivluk Lakes north

and south (Hall 1976). The temporal, social, and demographic implications of these types need to be explored through further work and cannot be addressed now.

Temporally, the entire range of Alaskan prehistory can be directly discerned or implied at this site. The Paleo-Arctic tradition is seen at Locality 2 with the presence of a core tablet and blade-like flake that is very reminiscent of what Dixon calls blades from Gallagher Flint Station. A Northern Archaic tradition component is indicated by a side-notched projectile point from Locality 3. The Arctic Small Tool tradition is only lightly represented. The Denbigh phase is not directly represented and is inferred on the basis of microblades unassociated with anything, such as on Localities 2 and 9, and Irving's 1961 observations. Also, since Denbigh is found at Tukuto and Etivluk Lakes to the north and south, it seems likely that this very similar environment would be exploited by these people as well. The Choris phase can possibly be discerned in the stemmed-barbed point from Locality 1, but that piece seems more likely to represent the following Norton or Ipiutak phases. If check-stamped pottery is a prerequisite for the Norton phase, then this phase can be said to be absent at XHP-115 (Dumond 1977). The projectile point base from Locality 3, does suggest an Ipiutak phase occupation. None of these earlier occupations, however, are as extensive as the late prehistoric and historic one related to the Arctic Tundra tradition. This is primarily inferred from the house types present, but also from gravel-tempered pottery, dog sled parts, and a kayak paddle. Finally, a proto-historic component around the turn of the nineteenth century, related to an Athapaskan presence is inferred on the basis of the tent ring of large stones. This suggestion is derived from ethnohistoric sources and some archeological work in the central Brooks Range pointing to association of Dihai Kutchen people with houses that are different from the contemporaneous Nunamiut houses (Alexander 1969; Hall 1969; Shields 1978).

Kinyiksukvik Lake, Etivluk Lake, and Tukuto Lake are part of a series of lakeside late prehistoric villages in NPR-A noted by Hall (1975), but are the only three where anything but minimal work has been done. Because of the large number of late prehistoric houses as well as flake scatters around its periphery, Kinyiksukvik Lake is, on one level, comparable to Tukuto and Etivluk Lakes. However, it differs from these two in at least three ways. One, it contains more of a time depth with the presence of Paleo-Arctic and Northern Archaic tradition tools, but on the other hand seems to be light on the Arctic Small Tool tradition that is high visible at the other two. Two, there are different house types. There is the uniquely large structure in Locality 8 and a similar one noted at Locality 2. While Tukuto Lakes seems to have one similar to the one at Locality 2, the nearest example of the one at Locality 8 is at Feniak Lake outside the reserve. The example at Kinyiksukvik Lake is the farthest north and east of this type of structure, which has a limited distribution in the first place (Hall 1970). The third distinction is the number of caribou fences at this site. None is mentioned for either lake, and by the number of fences in the immediate area (over 50), it seems that the art of the caribou drive was taken to unsurpassed heights. As a whole the qualities of this site, involving its simultaneous uniqueness and comparability, make it potentially one of the most significant sites on the north slope. In other words, the



data contained in this site could answer unique questions in local and regional prehistory as well as verify work done at other sites through replication of certain kinds of data. Its preservation for future work and needs are imperative.

<u>Catalog #</u>	<u>Description</u>
UA77-132-1	Bone Fragment
UA77-132-2	Charcoal Fragments
UA77-132-3	16 Bone Fragments
UA77-132-4	9 Bone Fragments
UA77-132-5	Charcoal Fragments
UA77-132-6	Nonutilized Flake
UA77-132-7	Burinated Flake
UA77-132-8	20 Gravel Tempered Pottery Fragments
UA77-132-9	Charcoal Fragments
UA77-132-10	Nonutilized Flake
UA77-132-11	Willow Fragments
UA77-132-12	22 Bone Fragments (Caribou)
UA77-132-13	1 Cut Bone Fragment
UA77-132-14	2 Bone Fragments
UA77-132-15	Charcoal Fragments
UA77-132-16	Charcoal Fragment
UA77-132-17	Charred Willow/Charcoal Fragments
UA77-132-18	Charred Willow/Charcoal Fragments
UA77-132-19	Bone Fragment
UA77-132-20	Charcoal Fragments
UA77-132-21	Charcoal/Willow Fragments
UA77-132-22	3 Bone Fragments
UA77-132-23	Charred Willow/Charcoal Fragments
UA77-132-24	2 Bone Fragments
UA77-132-25	3 Bone Fragments
UA77-132-26	Charred Willow/Charcoal Fragments
UA77-132-27	4 Bone Fragments
UA77-132-28	3 Bone Fragments
UA77-132-29	Charred Willow/Charcoal Fragments
UA77-132-30	4 Bone Fragments
UA77-132-31	2 Bone Fragments
UA77-132-32	Utilized Flake
UA77-132-33	Willow Fragment
UA77-132-34	Willow Fragment
UA77-132-35	8 Bone Fragments
UA77-132-36	3 Bone Fragments
UA77-132-37	Charcoal Fragments
UA77-132-38	Charcoal Fragments
UA77-132-39	Charcoal Fragments
UA77-132-40	2 Nonutilized Cortical Flakes
UA77-132-41	2 Bone Fragments
UA77-132-42	Cut Bone Fragment
UA77-132-43	Charcoal Fragments
UA77-132-44	13 Bone Fragments
UA77-132-45	23 Bone Fragments
UA77-132-46	18 Nonutilized Flakes (1 polished slate)

<u>Catalog #</u>	<u>Description</u>
UA77-132-48	Utilized Flake
UA77-132-50	4 Nonutilized Flakes
UA77-132-51	Drill
UA77-132-52	2 Bone Fragments
UA77-132-53	4 Bone Fragments
UA77-132-54	Charcoal Fragments
UA77-132-55	Wood Fragments
UA77-132-56	3 Bone Fragments
UA77-132-57	Charcoal Fragments
UA77-132-58	Wood Fragment
UA77-132-59	7 Bone/antler Fragments
UA77-132-60	3 Bone Fragments
UA77-132-61	Charcoal Fragments
UA77-132-62	Projectile Point
UA77-132-63	Nephrite Sliver
UA77-132-64	Bone Fragment
UA77-132-65	Bone Fragment
UA77-132-66	Willow Fragment
UA77-132-67	Fragment
UA77-132-68	Bone Fragment
UA77-132-69	Charred Willow/Charcoal Fragments
UA77-132-70	2 Bone Fragments
UA77-132-71	3 Nonutilized Flakes
UA77-132-72	Retouched Flake Fragment
UA77-132-73	Charred Willow/Charcoal Fragment
UA77-132-74	2 Bone Fragments
UA77-132-75	Charred Willow/Charcoal Fragments
UA77-132-76	Charred Willow/Charcoal Fragments
UA77-132-77	4 Bone Fragments
UA77-132-78	Bone Fragment
UA77-132-79	Wooden Dish - 8 Pieces
UA77-132-80	Blade-like Flake
UA77-132-81	Charcoal
UA77-132-82	Worked Bone Fragment
UA77-132-83	2 Bone Fragments
UA77-132-84	8 Nonutilized Flakes
UA77-132-85	Utilized Flake
UA77-132-86	Utilized Cortical Flake
UA77-132-87	Charcoal Fragments
UA77-132-88	28 Nonutilized Flakes
UA77-132-89	Utilized Flake
UA77-132-90	Amorphous Biface Fragment
UA77-132-91	Charcoal/Bone
UA77-132-92	4 Nonutilized Cortical Flakes
UA77-132-93	28 Nonutilized Flakes
UA77-132-94	Utilized Flake
UA77-132-95	Burinated Flake
UA77-132-96	Burinated Flake
UA77-132-97	Utilized Flake
UA77-132-99	Utilized Flake
UA77-132-100	Utilized Biface Trimming Flake

<u>Catalog #</u>	<u>Description</u>
UA77-132-103	Utilized Flake
UA77-132-104	Knife Side Blade
UA77-132-105	Projectile Point Tip
UA77-132-106	Projectile Point Tip
UA77-132-107	Charcoal/Bone/Calcine Fragments
UA77-132-108	Caribou Teeth
UA77-132-109	7 Nonutilized Cortical Flakes
UA77-132-110	70 Nonutilized Flakes
UA77-132-111	4 Bone Fragments
UA77-132-112	Charred Willow/Charcoal Fragments
UA77-132-114	Utilized Flake
UA77-132-116	Utilized Flake
UA77-132-118	Utilized & Retouched Flake
UA77-132-119	Utilized Flake
UA77-132-121	Burinated Flake
UA77-132-122	Utilized Flake
UA77-132-123	Utilized Flake
UA77-132-125	Utilized Flake
UA77-132-126	Utilized Flake
UA77-132-128	Utilized Flake
UA77-132-129	Utilized Flake
UA77-132-131	Utilized Flake
UA77-132-132	Preform
UA77-132-133	Preform
UA77-132-134	Utilized Cortical Flake
UA77-132-135	Utilized Cortical Flake
UA77-132-137	Weapon Side Blade Fragment
UA77-132-138	Utilized Flake
UA77-132-139	13 Nonutilized Flakes
UA77-132-140	Burin Spall
UA77-132-142	Microblade Core Tablet
UA77-132-143	6 Nonutilized Flakes
UA77-132-144	Burin Spall
UA77-132-145	Microblade
UA77-132-146	Nonutilized Flake
UA77-132-147	Microblade
UA77-132-148	Microblade
UA77-132-150	Projectile Point
UA77-132-151	Projectile Point Base
UA77-132-152	Side Scraper
UA77-132-153	Utilized Cortical Obsidian Flake
UA77-132-154	Utilized Flake
UA77-132-155	2 Nonutilized Flakes
UA77-132-156	2 Nonutilized Flakes
UA77-132-157	Utilized Flake
UA77-132-158	Utilized Obsidian Flake
UA77-132-159	Utilized Flake
UA77-132-160	Utilized Flake
UA77-132-161	19 Nonutilized Flakes
UA77-132-162	Burin Spall
UA77-132-163	Utilized Flake

<u>Catalog #</u>	<u>Description</u>
UA77-132-164	6 Nonutilized Flakes
UA77-132-166	Utilized Flake
UA77-132-167	Utilized Obsidian Flake
UA77-132-168	Charcoal Fragments
UA77-132-169	29 Nonutilized Flakes
UA77-132-177	Projectile Point
UA77-132-178	4 Caribou Bone Fragments
UA77-132-179	22 Nonutilized Flakes
UA77-132-182	Bifacially Flaked Nodule
UA77-132-183	Bone Fragment
UA77-132-184	3 Nonutilized Flakes
UA77-132-185	Sled Part-fragment
UA77-132-186	Utilized Flake
UA77-132-187	Drilled Wood-handle Fragment
UA77-132-188	Bone Fragment
UA77-132-189	194 Nonutilized Flakes
UA77-132-190	5 Nonutilized Cortical Flakes
UA77-132-193	Utilized Flake
UA77-132-195	Utilized Flake
UA77-132-196	Biface Trimming Flake
UA77-132-197	Utilized Flake
UA77-132-200	Utilized Flake
UA77-132-204	Utilized Flake
UA77-132-210	Utilized Flake
UA77-132-213	75 Nonutilized Flakes
UA77-132-214	8 Nonutilized Cortical Flakes
UA77-132-216	Nonutilized Flake
UA77-132-217	Bone Fragment
UA77-132-219	Utilized Flake
UA77-132-220	2 Bone Fragments
UA77-132-221	Antler Splinter
UA77-132-222	Willow Fragments
UA77-132-223	2 Bone Fragments
UA77-132-224	2 Bone Fragments
UA77-132-225	Cut Bone Fragment
UA77-132-226	9 Bone Fragments
UA77-132-227	Nonutilized Flake
UA77-132-228	2 Bone Fragments
UA77-132-229	2 Cut Bone Fragments
UA77-132-230	Wood Floor Sample
UA77-132-231	Charred Willow/Charcoal Fragments
UA77-132-232	5 Bone Fragments
UA77-132-233	3 Bone Fragments
UA77-132-234	2 Nonutilized Flakes
UA77-132-236	2 Bone Fragments
UA77-132-237	3 Nonutilized Flakes
UA77-132-239	24 Bone Fragments
UA77-132-240	30 Bone Fragments
UA77-132-241	84 Nonutilized Flakes
UA77-132-244	Utilized Flake
UA77-132-245	Utilized Obsidian Microblade
UA77-132-246	Wood Kayak Paddle Fragment

XHP-116

Location: Sec. 18, T.33N., R.11E., Kateel Meridian  
UTM 4/607000/7573000

Class: II

#### Location and Setting

This site is on a ESE-WNW trending bedrock ridge at the base of Kivliktort Mountain 600 m west of Inyorurak Pass Creek, and 120 m south of a small unnamed tributary. The ridge itself is sparsely covered with alpine tundra, with tussocks beginning at the end of the outcrop to the ESE, later changing to willows along the stream banks. Tussocks occur on both sides of the ridge, but alpine tundra vegetation persists upslope to the WNW.

#### Site Information

XHP-116 is a caribou fence with a windbreak/hunting blind at the southwest end. There are 11 to 12 inuksuks in a rough L-shape trending ENE-WSW for about 80 m. The length of the fence, which seems to run downslope, is 130 m. Spacing between inuksuks varies from 5 m to 36 m, with most being 12 m to 15 m apart.

#### Discussion

This is a hunting site associated with a caribou drive. The fences guide the caribou in the desired direction. The trend seems to be downslope toward the stream and the willows along its banks and where snares could be set to catch caribou. The trapped caribou would be killed by men with spears stationed near the snares (Spencer 1959). Gaps between the fences and the probable target do not necessarily negate this hypothesis. Inuksuks could have been built out of tussocks which have long since decomposed (Ray Bane 1979: Personal Communication).

The windbreak/hunting blind at the head of the fence may be associated, and have acted as a station behind which additional hunters would have been stationed to kill driven game and to make sure the rest of the animals continued along, or to one side of the fence. It may not be associated, however, and may represent another event in which a hunter would be positioned to kill caribou in the summer months when the caribou would be at higher elevations to escape mosquitos. However, an association between a similar fence and a windbreak/hunting blind at Fence No. 1 of nearby XHP-111 lends more credence to the first hypothesis.

Age and cultural affiliation are difficult to assign. However, based on two factors, the fence and the blind seem to be of Nunamiut origin from late prehistoric times. First, the fence as it was found fits what has been traditionally used by indigenous people in early historic times. Second, while it is in a state of disrepair it did not seem disturbed enough to be more than a few hundred years old. It is conceivable for alignments of stone piles to last for thousands of years, but this is unlikely in the opinion of the investigator. It also seems unlikely that a single fence

XHP-116

Location: Sec. 18, T.33N., R.11E., Kateel Meridian  
UTM 4/607000/7573000

Class: II

#### Location and Setting

This site is on a ESE-WNW trending bedrock ridge at the base of Kivliktort Mountain 600 m west of Inyorurak Pass Creek, and 120 m south of a small unnamed tributary. The ridge itself is sparsely covered with alpine tundra, with tussocks beginning at the end of the outcrop to the ESE, later changing to willows along the stream banks. Tussocks occur on both sides of the ridge, but alpine tundra vegetation persists upslope to the WNW.

#### Site Information

XHP-116 is a caribou fence with a windbreak/hunting blind at the southwest end. There are 11 to 12 inuksuks in a rough L-shape trending ENE-WSW for about 80 m. The length of the fence, which seems to run downslope, is 130 m. Spacing between inuksuks varies from 5 m to 36 m, with most being 12 m to 15 m apart.

#### Discussion

This is a hunting site associated with a caribou drive. The fences guide the caribou in the desired direction. The trend seems to be downslope toward the stream and the willows along its banks and where snares could be set to catch caribou. The trapped caribou would be killed by men with spears stationed near the snares (Spencer 1959). Gaps between the fences and the probable target do not necessarily negate this hypothesis. Inuksuks could have been built out of tussocks which have long since decomposed (Ray Bane 1979: Personal Communication).

The windbreak/hunting blind at the head of the fence may be associated, and have acted as a station behind which additional hunters would have been stationed to kill driven game and to make sure the rest of the animals continued along, or to one side of the fence. It may not be associated, however, and may represent another event in which a hunter would be positioned to kill caribou in the summer months when the caribou would be at higher elevations to escape mosquitos. However, an association between a similar fence and a windbreak/hunting blind at Fence No. 1 of nearby XHP-111 lends more credence to the first hypothesis.

Age and cultural affiliation are difficult to assign. However, based on two factors, the fence and the blind seem to be of Nunamiut origin from late prehistoric times. First, the fence as it was found fits what has been traditionally used by indigenous people in early historic times. Second, while it is in a state of disrepair it did not seem disturbed enough to be more than a few hundred years old. It is conceivable for alignments of stone piles to last for thousands of years, but this is unlikely in the opinion of the investigator. It also seems unlikely that a single fence

would be kept up for extremely long periods of time, from one culture to the next. This would indicate a continuity that does not exist in the archeological record. Despite the lack of substantial evidence that the fence is of Nunamiut origin, it is believed that this hypothesis is worth testing.

In terms of age, the same is true for the windbreak/hunting blind. However, there is no known ethnographic counterpart, and it is thus difficult to assign a cultural affiliation, as both Athapaskan and Eskimo people are proposed as having been here in this time period (Shields 1978). Given the short time proposed for the Athapaskan occupation, ca 50 years, the blind is likely to be Nunamiut as well.

XHP-117

Location: Sec. 29 (32) T.34N., R.11E., Kateel River Meridian  
UTM 4/608550/7577900

Class: IV

#### Location and Setting

This village site and caribou fence lies on a river terrace about 300 m east of the main channel of the Nigu River. The setting is unusual in that the cultural features lie within two large scallops, looking somewhat like a "W" cut into an even higher and older terrace to the east. Two more recent terrace levels step down 5 m each to the present, active, cut stream bank only 200 m from the site. The positioning of the site in the scallops shelters the area somewhat from the northeast and southwest winds. A single 50 cm square test pit in the camp area revealed a typical gravel-loess mix below a thin organic layer. Both open and closed-mat alpine tundra vegetation occur on the site, with open-mat vegetation occurring exclusively on the upper terrace level. Tussock meadow occurs to the east of the upper terrace level as well as to the west, where it grades into the riparian growth along the Nigu River.

#### Site Information

Seven tent rings, seven rock piles, and a caribou fence, as well as a scatter of bone, wood, and historic artifacts were found in a 100 m by 60 m area trending roughly N-S. Starting at the south end of the site, the first feature encountered is a tent ring made from large cobbles, measuring 5 m by 3 m and oriented N-S. It was encircled with willow branches, some over a meter in length. Inside the tent ring were two pieces of drilled wood 5 cm wide and 45 cm long, possibly dog sled parts, a wooden mouth piece for a bowdrill (UA77-133-2; Pl. 49 5; v.4:256), an oval can with a wooden stopper, possibly a gunpowder tin (UA77-133-5; Pl. 54 2; v.4:272), some sawn antler, and more willow branches. Underneath the mouthpiece a fragment of a wooden snowshoe frame (UA77-133-6; Pl. 60 3; v.4:259) was recovered. About 20 m north is Feature 2, a smaller tent ring measuring 3 m in diameter. A couple of meters southeast of this feature, three artifacts were found. One is a piece of planking

with two engraved designs of intersecting vertical and horizontal lines forming a matrix, one of which has diagonal lines scratched through it (UA77-133-1; Pl. 64 1; v.4:263). The second artifact is the casing of a spent cartridge with the bottom cut off and one end cut (broken) and rolled, forming what looks like a conical sleeve or clamp (UA77-133-3; Pl. 41 9; v.4:267). This may have been used to connect two shafts of differing diameters. Finally there was a possible arrowshaft (UA77-133-4; Pl. 52 3; v.4:243).

Feature 3 is another tent ring measuring 3 m by 2.2 m and is oriented E-W. It is 21 m northwest of Feature 2 and is more diffuse than the others, yet has four long fallen willow poles, with the ends pointing toward the center. A 50 cm square test pit was excavated inside the structure, but no cultural material was produced.

Twelve meters northwest is another tent ring (Feature 4). It measures 2.5 m by 2.7 m and trends N-S. About 3 m north are Features 6 and 7, two possible tent rings that are tangential. They measure 3.2 m by 3.3 m and 2.5 m by 2.8 m, respectively. Both are somewhat diffuse and may represent the remains of two simultaneously occupied, adjacent dwellings, or possibly they were built at separate times with one borrowing some stones from the other. Feature 6 does seem more complete. Between Features 4 and 6, lies Feature 5, a small stone ring measuring 1 m in diameter, that seems to be a hearth, possibly serving both structures. Located a few meters to the west of these features are five rock piles. These piles may have served to hold up drying racks of some sort or some other purpose unknown at this time.

Feature 8, the feature farthest north, is a tent ring measuring 2.5 m in diameter. It was found 17 m northeast of Feature 7, near two more rock piles like those in the other feature cluster. These are the only features found in this northern scallop.

Finally, there is a caribou fence on the high terrace about 5 m to 8 m above the site area. It extends south about 250 m onto three other terrace segments starting at the north end of the first scallop. There were about 12 inuksuks 20 m to 40 m apart.

#### Discussion

This site appears to be an early historic late summer/early fall hunting camp. The artifacts and the state of preservation give clues as to the age. The very presence of wood in a fair state of preservation on the site indicates not more than 100 years have passed. Also two of the artifacts themselves suggest this same time frame. The "gunpowder" tin would have been common in the 1880's when muskets were being supplied with relative frequency and the Eskimo people were reloading cartridges for breach loaders (Murdoch 1892). Also the bow drill mouthpiece has a square socket for the drill rest to fit. Murdoch (1892) mentions that the only piece he collected with a square socket was fitted with iron. The more traditional ones have round or oval sockets with a carved stone inset. This combination of new materials and a traditional tool also points to early historic times.



Seasonality is based on three factors. The presence of stone tent rings with exterior hearths indicates summer construction and use. This is based on Corbin's (1975,1976) typology of houses founded on the ethnographic work at Anaktuvuk Pass. Stones for the rings could only be gathered during the ice-free months from unfrozen ground, because otherwise they could neither be seen nor easily removed. The presence of the snowshoe fragment and parts of the sled indicate that the resident stayed until after the first snow and the pieces of equipment could be used. Finally, the association of the camp and caribou fence makes a fall hunt seem quite reasonable although the exact usage of the fence is not known. The fact that one end of the fence is at this site suggests that this scalloped terrace edge may have been used as a natural corral or possibly a device to redirect a drive toward the river. The animals may even have been driven over the edge of the bluff above the site forcing many to stumble and fall. Whether the camp or the drive came first is a problem to be resolved with more work. In general, it seems that the people camped in anticipation of the major southward caribou migration, anticipating herd movements and driving them accordingly.

<u>Catalog #</u>	<u>Description</u>
UA77-133-1	Game Board
UA77-133-2	Wooden Mouthpiece for Drill
UA77-133-3	Worked Rifle Shell
UA77-133-4	Wood Arrowshaft
UA77-133-5	Tin Can W/wooden Stopper
UA77-133-6	Wood Snowshoe Fragment

XHP-118

Location: Sec. 29 (32), T.34N., R.11E., Kateel River Meridian  
UTM 4/608450/7578100

Class: IV

#### Location and Setting

XHP-118 is a village on a high stream terrace 70 m south of an unnamed tributary of the Nigu River and 660 m southeast of the confluence of the creek and the river. Open-mat alpine tundra vegetation covers the site area, with tussocks surrounding the graveled terrace surface. To the north, the small stream is well lined with willows. Two 50 cm square test pits revealed a somewhat typical stratigraphy of mixed gravel and loess, the size and percentage of gravels increasing with depth.

#### Site Information

Of the 14 features mapped in the 130 m by 20 m site area (trending NW-SE), at least two are tent rings and two are hearths. There are also three probable tent rings, seven flake concentrations and three cairns (Fig. 45).

# XHP 118

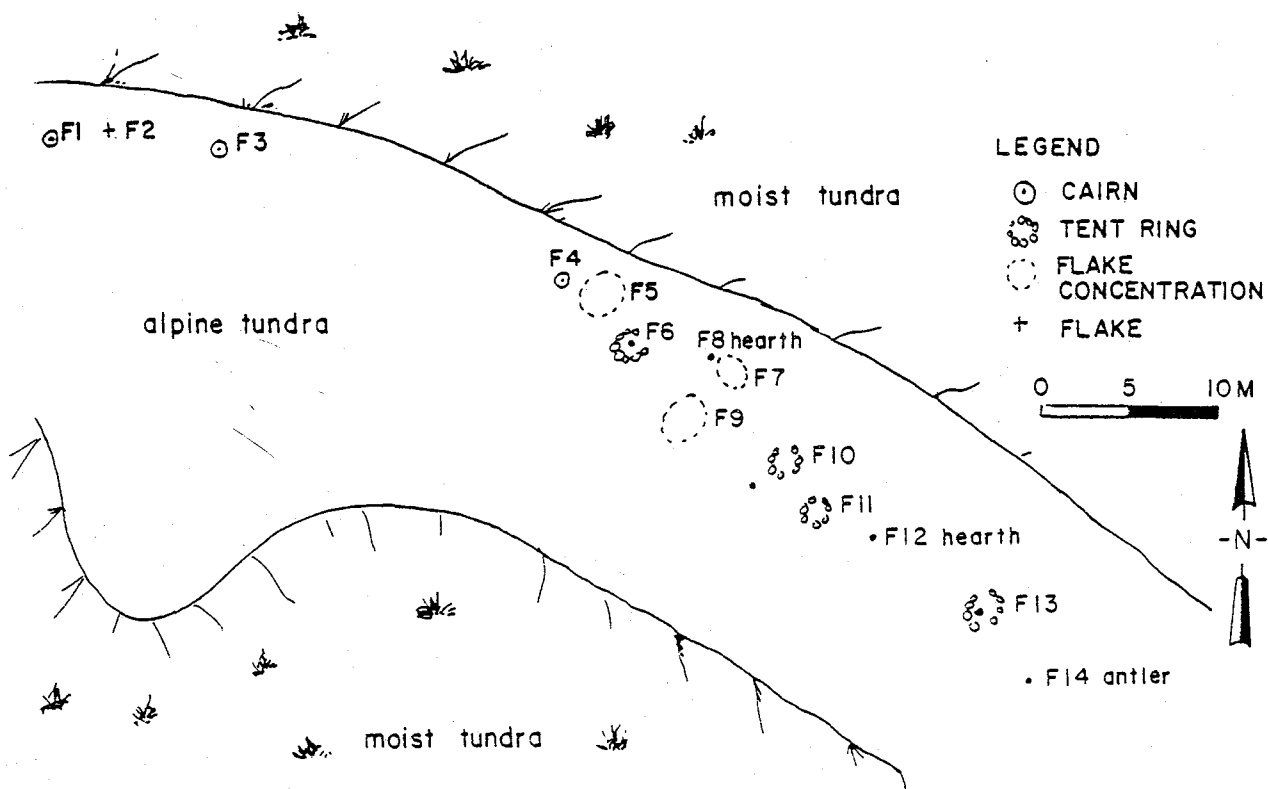
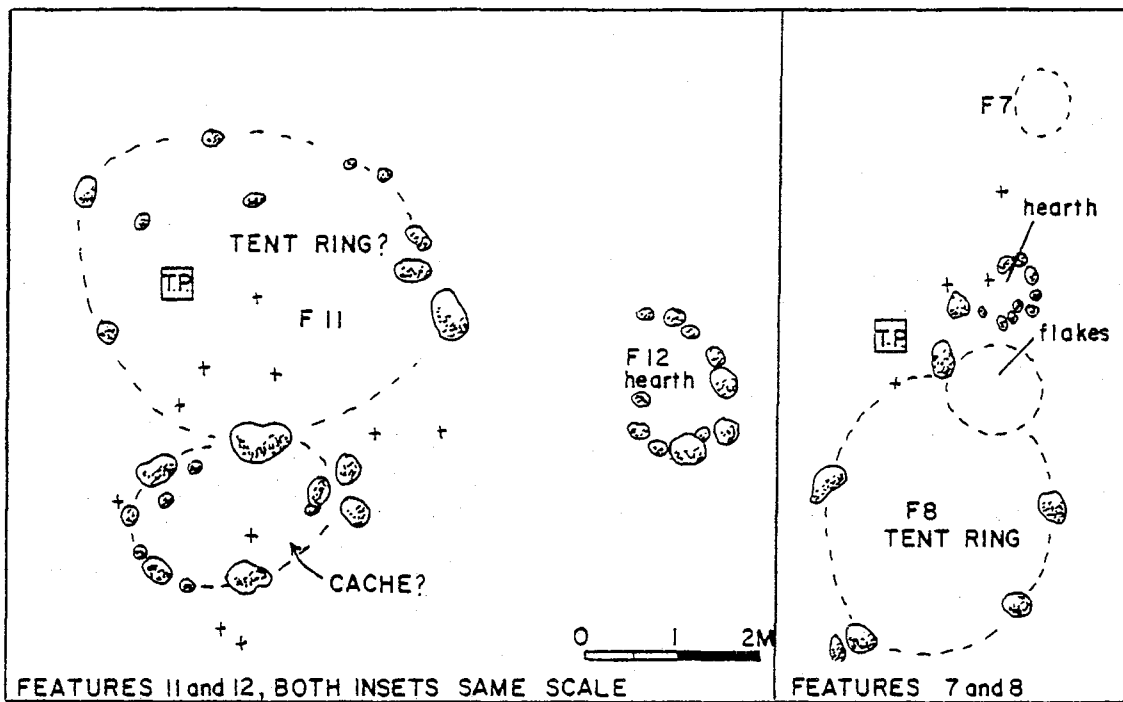


Figure 45

Starting at the northwestern end of the site (Feature 1) is a cairn with a cut willow branch lodged in it. Seven meters east was a single grey flake of CCS. Further east about 12 m is a second cairn. Next, 44 m to the southeast, is a cairn and flake scatter, Features 4 and 5. The flake scatter is about 3 m by 3 m and is fairly dense, containing large and small flakes of grey, black and variegated black CCS. Six meters southeast is Feature 6, a probable tent ring, measuring 3 m by 3.5 m and trending E-W. Another 5 m to 10 m down the way is a complex of features that may be associated. This includes a flake scatter (Feature 7), a hearth and possible tent ring with associated flake scatter and, to the south, a single black CCS flake (Fig. 45). Most of the flakes in the area are black and grey CCS, but there is a brown one.

A 50 cm square test pit placed outside the possible tent ring yielded three waste flakes and one utilized flake at no more than 5 cm below surface. Continuing about 10 m further southeast is another tent ring and a possible hearth, Feature 10. The "hearth" is on the inside and is near three CCS flakes. Next, Features 11 and 12 lie within just a few meters of each other 10 m down from Feature 10 (Fig. 45). Feature 11 is two possible tent rings. One is quite small, however, and may have served as a vestibule to an adjacent arrangement of rocks, which could also be a tent ring. There are a number of black and grey CCS flakes scattered around, and one obsidian flake was found. A 50 cm square test pit inside the larger of the probable tent rings produced 153 waste flakes, most less than 5 m in any dimension, and seven utilized flakes, to a depth of 15 cm. This seems to indicate that tools were finished here. About 2 m east is a small rock ring that is Feature 12. It appears to be a hearth and may have served the inhabitants of Feature 11. A side blade fragment (UA77-134-1; Pl. 4 4; v.4:vii) was also discovered in this area. It most closely resembles types from Norton and Ipiutak sites (Giddings 1964:Pl. 46 1-9; Larsen and Rainey 1948:Pl. 12, Pl. 13, Pl. 14 10, Pl. 84 36-37). Feature 13, a possible tent ring, is around 11 m southeast of Feature 12. It is 3.5 m in diameter and is a little different from the others in that besides having a slightly depressed interior, many of the stones marking its periphery are quite small. Finally, about 8 m southeast of Feature 13 is a piece of possibly worked antler, Feature 14.

#### Discussion

This extensive and complex site seems to have been used as a camping area by at least two cultural groups. There is a problem in the vagueness of the proposed structures. Possibly each in turn has been cannibalized for the other, or complete rock rings were not used in the first place, or they may just reflect great age, or perhaps the investigators just had over active imaginations that day. While this latter possibility may be a factor in some cases, it is doubted that it applies to all cases, especially given the association between proposed dwellings and other features, such as hearths and flake scatters. In fact, a combination of the above is probably closer to reality.

The diversity of raw materials at the site, including obsidian, as well as the extent and separation of the features, addresses the issue of multiple occupation and use of this site. However, the material present suggests

only two cultural groups, Norton/Ipiutak and Nunamiut. This is seen in the side blade found and in the presence of tent rings. Tent rings are usually associated with Nunamiut, as are the cairns. The condition of the rings and lack of historic material points toward the late prehistoric period. It is hypothesized that in most cases very old tent rings and cairns would be unrecognizable after long periods of time. Also the tent rings, especially those with external hearths, suggest a summer occupation. According to Corbin (1975,1976), rocks for tent rings can only be gathered in the snow-free months from unfrozen ground, because during the winter the rocks would be neither visible nor easily removed from the ground.

<u>Catalog #</u>	<u>Description</u>
UA77-134-1	Weapon Side Blade
UA77-134-2	Nonutilized Obsidian Flake
UA77-134-3	Nonutilized Flake
UA77-134-4	Utilized Flake
UA77-134-5	Utilized Flake
UA77-134-6	Utilized Flake
UA77-134-7	118 Nonutilized Flakes
UA77-134-8	Cortical Nonutilized Flake
UA77-134-9	Burinated Flake
UA77-134-19	Utilized Flake
UA77-134-22	Utilized Flake
UA77-134-25	Utilized Flake
UA77-134-26	Utilized Flake
UA77-134-32	32 Nonutilized Flakes
UA77-134-40	Utilized Flake
UA77-134-42	Utilized Flake
UA77-134-44	Utilized Flake
UA77-134-45	Nonutilized Flake
UA77-134-46	3 Nonutilized Flakes
UA77-134-47	Utilized Flake

XHP-119

Location: Sec. 9, T.33N., R.11E., Kateel River Meridian  
UTM 4/609600/7575100

Class: II

#### Location and Setting

XHP-119 is on what probably is a lake terrace on an unnamed lake 630 m southwest of Kinyiksukvik Lake. It is also 690 m northeast of Nigu Bend. The site is cut by a small, unnamed drainage running into the lake. There is a dense alpine tundra mat with mosses predominating, changing to sedges, willow, and other wetland vegetation in the drainage and on the lakeshore.

### Site Information

Two anomalies were found approximately 100 m apart on the eastern shore of this lake. Locality 1, south of the drainage, contains a possible house pit measuring 3 m by 2 m by .25 m in depth. Locality 2, north of the drainage, contains a possible cache pit, 1.5 m in diameter and excavated to a depth of 40 cm, as well as a CCS flake found 10 m to the NW.

### Discussion

If these manifestations are cultural features, they are probably related to the extensive house pit site at Kinyiksukvik Lake. This association on the basis of house form would relate to the earlier portions of the latest pre-historic period when, hypothetically, people were first resettling the area from the south (Hall 1976). Such a conclusion would make the inhabitants members of the Arctic Tundra tradition, somewhere between the sixteenth and eighteenth centuries.

XHP-120

Location: Sec. 5, T.33N., R.11E., Kateel River Meridian  
UTM 4/609350/7577150

Class: II

### Location and Setting

This site is located on two ridges, probably of glacial origin, about 1.56 km east of the Nigu River, 420 m north of Kinyiksukvik Lake, and 300 m southwest of an unnamed tributary of the Nigu River. It has a gravelly surface with a thin but fairly continuous alpine tundra mat. The gravels are of assorted ages. These two features are surrounded by tussock meadow.

### Site Information

XHP-120 contains a complex of stone features in two localities. Locality 1 has a caribou fence of 16 (possibly 24) inuksuks, a windbreak/hunting blind, and a possible fire hearth. The fence's inuksuks are mostly made of single, large rocks set on the gravel surface, oriented almost due E-W. This feature seems to run downslope where, as the gradient steepens at the western end, the fence seems to jog south to a lower elevation and continue on to the end of the ridge. The total length is 220 m; the spacing between inuksuks is irregular along most of the fence with gaps no greater than 20 m. The exception is that portion of the fence on the bench at the lower elevation where the inuksuks are about 2 m apart. The windbreak/hunting blind is placed about 5 m south of the fence at the approximate center of the inuksuk line. Its primary axis is oriented E-W and is 2.5 m in length. Because of what appear to be fallen rocks, the N-S measurement is 2 m. Its present height is .6 m. Finally, about 2 m north of the windbreak/hunting blind is a possible hearth made of three stones set around a small depression. It measures 65 cm N-S by 50 cm

E-W overall with a height of 40 cm. There is no evidence of burning in the depression; but the size, shape, and proximity to the windbreak/hunting blind are the factors suggesting the proposed function.

Locality 2 is approximately 40 m north of Locality 1 and contains two caribou fences. The main fence contains 12 inuksuks that trend 5° - 295° and seem to cross the base of the first fence. The configuration of this fence is similar to that found in XHP-111, XHP-116, and XHP-129 in which a section of the fence system runs perpendicular to, or in some way across, the other member or members.

#### Discussion

As a whole, this site appears to have been a loci of activity revolving around hunting caribou. It relates to the whole complex of similar features found all over this portion of Inyorurak Pass north of the Continental Divide. The fences act to guide caribou in the desired direction. There is nothing to suggest any relation or co-terminus use of the fences here, but it is feasible to discuss possible scenerios. The two E-W fences could have been placed to drive caribou over the rather high, steep bluff to the west bordering the Nigu River. The N-S fence could have led to one of two places. To the north is a steep-sided stream bordered by willows where snares could be set and men stationed to kill the trapped animals (Spencer 1959). This site seems to be of the late prehistoric to early historic time period and of Nunamiut origin.

#### XHP-121

Location: Sec. 9, T.33N., R.11E., Kateel River Meridian  
UTM 4/610050/7575400

Class: II

#### Location and Setting

XHP-121 is on a high river or lake terrace 420 m south of the outlet to Kinyiksukvik Lake and is 450 m east of the unnamed lake south of XHP-115. The graveled surface is covered with an open-mat alpine tundra vegetation and surrounded by tussock meadow.

#### Site Information

This site is made up of a caribou fence containing eight inuksuks. The fence trends N-S and measures about 60 m in length.

#### Discussion

XHP-121 is a hunting site associated with a caribou drive. Its orientation leads to an excellent trap--Kinyiksukvik Lake. This site seems to be late prehistoric to early historic in age and of Nunamiut origin.

XHP-122

Location: Sec. 5, T.33N., R.11E., Kateel River Meridian  
UTM 4/608450/7577450

Class: II

#### Location and Setting

The caribou fences are on a segment of a high stream terrace. Locality 1 is 1 km east of the Nigu River and 540 m northwest of XHP-115. It has a thin but fairly continuous alpine tundra mat and is surrounded by tussock meadow. The western side of this terrace is a steep bluff that forms one side of a V-shaped hollow.

#### Site Information

XHP-122 consists of two caribou fences in two different localities. Locality 1's fence contains five inuksuks trending  $40^{\circ}$  -  $220^{\circ}$  for 31 m. These inuksuks are, unlike XHP-120, piles of several rocks. They now appear to be somewhat fallen-over and disintegrated. Cairn 1, at datum A, is 15 m from Cairn 2; Cairn 2 is 6 m from Cairn 3; Cairn 3 is 6 m from Cairn 4; and Cairn 4 is 4 m from Cairn 5.

Two hundred meters to the northwest is Locality 2. This fence contains 19 inuksuks that roughly trend N-S for 300 m, but more specifically follow the curve of the U-shaped bluff near the edge of the terrace. The inuksuks average 5 m to 10 m apart.

#### Discussion

XHP-122 is a hunting site associated with a caribou drive. Because of their great distance apart and different orientation, these two fences are considered unassociated. It is hard to explain the placement of the first fence, perhaps it is part of a larger system. The second one seems unusual in that the inuksuks appear to be placed to keep caribou below the top of the bluff rather than directing a driven herd over it. Possibly the shape of the area below the bluff top acted as a natural corral from which game could be killed. This site seems to be late prehistoric to early historic in age and of Nunamiut origin.

XHP-123

Location: Sec. 9, T.33N., R.11E., Kateel River Meridian  
UTM 4/609950/7575100

Class: II

#### Location and Setting

A windbreak/hunting blind is located on a high stream or lake terrace 570 m south of the outlet to Kinyiksukvik Lake and 1 km NE of the great

bend in the Nigu River. The graveled surface is covered with open-mat alpine tundra vegetation and surrounded by tussock meadow.

#### Site Information

XHP-123 is a single, large windbreak/hunting blind. It measures 6 m by 1 m and is oriented in an E-W direction. This feature has the appearance of having been built up higher at one time.

#### Discussion

This feature was a loci of hunting activity and seems to be late prehistoric to early historic in age and of Nunamiut origin.

#### XHP-124

Location: Sec. 5, T.33N., R.11E., Kateel River Meridian  
UTM 4/608250/7577250

Class: II

#### Location and Setting

This site is on a high, T-shaped river or lake terrace segment, 840 m east of the Nigu River and 1.6 northeast of the confluence of Inyorurak Pass Creek and the Nigu River. The graveled surface supports open-mat alpine tundra vegetation and is surrounded by tussocks.

#### Site Information

XHP-124 contains two caribou fences with one roughly perpendicular to the other. The first row of inuksuks trends 20° - 200° for 83 m. There are eight inuksuks spaced 5 m to 10 m apart. The second fence contains 37 inuksuks (two questionable), runs 153 m, and trends 100° - 280°. This particular fence is not actually a single line; it has one section where there seems to be a double row for about 30 m and another section at the eastern end which seems to almost form a corral. As a whole, the second fence comes off roughly perpendicular to the center of the first fence.

#### Discussion

This is a hunting site associated with a caribou drive. The fences here present a somewhat confused picture since they seem to run at odds with each other. It is impossible at this time to determine the association, if any, between the two fences and how they may, in fact, work together. Too little is known of this kind of feature. This site seems to be of late prehistoric to early historic in age and of Nunamiut origin.



XHP-125

Location: Sec. 16, T.33N., R11E., Kateel River Meridian  
UTM 4/610400/7574500

Class: II

#### Location and Setting

XHP-125 is on a high river terrace 360 m north of the Nigu River and 1.1 km south of Kinyiksukvik Lake. The graveled surface has open-mat alpine tundra vegetation and tussock meadow north and east, with more tussocks on the present floodplain below the edge of the bluff south and west.

#### Site Information

This site is a caribou fence containing 25 inuksuks trending 150° - 330° for about 150 m. Large cobbles making up the inuksuks are locally derived in the reworked glacial till upon which the site sits.

#### Discussion

XHP-125 is a hunting site associated with a caribou drive. This fence's orientation leads to an excellent trap--the unnamed lake south of Kinyiksukvik Lake. This site seems to be late prehistoric to early historic in age and of Nunamiut origin.

XHP-126

Location: Sec. 5, T.33N. R.11E., Kateel River Meridian  
UTM 4/608250/7576900

Class: II

#### Location and Setting

A caribou fence is on a high river terrace 390 m east of the Nigu River and 840 m west of XHP-115. The graveled surface is covered with open-mat alpine tundra vegetation and surrounded by tussock meadow.

#### Site Information

The site consists of four inuksuks that trend roughly N-S for 30 m. Rocks for the cairns are derived from the glacial till directly underfoot.

#### Discussion

XHP-126 is a hunting site associated with a caribou drive. The fence, or perhaps fence segment, does not appear to be noticeably oriented toward any particular area of entrapment. It is quite possible that it is a part of a larger system represented by other fences in the area such as XHP-122

or XHP-124, both of which have lines of inuksuks trending N-S. This site seems to be late prehistoric to early historic in age and of Nunamiut origin.

#### XHP-127

Location: Sec. 8, T.33N., R.11E., Kateel River Meridian  
UTM 4/609050/7575500

Class: II

#### Location and Setting

A flake scatter is on an old stream terrace 540 m east of the Nigu River and 540 m west of Locality 8 at XHP-115. The graveled terrace surface has a cover of open-mat alpine tundra vegetation. A single 50 cm square test pit revealed a typical gravel-loess profile with the percentage of gravel increasing with depth. The view is good of the floodplain of the Nigu River and Nigu Bend area to the west.

#### Site Information

A scattering of black and grey CCS was found in an area measuring 2 m by 1 m, trending E-W. A total of 10 flakes were noted, and one projectile point base was collected (UA77-135-1; Pl. 2 8; v.4:13).

#### Discussion

This is very likely a lookout site relating to a single use. The point base resembles Type 1 projectile points from Point Hope and Cape Denbigh (Giddings 1964: Pl. 47, 5; Larsen and Rainey 1948: Pl. 2 1-6, Pl. 35 1-20), placing this site in the latter portion of the Arctic Small Tool tradition--in Norton or Ipiutak times.

<u>Catalog #</u>	<u>Description</u>
UA77-135-1	Projectile Point
UA77-135-2	Biface Trimming Flake

#### XHP-128

Location: Sec. 20, T.33N., R.11E., Kateel River Meridian  
UTM 4/609600/7572100

Class: II

#### Location and Setting

Situated on a flat topped hill at the northeast end of Koiyaktot Mountain is XHP-128. It is 730 m east of what was called (by the survey party) In-yorurak Pass Creek and 2.2 km south of Nigu Bend. At 300 m above the

valley floor, it possesses an exceptional view of the entire Inyorurak Pass-Nigu Bend area. The entire surface of the hill is a bedrock outcrop, primarily covered with lichen and occasional patches of alpine tundra. Tussock meadow surrounds the hill at lower elevations.

#### Site Information

A windbreak/hunting blind and three cairns make up XHP-128. The first feature is semicircular in outline, measures 4.7 m by 2.7 m by 1 m high, and is constructed of large, bedrock slabs turned on end. Near the inside curve are five additional slabs, but they are on their sides. They are possibly remnants of a floor, part of the fallen wall, or both. A caribou long bone and a scapula were found lodged in the crevices of the wall. Both have cut marks that appear to have been made by a metal knife. There are other fragments of bone in the vicinity. The wall is oriented WNW-ESE.

The three cairns are roughly in a line, but the investigator believes they were not intentionally placed to form such a line. All three are quite large and well made. Cairn 1, about 45 m northeast of the windbreak/hunting blind, is 2 m by .9 m by .65 m and is oriented N-S. It is constructed of a large bedrock slab stacked on smaller slabs and angular rocks. Cairn 2, about 12 m west of Cairn 1 is 1.3 m by .70 m (on the south end) and .30 m (on the north end) by .50 m and is oriented N-S. It is constructed of vertical bedrock slabs propped up against one another. Cairn 3, about 9 m west of Cairn 2 is, at the base, 1.7 m by 1.6 m by 1.2 m. It is constructed of moderately sized bedrock slabs stacked in a rather precise way. Overall, the site covers an area 70 m by 15 m.

#### Discussion

It seems that the activities at this location were associated with hunting. The windbreak/hunting blind would protect waiting hunters from the wind, as well as shielding them from the caribou. During the summer months caribou seek high places to rid themselves of the mosquito hordes. The nearby cairns could be markers for items cached by hunters, in which case, the cairns might be associated with the windbreak/hunting blind, whose hunters for some reason did not wish to cache goods near the rock wall. However, this is just a supposition and the four features may be unassociated. The cairns may not even be cache markers. These are the few cairns that can be seen for any distance, and they may be route markers. Because of their good condition, the investigator feels these features cannot be more than 200 years old and are probably more recent. Nunamiut Eskimos probably created this site.

XHP-129

Location: Sec. 3, T.33N., R.11E., Kateel River Meridian  
UTM 4/608800/7575950

Class: II

#### Location and Setting

XHP-129 is on a high stream terrace 690 m north of the unnamed lake bordering XHP-119 and 120 m southwest of Locality 7, XHP-115. The graveled surface is covered with a sparse alpine tundra growth and is flanked by tussock meadow to the north, east, and south. The western edge of this terrace segment borders a bluff that leads down to the present tussock-covered floodplain of the Nigu River.

#### Site Information

This site is a complex of four caribou fences arranged in such a manner as to be associated with each other. Material for the inuksuks had been gathered directly from the reworked glacial till that makes up the terrace. The arrangement of fences has three parallel segments roughly following the orientation of the bluff edge, 150° - 330°; the fourth segment is perpendicular to the other three and crosses the others at the southeastern end. The first two fences closely parallel each other and are approximately 25 m apart. Each contains 25 inuksuks, averaging 2 m to 4 m apart, and runs for 120 m. About 100 m to the west are 10 more inuksuks paralleling the first two lines. An inuksuk appears to be on each graveled "finger" at this the bluff edge of the terrace. These cairns are 10 m apart and continue for 100 m. The fourth fence has 27 inuksuks, from 2 m to 4 m apart, and runs for about 120 m, seemingly shutting off the southeastern end of this system. The configuration of this fence is similar to that found in XHP-111, XHP-116, and XHP-120 in which a section of the fence system runs perpendicular or in some way across the other member or members.

#### Discussion

XHP-129 is a hunting site associated with a caribou drive. The fences at this site seem to be designed for a single drive, with the southeastern end acting to stop or corral the animals. This interpretation, however, might be assuming too much, because as the inuksuks now stand, they would hardly stop a charging caribou. A superstructure, or corral, though, may have been constructed of willows and/or tussocks. This site seems to be of late prehistoric to early historic age and of Nunamiut origin.

XHP-130

Location: Sec. 18, T.33N., R.11E., Kateel River Meridian  
UTM 4/607650/7574300

Class: II

#### Location and Setting

This site was found on a high knoll at the southeast end at the base of Kivliktort Mountain 600 m west of what the survey part called Inyorurak Pass Creek and 120 m south of a crew-named stream called Chiniago Creek. The graveled terrace surface is covered with open-mat alpine tundra vegetation surrounded by tussock meadow.

#### Site Information

XHP-130 is a caribou fence of four inuksuks tending NE-SW. Each cairn is between 25 cm and 50 cm high and is spaced at intervals of 10 m from the other cairns.

#### Discussion

This is a hunting site associated with a caribou drive. The orientation of this short segment seems to indicate an association with XHP-132, a fence system further downslope, which seems to be directed toward the dense willow areas in a steep-sided section of Inyorurak Pass Creek. This site seems to be late prehistoric to early historic in age and of Nunamiut origin.

XHP-131

Location: Sec. 8, T.33N., R.11E., Kateel River Meridian  
UTM 4/609800/7576350

Class: II

#### Location and Setting

Two roughly perpendicular caribou fences are located on three adjacent knolls situated on a river terrace 500 m east of the Nigu River and 120 m northwest of Locality 7, XHP-115. The graveled surface is covered with a sparse growth of alpine tundra with tussock tundra surrounding each knoll.

#### Site Information

Together the fences occupy an area about 48 m by 30 m. The first fence trends mainly N-S for 30 m. Each of the 20 inuksuks is made of a large, upturned white rock and is spaced 1 m to 1.5 m apart. The second fence contained 22 inuksuks and was 38 m long. These inuksuks were made from small piles of rocks, now toppled over, and are much more irregularly

spaced and positioned than the ones in the first fence. There is an average gap of 2 m to 3 m between cairns. The two fences are no more than 10 m apart at the western end of the second fence.

### Discussion

Although both of these fences occupy the same terrace and are in close proximity to each other, the investigator feels that they are unrelated in time and orientation. The first fence has a fresher, newer look than the second, as its gleaming, white stones stand out more than the toppled over cairns of the second one. The second fence is less clearly constructed; in fact, the two knolls it occupies contain many other possible inuksuks which are not recorded because their dispersion was such as to question their authenticity.

The first fence appears to be associated with XHP-133, which is approximately 100 m northeast. The inuksuks on that site are also trending N-S. On the other hand, fence number two appears to be oriented toward the western shore of Kinyiksukvik Lake and any one of a number of fences in Localities 7 and 8.

### XHP-132

Location: Sec. 18, T.33N., R.11E., Kateel River Meridian  
UTM 4/607600/7574550

Class: II

### Location and Setting

Four roughly parallel caribou fences were found on a river terrace 300 m southwest of the confluence of what the survey party called Chiniago Creek and Inyorurak Pass Creek. The graveled terrace surface is covered with open-mat alpine tundra vegetation with tussocks surrounding it. A short distance north and west along the two creek banks is a fairly good growth of willows, especially dense at the confluence. A particularly interesting feature of this general area is that this part of Inyorurak Pass Creek runs through a small canyon created when the creek cut through a possible moraine of glacial till into some soft sediments below.

### Site Information

The four fences come in various sizes and arrangements. Fence 1, the one farthest east, contains 11 or 14 cairns, depending on how one looks at it. There is a gap of over 100 m between three somewhat isolated inuksuks and the rest of the fence. The orientation of these three cairns associates with Fence 1 more closely than Fence 2 despite its closer proximity to the latter. Without the three cairns, the length of this feature is about 175 m; including the others, it becomes 285 m long. This fence is quite irregular in spacing and deployment of inuksuks. The inuksuks range from 4 m to 24 m apart and very few of them are directly aligned for any great distance. The second fence is approximately 65 m southeast of Fence

1 at its closest point (this measure excludes the isolated group of three cairns). The inuksuks are spaced at 6 m to 12 m intervals and generally trend N-S for about 45 m. Fences 3 and 4 appear to run in tandem for about 200 m in a N-S direction. They are 25 m apart at the southern end and 10 m apart at the northern end. Fence 3 has 55 inuksuks at about 3 m intervals, and Fence 4 has 38 at 3 m to 10 m intervals. Near the center of Fence 4 are two cairns off to the west and aligned in an E-W orientation. Association with the other inuksuks of Fence 4 is unclear.

#### Discussion

These caribou fences may not all be associated with the same drive, but all seem to be designed for the same purpose. Caribou driven along or through the fences of this terrace would wind up in the dense willow thicket at the confluence of the two creeks, or even beyond in the small canyon formed by Inyorurak Pass Creek. Both situations offer ideal circumstances for trapping and killing large numbers of caribou.

The association of all fences is somewhat in doubt. The irregularity of Fences 1 and 2 suggests a greater age, or possibly just less care in construction, or perhaps a functional reason we are not yet able to ascertain. On the other hand, Fences 3 and 4 together form a slightly V-shaped arrangement through which caribou could be funneled. Their association is almost certain. It is possible that this fence may be associated with a larger design associating XHP-130, XHP-134, XHP-136, and maybe XHP-116.

#### XHP-133

Location: Sec. 5, T.33N., R.11E., Kateel River Meridian  
UTM 4/608800/7576550

Class: II

#### Location and Setting

Three parallel caribou fences lie on an old stream or lake terrace 120 m west of Locality 6 (XHP-115) and 700 m east of the Nigu River. The gravel surface terrace is covered with a sparse growth of alpine vegetation and is surrounded by tussocks to the north, east, and west. To the south, this terrace seems to connect or abut Locality 7, XHP-115.

#### Site Information

The fence farthest west of the three fences has 54 inuksuks and is 200 m long. It should be noted that this fence is less obvious, looks more eroded, and is more heavily vegetated than the other fences on this terrace. Eighty meters west is another fence about 100 m long. This second fence has a line of five inuksuks crossing it toward its northern end, perpendicular to its main axis. The small fence is approximately 50 m long. There is the third fence which is 80 m west of the second and is 90 m

long. All three major fences are oriented N-S and are very precisely made with closely spaced, low-lying inuksuks.

#### Discussion

It is not certain whether or not these fences were constructed for the same drive, but their orientation seems to suggest a common goal for each drive. The distance between them and the different "look" of the first fence, as stated above, seem to imply their use was at different times. These fences could, in some way, be associated with the nearby and similarly trending fence at XHP-131, 100 m southwest. The ultimate goal or trap for the caribou driven along these fences is somewhat elusive. Being so close to the fences along Kinyiksukvik Lake, although at cross purposes, makes one wonder whether these at XHP-131 and XHP-133 are not somehow tied in to an elaborate system of drive lines with the lake being used as a trap. The cross member to the second fence could somehow be connected with the above purpose and design, but at this time it is just so much conjecture. Other fences, such as XHP-111, XHP-116, XHP-124, XHP-129, XHP-131, and XHP-139, are noted as having similar situations with intersecting fences.

Despite the differences in age in the fences here, all lie within the late prehistoric to early historic time period and were constructed by Nunamiut Eskimos.

#### XHP-134

Location: Sec. 18, T.33N., R.11E., Kateel River Meridian  
UTM 4/607550/7573750

Class: II

#### Location and Setting

These two caribou fences were on a high stream terrace 200 m south of Chiniago Creek and 480 m west of Inyorurak Pass Creek. The graveled surface is covered with sparse alpine vegetation and is surrounded by tussock meadow.

#### Site Information

Although both fences are 120 m apart, they both trend NNW-SSE. The fence farthest east is made up of three, possibly four, insuksuks, altogether about 40 m long. Ten, possibly 11, inuksuks make up the other fence which runs for 65 m. The inuksuks in this fence are composed both of piles of rocks and of large, single rocks; and average 4 m to 5 m between each other.

#### Discussion

As with other fences in this area south of Chiniago Creek and west of Inyorurak Pass Creek, the goal or trap seems to be in the willows along



the two creeks or the canyon of Inyorurak Pass Creek. Admittedly the three or four cairns for the first fence are a little short to be associated with a drive; but, given that there are at least three in alignment and it is in the company of so many other assured fences, this conclusion does not seem unreasonable. Other fences, XHP-130, XHP-132, XHP-136, and XHP-116 in the area, including this one, may be part of a grand scheme.

Both fences are from the late prehistoric to early historic period and are of Nunamiut origin.

#### XHP-135

Location: Sec. 8, T.33N., R.11E., Kateel River Meridian  
UTM 4/608100/7574800

Class: II

#### Location and Setting

Two caribou fences are situated on a low, small ridge 450 m east of Inyorurak Pass Creek and 300 m west of Nigu Bend. The ridge's gravelly surface is covered with patches of open-mat alpine tundra vegetation and is surrounded by tussock meadow. Not too far NW are the cliffs of the nearby "canyon" cut by Inyorurak Pass Creek.

#### Site Information

These two caribou fences contain 19 inuksuks. The denser, more continuous one is 63 m long, with 15 inuksuks averaging 4 m apart, trending 45° - 225°. The other fence only has four cairns trending 80° - 260° for 142 m. This line does not join the other. Together, however, they seem to be converging. Some inuksuks are made up of two or three rocks propped up against each other and some are just a single rock set in the line.

#### Discussion

The orientation of these two fences leads toward the high bluffs of Inyorurak Pass Creek. Any intimation of these two fences acting together is admittedly weak given the less continuous nature of the second fence, but in light of their convergent orientation and the similar characteristics of their inuksuks, this interpretation is not unreasonable. These features are probably late prehistoric or early historic in age and of Nunamiut construction.

XHP-136

Location: Sec. 18, T.33N., R.11E., Kateel River Meridian  
UTM 4/607750/7573600

Class: II

#### Location and Setting

Two caribou fences are on a stream terrace 75 m west of Inyorurak Pass Creek and 630 m south of Chiniago Creek. The graveled terrace segments upon which the fence lie are covered with open-mat alpine tundra vegetation and are surrounded by tussocks. Willow growth, occasionally quite dense, can be found along the nearby stream banks.

#### Site Information

These fences are pretty much parallel and trend NE-SW for roughly 200 m. The southeasternmost fence contains 19 inuksuks, in a fairly continuous line, spaced from 3 m to 40 m apart, but averaging 7 m apart. Approximately 35 m away is the other fence containing 10 inuksuks. The inuksuks are from 5 m to 60 m apart, but average a 22 m interval.

#### Discussion

The proximity of these two fences on the same terrace makes it likely that they are associated. Nothing seems to indicate any difference between them. As with the other fences in this area south of Chiniago Creek and west of Inyorurak Pass Creek, the goal or trap seems to be the willows along the two creeks or the canyon of Inyorurak Pass Creek. It is likely that this site is late prehistoric to early historic in age and of Nunamiut origin.

XHP-137

Location: Sec. 8, T.33N., R.11E., Kateel River Meridian  
UTM 4/607800/7574850

Class: II

#### Location and Setting

A caribou fence complex and flake scatter is situated at the northern end of a glacial ridge (esker ?) bordering Inyorurak Pass Creek. The topography at the end of the ridge is quite varied and irregular, forming many small knolls. This is also the area where the creek makes a sharp bend east and then flows into the Nigu. There is a steep canyon at the bend roughly 10 m deep. Open-mat alpine tundra vegetation occurs over most of the site.

## Site Information

Three rows of inuksuks, running generally 60° - 240°, exist in a 300 m by 50 m area. In addition, two flake concentrations, a piece of wood, and a piece of antler were found in the vicinity. The northwesternmost line, oriented 50° - 230°, contains 11 inuksuks, and is 35 m long. The southeasternmost fence has an orientation of 45° - 225°, which switches to 85° - 265° toward the northeast end. It contains 47 inuksuks and is 230 m long. There is a series of inuksuks between these two fences that seems to form a third fence oriented 70° - 250°, containing seven inuksuks over a 61 m distance. The distance between cairns varies from 1 m to 35 m, but averages 3 m to 5 m. It appears that the middle and southeastern fences converge. Actually, it is difficult to relate one fence to the other, although all seem to be associated. The presumed purpose of the fences is to direct caribou to the steep southwest bluff.

Again, it is difficult to relate the other cultural items with each other or with the fence. One area had two flakes 2 m apart. One was of heavily patinated, dark grey CCS that had been bifacially retouched. The other appeared to be of basalt. Ten meters to the east is another small concentration of six black and grey CCS flakes in a 6.5 m by 1 m area oriented NNE-SSW. At the far southwest end of the site is an isolated piece of caribou bone that has been cut by a metal saw. Finally, a piece of milled planking was found with three holes in one edge that appear to have been made by square nails. It seems that it may have been part of a wooden box at one time or perhaps a bracing piece for a sled.

## Discussion

This is primarily a hunting site where the fence was used to direct caribou drives. The most logical direction of a drive, given the parameters of the site, is to the southwest, up and over the higher portions of this area to the bluff edge, over which the caribou could be driven. If the caribou were not killed by falling over the edge, snares and a corral could be built on a large willow patch not far beyond the bluff at the confluence of the creek and Chiniago Creek. The other cultural features do not seem to be associated with the caribou fence. The flake scatters could represent lookouts or casual camps.

The fence is probably late prehistoric to early historic in age and of Nun-amiut origin. The wooden piece is definitely historic and probably early historic, given the square holes punched in it. As for the flake scatters, it is hard to tell. The one patinated piece suggests some use of the site prior to late prehistoric times. As a whole, the site contains at least two components.

<u>Catalog #</u>	<u>Description</u>
UA77-136-1	Milled Wood Fragment W/Square Nail Holes
UA77-136-2	Utilized Flake

XHP-138

Location: Sec. 7, T.33N., R.11E., Kateel River Meridian  
UTM 4/607350/7574950

Class: II

#### Location and Setting

This caribou fence and associated windbreak/hunting blind is on a stream terrace directly above and north of a steep bluff belonging to Inyorurak Pass Creek canyon. This is 25 m west of the big bend in the creek and 420 m north of Chiniago Creek. The graveled terrace surface is covered with open-mat alpine tundra vegetation with tussock meadow on three sides. To the south is the bluff, with the creek below and some willows growing along the banks.

#### Site Information

XHP-138 contains five inuksuks trending generally N-S with a windbreak/hunting blind at the southern end. The cairns are not all in a row. Three inuksuks and the windbreak/hunting blind are all lined up with the rock wall at the southern end. However, another cairn was found 18 m southeast of the wall and 20 m due west of the northernmost inuksuk, giving a somewhat zigzag arrangement. The total length of the fence, including the rock wall, is 128 m long with spacing averaging 15 m to 20 m. The windbreak/hunting blind appears to be collapsed.

#### Discussion

The windbreak/hunting blind and the fence seem to be associated with a caribou drive, directed toward getting game to go over the nearby cliff. These features are probably late prehistoric to early historic in age and of Nunamiut origin.

XHP-139

Location: Sec. 17, T.33N., R. 11E., Kateel River Meridian  
UTM 4/607950/7574600

Class: II

#### Location and Setting

This complex system of caribou fences is on a small ridge and several adjoining knolls bordering Inyorurak Pass Creek. The ridge forms the steep-sided, eastern bank of the nearby stream, and is actually cut by the creek at the northern end, forming a steep bluff. The knolls just to the east of the ridge form small, irregular valleys and gulleys 2.5 m to 8 m in depth, with one or two seasonal ponds. Alpine tundra covers the graveled knolls and ridge. Tussock meadow covers the lowland areas. Willows grow only 25 m to the west along the stream course. The ridge and knolls appear to be the remnants of glacial activity.

### Site Information

XHP-139 occupies an area 500 m by 300 m and contains 47 inuksuks. It is difficult to get an overall idea of the pattern, as several inuksuks line up quite nicely but then fade off in either direction into a field of other cairns in a seemingly random pattern. One possible exception is a V-shaped arrangement at the northern end. Here, 11 inuksuks, in two converging rows of seven and four, seem to point directly to one of the seasonal ponds. The inuksuks can be either single, large cobbles lying on the surface, to several rocks scattered or in a small pile, none of which is very high. There is anywhere from 2 m to 50 m separating an inuksuk and its nearest neighbor.

### Discussion

It is hard to determine, in this case, exactly what the ultimate goal or trap is for this arrangement. In some cases, it seems as if the inuksuks may be arranged to make use of the natural topography. The small valley and gulleys would be useful in directing caribou movements. As stated previously, one arrangement seems to be oriented toward a small pond. In general, however, with the N-S orientation of the site area and the similar orientation for some fence sections within the area, the trap seems to be down in Inyorurak Pass Creek or perhaps over one of the steep bluff edges. The seemingly random pattern of these cairns indicates an intense use of this ridge over a long time, producing a series of intersecting fences from different times in varying states of decay. Despite inferred age differences, the whole complex is thought to be of late prehistoric to early historic age and of Nunamiut origin.

XHP-140

Location: Sec. 7, T.33N., R.11E., Kateel River Meridian  
UTM 4/607050/7575600

Class: II

### Location and Setting

Two caribou fences are located on a river terrace at the base of Kivliktort Mountain, 1.5 km west of the Nigu River and 900 m northwest of Inyorurak Pass Creek. The graveled surface of the terrace is covered with a sparse growth of alpine tundra and surrounded by tussock meadow.

### Site Information

The two caribou fences are nearly parallel as they snake along a N-S orientation. The westernmost fence contains 10 inuksuks; the eastern one has five. They are separated by about 45 m and run for 130 m. The inuksuks average 10 m to 15 m apart, but in one case two of them are 75 m apart. Each inuksuk appears to be of the single rock variety.

## Discussion

These two fences are very likely associated. The large gap in the eastern fence, however, does present a problem in continuity of that fence. Imagination, faith, and the alignment of all five inuksuks makes their integrity a good possibility.

The closest catchment area for the drive in this case is the willow-lined stream of Inyorurak Pass Creek or its associated high bluffs. This pair of fences is thought to be of late prehistoric to early historic age and associated with Nunamiut use.

XHP-141

Location: Sec. 7, T.33N., R.11E., Kateel River Meridian  
UTM 4/607600/7575800

Class: II

## Location and Setting

This habitation site is on a high river terrace at the base of Kivliktort Mountain, 1 km west of the Nigu River and 690 m north of the big bend of Inyorurak Pass Creek. The terrace supports open-mat alpine tundra vegetation and is surrounded by tussock meadow.

## Site Information

This site contains two tent rings with depressed interiors and eight cache pits. Each feature was numbered from south to north (see table).

Table 1

Feature 1	- Cache Pit	1.5 m by 1.5 m
Feature 2	- Cache Pit	1.5 m by 1.0 m
Feature 3	- Cache Pit	1.0 m by 1.0 m
Feature 4	- Cache Pit	1.5 m by 1.5 m
Feature 5	- Cache Pit	1.0 m by 1.0 m
Feature 6	- Cache Pit	1.5 m by 1.0 m
Feature 7	- Tent Ring	5.0 m by 4.5 m
Feature 8	- Cache Pit	1.0 m by 1.0 m
Feature 9	- Cache Pit	1.0 m by 1.0 m
Feature 10	- Tent Ring	5.2 m by 5.5 m

The whole site takes in an area 105 m by 10 m following the long dimension of the terrace. The terrace is oriented NW-SE. All structures seem to be made by taking the angular rock slabs from their interiors and stacking them around their edges. Measurements of all structures include the rock rings. The house interiors were about a meter below the surface and 1.5 m by 1.5 m in extent. Despite the profusion of structural features,

no portable artifacts were found, notwithstanding the fact that the interiors and exteriors were carefully examined. The broken bedrock surface and lack of soil prevented excavation of conventional test pits, as so many rocks were turned over during the inspection process.

#### Discussion

The high elevation and openness of this location make it a likely summer dwelling place. Exposed and elevated locations such as this are only selected for occupation in the warmer months, especially in an open mountain pass (Ray Bane 1979: Personal Communication). This was probably a temporary summer settlement during a time of year when the caribou scatter and tend to frequent high places to escape the mosquitos, which are more prevalent at lower elevations. The site represents the late prehistoric to early historic period, and may be of Athapaskan origin.

#### XHP-142

Location: Sec. 7, T.33N., R.11E., Kateel River Meridian  
UTM 4/607200/7576100

Class: II

#### Location and Setting

This caribou fence site is on a stream terrace near the base of Kivliktort Mountain, 1.2 km west of the Nigu River and 1 km north of the great bend in Inyorurak Pass Creek. The graveled terrace has a sparse growth of alpine tundra.

#### Site Information

XHP-142 contains two parallel caribou fences trending NW-SE. The southwestern fence has 17 inuksuks that are fairly regularly spaced for about 90 m. Thirty meters northeast is the second fence, with five inuksuks, that runs for about 30 m. Nine more cairns, possibly inuksuks, appear to be scattered about in a random array over the terrace segment, which measures 125 m by 50 m.

#### Discussion

The two fences on the site seem to be related; it is the scattering of other cairns that causes some problem. The survey party noted that the terrain of this terrace is particularly rugged with many natural outcrops or protruding rocks that could have been used to the advantage of the caribou drivers. Unfortunately, these were not mapped in as well. Only the intentionally placed ones were recorded. Perhaps the "random array" of cairns would not appear random with further mapping work at this location. Another possibility is that some of these cairns are not associated with a caribou drive, but serve the same function as the isolated cairns found elsewhere in the survey area. The latter interpretation seems unlikely in light of the numerous fences that occur in the immediate area, not

to mention the two on the terrace itself. The object of the fences is not readily obvious here, but it may tie in with nearby fences in a larger system of some sort. This site is late prehistoric to early historic in age and of Nunamiut origin.

XHP-143

Location: Sec. 6, T.33N., R.11E., Kateel River Meridian  
UTM 4/607150/7576950

Class: II

#### Location and Setting

Two, possibly three, caribou fences are on two graveled sections of a river terrace. The terrace is 720 m west of the Nigu River and 1.5 km north of the big bend in Inyorurak Pass Creek. Open-mat alpine tundra vegetation grows on the graveled terrace, which is surrounded and divided by tussock tundra. There is a sharp drop of 20 m to 25 m on the east side of the terrace.

#### Site Information

This site consists of two localities. On Locality 1 is a 121 m long caribou fence of seven, widely spaced inuksuks that appear to be in two sections. Dividing the fence in the middle is a 24 m wide swale of tussocks. Altogether, there is a gap of 69 m between the two sections. The gaps between the rest of the cairns are from .3 m to 15 m. The alignment of the cairns in both sections suggest little problem in associating the two. There is a jog at each end of this fence with one cairn being out of alignment. Locality 2 has one and possibly two fences. The northwestern fence runs for about 150 m and has five widely spaced inuksuks. This one also has a gap of about 60 m in its center. The gaps between the rest are from 20 m to 40 m. Approximately 60 m to the southeast are two more cairns whose alignment parallels the other. They are 40 m apart. All fences trend roughly NE-SW.

#### Discussion

The spacing on these fences makes them more nebulous than most in the area, but they are fences nonetheless. The alignments are not easily denied. The two-cairn "fence" is, however, quite questionable. Orientation of the fences make the immediate steep edge of the terrace the most obvious destination for the drive. Probably of Nunamiut origin, the fences are of late prehistoric to early historic age.



XHP-144

Location: Sec. 6, T.33N., R.11E., Kateel River Meridian  
UTM 4/607150/7577400

Class: II

#### Location and Setting

Two caribou fences are on a river terrace near the north end of Inyorurak Pass, 500 m northwest of the Nigu River. The graveled terrace surface is covered with open-mat alpine tundra vegetation and is surrounded by tussock meadow.

#### Site Information

The main fence at the site contains 35 inuksuks, about 10 m to 15 m apart, and is approximately 450 m long. The western end of the fence seems to curl back on itself, to the south as well as a bit to the north. Each inuksuk is made of three or four upturned rocks. The second fence is not so clearly defined, and is considered questionable; the inuksuks are more scattered and have more soil surrounding them. Ten of these possible cairns line up for 220 m. While both fences do undulate across the ground surface a bit, both are generally oriented 95° - 275°. They do, however, converge at the eastern end.

#### Discussion

Given the validity of the second fence, it would be interpreted as being older than the first. This is due to its state of disrepair. Although the objective of either fence is unknown, it was probably the same for each given their common orientation. Despite an inferred difference in age, both fences are of the late prehistoric to early historic period and of Nunamiut origin.

XHP-145

Location: Sec. 23, T.32N., R.11E., Kateel River Meridian  
UTM 4/610600/7564200

Class: II

#### Location and Setting

XHP-145, a single cairn, is on a high WNW-ESE trending ridge 1.6 km south of Inyorurak Pass Creek, and 5.4 km east of the middle of Inyorurak Pass. It is also only 300 m west of XHP-086. The ridge top is primarily bare rock, but it does support open-mat alpine tundra vegetation. Immediately off the crest, to the north and south, tussock meadows begin, whereas the tussocks east and west of the site do not show up for at least 1.8 km to the east or 2.1 km to the west.

#### Site Information

This single cairn measures 1.25 m by 1.5 m by .25 m to .5 m in height. The long axis is oriented 100° - 280°. The cairn was constructed by piling many rocks of local origin on top of each other.

#### Discussion

XHP-145 is one of a series of isolated cairns found in the Howard Pass survey area. Based on the condition of the cairn, a Nunamiut origin and a late prehistoric to early historic period seems likely.

XHP-146

Location: Sec. 33, T.33N., R.11E., Kateel River Meridian  
UTM 4/609900/7569100

Class: II

#### Location and Setting

This site, consisting of a single cairn, is located on the west end of a small ridge 240 m south of an unnamed tributary. It is also 400 m north-west of XHP-147. The ridge top is primarily bare rock but does support open-mat alpine tundra vegetation. Tussock meadows begin almost immediately off the ridge to the north and west. To the east and south is more bare rock and alpine tundra, which are part of this small ridge system.

#### Site Information

The cairn was constructed from two large slabs of local bedrock propped up in a natural crevice. One of the slabs has, since construction, fallen over. A few other rocks near the cairn might have been part of the feature at one time. It measures 1.5 m by 1.4 m by 1.2 m high.

#### Discussion

XHP-146 is one of a series of isolated cairns found in the Howard Pass survey area. Based on the condition of the cairn, a Nunamiut origin and a late prehistoric to early historic period seems likely.

XHP-147

Location: Sec. 33, T.33N., R.11E., Kateel River Meridian  
UTM 4/609900/7568700

Class: II

#### Location and Setting

This isolated cairn is on the crest of a segment of an E-W trending ridge system 420 km south of an unnamed tributary of what the survey party called Inyorurak Pass Creek. It is also 400 km southeast of XHP-146. The ridge top supports open-mat alpine tundra vegetation. Almost immediately north and west, just off the crest, tussock meadow extends away from the site. To the south and east there is more bare rock and thin alpine tundra cover.

#### Site Information

The cairn measures 2.44 m by 1.2 m by .75 m in height and is oriented N-S. It is constructed of many local bedrock slabs propped up on their edges and leaning against one another. The remaining rocks are chunkier and seem to be chinked in place between the slabs. Because of its shape and construction, this feature may actually be a windbreak/hunting blind.

#### Discussion

XHP-147 is one of a series of isolated cairns found in the Howard Pass survey area. Based on the condition of the cairn, Nunamiut origin and a late prehistoric to early historic period seem likely.

In this particular case, as a windbreak/hunting blind, it could represent seasonal use for the hunting of caribou or a temporary shelter from the wind. Summer use is indicated by its location on a high ridge. During the hot summer months one would expect to encounter caribou high on ridges in their attempts to escape the mosquitos, so the placement of a hunting blind up here is not unreasonable.

XHP-148

Location: Sec. 14, T.32N., R.10E., Kateel River Meridian  
UTM 4/603000/7564600

Class: II

#### Location and Setting

XHP-148, a rock pile, is at the south end of a N-S trending ridge on the west side of Inyorurak Pass. It is 2.4 km north of Flora Creek and 3 km west of the center of the pass. In addition, it is only 180 m east of XHP-149. The ridge is primarily broken bedrock with a scattering of avens, lichens and mosses. The bedrock ridge top and associated alpine vegetation is surrounded by tussock meadow.

#### Site Information

This site consists of a cairn measuring 70 cm by 50 cm by 40 cm high, which is oriented E-W. It is made up of six or seven rocks of local material propped up against each other.

#### Discussion

XHP-148 is one of a series of isolated cairns found in the Howard Pass survey area. Based on the condition of the cairn, a Nunamiut origin and a late prehistoric to early historic period seems likely.

XHP-149

Location: Sec. 14, T.32N., R.10E., Kateel River Meridian  
UTM 4/602820/7564600

Class: II

#### Location and Setting

This isolated cairn is at the south end of a N-S trending ridge on the west side of Inyorurak Pass. It is 2.4 km north of Flora Creek and 3.2 km west of the center of the pass. In addition, it is only 180 m west of XHP-148. The ridge is primarily broken bedrock with a scattering of avens, lichens, and mosses. The bedrock ridge is surrounded by tussock meadow.

#### Site Information

XHP-149 is a rock pile measuring 70 cm by 70 cm by 25 cm high. It is constructed of smaller rocks that for the most part underly a larger rock.

#### Discussion

This site is one of a series of isolated cairns found in the Howard Pass survey area. A Nunamiut origin and a late prehistoric to early historic time period seem likely.

XHP-150

Location: Sec. 10, T.33N., R. 11E., Kateel River Meridian  
UTM 4/611200/7575800

Class: II

#### Location and Setting

This unusual site, a cluster of cairns, is on top of a segment of an unnamed mountain group referred to by the crew as Bogota Peak. The area consists entirely of broken bedrock surface with no vegetation evident. It

is 1.5 km north of the Nigu River before it bends to the north, 1.4 km ESE of Locality 8 of XHP-115, and roughly 450 m above the valley floor.

#### Site Information

XHP-150 consists of a cluster of 16 bedrock cairns that trend N-S for approximately 60 m. Four of the cairns are constructed of large rectangular slabs propped up with smaller rocks around the base. The other 12 are essentially piles of loose bedrock of varying sizes. The largest almost appears to be a collapsed wall connecting two of the piled cairns and measures about 2 m long by 1 m wide and 1 m high.

#### Discussion

This site is the greatest cluster of cairns found in the Howard Pass survey area, and in the entire NPR-A. It is unusual for two reasons. First, is its location at an elevation far above any other site found on the survey. This, however, is more a factor of chance than anything else, since the site was originally found by John Kauffman of the National Park Service while on a float-trip on the Nigu River. The survey method did not typically allow for inspection of areas above the major break in elevation and the site would not have been checked without his recommendation. This does not negate the fact that it lies a considerable distance above the most usable terrain. Second, it is a clustering of cairns the location of which does not allow it to function in the typical manner associated with cairns in general. While the cairns are generally lineated, they could not possibly function as a caribou fence, given their location away from the primary caribou migration route, as well as its lack of reasonable accessibility for large numbers of caribou. As for being markers of cached equipment or meat, it is quite atypical given other examples from the area (XHP-075, XHP-086, XHP-145, XHP-146, etc). The "wall" cairn could conceivably have been a windbreak/hunting blind but again its location belies that notion, as does the fact that it connects two other cairns.

The investigator feels the site's function may relate to its proximity to the major village site of XHP-115. At the risk of invoking the ever present archeological answer for the unanswerable, it is quite likely that this site served a ceremonial purpose for the residents of the lake below. In this case, the cairns would be physical manifestations of various rituals.

As with any feature of this sort, age and cultural affiliation are difficult to assign. Based on the condition of the cairns and suspected association with the village site below, a Nunamiut origin and a late prehistoric to early historic time period seem likely.

XHP-151

Location: Sec. 17, T.33N., R.11E., Kateel River Meridian  
UTM 4/608600/7573700

Class: II

#### Location and Setting

This site, an isolated cairn, is on a terrace 360 m east of the drainage called Inyorurak Pass Creek. The cairn is on a graveled terrace segment that has open-mat alpine tundra vegetation and is surrounded by tussock meadows.

#### Site Information

XHP-151 consists of two large cobbles lying in close proximity to each other on the surface. It is presumed that one was originally set on the other. Cobbles of this size are usually buried in the gravel matrix and would have to be exhumed to be on the surface.

#### Discussion

This site is one of a series of isolated cairns found in the Howard Pass survey area. A Nunamiut origin and a late prehistoric to early historic time period seems likely.

XHP-152

Location: Sec. 6, T.33N., R.11E., Kateel River Meridian  
UTM 4/606800/7577200

Class: II

#### Location and Setting

XHP-152, consisting of two cairns, is on top of a bedrock knoll off the top of a prominent hill, referred to by the crew as Black Mountain. It is on the west side of Inyorurak Pass near the north end, 130 m east of an unnamed drainage and 1.1 km west of the Nigu River. The rocky surface is covered with open-mat alpine tundra vegetation. Bedrock predominates to the west, north, and south; tussock meadow dominates the land down off the outcrop to the east.

#### Site Information

This site is made up of two rather large cairns that are 10 m apart. Both cairns are constructed of many large angular pieces of bedrock piled up against each other. The first one is composed of unlichenated rocks and measures 3 m by 2.2 m by .60 m high. It trends N-S. The second one is covered with black lichen and measures 2 m by 1.8 m by .40 m high. It is oriented N-S as well.

## Discussion

These cairns, while occurring in proximity to each other, seem to be a part of the series of isolated cairns found in the Howard Pass survey area, and appear to represent two separate events. A temporal difference is inferred by the differential lichen growth on the cairns. Based on the condition of the cairns, both seem to be of Nunamiut origin and a late prehistoric to early historic time period seems likely.

### XHP-153

Location: Sec. 20, T.33N., R.11E., Kateel River Meridian  
UTM 4/609600/7572800

Class: II

### Location and Setting

This isolated cairn is on top of a ridge at the northwest end of Koiyaktot Mountain. It is 1.4 km east of a drainage called Inyorurak Pass Creek, 100 m east of XHP-291, and 1.4 km south of the Nigu River. The ridge is primarily lichen covered rock with more rock to the south, east, and west. Tussock meadow predominates to the north.

### Site Information

XHP-153 is a cairn measuring approximately one meter square by .70 m high. It consists of an upright rectilinear slab of bedrock propped up by eight other rocks.

## Discussion

XHP-153 one of a series of isolated cairns found in the Howard Pass survey area. Based on its condition, Nunamiut origin and a late prehistoric to early historic time period seems likely.