Archaeological Salvage Excavation of the GhGk-4 site, 1991

Presented to:
Whapmagoostui Band Council
and
Municipality of Kuujjuarapik

By:
Avataq Cultural Institute

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Acknowledgments

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1.0 Introduction

The present document reports the archaeological salvage excavation project conducted in 1991 at the GhGk-4 site, a partially disturbed Pre-Dorset site located near the mouth of the Great Whale River, southeastern Hudson Bay. This project represents the continuation of salvage excavations begun in the site in 1990. It was organized and implemented by the Avataq Cultural Institute in co-operation with the Cree Regional Authority (CRA), The Whapmagoostui Band Council and the Municipality of Kuujjuarapik.

The need to undertake salvage excavations in GhGk-4 arose from the destruction in 1989 of a considerable portion of the site, caused by the extraction of boulders for local construction purposes. As in the case of the 1990 project, the main objective of last year`s excavations was to rescue archaeological data threatened by the impacts this past work and of similar work in the future. The exercise was also research in orientation and focused on the acquisition of new information regarding, in particular, seasonal adjustments in the lithic tool assemblage, the inter-relationships of the various habitation structures and the chronology of occupation of the site. The project stressed training as well, and provided a number of young Inuit and Crees instruction in archaeological excavation techniques.

Field activities were carried out during 10 working-days between 27 June and 12 July, under the direction of Daniel Gendron, Assistant Director of the Avataq Archaeology Department. The field crew was composed of Caroline Weetaluktuk, Lizzie Fleming and Johnny Cookie, from Kuujjuarapik, and Andrew Petagumskum and Shermon Mastie, from Whapmagoostrui. Shermon replaced Roy Mamiamskun, who was engaged for the earliest part of the project.

2.0 The GhGk-4 site

2.1 General Description

The GhGk-4 site is located on Category 1A land of the Whapmagoostui Crees. It occupies a boulder field situated 1.6 km east of Hudson Bay and 1.2 km north of the Great Whale River (Figure 1). The site was first investigated in 1969 by Patrick Plumet, who recorded 17 habitation structures and 7 exterior features in the western section of the boulder field (c.f., Plumet, 1976). However, visual inspection of the locality carried out in 1988 by the CRA during the pre-inventory of the Kuujjuarapik airport study area resulted in the observation of more than 50 habitation structures scattered throughout the boulder field (Denton and Laforte, n.d.). These observations allowed GhGk-4 to be redefined as encompassing the formation in its entirety.

Boulder extraction and an earlier graded ATV trail have distrubed approximately 2,000 m^2 in the south-central portion of the site (c.f., Appendix 3). Disturbance related to extraction work includes 2 deep borrow pits, a bulldozed access road, piles of redeposited boulder overburden and scraped zones. This work has obliterated 10 habitation structures and 2 other cultural features that were registered in the site in 1969.

The boulder field is interrupted by an extensive, flat bedrock outcrop which, together with the disturbed zones, divides GhGk-4 into 3 "areas". Area A comprises the western section of the site and Areas B and C the southeastern and northeastern sections, respectively. All archaeological salvage activities have been confined to Area A.

Area A covers approximately 9,500 m^2 and varies in altitude from 63 to 70 m.a.s.l. It extends from the central outcrop westward to the foot of a bedrock hill and is delimited to the north and south by the edges of the boulder field. The southeastern limit incorporates the greater part of the disturbed zones. Vegetation is scant and consists of a few stunted black spruce, scattered shrubs and patches of moss and lichens mixed with grass.

The area contains 19 habitation structures, 2 modern hunting blinds and 4 cache pits. The habitations are represented by 5 semi-subterranean dwellings and 14 tent rings. The structures are oval or circular in form and range from 1.90 x 2.60 m to 5.10 x 6.25 m (c.f., Avataq Cultural Institute, 1992, Table 1). Excluding the hunting blinds, all cultural features noted in Area A are presumed to be Pre-Dorset in affiliation.

Figure 1. Location of **the** GhGk-4 **Site**

2.2 Previous Research

One habitation structure was excavated and a second was tested by Plumet (1976) in 1969. Burins and projectile points included in the small collection of lithic artifacts recovered from these structures confirmed Pre-Dorset occupation of the site. A charcoal sample from the excavated structure yielded a radiocarbon date of 3,300 ± 100 B.P. (GIF 1576), later corrected to 3,671 B.P., or 1721 B.C. (Plumet, 1976: 142-144). This research was complemented by Elmer Harp`s 1970 excavation of 3 habitation structures and testing of another in the site (Harp, n.d.; Plumet, 1980).

The 1990 salvage project involved the complete excavation of 4 semi-dwellings (i.e., Structures 1, 2, 5 and 7) and 3 cache pits (Features III, IV and V) and the partial excavation of 2 tent rings (i.e., Structures 12 and 17). Structures 3 and 4, the interiors of which had been excavated by Harp and Plumet, and several inter-structural zones were also tested, for a total of 105 excavated square metres.

The excavations and brief surface-collecting produced 4,734 lithic artifacts, including 233 tools (c.f., Avataq Cultural Institute, 1992, Table 2). Approximately 85% of the collection was recovered from Structures 12 and 17 while the semi-subterranean dwellings yielded only 13 tools and 57 waste flakes, or 1.4% of the collection. Major categories in the tool assemblage include burins, burin spalls, microblades, projectile points and endscrapers.

Two charcoal samples from Structure 12 provided uncorrected radiocarbon determinations of 3,260 ± 100 B.P. (BGS 1475) and 3,360 ± 90 B.P. (BGS1474). A third sample from Structure 17 is dated to 3,790 ± 70 B.P. (BGS 1475). These dates indicate occupation of the site by Early Pre-Dorset groups around 1840 B.C. and during the period 1410 - 1310 B.C.

3.0 Field Techniques and Excavations

Field techniques were identical to those employed in the 1990 project. The previous grid system, composed of intersecting one-metre bands, was reinstalled using a Sokkisha theodolite and surveyors' chain. The square metres were alpha-numerically coded (i.e., DD86), with the value of the letters and numbers increasing toward the east and north, respectively. Square metres served as basic units for the excavation of 3 tent rings and the testing of a fourth. Other structures were excavated using "habitation" quadrants. The latter method is particularly appropriate to boulder field contexts. It involves the subdivision of a habitation into 4 roughly equal parts based on the orientation of its length axis.

Waste flakes recovered in the square metres were collectively registered according to quadrants, measuring 50 x 50 cm, and stratigraphic level. The north and east co-ordinates of each tool and tool fragment were recorded and these specimens were individually collected. Similar registration techniques were applied to habitation quadrants. However, in these cases tool co-ordinates were recorded in relation to quadrant dividing lines which, the position of the quadrant in the structure depending, may assume a number of different orientations.

The location of all excavated artifacts and other occupational remains was plotted on millimetric graph paper at a scale of 1:10. Plans of the excavated habitation structures and the test pits and stratigraphic profiles were also drawn at that scale. The structures, interior features and profiles were photographed in colour and black and white prints and slides.

A total of 62 m^2 was excavated in 9 habitation structures (c.f., Appendix 3). These excavations were concentrated mainly in the Structure 17 zone, which encompasses Structures 18 and 19 (38 m^2), Structure 15 (5.5 m^2), the northeast and southwest quadrants of Structure 10 (5.5 m^2) and the northeast quadrant of Structure 9 (4.0 m^2); 3.7 m^2 were excavated in the southeast quadrant of Structure 8, 3.2 m^2 in the southwest quadrant Structure 12 and 2.0 m^2 in Structure 16. With several exceptions, the excavations penetrated to the limit of artifact infiltration, defined by sterile sand-gravel deposits or bedrock. The exceptions include Structures 8, 9 and 16 and a number of square metres in the Structure 17 zone (DA - DF81, DB78 - 80). Time limitations prevented completion of these units.

Surface-collecting was briefly carried out in Collection Zone 1A. Boulder overburden in this small area had been bulldozed in 1989 to underlying sandy deposits. Although the zone was surface-collected in 1990, erosion of these deposits during the course of the following year had exposed other lithic artifacts.

4.0 Project Results.

4.1 Stratigraphy

Four stratigraphic sequences were revealed in the profiles of the excavated habitation structures (Table 1). So as to avoid confusion, comparable horizons cross-cutting the stratigraphies are identified by the same number. In brief, Level I refers to vegetation cover and Level Ia to a layer of cobbles of generally uniform size in Structures 10 and 15. Level Ib designates unsorted boulder deposits occurring in these 2 habitations and square metre DD87, on the northeastern periphery of Structure 17. Level II is reserved for organic soils or fine sand high in organic content. Level III is somewhat more variable but usually consists of sand-gravel or coarse sand.

Level III represents the basement layer of the stratigraphies recorded in 8 habitation structures. It compares with Level IV in Structure 12, the lowest excavated unit in this habitation. In contrast, Level Ib is the lowest unit in the DD87 profile. It underlies Level II, which extends only 20 cm into the southern portion of the square metre (c.f., Appendix 5).

Notable differences in the stratigraphic sequences include:

- the presence of Level Ia and absence of vegetation and a well-defined humus layer in Strucures 10 and 15;
- the occurrence of a boulder layer in Structure 12, separating Level II humus from Level IV sand-gravel;
- variation in the content and thickness of Level II.

Though possibly influenced to some degree by cultural activities, the above differences appear to relate basically to the position of the habitations in parts of the boulder field of differing character. For example, Structures 10 and 15 are located on the forward edge of an ancient beach ridge, the composition of which has allowed rapid erosion and infiltration of finer sediments. Alternately, the other structures occur in slight, natural depressions that, situated in rear beach zones, are generally characterized by thinner surface deposits of more scattered boulders. These depressions, originally of variable depth, have acted as catchment basins promoting the accumulation of sediments and, consequently, vegetation and humus development.

Table 1. Summary of Stratigraphic Levels

Levels	Structures			DD87 (Structure 17)
	10 and 15	12	8,9,16,17, 18 and 19	
I	Ia- cobbles of generally uniform size; 15 cm in thickness Ib- cobbles and larger boulders; 40 to 50 cm in thickness	discontinous vegetation, 6cm in average thickness	vegetation of variable density and thickness	I- discontinous vegetation, 3 to 5 cm in thickness Ib- cobbles and boulders, interspersed with sand-gravel pockets; 25 to 35 cm in thickness
II	sand, high in organic content; 5 to 10 cm in thickness	sandy humus mixed with numerous pebbles and boulders; 5 to 10 cm in thickness		humus mixed with sand-gravel; 20 cm in thickness and 20 cm in length
III	coarse sand (excavation limit)	boulders; 20 to 30 cm in thickness	sand-gravel, 10 to 25 cm thick in Structures 17, 18 and 19	-----
IV	------	sand-gravel, 25 cm in average thickness	-------	-------

4.2 Habitation Structures

Structure 15 is the fifth and last-remaining semi-subterranean dwelling in Area A. Identified in 1969 as a cache pit, this small dwelling is defined by an oval depression encircled by a low boulder rim (c.f., Apendix 4). It measures 1.90 x 2.60 m and attains a depth of 0.40 m.

Structures 12 and 17 are oval and circular tent rings measuring, respectively, 2.60 x 3.40 m and 4.00 m in diametre. Structures 8, 9 and 10 are defined by alignments of irregularly-spaced boulders of varying size enclosing, in the first 2 cases, dense patches of relatively thick vegetation. The contours of Structures 8 and 9 are obscured by vegetation while perimetre rocks on the eastern limit of Structure 10 appear to have been displaced following occupation of the habitation. However, one sub-triangular and 2 oval tent rings are suggested, with dimensions varying from 2.50 x 3.00 m to 3.8 x 4.50 m. These dimensions are adjusted from those recorded in 1990 and indicate larger habitations than previously registered (c.f., Avataq Cultural Institute, 1992, Table 1).

The shape and size of Structures 16, 18 and 19 are unknown. The latter 2 habitations were suggested primarily by lithic artifact concentrations observed during excavation of the Structure 17

zone. As noted earlier, these tent rings, together with Structure 16, were only partly excavated. The southeastern portion of Structure 19 has been destroyed by the grading of the ATV trail and the southern portion of Structure 16 by extraction work.

Interior features include a central hearth area in Structure 12 and a mid-passage in Structure 7, both of which were noted in 1990. The Structure 12 hearth area is composed of a concentration of charcoal pockets partially delimited by large rocks. The Structure 17 mid-passage, oriented northwest-southeast, is approximately 3 m in length and 60 to 70 cm in width. Mid-passages are also suggested in Structures 8 and 9. Scattered charcoal was associated with each of these possible features.

Table 2. Summary of Excavated Habitation Structures.

Structure	Type	Form	Dimensions (m)	Remarks
8	tent ring	oval	3.80 x 4.50	possible mid-passage
9	tent ring	sub-triangular	3.80 x 4.00	possible mid-passage
10	tent ring	oval	2.50 x 3.00	-
12	tent ring	oval	2.60 x 3.40	central hearth area
15	semi-subterranean	oval	1.90 x 2.60	depth: 40 cm
16	tent ring	unknown	2.50 x ?	partially destroyed
17	tent ring	circular	4.00 dia.	mid-passage
18	tent ring	unknown	unknown	-
19	tent ring	unknown	unknown	partially destroyed

4.3 Lithic Collection

Salvage activities carried out in 1991 yielded a total of 9,481 lithic artifacts, comprising 221 tools and 9,260 waste flakes (Table 3). The bulk of the collection was recovered from Structure 17 (76.3%), followed by Structure 10 (7.7%), Structure 8 (5.5%) and Structure 18 (4.9%). Structure 19 produced 171 specimens, Structure 12, 120 specimens and 166 artifacts were surface-collected. Structures 9 and 15 were less productive, yielding 6 and 67 artifacts, respectively. The 2 square metres excavated in Structure 16 were sterile.

Excluding a number of artifacts located in Level Ib in Structure 10, the lithics from this habitation and Structure 15 were situated in Level II. Almost all of the specimens from Structures 8, 9, 18 and 19 were found in the upper portion of Level III while those in Stucture 12 occurred in a similar context in the Level IV sand-gravel. In contrast, approximately 45% of the Structure 17 lithics were recovered from Level II. These specimens were concentrated in 4 square metres in the southeastern part of the habitation, in association with the extremity of the mid-passage and probable entrance of the structure. This distribution corresponds well with that observed in 1990, with artifact density increasing markedly in and around the mid-passage. The balance of the artifacts from Structure 17 were associated with Level III. Although these specimens were more widely and evenly distributed, most were concentrated in the vicinity of the mid-passage and, to a lesser extent, in the southern and northeastern parts of the structure.

The greatest proportions the tool assemblage were obtained from Structure 17 (N=121), Structure 18 (N=54) and Structure 8 (N=18). The other tent rings furnished a total of 16 implements, 9 were surface-collected and 3 were recovered from the semi-subterranean dwelling. The assemblage is dominated by retouched flakes, burins, burin spalls, projectile points, used flakes, knives and fragments of bifacial tools of unknown function. It also contains comparatively large numbers of endscrapers, side scrapers and flake cores. On the other hand, microblade cores and microblades are relatively rare. The assemblage is completed by 5 preforms, 3 polished fragments, 2 drills or perforators and a uniface fragment.

The 1991 assemblage compares closely with the 1990 assemblage in terms of tool categories (c.f., Avataq Cultural Institute, 1992, Table 2). Implements lacking in last year`s assemblage comprise large prismatic blades, adze blades, side blades and hammerstones, which are replaced by drills, absent in the earlier tool list. Also, larger numbers of knives and side scrapers and fewer microblade cores and microblades were collected in 1991 than in 1990. However, the above differences are minor in character and do not alter the complexion of the Area A lithic industry as perceived in 1990.

Table 3. Summary of the Lithic Collection

Categories	Structures								Collection Zone A1	General Provenience	Total
	8	9	10	12	15	17	18	19			
Points	1	-	-	-	-	12	2	1	4	-	20
Knives	1	-	3	1	-	5	6	-	-	-	16
End scrapers	1	-	-	-	-	6	3	-	-	-	10
Side scrapers	1	-	-	-	-	4	4	-	-	-	9
Burins	2	-	1	1	1	19	7	-	-	-	31
Burins spalls	7	-	-	-	-	13	2	-	1	-	6
Microblade cores	1	-	-	1	-	1	2	-	-	-	5
Microblades	1	-	-	-	-	6	4	-	-	-	11
Drills/perforators	1	-	-	-	-	1	-	-	-	-	2
Biface fragments	1	-	1	1	-	10	1	-	1	-	15
Uniface fragments	-	-	-	-	-	1	-	-	-	-	1
Polished fragment	-	-	1	-	-	1	1	-	-	-	3
Preforms	-	-	-	-	-	3	2	-	-	-	5
Retouched flakes	1	-	-	3	2	24	14	-	3	-	47
Used flakes	-	-	2	-	-	12	4	-	-	-	18
Sub-total	18	-	8	7	3	121	54	1	9	-	221
Waste flakes	501	6	726	113	64	7,114	409	170	154	3	9,260
Total	519	6	734	120	67	7,235	463	171	163	3	9,481
%	5.5	0.06	7.7	1.3	0.7	76.3	4.9	1.8	1.7	0.03	99.99

The wastes flakes are of variable size and suggest that all stages of lithic tool manufacturing were carried out at the site. Most, however, are small, suggesting final manufacturing stages, and edge retouch or resharpening of blunted tools. Cortex was observed on several of the larger flakes.

Chert is the overwhelmingly predominant raw material, representing 99% of collection. Fifty artifacts are in quartz crystal or hyalin, 29 in metabasalt, 12 in metamorphosed sandstone and 4 in slate. The raw material of 4 specimens is undetermined

Table 4. Lithic Categories and Raw Materials

Categories	Raw Materials						Total
	Chert	Quartz	Metabasalt	Sandstone	Slate	Undetermined	
Points	20	-	-	-	-	-	-20
Knives	15	-	-	-	-	1	16
End scrapers	10	-	-	-	-	-	10
Side scrapers	8	-	-	-	-	1	9
Burins	31	-	-	-	-	-	31
Burins spalls	22	-	-	-	-	-	22
Flakes cores	6	-	-	-	-	-	6
Microblades cores	4	1	-	-	-	-	5
Microblades	7	4	-	-	-	-	11
Drills/perforators	2	-	-	-	-	-	2
Biface fragments	15	-	-	-	-	-	15
Uniface fragments	1	-	-	-	-	-	1
Polished fragments	-	-	1	-	1	1	-3
Preforms	5	-	-	-	-	-	5
Retouched flakes	46	1	-	-	-	-	47
Used Flakes	16	1	-	-	1	-	18
Sub-Total	208	7	1	-	2	3	221
Waste flakes	9,174	43	28	12	2	1	9,260
Total	9,382	50	29	12	4	4	9,481

4.4 Charcoal Samples and Radiocarbon Dates

Eight charcoal samples were collected from 4 habitation structures. Two of the samples were associated with Level II and 3 with Level III in Structure 18. One was recovered from Level II in Sructure 16 and 2 others from Level III in Structures 8 and 9. Charcoal represented the only organic remains present in the excavation units.

The samples from Structures 8 and 16 were selected for dating, in the hope of clarifying possible occupation of the site by Late Pre-Dorset groups. These samples, processed by the Geological Sciences Radiocarbon Lab of Brock University, St. Catherines, Ontario, provided

uncorrected dates of 2,135 ± 80 B.P. (BGS 1519) and 320 ± 70 B.P. (BGS 1520). The dates obtained convert to 185 B.C. for Structure 8 and A.D. 1630 for Structure 16.

Neither date is supported by existing data and both are rejected. The Structure 8 date is more than 400 years too late for the Pre-Dorset culture, which ended in Arctic Canada between 900 - 600 B.C. (c.f., Maxwell, 1985: 77). It falls, instead, in the Middle phase of the succeeding Dorset culture. As Dorset artifacts are entirely lacking in the lithic collections from Area A, it is suggested that the charcoal from Structure 8 was impregnated with younger carbon compounds leached from the overlying Level II humus.

The Structure 16 date is more equivocal. No artifacts were recovered from the 2 square metres excavated in this structure and it is not impossible that the habitation was occupied during the 17th century. However, the presence in the lithic collection of tools stylistically characteristic of only the Pre-Dorset culture tends to militate against the suggestion of later prehistoric or proto-historic occupations in Area A. Accordingly, it is suspected that the Structure 16 sample was also contaminated by younger, leached compounds and, in the absence of evidence to the contrary, the date produced by this sample is rejected.

5.0 Discussion and Recommendations

Archaeological salvage excavations carried out in 1990 and 1991 in Area A of the GhGk-4 site cover a total of 167m^2. The 5 semi-subterranean dwellings and 2 of the tent rings in the area have been completely excavated and 8 tent rings have been partly excavated or tested. This field work has produced 14,215 lithic artifacts, including 454 tools and tool fragments. Approximately 94% of the lithic collection was recovered from the tent rings, with Structure 17 yielding more than 10,600 specimens. The semi-subterranean dwellings yielded 121 waste flakes and 16 tools, equivalent to less than 1% of the collection. Organic remains are poorly represented and, charcoal aside, comprise a small amount of carbonized grease and a bone fragment.

The data recovered from last year`s excavations reinforce the interpretations forwarded in the report of the 1990 salvage project (Avataq Cultural Institute, 1992: 17-18). As presented in that report, radiocarbon determinations indicate that Area A was occupied between 1840 - 1720 B.C. and from 1410 to 1310 B.C. Both cold and warm-weather occupations by small groups composed of from 1 to several families are suggested. The large quantities of artifacts found in most of the tent rings confirm multiple occupations of these habitations, Structures 9, 16 and 19 excluded. The tools and numerous waste flakes associated with the tent rings reflect a wide range of activities, including the hunting of diverse animal species and the intensive manufacturing of stone and organic implements. A single, brief occupation is interpreted for each of the semi-subterranean dwellings. A reduced level of cultural activity and relative scarcity of lithic raw material during cold weather are also suggested. In addition, the homogeneity of the lithic collection, consisting almost exclusively of mottled black chert, signifies exploitation of the same raw material source by the different groups that occupied the site. Continuity of occupation through time by a local population may be implied.

The results of the salvage excavation projects fulfill in large measure the objectives of these exercises. The major cultural deposits identified in Area A have been excavated or sampled and a considerable amount of data has been rescued. Besides providing new insight into Early Palaeoeskimo culture in southeastern Hudson Bay, these results have certain methodological implications for Pre-Dorset boulder field archaeology. For example, the consistently low productivity of the semi-subterranean dwellings and the generally high productivity of the tent rings emphasize the importance of tent rings to the evaluation of site potential. As well, the discovery of Structure 17 in 1990 and of Structures 18 and 19 in 1991 stresses the importance of testing interstructural zones.

Three "intact" and 6 partly excavated tent rings remain in Area A. Of the latter, Structures 8, 10 and 18 are of proven potential in terms of information content. Structures 9 and 16 are assessed as being of little potential and it is not impossible the Structure 19, partially disturbed by the ATV trail, has yielded the bulk of its contents. The potential of Structures 11, 13 and 14, the intact tent rings, is undetermined.

In view of the above, it is therefore recommended that excavation of Structures 8, 10 and 18 be completed and that Structures 11, 13 and 14 be excavated or tested at the earliest convenience. The eventual excavation of these habitations will complete the salvage of Area A and clear this portion of the site for future construction work. In the interim, it is recommended that the partly excavated structures be monitored annually by a local resident with training in archaeology. Monitoring would involve the inspection, systematic collection and registration of artifacts eroding from unexcavated deposits in the structures. This activity would not only contribute to the preservation of cultural heritage resources but allow for assessment of the deterioration of the site through time.

It is further recommended that analysis of the archaeological data recovered from the salvage excavation projects be undertaken. Analysis is essential to the comprehension of the cultural information inherent in these data, to the interpretation of the nature of the occupations in Area A and to comparisons with other Pre-Dorset sites. It is also necessary in order to fulfill the agreement between the Whapmagoostui Cree Band and the Municipality of Kuujjuarapik for the conduct of salvage excavations in the GhGk-4 site. As per that agreement, the Whapmagoostui Band has consented to eventually transfer stewardship of the artifact collection to the municipality but may retain a sample of the artifacts. The physical transfer of the collection, presently stored in the Avataq Archaeology Department in Montreal, will follow the development in Whapmagoostui and Kuujjuarapik of facilities for its maintenance and display. Analysis and interpretation of the data will, naturally, complement the artifact displays and serve to foster a greater appreciation in the communities of the cultural heritage importance of archaeological resources.

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7.0 Photographs

Photo 1. Structure 8 prior to excavation, toward the southwest.

Photo 2. Southeast quadrant of Structure 8, toward the northwest.

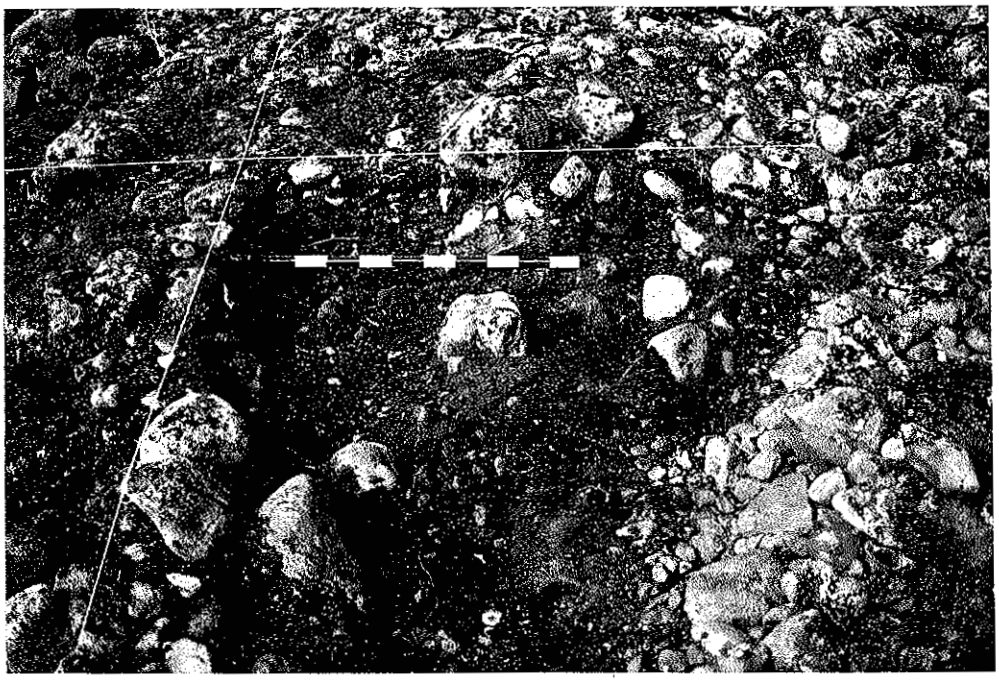

Photo 3. Partially excavated southeast quadrant of Structure 8, toward the north.

Photo 4. Structure 9 prior to excavation, toward the southeast.

Photo 5. Northeast quadrant of Structure 9, toward the north.

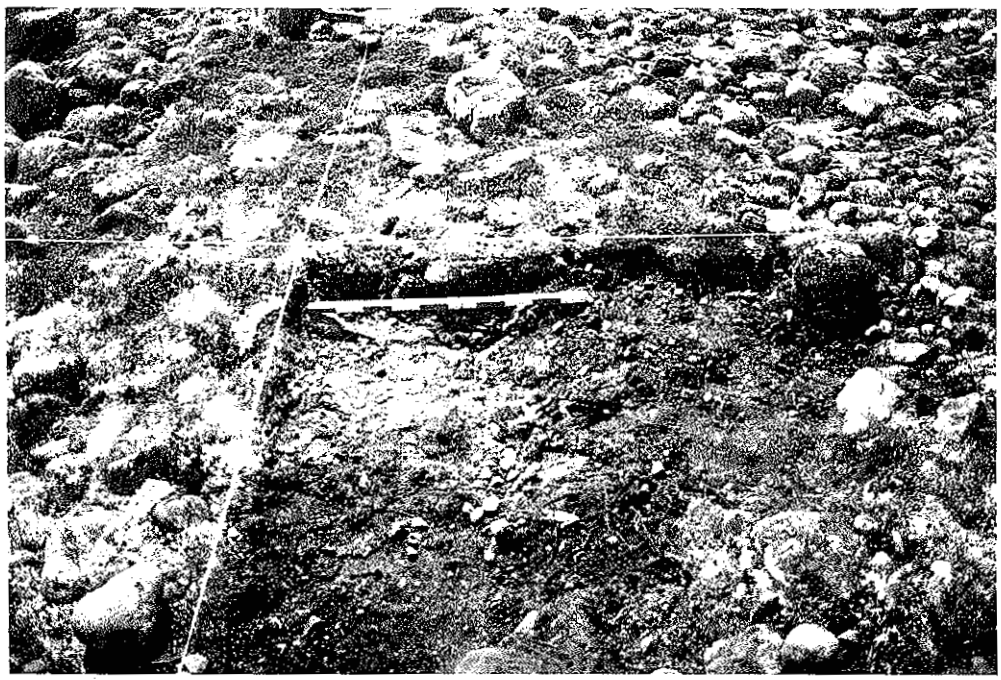

Photo 6. Partially excavated northeast quadrant of Structure 9, toward the west.

Photo 7. Structure 10 prior to excavation, toward the southwest.

Photo 8. West stratigraphic profile of the northeast quadrant of Structure 10.

Photo 9. Structure 15 prior to excavation, toward the northeast.

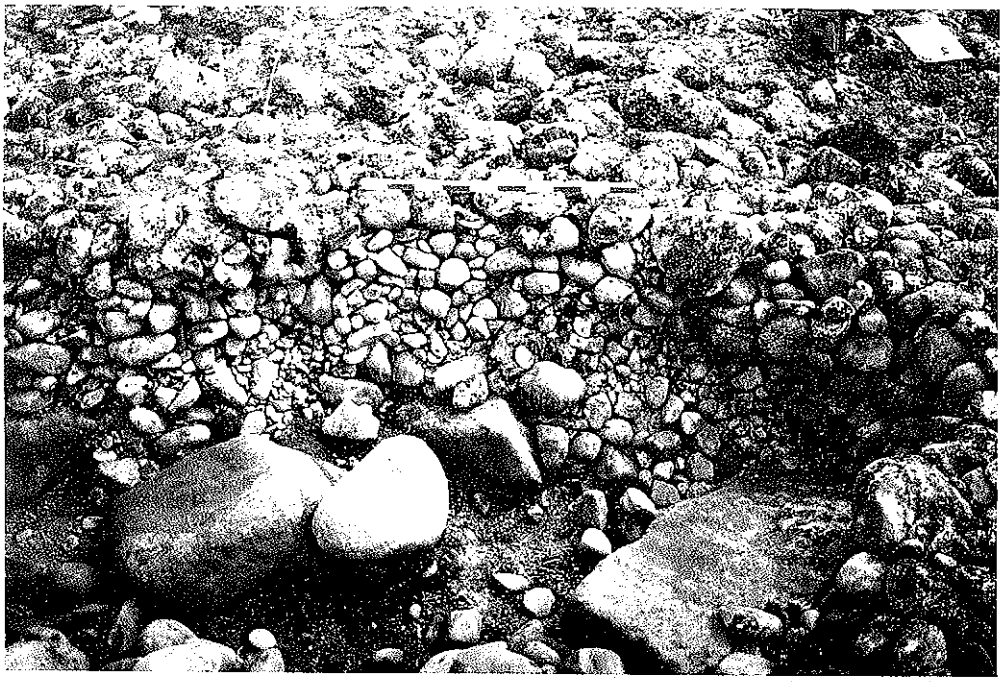

Photo 10. South stratigraphic profile of Structure 15.

Photo 11. Structure 16, BY-BZ 56, toward the south. Note the extraction zone in the background

Photo 12. Structure 17, eastern and southern extremities. Toward the southeast.

Photo 13. West stratigraphic profile of DD 87, immediately north of Structure 17.

Photo 14. Structure 18 partially excavated (CY-CZ 84-85). Toward the northwest.

Photo 15. Structure 19 partially excavated (DG 78-79). Toward the south.

Appendix 1

Appendix 1. List of Photographs.

Colour Roll	Negative	Subject	Orientation	Date
C9102-1	1a	Structure 12, NW-NE quadrant	E	1991/7/3
	2a	Structure 12, SW-SE quadrant	E	1991/7/3
	3a	Structure 12, SW quadrant	NE	1991/7/3
	4a	Structure 12, centre	S	1991/7/3
	5a	Structure 13 before excavation	SE	1991/7/3
	6a	Structure 15 before excavation	NE	1991/7/3
	7a	Structure 10 before excavation	SW	1991/7/3
	8a	Structure 8 before excavation	SW	1991/7/3
	9a	Structure 9 before excavation	SE	1991/7/3
	10a	Possible structure	SW	1991/7/3
	11a	CU-CW 84-85	S	1991/7/5
	12a	CU-CW 85	E	1991/7/5
	13a	CU-CW 84	E	1991/7/5
	14a	DG 85-86	E	1991/7/5
	15a	DG 85-86	S	1991/7/5
	16a	DD-DE-DF 87	W	1991/7/5
	17a	CZ-DA 84-85-86	N	1991/7/8
	18a	CY-CZ 84-85	NW	1991/7/8
	19a	DF-DG 82-83-84	W	1991/7/8
	20a	DC-DD-DE 82-83-84	NW	1991/7/8
	21a	DF-DG 83	W	1991/7/8
	22a	DG 84	W	1991/7/8
	23a	DD-DE 83	W	1991/7/8
	24a	DF-DG 83-84	NE	1991/7/8
	25a	DC 82-83	E	1991/7/8
	26a	DC-DD-DE-DF 82-83	E	1991/7/8
	27a	DB-DC-DD 84	E	1991/7/8
	28a	Structure 17 mid-passage	SE	1991/7/8
	29a	DF 79-80	S	1991/7/8
	30a	DG 78-79	S	1991/7/8
	31a	DE 80	N	1991/7/8
	32a	DD 80	W	1991/7/8
	33a	Structure 10, NE quadrant	W	1991/7/8
	34a	Structure 10, NE quadrant, stratigraphic profile	W	1991/7/8
	35a	Structure 10, Level II	N	1991/7/8
	36a	Structure 10, Level II	N	1991/7/8
C9102-2	1a	Structure 10, NE quadrant	N	1991/7/10
	2a	Structure 8, SE quadrant	N	1991/7/10
	3a	Structure 8, NE quadrant	W	1991/7/10
	4a	Structure 8, NW quadrant	E	1991/7/10
	5a	Structure 8, SE quadrant	E	1991/7/10
	6a	Structure 8, overview	ESE	1991/7/10
	7a	Structure 8, overview	S	1991/7/10
	8a	DB-DC 82	E	1991/7/10
	9a	DC 82-83	N	1991/7/10

Appendix 1. List of Photographs.

Roll	Negative	Subject	Orientation	Date
	10a	DD 80	SE	1991/7/10
	11a	Structure 8, SE quadrant	NW	1991/7/11
	12a	Structure 8, SE quadrant	NW	1991/7/11
	13a	Structure 8, SE quadrant	NW	1991/7/11
C9102-2	14a	Structure 9, NE quadrant	S	1991/7/11
	15a	Structure 9, NE quadrant	S	1991/7/11
	16a	Structure 9, NE quadrant, hearth area (?)	N	1991/7/11
	17a	CW-CY 84, after excavation	E	1991/7/11
	18a	Lizzie Fleming and Caroline Weetaluktuk at work	E	1991/7/11
	19a	CU 84, stratigraphic profile	W	1991/7/11
	20a	CW 84, stratigraphic profile	S	1991/7/11
	21a	CU 84, stratigraphic profile	S	1991/7/11
	22a	DD 87, stratigraphic profile	W	1991/7/11
	23a	Structure 16, BY-BZ 56	S	1991/7/11
	24a	Structure 16, BY-BZ 56	E	1991/7/11
	25a	Structure 16, BY-BZ 56	NW	1991/7/11
	26a	Structure 15, excavated	W	1991/7/11
	27a	Structure 10, SW quadrant, excavated	E	1991/7/11
	28a	Structures 10 and 15, excavated	E	1991/7/11
	29a	Structures 10 and 15, excavated	W	1991/7/11
	30a	Structure 10, SW quadrant, north wall	N	1991/7/11
	31a	Structure 15, excavated	S	1991/7/12
	32a	Structure 8, SE quadrant, partially excavated	N	1991/7/12
	33a	Structure 8, SE quadrant, partially excavated	W	1991/7/12
	34a	Structure 9, NE quadrant, partially excavated	S	1991/7/12
	35a	Structure 9, NE quadrant, partially excavated	W	1991/7/12
Black and White				
BW9102-1	2a	Structure 12, NW-NE quadrant	E	1991/7/3
	3a	Structure 12, SW-SE quadrant	E	1991/7/3
	4a	Structure 12, SW quadrant	NE	1991/7/3
	5a	Structure 12, centre	S	1991/7/3
	6a	Structure 13 before excavation	SE	1991/7/3
	7a	Structure 15 before excavation	NE	1991/7/3
	8a	Structure 10 before excavation	SW	1991/7/3
	9a	Structure 8 before excavation	SW	1991/7/3
	10a	Structure 9 before excavation	SE	1991/7/3
	11a	Possible structure	SW	1991/7/3
	12a	CU-CW 84-85	S	1991/7/5
	13a	CU-CW 85	E	1991/7/5
	14a	CU-CW 84	E	1991/7/5
	15a	DG 85-86	E	1991/7/5

Appendix 1. List of Photographs.

Roll	Negative	Subject	Orientation	Date
	16a	DG 85-86	S	1991/7/5
	17a	DD-DE-DF 87	W	1991/7/5
	18a	CZ-DA 84-85-86	N	1991/7/8
	19a	CY-CZ 84-85	NW	1991/7/8
	20a	DF-DG 82-83-84	W	1991/7/8
	21a	DC-DD-DE 82-83-84	NW	1991/7/8
	22a	DF-DG 83	W	1991/7/8
	23a	DG 84	W	1991/7/8
	24a	DD-DE 83	W	1991/7/8
	25a	DF-DG 83-84	NE	1991/7/8
	26a	DC 82-83	E	1991/7/8
	27a	DC-DD-DE-DF 82-83	E	1991/7/8
	28a	DB-DC-DD 84	E	1991/7/8
	29a	Structure 17 mid-passage	SE	1991/7/8
	30a	DF 79-80	S	1991/7/8
	31a	DG 78-79	S	1991/7/8
	32a	DE 80	N	1991/7/8
	33a	DD 80	W	1991/7/8
	34a	Structure 10, NE quadrant	W	1991/7/8
	35a	Structure 10, NE quadrant, stratigraphic profile	W	1991/7/8
	36a	Structure 10, Level II	N	1991/7/8
BW9102-2	3	Structure 10, NE quadrant	N	1991/7/10
	4	Structure 8, SE quadrant	N	1991/7/10
	5	Structure 8, NE quadrant	W	1991/7/10
	6	Structure 8, NW quadrant	E	1991/7/10
	7	Structure 8, SE quadrant	E	1991/7/10
	8	Structure 8, overview	ESE	1991/7/10
	9	Structure 8, overview	S	1991/7/10
	10	DB-DC 82	E	1991/7/10
	11	DC 82-83	N	1991/7/10
	12	DD 80	SE	1991/7/10
	13	Structure 8, SE quadrant	NW	1991/7/11
	14	Structure 8, SE quadrant	NW	1991/7/11
	15	Structure 9, NE quadrant	S	1991/7/11
	16	Structure 9, NE quadrant	S	1991/7/11
	17	Structure 9, NE quadrant, hearth area	N	1991/7/11
	18	CW-CY 84, after excavation	E	1991/7/11
	19	Lizzie Fleming and Caroline Weetaluktuk at work	E	1991/7/11
	20	CU 84, stratigraphic profile	W	1991/7/11
	21	DD 87, stratigraphic profile	W	1991/7/11
	22	Structure 16, BY-BZ 56	S	1991/7/11
	23	Structure 16, BY-BZ 56	E	1991/7/11
	24	Structure 16, BY-BZ 56	NW	1991/7/11

Appendix 1. List of Photographs.

Roll	Negative	Subject	Orientation	Date
	26	Structure 15 excavated	W	1991/7/11
	27	Structure 10, SW quadrant, excavated	E	1991/7/11
	28	Structures 10 and 15, excavated	E	1991/7/11
	29	Structures 10 and 15, excavated	W	1991/7/11
	30	Structure 10, SW quadrant, north wall	N	1991/7/11
	31	Structure 15, excavated	S	1991/7/12
	32	Structure 8, SE quadrant, partially excavated	N	1991/7/12
	33	Structure 8, SE quadrant, partially excavated	W	1991/7/12
	24	Structure 9, NE quadrant, partially excavated	S	1991/7/12
	35	Structure 9, NE quadrant, partially excavated	W	1991/7/12
Slides				
S9102-1	2	Structure 12, NW-NE quadrant	E	1991/7/3
	3	Structure 12, SW-SE quadrant	E	1991/7/3
	4	Structure 12, SW quadrant	NE	1991/7/3
	5	Structure 12, centre	S	1991/7/3
	6	Structure 13 before excavation	SE	1991/7/3
	7	Structure 15 before excavation	NE	1991/7/3
	8	Structure 10 before excavation	SW	1991/7/3
	9	Structure 8 before excavation	SW	1991/7/3
	10	Structure 9 before excavation	SE	1991/7/3
	11	Possible structure	SW	1991/7/3
	12	CU-CW 84-85	S	1991/7/5
	13	CU-CW 85	E	1991/7/5
	14	CU-CW 84	E	1991/7/5
	15	DG 85-86	E	1991/7/5
	16	DG 85-86	S	1991/7/5
	17	DD-DE-DF 87	W	1991/7/5
	18	CZ-DA 84-85-86	N	1991/7/8
	19	CY-CZ 84-85	NW	1991/7/8
	20	DF-DG 82-83-84	W	1991/7/8
	21	DC-DD-DE 82-83-84	NW	1991/7/8
	22	DF-DG 83	W	1991/7/8
	23	DG 84	W	1991/7/8
	24	DD-DE 83	W	1991/7/8
	25	DF-DG 83-84	NE	1991/7/8
	26	DC 82-83	E	1991/7/8
	27	DC-DD-DE-DF 82-83	E	1991/7/8
	28	DB-DC-DD 84	E	1991/7/8
	29	Structure 17 mid-passage	SE	1991/7/8
	30	DF 79-80	S	1991/7/8
	31	DG 78-79	S	1991/7/8
	32	DE 80	N	1991/7/8
	33	DD 80	W	1991/7/8
	34	Structure 10, NE quadrant	W	1991/7/8
	35	Structure 10, NE quadrant, stratigraphic profile	W	1991/7/8
	36	Structure 10, level II	N	1991/7/8

Appendix 1. List of Photographs.

Roll	Negative	Subject	Orientation	Date
S9102-2	1	Structure 10, NE quadrant	N	1991/7/10
	2	Structure 8, SE quadrant	N	1991/7/10
	3	Structure 8, NE quadrant	W	1991/7/10
	4	Structure 8, NW quadrant	E	1991/7/10
	5	Structure 8, SE quadrant	E	1991/7/10
	6	Structure 8, overview	ESE	1991/7/10
	7	Structure 8, overview	S	1991/7/10
	8	DB-DC 82	E	1991/7/10
	9	DC 82-83	N	1991/7/10
	10	DD 80	SE	1991/7/10
	11	Structure 8, SE quadrant	NW	1991/7/11
	12	Structure 8, SE quadrant	NW	1991/7/11
	13	Structure 8, SE quadrant	NW	1991/7/11
S9102-2	14	Structure 9, NE quadrant	S	1991/7/11
	15	Structure 9, NE quadrant	S	1991/7/11
	16	Structure 9, NE quadrant, hearth area	N	1991/7/11
	17	CW-CY 84, after excavation	E	1991/7/11
	18	Lizzie Fleming and Caroline Weetaluktuk at work	E	1991/7/11
	19	CU 84, stratigraphic profile	W	1991/7/11
	20	CW 84, stratigraphic profile	S	1991/7/11
	21	CU 84, stratigraphic profile	S	1991/7/11
	22	DD 87, stratigraphic profile	W	1991/7/11
	23	Structure 16, BY-BZ 56	S	1991/7/11
	24	Structure 16, BY-BZ 56	E	1991/7/11
	25	Structure 16, BY-BZ 56	NW	1991/7/11
	26	Structure 15 excavated	W	1991/7/11
	27	Structure 10, SW quadrant, excavated	E	1991/7/11
	28	Structures 10 and 15, excavated	E	1991/7/11
	29	Structures 10 and 15, excavated	W	1991/7/11
	30	Structure 10, SW quadrant, north wall	N	1991/7/11
	31	Structure 15, excavated	S	1991/7/12
	32	Structure 8, SE quadrant, partially excavated	N	1991/7/12
	33	Structure 8, SE quadrant, partially excavated	W	1991/7/12
	34	Structure 9, NE quadrant, partially excavated	S	1991/7/12
	35	Structure 9, NE quadrant, partially excavated	W	1991/7/12

Appendix 2

Appendix 2. Catalogue of Lithic Specimens.

1. Tools

Catalogue Number	Object	Excavation Unit	Level	Coordinates	Raw Material
399	microblade	CY 84	III	N55/E55	quartz crystal
400	microblade	CZ 84	III	N15/E70	quartz crystal
401	microblade	CZ 86	III	N24/E93	chert
402	microblade	DA 85	II	N55/E40	chert
403	microblade	DD 83	III	N86/E80	quartz crystal
404	microblade	DD 84	III	N40/E55	chert
405	microblade	DE 83	III	N84/E75	quartz crystal
406	microblade	DF 83	II	N05/E80	chert
407	microblade	DF 87	III	N15/E40	chert
408	microblade	DF 87	III	N56/E45	chert
409	microblade	Structure 8	III	SE quad.	chert
410	point	CW 84	III	N89/E65	chert
411	point	DA 85	II	N54/E40	chert
412	point	DD 84	II	N50/E50	chert
413	point	DE 87	III	N80/E20	chert
414	point	DF 80	III	N77/E21	chert
415	point	DF 83	II	N40/E75	chert
416	point	DF 84	III	N15/E18	chert
417	point	DF 84	III	N65/E80	chert
418	point	DF 84	II	N10/E70	chert
419	point	DF 87	III	N65/E26	chert
420	point	DG 85	III	N80/E20	chert
421	point	DG 85	III	N90/E20	chert
422	point	DG 85	III	N60/E59	chert
423	point	DG 85	III	N90/E90	chert
424	point	DG 86	III	N60/E65	chert
425	point	Structure 8	III	S00/E130	chert
426	point	Coll. Zone A1	surf.	-	chert
427	point	Coll. Zone A1	surf.	-	chert
428	point	Coll. Zone A1	surf.	-	chert
429	point	Coll. Zone A1	surf.	-	chert
430	knife	CU 84	III	N48/E60	chert
431	knife	CW 84	III	N38/E20	chert
432	knife	CY 84	III	N05/E16	chert
433	knife	CY 85	III	N69/E26	chert
434	knife	DA 84	III	N64/E63	chert
435	knife	DA 86	I	N19/E65	chert
436	knife	DE 84	III	N07/E91	chert
437	knife	DD 84	II	N10/E20	chert
438	knife	DD 87	III	N52/E60	chert
439	knife	DF 87	III	N100/E80	chert
440	knife	DG 83	II	N15/E75	chert
441	knife	Structure 8	III	S50/E50	undetermined
442	knife	Structure 10	Ib	N190/E70	chert
443	knife	Structure 10	Ib	N83/E55	chert
444	knife	Structure 10	Ib	N74/E60	chert
*445	knife	Structure 12	III	N05/E20	chert
* 446	burin	CU 85	III	N89/E82	chert
* 447	burin	CU 85	III	N90/E90	chert
448	burin	CW 85	III	N13/E28	chert
449	burin	CW 85	III	N10/E15	chert
450	burin	CZ 85	III	N20/E80	chert

Appendix 2. Catalogue of Lithic Specimens.

Catalogue Number	Object	Excavation Unit	Level	Coordinates	Raw Material
451	burin	DA 85	II	N25/E20	chert
452	burin	DA 85	II	N58/E35	chert
453	burin	DC 84	III	N60/E95	chert
454	burin	DD 83	III	SW quad.	chert
455	burin	DE 87	III	N15/E13	chert
456	burin	DE 87	III	N100/E00	chert
457	burin	DE 87	III	N80/E15	chert
458	burin	DE 87	III	SW quad.	chert
459	burin	DE 87	III	SW quad.	chert
460	burin	DE 87	III	SW quad.	chert
461	burin	DF 83	II	N93/E07	chert
462	burin	DF 83	II	N10/E80	chert
* 463	burin	DF 84	II	N15/E35	chert
464	burin	DF 84	II	N70/E90	chert
* 465	burin	DF 84	II	N55/E55	chert
466	burin	DF 84	III	N51/E35	chert
467	burin	DF 87	III	N15/E40	chert
* 468	burin	DF 87	III	NE quad.	chert
* 469	burin	DF 87	III	N100/E82	chert
470	burin	DG 83	III	N04/E84	chert
471	burin	DG 84	II	N30/E85	chert
472	burin	Structure 8	III	S22/E79	chert
473	burin	Structure 8	I	SE quad.	chert
* 474	burin	Structure 10	II	S48/W86	chert
475	burin	Structure 12	III	NW quad.	chert
476	burin	Structure 15	II	N10/W05	chert
477	burin spall	CW 84	III	N24/E19	chert
478	burin spall	CW 84	III	N88/E93	chert
479	burin spall	DD 84	III	N40/E55	chert
480	burin spall	DE 83	III	N80/E100	chert
481	burin spall	DE 87	III	N75/E15	chert
482	burin spall	DF 83	II	NE quad.	chert
483	burin spall	DF 83	II	N85/E10	chert
484	burin spall	DF 83	II	N86/E97	chert
485	burin spall	DF 83	II	N25/E98	chert
486	burin spall	DF 83	III	N76/E28	chert
487	burin spall	DF 83	III	SW quad.	chert
488	burin spall	DF 84	II	SE quad.	chert
489	burin spall	DF 87	III	N89/E74	chert
490	burin spall	DF 87	III	N15/E75	chert
491	burin spall	DG 83	III	N34/E68	chert
492	burin spall	Structure 8	III	SE quad.	chert
493	burin spall	Structure 8	III	SE quad.	chert
494	burin spall	Structure 8	III	SE quad.	chert
495	burin spall	Structure 8	III	SE quad.	chert
496	burin spall	Structure 8	III	SE quad.	chert
497	burin spall	Structure 8	III	SE quad.	chert
498	burin spall	Structure 8	III	SE quad.	chert
499	end scraper	CZ 84	III	N10/E60	chert
500	end scraper	DA 84	III	N55/E30	chert
501	end scraper	DA 85	III	N99/E51	chert
502	end scraper	DD 87	III	SE quad.	chert
503	end scraper	DE 84	III	N03/E11	chert
504	end scraper	DE 84	III	N65/E40	chert

Appendix 2. Catalogue of Lithic Specimens.

Catalogue Number	Object	Excavation Unit	Level	Coordinates	Raw Material
505	end scraper	DE 84	III	N97/E76	chert
506	end scraper	DE 84	III	N80/E82	chert
* 507	end scraper	DG 86	III	N30/E78	chert
508	end scraper	Structure 8	III	S20/E120	chert
509	side scraper	CU 84	III	N94/E81	chert
510	side scraper	CZ 84	III	N70/E20	undetermined
511	side scraper	CZ 84	III	N10/E60	chert
512	side scraper	CZ 86	III	N80/E90	chert
513	side scraper	DD 84	III	N64/E15	chert
514	side scraper	DD 87	III	N100/E40	chert
515	side scraper	DE 84	III	N27/E76	chert
516	side scraper	DE 84	III	N37/E60	chert
517	side scraper	Structure 8	III	S10/E32	chert
518	drill	DD 84	III	N40/E55	chert
519	drill	Structure 8	III	SE quad.	chert
520	preform	CZ 86	III	N80/E90	chert
521	preform	DA 85	II	N63/E45	chert
522	preform	DD 84	III	N27/E47	chert
523	preform	DF 84	III	N53/E30	chert
524	preform	DF 87	III	N90/E70	chert
525	polished fragment	CZ 86	III	N60/E45	undetermined
526	polished fragment	DG 84	III	N33/E17	metabasalt
527	polished fragment	Structure 10	II	S96/W130	slate
528	biface fragment	DA 84	II	N23/E55	chert
529	biface fragment	DD 81	III	SW quad.	chert
530	biface fragment	DD 83	III	N75/E57	chert
531	biface fragment	DD 84	III	N95/E45	chert
532	biface fragment	DE 84	III	N31/E86	chert
533	biface fragment	DF 82	III	N23/E26	chert
534	biface fragment	DF 84	II	N70/E57	chert
535	biface fragment	DF 87	III	N84/E91	chert
536	biface fragment	DG 83	III	N04/E63	chert
537	biface fragment	DG 84	II	N55/E65	chert
* 538	biface fragment	DG 84	II	N05/E95	chert
* 539	biface fragment	Structure 8	III	SE quad.	chert
540	biface fragment	Structure 10	II	N70/E48	chert
541	biface fragment	Structure 12	III	S07/W158	chert
542	biface fragment	Coll. Zone A1	surf.	-	chert
543	uniface	DF 84	III	N57/E91	chert
544	microblade core	CW 84	III	N84/E52	chert
545	microblade core	CY 84	III	N70/E60	chert
546	microblade core	DD 87	III	N100/E45	chert
547	microblade core	Structure 8	III	SE quad.	chert
548	microblade core	Structure 12	III	S05/W122	quartz crystal
549	flake core	CU 84	III	N07/E57	chert
550	flake core	DA 84	III	N55/E95	chert
551	flake core	DC 84	III	N74/E40	chert
552	flake core	DE 87	III	N05/E05	chert
553	flake core	DG 85	III	N85/E50	chert
554	flake core	Coll. Zone A1	-	-	chert
555	retouched flake	CU 84	III	N10/E80	chert
556	retouched flake	CU 85	III	NW quad.	chert
557	retouched flake	CW 84	III	SW quad.	chert
558	retouched flake	CW 84	III	SW quad.	chert

Appendix 2. Catalogue of Lithic Specimens.

Catalogue Number	Object	Excavation Unit	Level	Coordinates	Raw Material
559	retouched flake	CY 85	II	N15/E31	chert
560	retouched flake	CZ 84	III	N53/E79	chert
561	retouched flake	CZ 85	III	N50/E10	chert
562	retouched flake	CZ 85	III	N10/E25	chert
563	retouched flake	CZ 85	III	N78/E51	chert
564	retouched flake	CZ 85	III	N10/E55	chert
565	retouched flake	CZ 86	II	N30/E60	chert
566	retouched flake	CZ 86	III	N76/E30	chert
567	retouched flake	DA 84	III	N81/E61	chert
568	retouched flake	DA 86	II	N40/E37	chert
569	retouched flake	DD 83	III	SW quad.	chert
570	retouched flake	DD 87	III	N11/E30	chert
571	retouched flake	DD 87	III	N100/E40	chert
572	retouched flake	DD 87	III	N90/E48	chert
573	retouched flake	DE 83	III	N37/E17	chert
574	retouched flake	DE 83	III	N70/E77	chert
575	retouched flake	DE 84	III	N63/E36	chert
576	retouched flake	DE 84	III	N24/E58	chert
577	retouched flake	DE 87	III	N100/E30	chert
578	retouched flake	DF 83	II	N95/E30	chert
579	retouched flake	DF 83	II	N70/E27	chert
580	retouched flake	DF 83	III	N22/E88	chert
581	retouched flake	DF 84	II	N55/E98	chert
582	retouched flake	DF 84	III	N52/E20	chert
583	retouched flake	DF 84	III	N40/E80	chert
584	retouched flake	DF 84	III	N43/E75	chert
585	retouched flake	DF 87	III	NE quad.	chert
586	retouched flake	DF 87	III	NE quad.	chert
587	retouched flake	DG 82	III	N52/E27	chert
588	retouched flake	DG 83	III	N70/E55	chert
589	retouched flake	DG 84	III	N63/E30	chert
590	retouched flake	DG 85	III	-	chert
591	retouched flake	DG 86	III	N70/E24	chert
592	retouched flake	Structure 8	III	SE quad.	chert
593	retouched flake	Structure 12	III	S105/W135	slate
594	retouched flake	Structure 12	III	S05/W30	chert
595	retouched flake	Structure 12	III	N53/W21	chert
596	retouched flake	Structure 15	II	S50/E20	chert
597	retouched flake	Structure 15	II	N00/W80	chert
598	retouched flake	Coll. Zone A1	-	-	chert
599	retouched flake	Coll. Zone A1	-	-	chert
600	retouched flake	Coll. Zone A1	-	-	chert
601	retouched flake	DD 84	III	N80/E30	quartz crystal
602	used flake	CU 84	III	N84/E47	quartz crystal
603	used flake	CU 84	III	N10/E90	chert
604	used flake	CZ 84	III	N45/E15	chert
605	used flake	DA 85	III	N10/E70	chert
606	used flake	DD 84	III	N40/E55	chert
607	used flake	DE 84	III	N37/E33	chert
608	used flake	DE 87	III	SE quad.	chert
609	used flake	DF 82	III	N05/E53	chert
610	used flake	DF 83	III	N37/E23	chert
611	used flake	DF 83	III	N83/E65	chert
612	used flake	DF 83	III	N20/E92	chert

Appendix 2. Catalogue of Lithic Specimens.

Catalogue Number	Object	Excavation Unit	Level	Coordinates	Raw Material
613	used flake	DF 83	III	N27/E77	chert
614	used flake	DG 83	III	N90/E70	chert
615	used flake	DG 85	III	-	chert
616	used flake	DG 85	III	-	chert
617	used flake	DG 86	III	N60/E80	chert
618	used flake	Structure 10	II	S40/W75	chert
619	used flake	Structure 10	II	S98/W127	slate

2. Waste Flakes

Catalogue Number	Excavation Unit	Quadrant	Level	Raw Material	Number of Flakes
620	CU 84	NW	III	chert	4
621	CU 85	SE	III	chert	14
622	CU 85	SW	III	chert	5
623	CW 84	NE	III	chert	13
624	CW 84	SW	III	chert	86
625	CW 84	NW	III	chert	13
626	CW 85	NE	III	chert	5
627	CW 85	SE	III	chert	1
628	CW 85	SW	III	chert	1
629	CW 85	NW	III	chert	1
630	CY 84	SE	III	chert	4
631	CY 85	NE	III	chert	2
632	CY 85	NE	III	hyalin	1
633	CY 85	SE	III	chert	3
634	CY 85	SE	III	metabasalt	1
635	CY 85	NW	III	chert	4
636	CZ 84	NE	III	chert	27
637	CZ 84	SE	III	chert	10
638	CZ 84	SW	III	chert	2
639	CZ 84	NW	III	chert	53
640	CZ 85	NE	III	chert	9
641	CZ 85	NE	III	metabasalt	1
642	CZ 85	SE	III	chert	13
643	CZ 85	SE	III	undetermined	1
644	CZ 85	SW	III	chert	12
645	CZ 85	SW	III	metabasalt	2
646	CZ 85	SW	III	quartz crystal	1
647	CZ 85	NW	III	chert	8
648	CZ 85	NW	III	metabasalt	1
649	CZ 85	NW	III	hyalin	1
650	CZ 86	NE	III	chert	16
651	CZ 86	SE	III	chert	7
652	CZ 86	SE	III	metabasalt	3
653	CZ 86	SW	III	chert	11
654	CZ 86	SW	III	metabasalt	1
655	CZ 86	NW	III	chert	7
656	CZ 86	NW	III	sandstone	2
657	DA 84	NE	II	chert	1
658	DA 84	NE	III	chert	15
659	DA 84	NE	III	metabasalt	1

Appendix 2. Catalogue of Lithic Specimens.

Catalogue Number	Excavation Unit	Quadrant	Level	Raw Material	Number of Flakes
660	DA 84	SW	III	chert	1
661	DA 84	NW	III	chert	8
662	DA 85	SW	I	chert	4
663	DA 85	NE	II	chert	3
664	DA 85	SW	II	chert	2
665	DA 85	NE	III	chert	7
666	DA 85	SE	III	chert	3
667	DA 85	NW	III	chert	11
668	DA 86	NE	II	chert	2
669	DA 86	SE	II	chert	1
670	DA 86	SW	II	chert	1
671	DA 86	NW	II	chert	2
672	DA 86	NE	III	chert	1
673	DB 82	SW	II	chert	1
674	DB 84	NE	II	chert	2
675	DB 84	SW	III	chert	4
676	DB 84	NE	III	chert	5
677	DC 82	NE	II	chert	2
678	DC 83	NW	II	chert	45
679	DC 84	SE	III	chert	4
680	DC 84	SW	III	chert	5
681	DC 84	NW	III	chert	106
682	DD 80	NW	II	chert	3
683	DD 81	SW	III	chert	1
684	DD 83	SW	III	chert	356
685	DD 83	SW	III	quartz crystal	2
686	DD 83	-	III	chert	175
687	DD 83	-	III	metabasalt	1
688	DD 84	NW	I	chert	6
689	DD 84	NE	II	chert	32
690	DD 84	SW	II	chert	23
691	DD 84	NW	II	chert	14
692	DD 84	SE	III	chert	32
693	DD 84	SE	III	quartz crystal	1
694	DD 84	SW	III	chert	2
695	DD 84	NW	III	chert	2
696	DD 84	NW-NE	III	chert	184
697	DD 84	NW-NE	III	quartz crystal	1
698	DD 84	NW-NE	III	hyalin	1
699	DD 87	NE	III	chert	3
700	DD 87	SE	III	chert	19
701	DE 82	NE	III	quartz crystal	1
702	DE 82	SW	III	chert	4
703	DE 82	NW	III	chert	31
704	DE 83	NE	III	chert	65
705	DE 83	SE	III	chert	49
706	DE 83	SE	III	quartz crystal	3
707	DE 83	SW	III	chert	133
708	DE 83	NW	III	chert	104
709	DE 83	NW	III	metabasalt	1
710	DE 84	NE	III	chert	26
711	DE 84	NE	III	metabasalt	1
712	DE 84	SW	III	chert	26
713	DE 84	NW	III	chert	20

Appendix 2. Catalogue of Lithic Specimens.

Catalogue Number	Excavation Unit	Quadrant	Level	Raw Material	Number of Flakes
714	DE 87	NE	III	chert	9
715	DE 87	SE	III	chert	33
716	DE 87	SE	III	quartz crystal	1
717	DE 87	SE	III	hyalin	1
718	DE 87	SE	III	sandstone	1
719	DE 87	SW	III	chert	52
720	DF 79	NW	III	chert	2
721	DF 80	NE	III	chert	1
722	DF 80	SE	III	chert	158
723	DF 80	SE	III	sandstone	2
724	DF 82	NE	II	chert	5
725	DF 82	SE	II	chert	2
726	DF 82	NE	III	chert	302
727	DF 82	SE	III	chert	1
728	DF 82	NW	III	chert	44
729	DF 82	-	III	chert	53
730	DF 83	NE	II	chert	477
731	DF 83	NE	II	metabasalt	1
732	DF 83	SE	II	chert	951
733	DF 83	SE	II	quartz crystal	2
734	DF 83	SW	II	chert	119
735	DF 83	SW	II	quartz crystal	1
736	DF 83	NW	II	chert	636
737	DF 83	NE	III	chert	202
738	DF 83	NE	III	quartz crystal	2
739	DF 83	SE	III	chert	314
740	DF 83	SW	III	chert	339
741	DF 83	NW	III	chert	107
742	DF 83	NW	III	quartz crystal	2
743	DF 84	SE	II	chert	147
744	DF 84	SW	II	chert	127
745	DF 84	NW	II	chert	136
746	DF 84	NW	II	quartz crystal	2
747	DF 84	NE	III	chert	77
748	DF 84	NE	III	quartz crystal	3
749	DF 84	SW	III	chert	184
750	DF 84	NW	III	chert	74
751	DF 84	NW	III	quartz crystal	2
752	DF 87	NE	III	chert	11
753	DF 87	NE	III	metabasalt	2
754	DF 87	SE	III	chert	6
755	DF 87	SW	III	chert	121
756	DF 87	SW	III	metabasalt	1
757	DF 87	NW	III	chert	27
758	DF 87	NW	III	sandstone	1
759	DG 79	SW	III	chert	3
760	DG 82	SE	III	sandstone	2
761	DG 83	NE	II	chert	329
762	DG 83	SW	II	chert	9
763	DG 83	NE	III	chert	15
764	DG 83	SW	III	chert	72
765	DG 83	NW	III	chert	190
766	DG 84	NE	II	chert	19
767	DG 84	NE	II	quartz crystal	3

Appendix 2. Catalogue of Lithic Specimens.

Catalogue Number	Excavation Unit	Quadrant	Level	Raw Material	Number of Flakes
768	DG 84	SW	II	chert	42
769	DG 84	NW	II	chert	19
770	DG 84	NW	II	quartz crystal	1
771	DG 84	NE	III	chert	115
772	DG 84	NE	III	metabasalt	1
773	DG 84	NE	III	hyalin	1
774	DG 84	SE	III	chert	24
775	DG 84	SW	III	chert	60
776	DG 84	SW	III	hyalin	1
777	DG 84	NW	III	chert	28
778	DG 84	NW	III	metabasalt	2
779	DG 84	NE	?	sandstone	1
780	DG 85	NE	III	chert	4
781	DG 85	SE	III	chert	31
782	DG 85	SW	III	chert	21
783	DG 85	NW	III	chert	39
784	DG 86	SE	III	chert	3
785	DG 86	SW	III	chert	6
786	DG 86	NW	III	chert	3
787	Structure 8	SE	III	chert	499
788	Structure 8	SE	III	sandstone	2
789	Structure 9	NE	III	chert	1
790	Structure 9	SE	III	chert	3
791	Structure 9	NW	III	chert	2
792	Structure 10	NE	II	chert	60
793	Structure 10	NE	II	quartz crystal	3
794	Structure 10	NE	II	metabasalt	2
795	Structure 10	NE	II	sandstone	1
796	Structure 10	NE	II	chert	37
797	Structure 10	NE	II	chert	62
798	Structure 10	NE	II	quartz crystal	1
799	Structure 10	NE	II	chert	6
800	Structure 10	NE	II	chert	2
801	Structure 10	NE	II	chert	93
802	Structure 10	NE	II	chert	292
803	Structure 10	NE	II	quartz crystal	2
804	Structure 10	NE	Ib	chert	16
805	Structure 10	NE	Ib	metabasalt	2
806	Structure 10	SE	Ib	chert	1
807	Structure 10	SW	II	chert	4
808	Structure 10	SW	II	chert	17
809	Structure 10	SW	II	chert	75
810	Structure 10	SW	II	chert	27
811	Structure 10	SW	Ib	chert	21
812	Structure 10	SW	Ib	slate	2
813	Structure 12	NE	III	chert	9
814	Structure 12	SW	III	chert	40
815	Structure 12	SW	III	quartz crystal	1
816	Structure 12	NW	III	chert	50
817	Structure 12	NW	III	quartz crystal	2
818	Structure 12	backdirt	-	chert	11
819	Structure 15	NE	II	chert	16
820	Structure 15	SE	II	chert	8
821	Structure 15	SW	II	chert	4

Appendix 2. Catalogue of Lithic Specimens.

Catalogue Number	Excavation Unit	Quadrant	Level	Raw Material	Number of Flakes
822	Structure 15	NW	II	chert	32
823	Structure 15	NW	II	metabasalt	4
824	Structure 17	backdirt	-	chert	3
825	Coll. Zone A1	-	-	chert	154
826	backdirt	-	-	chert	3