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Permit report on the 1980 archaeological

PERMIT REPORT ON THE 1980
ARCHAEOLOGICAL SURVEY ALONG THE
NWA PIPELINE FROM DELTA JUNCTION
TO PRUDHOE BAY

by

Jean S. Aigner & B. Gannon

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PERMIT* REPORT ON THE 1980 ARCHAEOLOGICAL SURVEY ALONG THE NORTHWEST
ALASKAN PIPELINE COMPANY NATURAL GAS PIPELINE, FROM DELTA JUNCTION TO
PRUDHOE BAY**

Submitted to Fluor Northwest, Inc.
for transmittal to:

Heritage Conservation Recreational Service
Bureau of Land Management
State Historic Preservation Office
Bureau of Indian Affairs
U.S. Fish and Wildlife Service
Advisory Commission on Historic Preservation
Office of the Federal Inspector
State Pipeline Coordinator

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Anthropology Program & Institute of
Arctic Biology
University of Alaska, Fairbanks
November 30, 1980

*With additional work between Delta Junction and the Canadian border.

**Alaska archaeology permit 80-3, State MLUP/NC 80-18, Federal TUP
F-65185 (BLM), and HCRS (antiquities) permit 79-AK-137 (BLM F-37488).

FLUOR

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TABLE OF CONTENTS

ABSTRACT.	1
SCOPE OF WORK	4
SURVEY METHODOLOGY.	7
THEORETICAL PERSPECTIVES EMPLOYED IN ARCHAEOLOGICAL ASSESSMENTS.	10
WORK COMPLETED.	16
1980 SURVEY RESULTS AND RECOMMENDATIONS	19
REFERENCES CITED.	106
APPENDIX 1: Centerline Segments.	107
2: Summary of EMS's	108
3: Miscellaneous Work	112
4: Summary of Monitored Backhoe Trenches on EMS's	113
5: Field Personnel.	116
6: Artifact Catalog	117

LIST OF TABLES

Table 1. Summary of Assessments & Recommendations for 74 Cultural Resources & Finds.	3
Table 2. Summary of 1980 Survey Results	103

LIST OF FIGURES

Figure 1. Selected diagnostic artifacts	99
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ABSTRACT

Background

From June 28 to August 29, 1980, an on-the-ground archaeological survey from Delta Junction to Prudhoe Bay was undertaken by the University of Alaska, Fairbanks. The work was mandated by the National Historic Preservation Act of 1966 (PL. 89-665), the National Environmental Policy Act of 1969 (PL. 91-190), the Advisory Council's Procedures for the Protection of Historic and Cultural Properties (36 CFR 800), Federal Executive Order 11593, PL. 93-291 (the Moss-Bennett Act of 1974) and the Alaska Historic Preservation Act of 1975.

Research was conducted under the sponsorship of Northwest Alaskan Pipeline (NWA) Company (Master Agreement A78-065) acting through Fluor Norhtwest, Inc. (Contract No. 478085-9-K050), Work Order No. 8 and amendments. Work was undertaken with Alaska field archaeology permit 80-3, state multiple land use permit (MLUP)/NC 80-18, federal temporary use permit (TUP) F-65185 (Bureau of Land Management case file), and Heritage Conservation Recreational Service antiquities permit 79-AK-137, BLM case file F-37488. Principal investigator responsible for the work and in charge is Dr. Jean S. Aigner, Anthropology Program and Institute of Arctic Biology, University of Alaska, Fairbanks.

This permit report complies with stipulations in the several permits under which the work was conducted. It is submitted to the following pertinent state and federal agencies and representatives: Heritage Conservation Recreation Service (HCRS), Bureau of Land Management (BLM - state and district offices in Alaska), State Historic Preservation Office (SHPO - Alaska), Bureau of Indian Affairs (BIA), U.S. Fish and Wildlife Service, Advisory Council on Historic Preservation and Office of the Federal Inspector.

Work Undertaken

Work completed includes the survey of 227.1 miles of NWA (proposed) project corridor (discontinuous segments), five borehole localities and their accesses, five trench stability plots and their access, and 4009 acres on 72 exploratory material sites (EMS's). In addition, visual inspection or aerial photographic examination of an additional 67 EMS's was undertaken. Four crews of five-six archaeologists and two backhoe monitors completed the field work between June 28 and August 29, 1980.

One hundred percent coverage of foot surveyed centerline and EMS's was completed with an average intensity of 40 worker days per square mile. Intensity was 33 on centerline, primarily in tundra areas, and 50 on EMS's, largely in tundra. Intensity in forested areas in previous years was 43-46 worker days per square mile. Systematic shovel clearing of vegetation and more intensive probing (shovel clearing, testing) in high probability areas was part of the field methodology.

Cultural Resources Identified

Some 74 potential cultural resources were identified during the course of the field season. These include 38 newly identified cultural resources, two of which are less than 50 years old, eight finds with dubious or no context, 25 previously reported archaeological sites and several other loci with modern materials (one) or of unknown status (two). Each of the potential cultural resources was assessed in terms of eligibility for nomination to the National Register, based upon potential for revealing pertinent scientific information, historic importance and other established criteria.* Based upon this assessment and the potential for adverse impact, as a result of proposed construction and operational activities, recommendations for mitigation are provided to the sponsor.

Recommendations

Proposed construction activities (as of November 1980) will directly impact 48 of the new and previously reported cultural resources as these lie directly on the NWA route, its proposed EMS's and other ancillary localities. Of these, 20 resources appear to have significant scientific information associated with them and therefore are deemed potentially eligible for nomination to the National Register of Historic Places. It is our recommendation that these resources be mitigated by avoidance or scientific excavation (see individual discussions and Table 1).

A number (nine) of the potential resources identified are directly impacted but are not considered to contain sufficient information potential to warrant nomination to the National Register. Nonetheless, it is recommended that salvage of these (remaining) archaeological materials be undertaken prior to commencement of construction activities (see Table 1).

Indirect impacts will affect 15 cultural resources. In eight cases we recommend that the sponsor take responsibility for mitigation consisting of: preserving (fencing, posting), backfilling (to lessen erosion), and education of personnel regarding cultural resource management (see Table 1).

During the field operations in 1980, several cultural resources identified or visited did not produce sufficient information for an assessment of potential Register eligibility. In these six cases, additional testing in 1981 is recommended. In addition, further testing is recommended for these find areas (see Table 1).

*Criteria and draft revisions "to guide the States, Federal agencies, and the Secretary of the Interior in evaluating potential entries...for the National Register." 36 CFR part 60, 1976 Draft Revisions (see King et al. 1977:235 ff.).

Table 1. Summary of Assessments and Recommendations for 74 Cultural Resources and Finds

Cultural Resources	Judged Register eligible because of potential in- formation or historic import REC: Avoid <u>or</u> Preserve/Excavate	Not Register quality but contains useful information REC: Avoid <u>or</u> Salvage	Insufficient data to assess REC: Avoid or Test/Assess	Not Register eligible REC: No Action	No Action (Mod
DIRECTLY IMPACTED:					
1) Newly Reported Sites	3	11	4	6	1
2) Known Sites	0	6	5	1	2
TOTAL	48				0
INDIRECTLY IMPACTED:*	REC: Avoid/Maintain	REC: Avoid/Stabilize	REC: Avoid/Protect	REC: Avoid (No Action)	
1) Newly Reported Sites	0	1	6	4	
2) Known Sites	1	1	0	2	
TOTAL	15				
NEW FINDS	Insufficient Data to Assess	Not Register Eligible			
DIRECTLY IMPACTED:	REC: Avoid/Test/Asses	No Action	Modern	Non-Cultural	
TOTAL	11	5	1	2	

*See individual discussion for assessment.

SCOPE OF WORK

Introduction

Archaeological survey was conducted from June 28 to August 29, 1980, by crews from the University of Alaska along Northwest Alaskan Pipeline Company's (NWA's) proposed alignment and ancillary locations from Prudhoe Bay to the Yukon Border. The work was executed under contract between the University of Alaska (IAB 78-42), Jean S. Aigner, Principal Investigator, and the Northwest Alaskan Pipeline Company (Master Agreement A78-065) acting through Fluor Northwest, Inc. (Contract No. 478085-9-K050). The research was undertaken in accordance with Alaska field archaeology permit 80-3, state multiple land use permit NC 80-18, federal temporary use permit F-65185 (Bureau of Land Management), and Heritage Conservation Resources Service antiquities permit 79-AK-137 (BLM F-37488).

Prior to the field season extensive literature reviews were conducted, producing an extensive inventory and analysis of known cultural resources in the general study area. Results are presented in Historic and Prehistoric Land Use in the Upper Tanana Valley (Shinkwin and Aigner 1979), Historic and Prehistoric Land Use in the Upper Tanana Valley II (supplement, Aigner 1979), and for the northern segments which figure prominently in the present report, Historic and Prehistoric Land Use in Interior Alaska (Aigner and Gannon 1980).

Objectives of the Present Study

The field research was undertaken with several basic premises. It is critical for contract archaeology to gather and analyze data in order to contribute substantively and methodologically/theoretically to anthropological knowledge. At the same time, the area of survey for cultural resources is defined by management needs of the sponsor in order to comply with federal and state stipulations. The concerns of the sponsor are mandated by the National Historic Preservation Act of 1966 (NHPA, PL. 89-665), the National Environmental Policy Act of 1969 (NEPA, PL. 91-190), the Advisory Council's Procedures for the Protection of Historic and Cultural Properties (36 CFR 800), Executive Order 11593 (1971), the Archaeological and Historic Preservation Act of 1974 (Moss-Bennett bill, PL. 93-291), and the Alaska Historic Preservation Act of 1975. It is the premise of our work that the needs of the sponsor and professional responsibility to the interests of the discipline can both be met. Towards this end, a research framework which sees cultural resources in terms of land use models with a wider study area (than the corridor defined by the sponsor) is employed in data gathering and analysis. For a discussion see Shinkwin and Aigner 1979, Aigner 1979, and Aigner and Gannon 1980.

It should also be reiterated that the use of local informants is considered basic to the success of the project. Preparation of the background reports has utilized these sources in order to augment as well as to add to archaeological and traditional historic data. Key to the background study in preparation for the 1980 fieldwork were the many recent

land use studies sponsored by various native groups, corporations, and state governments. These have been especially important in understanding native (and non-native) patterns of land use, community location, and organization for economic pursuits in the recent and distant past (Aigner and Gannon 1980).

Nature of the 1980 Work

The 1980 field work consisted of both intensive on-the-ground survey of selected portions of the proposed route between Prudhoe Bay and the Yukon Border, and of visual survey. Intensive survey was to be performed on centerline segments of the proposed NWA route, a centerline borehole location and its over-land access, selected exploration material sites (EMS's) and accesses, and the locations of backhoe trenches in selected EMS's and their over-land access routes. Visual inspection was performed on certain EMS sites. Clearance (or non-clearance) for construction was provided for the intensively surveyed alignment segments and EMS's (and for certain added localities described below). Clearance (or non-clearance) for backhoe trenches only, for borehole drilling only or for EMS sampling and drilling only was provided in those other cases.

Work Order No. 8 from Northwest Alaskan Pipeline Company, acting through Fluor Northwest, Inc. originally outlined work consisting of survey along 231 miles of centerline in discontinuous segments, one borehole location (and access) covering an area 260 x 200 feet (plus 30' access), and 67 EMS's totalling approximately 3,959 acres, and field monitoring of 28 EMS's during backhoe trenching activities. In addition there were 64 proposed EMS's designated for visual examination.

Programmatic changes occurred during the course of the field season. Except for a series of EMS's south of Livengood (to the border) all were accommodated within existing W.O. No. 8 (the southern work was handled as an amendment). Changes included the addition of 26 EMS's (and 79 trenches) requiring backhoe monitoring (constituting the only work carried out south of Delta Junction), additions and deletions from the remainder of the backhoe program resulting in a total of 58 (rather than 28) EMS's (and 223 trenches) requiring backhoe monitoring, the addition of five trench stability and four borehole sites (103.3 acres) needing on-the-ground survey, changes in the EMS survey including the deletion of some EMS's (and acres) and the addition of other EMS's (and acres) for a total of 4009 acres surveyed, and changes in the centerline survey segments resulting in 0.4 miles of (completed) additions for a total of 227.1 miles. Changes in the EMS survey schedule included deletions of inaccessible sites and sites in active stream channels. Appendices 1, 2, 3 and 4 detail the work completed during the 1980 field season reported herein.

Survey Methodology Outlined by the Sponsor

Work Order No. 8 calls for visual or cursory survey of selected EMS's, meaning examining the topographic location of the EMS and clearing those in active stream channels or which are heavily disturbed and have low/no

probability of historic and prehistoric cultural resources. In cases where the potential for cultural resources exists, clearance is not provided.

Intensive survey (EMS's, centerline, etc.) calls for on-the-ground examination. One hundred percent coverage is required, with periodic clearing and shovel testing to implement observation and evaluation. Limited test excavations, meaning more extensive shovel testing, is to be undertaken on cultural resources in order to determine vertical and horizontal extent. This is to gather the information necessary for an evaluation of significance, based upon the criteria of eligibility for nomination to the National Register of Historic Places (set forth in 36 CFR 800.10). Resources are to be classified as eligible for nomination, ineligible or needing additional data for a determination of eligibility. Resources are to be related to the larger cultural-historical context. Project impact is also to be assessed.

In order to comply with the scope of Work Order No. 8 the field survey methodology and operationalization of concepts (site, impact, significance, mitigation) provided below structured our research operations.

SURVEY METHODOLOGY

The summer 1980 NWA archaeological survey was accomplished by four field crews, each comprising (basically) five persons, including a crew chief. This search for cultural resources occurred in three principal modes: 1) intensive (100%) systematic coverage of selected potential exploratory material sites (EMS's); 2) visual inspection of certain material sites in marginal environments and with anticipated negligible cultural resource potential; and 3) intensive (100%) coverage of selected segments of proposed NWA gasline corridor.

Survey methodology was consistent with that employed in previous seasons but modified on the basis of past experience in order to ensure maximum results. Variables dictating these modifications comprised general terrain character, geomorphic features, stratigraphic units, potential subsistence/commercial resource availability and the knowledge of historic and prehistoric land use gleaned through an extensive review of the literature (Aigner and Gannon 1980). The aspect of the survey which varied most in response to these environmental variables was intensity of shovel testing and surface clearing.

The work order for 1980, as in prior years, called for periodic clearing of the ground surface possessing any appreciable vegetative mat. Previous surveys where surface clearing has been conducted have resulted in marked increases in located cultural resources. During the 1980 field season a systematic program of clearing/testing involved removing the vegetative mat (typically 1 ft²), probing several inches to a foot (or more when warranted by circumstances), examining the mat and soil for anomalies (e.g., charcoal, flakes, bone), noting soil characteristics, refilling the hole and replacing the mat. No fewer than three persons were engaged in this activity in areas with considered moderate and high cultural resource potential. The remaining crew members simultaneously scanned the immediate vicinity for surficial anomalies (e.g., structures). Between surface tests, tasks consisted of navigating, visual examination of the ground surface and vicinity and note keeping. In addition to documenting cultural resources, notes were taken regarding such items as the amount of standing water, terrain, and flora and fauna. All crew members maintained independent notes. Despite the fact that 'environment' guided such testing, test pitting and surface clearing was conducted in certain considered low potential areas in order to gauge the efficacy of the technique and allow for better evaluation of survey results.

All cultural resources encountered during the 1980 field survey, and evidence of modern activity as well, were thoroughly photographed, mapped and described in notes and on pre-printed forms. This approach applied to sites formerly worked by Alyeska archaeologists as well. In the case of historic and prehistoric sites, subsurface testing delimited the extent of the activity area within constraints of time, and aimed to provide data adequate for assessment of eligibility for nomination to the National Register.

EMS Survey

For exploratory material sites requiring intensive coverage, transects were made with an average spacing of 60 feet between surveyors. In most cases each EMS was surveyed by way of a compass-oriented rectilinear grid system superimposed on the locality, using maps prepared by Michael Baker as a base. This allowed for controlled 100% coverage of each EMS and its periphery as well. This method was adopted in 1979 as it was found easier to follow compass bearings on large or heavily forested EMS's rather than follow the commonly irregular or unmarked boundaries.

A particular EMS would be entered at and along a specific bearing (using Brunton-style compasses) with appropriate spacing of crew members. Passes and turns were then made within the EMS using the 'pace and compass' technique. Paced distances were incremented normally at 100 foot intervals with pacing determined by from one to all crew members, depending on the crew chief's decision. At each 100 foot interval surface testing was conducted. A variation on the pacing and testing routine was employed by some crews and consisted of pacing the specified distance, dropping a marker, then wandering back over the area previously covered up to the last station, testing at the individual's discretion. This technique was advantageous by maintaining navigation control yet allowing each crew member to be more attentive to the surroundings rather than preoccupied with pace counting. Variations also occurred on some large EMS's which were not amenable to gridding by surveying in a spiral manner. In high potential areas, surface testing was categorically done at less than 100 foot intervals and commonly left to individual discretion (testing at will). In all cases, bedrock exposures, rodent burrow throwout, frost boils, channel banks, uprooted tree root balls and other areas void of vegetation were examined.

Those EMS's requiring visual inspection were approached on foot as closely as possible, but many would have required helicopter support to actually reach them. Each such EMS was visually scanned by all crew members with the aid of binoculars. In many of these cases, distance, large size of the EMS and frequent inclement weather precluded more than just a fraction of the site from being directly observed. The unobserved portions have subsequently been evaluated with the aid of low altitude (1:24,000) color aerial photographs. All the EMS's specified for visual examination are in geologically active areas such as river channels and modern floodplains, and are considered to have little or no cultural resource potential. The primary intent of this survey mode was to verify their topographic and geologic setting.

Alignment Segments

The bulk of scheduled proposed alignment segments surveyed were adjacent to the Alyeska oil pipeline or the Prudhoe Bay Haul Road, thereby facilitating navigation. Those segments passing 'overland' or adjacent to the Alyeska pipeline were surveyed by transects 500 feet wide, and segments adjacent to the Haul Road by transects 150 feet wide. Spacing between crew members (five) averaged 30 feet on 150 foot transects and 100 feet

on the 500 foot transects. Shovel testing and surface clearing was normally conducted at 100 or 150 foot increments, more rarely at 200 foot increments, or less than 100 feet when cultural resource potential was considered high. In other aspects, survey methodology and documentation was comparable with that employed on the material sites. In both cases, certain settings known to have a higher potential for harboring archaeological materials (e.g., promontories and river confluences) were examined more intensively. For the northern (tundra) segments, five miles of alignment per day per crew was found to be the practical maximum to achieve thorough examination of those segments with even moderate potential. This does not include the time required to document any more than minimal cultural resources. It was found that surveying more than five miles of tundra terrain per day severely impaired the alacrity of most crew members.

Trench Stability Plots and Borehole Locations

Both of these categories of location, akin to small EMS's, were surveyed in the mode described for exploration material sites.

Backhoe Monitoring

The flagged access into the proposed backhoe test site was walked by the archaeologist before the CAT was driven through the area. A visual, surface clearance was given for fifteen feet on either side of the flagged access. At each proposed backhoe test site a twenty-five foot radius was also surveyed for any visual indication of archaeological remains. If none were encountered the backhoe then proceeded to excavate the trench. The operator initially removed only the sod and the first couple of inches of the soil for close examination by the archaeologist. The sod was thoroughly checked for any archaeological remains. The archaeologist then monitored the excavation for any archaeological evidence and for changes in soil deposition. If the CAT was exiting along its path of entry (and no clearance was therefore necessary), then the archaeologist followed behind the CAT checking for any archaeological remains in the areas disturbed by the CAT's tracks.

THEORETICAL PERSPECTIVES EMPLOYED IN ARCHAEOLOGICAL ASSESSMENTS*

The present report relates the available information on cultural resources identified within the confines of the alignment and exploratory material sites surveyed in 1980. From the available information an assessment of National Register eligibility for identified sites is made. Potential impacts resulting from the effects of planning, construction and operational stages of the project upon these resources are also assessed.

The theoretical perspectives which apply, that is, the philosophy regarding cultural resources, their identification and management, must be explicated. This chapter aims to provide the background necessary to understanding the assessments of impact, significance, Register eligibility and viable mitigation alternatives which are made - in short, the application of the theoretical perspectives to the cultural resources identified and predicted in the immediate project area.

Site Definition

The basic definition of a site used in this project for purposes of reporting to the state is "a locality with any evidence of past human activity" (Shinkwin and Aigner 1979:90). Thus, a site may be found in primary or in secondary deposits; it may consist of a feature without artifacts or of a cluster of artifacts alone. Operational problems arise in the field with such a general site definition. Indeed, during the 1979 field survey we identified one locality which consisted of a depression with a (probable) hearth and one find of an obsidian artifact in a recent and disturbed context.

During the past several years archaeologists have come to rethink the concept of "site" and some have introduced "non-site" as a unit of consideration, particularly in the context of site survey (c.f. Shinkwin and Aigner 1979:90-91). The profession continues to deal with the question of decision making in the field concerning site status. There has been a general bias for workers toward the identification and favoring of large "sites," often defined in terms of artifact density and multiple loci of past human activity. Such a preoccupation excludes many manifestations of less spectacular land use by non-sedentary populations who traditionally occupied the interior of Alaska. Rather than leaving large locations with definable limits and multiple definable activity loci, interior peoples have left scanty evidence which is often widely scattered. They are not "sites" in the sense traditionally used in archaeology.

Plog et al. (1979) note that professionals working in areas of this kind, where humans leave a diffuse trail of past activities for us to follow, are increasingly cognizant of the value of loci of cultural material which are both sparse and diffuse (i.e. "non-sites"). Furthermore, they argue for the retention of both the concept of "site" and of "non-site" (p. 388).

*From Aigner 1979 with minor changes.

In this project the site concept has been operationalized for analytical purposes as a discrete and potentially interpretable locus of cultural materials. Following Plog et al. (1979) discrete means spatially bounded with those boundaries marked by at least relative changes in artifact densities. Interpretable means materials of sufficient quality and/or quantity to permit behavioral inferences. Cultural materials include artifacts, ecofacts and features. The non-site is potentially interpretable but it is a diffuse, rather than a spatially discrete locus of cultural materials.

For purposes of analysis, given the research framework which emphasizes human adaptation and land use, the depression which a hearth was reported to the state as a site (because it is a locus of past human activity; because it is discrete, interpretable, and the locus of a feature). The isolated obsidian artifact which may be redeposited in a recent context was not reported to the state as a site and is not considered as an analytic unit in this analysis (it is not a non-site). Its presence was noted; further testing was done but the artifact could not be associated with evidence of past human activity or a discrete locus of activity in the area from which it may derive.

Summary. A site is defined as a locality (spatially bounded and discrete) with evidence (artifacts, ecofacts, features) of past human activity (interpretable in terms of behavioral inferences). Such loci are considered sites for purposes of analysis and for purposes of reporting to the state. Non-sites are potentially interpretable but are spatially diffuse loci of cultural material. Although not reported to the state as sites, such loci are recorded and used for analytical purposes. Isolated artifacts lacking context (uninterpretable) are recorded but do not constitute analytical units for purposes of this research report.

Determining Effects and Impacts

Information about impacts is extremely important for management purposes. Responsible proposals for mitigation rest upon the reliable predictions of impacts. Impacts may be direct or indirect: "Direct impacts occur from the immediate physical consequences of a project's planning, construction, or use, while indirect impacts are those that are not directly caused by the project's activities but that would not occur otherwise" (Schiffer and Gumerman 1977:291; also see McGimsey and Davis 1977:111; Lipe and Lindsay 1974). It is not the concern of this report to draw a strict distinction between direct and indirect impact. Due to advisory regulations, because an impact as indirect does not relieve the sponsor of developing a viable mitigation plan.

Assessment of impacts is predicated upon evidence which indicates that damage to the archaeological resource base can "reasonably be predicted as a result of some activity or process set in motion or accelerated by the land modification project being considered" (Schiffer and Gumerman 1977: 291-292). In order to assess impacts, it is necessary to delineate the

effects of all activities that occur during a project's planning, construction, and operation, to have knowledge of the nature and significance of the archaeological resources in the affected area, and to understand the relationships between the resources and expected effects.

Since it is agreed that archaeological clearance is required preparatory to engineering studies which may impinge upon archaeological resources (such as tree clearance, core drilling, track vehicles on the tundra), planning stage effects upon the archaeological resource base are being taken into account by project management. The analysis of effects may, therefore, be considered within the same framework as that occurring in the construction stage of the project.

Primary, secondary, and tertiary effects are recognized as potentially having adverse impacts on archaeological resources. Primary effects include obvious activities such as bulldozing, coring, digging, operation of track vehicles over the land surface, and removal of material from a borrow area. Secondary effects are associated with support activities such as construction of access roads, establishment of control centers, and the like. Both directly affect the cultural resource. Tertiary effects are not the direct result of construction or support activities; for example, artifact collecting by construction personnel would constitute a tertiary effect (Schiffer and Gumerman 1977:294). Primary, secondary, and tertiary effects also must be considered when the construction is completed and the operational phase of the pipeline is begun. Additional tertiary effects would include project-induced changes in demography and land use, including opening the haul road to commercial traffic.

At this point, also in reference to tertiary effects, the position cited in Schiffer and Gumerman (1977:294) is stressed that "construction personnel will vandalize archaeological sites unless strong negative sanctions are maintained against such activities" (emphasis ours). Given the scope of the gasline project and length in miles of the work area, it is not believed likely that adequate measures are enforceable. In addition to construction personnel, support personnel and truckers supplying camps cannot be adequately monitored. Although the sponsor is aware of the potential problem of artifact collecting and has initiated steps to educate personnel in order to lessen the potential adverse impacts from tertiary effects, the position taken here is that such a program is to be recommended but it does not constitute a mitigation alternative.

Assessment of impacts and recommendations for mitigation require an evaluation of the significance of the endangered archaeological resource. This is somewhat apart from a determination of eligibility for the National Register. Register eligibility and significance are not strictly synonymous in the view of the contractor. "Adverse impacts to the archaeological resource base are not simply land disturbance or even modifications of cultural deposits; instead they are losses of values related to significance" (Schiffer and Gumerman 1977:299).

Summary. Primary and secondary effects of project planning; construction and operation may have direct adverse impacts on archaeological resources. Tertiary effects may have indirect adverse impacts.

Significance

"The assessment of significance is central to archaeological research and management planning" (Moratto and Kelly 1979:1). Significance may be arrayed within a hierarchy of cultural phenomena (intrasite, site and inter-site levels are commonly recognized). But it may be interpreted only in relation to a frame of reference. The types of significance commonly recognized include scientific, historical, ethnic, public and legal (Schiffer and Gumerman 1977:249-257; King, Hickman and Berg 1977:95-104; Moratto and Kelly 1979:1-24). A cultural resource is historically significant if it can be associated with a specific individual event or aspect of history.

Ethnic significance is associated with a cultural resource that has religious, mythological, spiritual or other symbolic importance to a group. As generally applied, the resource is a (conventional) cultural/archaeological one. Examples given by Moratto and Kelly (1979:11) are structures, settlements and other "cultural properties." Thus, in the forgoing context, the hill associated with an Athapaskan winter settlement (known from ethnographic studies) probably would not receive an evaluation of significance by most archaeologists, at least for purposes of Register eligibility. Nonetheless, "religious" significance to the native group is a consideration recently reiterated (R. Leicht, oral communication).

The assessment of scientific significance is based upon the potential of the site (or some aspect of the site, or the site within some larger context) to answer research questions. A resource has scientific or research significance if there is potential for establishing reliable facts and generalizations about the past. Thus, the resource may reveal data relevant to specific events and times, or may allow the testing of anthropological principles relating to long-term culture change and human adaptation, or may relate to theoretical concerns of the discipline, or may permit technical or methodological innovations. Determinations of Register eligibility are based upon considerations of significance.

In 1976 the Society for American Archaeology prepared an informational paper on determinations of eligibility to the National Register of Historic Places: "Any archaeological resource is potentially eligible if it can legitimately be argued that it is associated with a cultural pattern, process, or activity important to the history or prehistory of its locality, the United States, or humanity as a whole, provided its study can contribute to the understanding of that pattern, process, or activity" (Society for American Archaeology 1976:1). Furthermore, some properties which cannot be shown to be significant individually "may be eligible as segments of archaeological districts" (Society for American Archaeology 1976:1).

Resources should be evaluated in relation to a regional or areal research design. It is not a priori acceptable to judge a small, surface site insignificant - it must be a decision made in light of the regional, cultural historical frameworks. At the same time, the Society suggests that "properties that have lost their integrity by being completely excavated or otherwise totally disturbed do not normally qualify[sic], unless they are of particularly noteworthy historical significance for the data they have yielded" (Ibid., p. 1). They are not excluded a priori. A statement of significance must be based upon adequate data from and information about a site. "It is not sufficient to simply assert one's professional opinion that the property does or does not contain information important to history or prehistory" (Ibid., p. 3).

Summary. The significance of a cultural or archaeological resource is determined in light of its relationship to some framework. Significance may be historic, ethnic, public, legal or scientific. Scientific significance is a judgement, based upon the resource in light of a regional perspective of its research potential.

Mitigation

Mitigation is the alleviation of adverse impacts (McGimsey and Davis 1977:111; Schiffer and Gumerman 1977:321). Mitigation activities include avoidance and preservation of archaeological resources. The aim of conservation archaeology is to explore possible ways to preserve or avoid destruction of archaeological resources. This will depend upon the scope of the project, its current stage, and predicted impacts on and significance of the archaeological resource. However, as Schiffer and Gumerman note, when factors of significance and on-going destructive processes (including impacts) are considered, the conservation model becomes complicated. Excavation is a mitigation alternative which may be most viable in some cases.

It should be emphasized that care alone, or negative sanctions against off-road activities, do not protect sites. Active preservation of sites along the gasline is also another possible mitigative alternative. However, it should be noted that most arctic sites lack the materials which mark them for "public use" (through development of parks and the like). Stockpiling sites by burying them under fill, similarly, is sometimes recommended. In the arctic, however, burial under yards of gravel (to make sites inaccessible) will change the environment of the sites and thus the geomorphic processes affecting them. The potential impact of these newly created effects may be highly adverse in themselves. Altering the landscape may damage the integrity of the site.

Movement of the centerline to avoid impact of a known archaeological resource may result in greater site destruction than some other mitigation alternative. This is because impacts include those resulting from secondary and tertiary effects and because in avoiding one known site there is no guarantee that two new sites will not be potentially impacted. On the other hand, mitigation of a site by excavation will require not only money, but more important from a management consideration, time. The management decision must be based on a consideration of both the cost of moving the line (far

more expensive than excavation) versus the time lost in construction along the preferred route while mitigation is carried out.

This brings us finally to excavation as an alternative. If and only if avoidance and active preservation alternatives cannot guarantee the integrity of the archaeological resource, then scientific archaeological excavation, that is, multistage research, problem oriented research design, rigorous sampling programs, multidisciplinary cooperation, rapid publication and wide dissemination of results, may be a viable alternative. Excavation is justifiable, however, only if it makes a solid research contribution: salvage work as formerly undertaken does not constitute a viable mitigation alternative. Thus, when we recommend multistage mitigative excavation, we propose exploratory testing, literature review, and the like first, then development of the research program which warrants intensive excavation.

Summary. Mitigation, whether by avoidance, preservation or excavation, aims to alleviate adverse impacts to cultural resources.

WORK COMPLETED

Four crews averaging 5-6 persons each completed the survey of 227.1 miles of centerline, 4009 acres on 72 EMS's, 5 boreholes and 5 trench stability plots totalling 103.3 acres between June 28 and August 12, 1980. Two backhoe monitors oversaw the excavation of 390 trenches on 84 EMS's between July 30 and August 29, 1980. The latter worked the same schedule as the backhoe program, namely ten hours per day, seven days per week, for a total of 27 field days. Survey crews averaged 5.5, 8-10 hour field days per week with a minimum of one day per week devoted to preparation of notes and maps, equipment maintenance, and housekeeping. Crew chiefs (Gannon, Fetter, Cannon, Leitgeb) worked slightly longer daily hours and took more responsibility for mapping, scheduling, decision making and the like. Visual inspection on 52 EMS's was made and areal photo inspection of 15 others completed during the field season.

Centerline Segments Completed

Some 227.1 miles of centerline segments (discontinuous) were foot surveyed between Delta Junction and Prudhoe Bay. The sponsor assigned 231 miles in Work Order No. 8 and 0.4 miles were added in the field. Owing to permitting problems which precluded flagging by surveyors, or to access problems on short segments, 4.3 miles were deleted in the field as per verbal instructions (NWA MP 247.7-248.5, 528-525.5, 537-539.3). All other segments were surveyed by field crews during the course of the 1980 season (Appendix 1). It is estimated that some 285 worker days were required to complete the 8.7 square miles of segments for an intensity of 33 worker days per square mile. This compares with slightly more than 40 worker days per square mile along 1978 and 1979 segments which were all located in forested areas. Open terrain characterized much of the northern centerline and contributed to more rapid survey there using the same methodology employed in previous seasons. In fact, spacing of field personnel was similar, for the most part, during the 1980 season as previously, and shovel probing was at least as frequent.

Detailed information on the terrain surveyed will be provided in the final report to the sponsor and permitting agencies. In a section which follows the cultural resources identified along the centerline segments in 1980 are summarized. The significance of these resources, potential impacts from proposed construction and associated activities, and mitigation alternatives are provided.

Exploratory Material Sites: Survey

Work Order No. 8 outlined the intensive on-the-ground survey of some 67 EMS's totalling approximately 3959 acres, plus their accesses. Prior to the start of the field season, it was agreed to delete several EMS's which were not readily accessible (parts of EMS 16-1, all of 16-2, 19-2A, 30-3, and 33-1). In the field conditions permitted access to several of these (19-2A and 33-1) and they were reincorporated into the program. In addition, we field examined several unscheduled EMS's which were part of the visual

program* (but accessible and with archaeological potential) and several viable alternative EMS's to others with known associated cultural resources (1-4*, 12-2A, 12-2B, 20-3B*, 45-1*, 60-1.1). Parts of several EMS's scheduled for intensive survey were partially inaccessible and therefore partially visually examined (29-1C, 32-1, 32-3).

A total of 4009 acres on 72 EMS's was intensively surveyed during the 1980 field season by four crews of 5-6 archaeologists (Appendix 2). Several of the intensively surveyed EMS's were also monitored during the backhoe program (see below).

Prior to commencement of the 1980 field season an in-depth background review of previously recorded cultural resources in the vicinity of EMS's alerted field crews to high probability areas and to EMS's which might contain extant materials of known sites. In most cases reported sites did produce additional materials during our reassessments of them (even in cases where total excavation was reported in the literature). Several of the known resources contain significant information and are treated below in our assessments of eligibility for nomination to the National Register. In all but a few cases, owing to poor or inaccurate locational information in the literature, we were able to assign the state AHRS number to these resources.

We identified a number of new cultural resources on or immediately adjacent to the EMS's surveyed during 1980 (see below). In all but the few cases indicated sufficient information was obtained during our limited field testing to provide for an assessment of significance (and eligibility for nomination to the Register). Detailed site maps and descriptions will appear in the final report to the sponsor and permitting agencies on the 1980 work. This permit report presents AHRS data and assessments, briefly, below.

Exploratory Material Sites: Visual Examination

Work Order No. 8 listed some 64 EMS's (the actual number is larger as adjacent EMS's bear the same numbers and are differentiated by letter), mainly inaccessible from the haul road or in active stream channels, for visual examination and determination of potential for revealing cultural resources. We visually examined 52 EMS's in the field and interpreted aerial photos for an additional 15 EMS's (Appendix 2). As noted above, several of the EMS's were intensively surveyed since they were accessible and had some potential for revealing cultural resources.

Borehole Locations and Trench Stability Plots

Work Order No. 8 marked one borehole location and its access for intensive survey. During the course of the field season four additional locations and five trench stability plots were added to the program. Borehole locations varied in size from 150 x 150' to 260 x 200' plus accesses and totalled 4.6 acres. Five trench stability plots were added to the program; they were the size of small EMS's and totalled 98.7 acres (Appendix 3).

Backhoe Program: Archaeological Monitoring of Trenching

Work Order No. 8 outlined archaeological monitoring of approximately 28 EMS's which were to be trenched during the course of the field season. Two archaeologists were assigned as monitors, one with each of the two backhoes. They were responsible for examining the access routes and areas to be disturbed by backhoe activities. During the course of the program a number of field deletions and additions were made (Appendix 4, end) and a number of EMS's were added to the field program north of Delta Junction. South of Delta Junction an amendment to Work Order No. 8 expanded the original number of EMS's to be monitored to 84 and the number of trenches to be examined to 302 (see Appendix 4).

As noted above, several EMS's were both intensively surveyed and monitored as part of the backhoe program. In only two cases where cultural resources were identified (EMS 21-1 and 27-1) was their danger that the CAT would adversely impact a newly reported resource. In these examples indistinct or confused* flagging of cultural resources by survey crews was compensated for by field notes supplied the monitor which allowed the CAT to avoid the known site area both during access and trenching activities. The backhoe program did reveal several cultural resources and find areas reported in a later section.

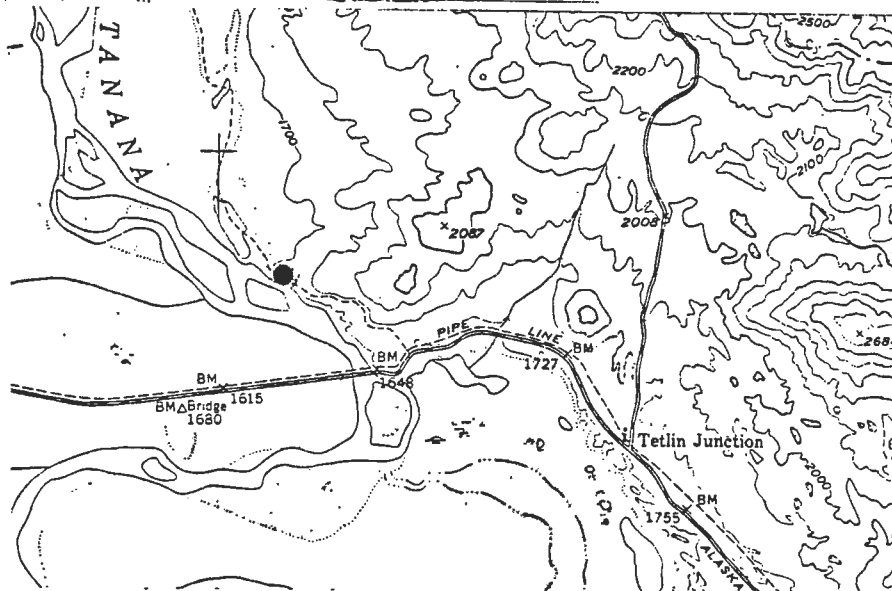
*Flagging by several NWA programs and flagging remaining from Alyeska archaeological surveys posed interpretive problems for the backhoe operator.

1980 SURVEY RESULTS AND RECOMMENDATIONS

The descriptions of cultural resources and finds identified during the 1980 field season are presented below. For newly reported and previously recorded cultural resources (and finds with AHRS designations), facsimiles of AHRS cards are presented and map locations (1:63,360) provided. In addition, a summary of assessments, to be expanded in the final report to the sponsor and permitting agencies, is provided. This includes a summary assessment of significance in terms of Register criteria. Not all resources are considered potentially Register eligible but some with information to reveal about historic or prehistoric land use in interior Alaska are noted as a separate category. When the impacts upon Register eligible resources are direct, mitigation alternatives recommended are avoidance or scientific excavation. For resources with some potential for adding useful substantive information, avoidance or salvage of remaining materials may be recommended. In cases where available data are insufficient to permit an assessment of Register eligibility, further testing of the resource or find area is recommended. Some resources and finds are judged to have no significant information to yield and no mitigation is recommended. In the case of indirectly impacted resources, our view is that the sponsor has some responsibility for lessening potential adverse effects, especially when construction and operation-related activities will increase the likelihood of such indirect impacts. Protection and stabilization (posting, fencing, filling in eroding Alyeska test pits, etc.) are potential efforts the sponsor may take towards management.

The resources and finds are presented from south to north. At the end of the review of 74 localities (newly recorded and previously recorded cultural resources and finds) Table 2 summarizes each in a tabular format.

1. TNX-find		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-321 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE T 8 (Fault Stability Study)		3. PERTINENT DATES Unknown		CODED BY			
4. LOCATION NW 1/4 of the NW 1/4 of the SW 1/4 of Section 24, T18N, R14E, Copper River Merid. TNX B-4 Quad. ACS (Zone 2): 3,407,600 ft N; 392,350 ft E.				A) AHS ID. NO.			
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) 3 black basalt flakes were recovered from a paleosol in the loess overburden on the east bank of the Tanana River. Found in a road cut exposure. No other material located, site is a find spot. Spruce forest area, medium dense. Good view up and down the Tanana River. Material located 53.67cm below the surface. Location suggests that these may be the remains of a site that was destroyed by the road. NWA intends to use this area for a fault stability study trench site. Clearance was given for trenching only if an archeologist/monitor was present.				B) SITE NAME			
				C) LAT. (DEG) (MIN) (SEC) 63° 19' 25"			
				LONG. (DEG) (MIN) (SEC) 142° 39' 20"			
				D) THEME E) RESOURCE NATURE			
				F) OWNERSHIP C) SIZE			
				H) PRESERVATION STATUS			
				I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
6. SIGNIFICANCE As this is a find spot, this site is of limited research value. The research potential may change, however, after monitoring of the test trench.				K) DATES			
				L) RELIABILITY M) AHS DATE			
				N) NR/NRE DATE			
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES R. Joan Dale Fault Stab. Notebook:10-12 & 34-44. Leitgeb Soils Book 12:15-27.				O) SITE CONDITION			
8. OWNER OF PROPERTY/ADDRESS USA (Tetlin village ownership election) Museum Acc#UA80-166				P) SITE ENVIRONMENT			
				Q) SITE REPOSITORY			

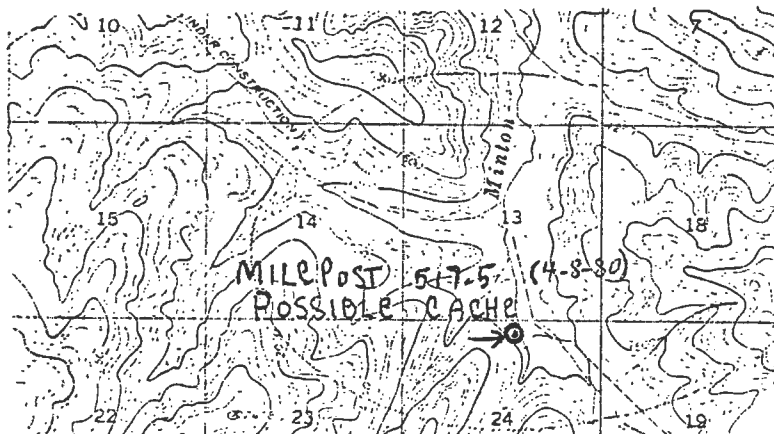


Significance: None. Presumably the resource was destroyed earlier by road construction. Reconnaissance and subsequent testing revealed no additional materials.

Impact: Directly on access but no adverse effect will occur.

Mitigation: None

1. XBD-042		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE		3. PERTINENT DATES		CODED BY			
AS 92/1/L Milepost 517.5 (April 1980)		unknown		A) AHAS ID. NO.			
4. LOCATION NE 1/4 of the NW 1/4 of the NE 1/4 of Section 24, T6S, R7E, Fairbanks Meridian, XBD S-Squad. (1:63,360). ACS (Zone 3): 3,796,200 ft North; 458,000 feet East				B) SITE NAME			
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)				C) LAT. (DEG) (MIN) (SEC)			
A rounded depression, possible cache, 1.7 m. E-W X 1.84 M. N-S, located in an area of stunted spruce, moss, labrador tea, lichen; hummocky terrain. Located north of one of the Minton Creek drainage channels, near the junction of two cyclical streams, backed by a steep NE-SW ridge to the south. One small piece of charcoal and some possible bird bones recovered. "Cache" is within the proposed NWA centerline corridor and as of July, 1980, we recommended avoidance.				64° 23' 15"			
				LONG. (DEG) (MIN) (SEC)			
				146° 15' 55"			
				D) THEME E) RESOURCE NATURE			
				F) OWNERSHIP G) SIZE			
				H) PRESERVATION STATUS			
				I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
				K) DATES			
				L) RELIABILITY M) DATA DATE			
				N) VISIT DATE			
				O) SITE CONDITION			
				P) SITE ASSIGNMENT			
				Q) SITE REVISIONS			
6. BIBLIOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980): Leitgeb Field Notes Book 1:25-26.							



Significance: Low. This isolated (cache?) is unlikely significant to reveal information on historic land use, though some data may be forthcoming.

Impact: Directly on proposed centerline.

Mitigation: Avoid or salvage.

LIV_041(7). Addendum

ALASKA HERITAGE RESOURCES SURVEY
RECORD CARD10-521
REV. 1972, 1976-1977

SPACE BELOW FOR ADP USE ONLY

2. NAME OF SITE

NWA field # EMS 71-3B Site Five (Tolovana 3) (S of EMS-71-3B)

3. PERTINENT DATES

4. LOCATION

N half of the NE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Sec 36, T8N, R6W, Fbks Meridian
LIV B-4 Quad. ACS (zone 4): 4,199,300' N; 701,500' E

5. DESCRIPTION (CONDITIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION)

Located on the flat crest of a bedrock ridge (Rosebud Knob) approx 3300' E of 70-Apl/AMS-1M road; 700' SW of the pipeline. Datum stake on site weathered, but possibly reads Tol 3. Location on last knoll before steep drop off correlates with Cooks map (1977:258) and text location (1977:268). Much cultural material on surface and in open test pits. Off EMS, so did not do test pits. Two areas of excavation, one on small, sharp knob, one on flat area to the W & NW. Test pits were not filled in, so site is subject to erosional processes. Cultural material was eroding out of the side walls of the test pits. NWA's proposed material source is approx 300' N. This site would presumably not be subject to primary impact, but it would be subject to tertiary impact ("potters") and possibly secondary impact. Due to other sites located on the EMS, we have recommended avoidance of the area at this time.

A final report on this site has never been published. There are no site maps in the literature and no discussion of excavation strategies. Cultural material is still present; however, as the site has been so greatly disturbed by excavation and erosion and as the literature on previous work is incomplete, the remainder of the cultural material on this site is of limited research value.

7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES

Derry in Cook 1977:257-299. Derry in Cook 1976:12-18. AHRs card. UA/NWA Archeological Survey (1980). Leitgeb Field Notes Book 1:150.

8. OWNER OF PROPERTY/ADDRESS

USA

Coded by

A) AHRs ID. NO.

B) SITE NAME

LAT. (DEG) (MIN) (SEC)

65° 29' 03"

LONG. (DEG) (MIN) (SEC)

148° 40' 20"

D) THEME E) RESOURCES NAT.

F) OWNERSHIP G) SIZE

H) PRESERVATION STATUS

I) CULTURAL AFFILIATION

J) BIBLIOGRAPHIC REFERENCE

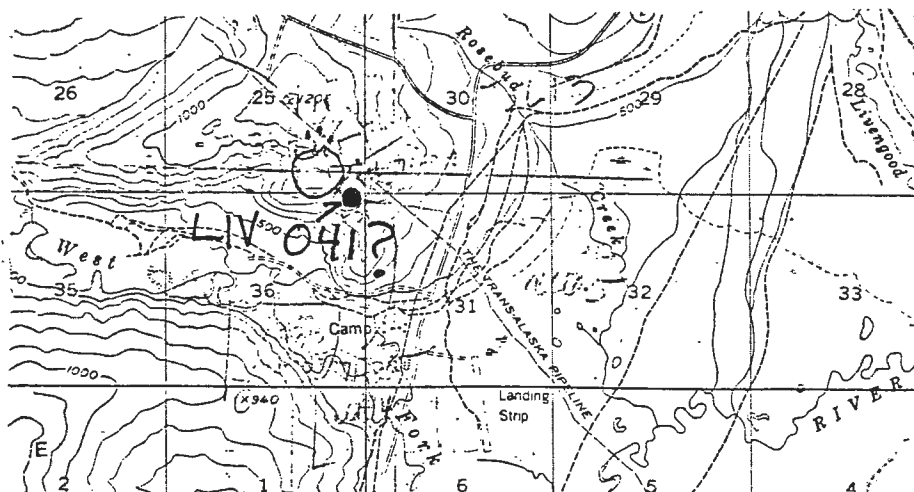
K) DATES

L) RELIABILITY M) AHRs DATE

N) NR/NRE DATE

O) SITE CONDITION

P) SITE ENVIRONMENT



Significance: Low. Extensive site damage and erosion suggest little pertinent information on past land use exists.

Impact: Indirect. Proposed EMS is 300' distant.

Mitigation: Avoid and fill in Alyeska test pits to curtail erosion.

Possibly LIV 043

1. Addendum ANRS ID. NO.

ALASKA HERITAGE RESOURCES SURVEY
RECORD CARD10-521
REV. 1972, 1976-1977

SPACE BELOW FOR ADP USE ONLY

2. NAME OF SITE

3. PERTINENT DATES

Prehistoric

NWA field F EMS71-3B Site 4 (Tolovana 52)

4. LOCATION
NE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Sec 25, T8N, R6W, Fbks. Meridian, LIV B-4 Quad. ACS (Zone 4): 4,199,900 ft N; 701,700 ft E.5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)
Located on the flat crest of a bedrock ridge (Rosebud Knob) approx 3100' E of 70-APL/AMS-1M road; directly SW of the pipeline. Datum stake on site weathered and unreadable. Per Cook's map (1977: 258) may be LIV043. However, LIV 043 was 900 sq. meters per Cook; while our site map is roughly 25 sq. meters. Possibly, this area is only one of the three loci of LIV 043, with the other two loci having been destroyed by the pipeline. There are no published site maps, so cannot correlate our site map. Some material still on the surface and in the open test pits, but not much. NWA intends to use this area for a material source. As of July, 1980, we have recommended avoidance of this area.

See also LIV 030, 040, and 041 Addendums.

6. SIGNIFICANCE Tests around the perimeter of this knoll did not reveal any other cultural material, and there was little material left on the knoll or in the test pits. There was no final report on LIV 043. Due to lack of information on the previous excavation and the apparent small amount of remaining cultural material, this site is of severely limited research value.

7. REFERENCES (LITERATURE, DOCUMENTS, PHOTOGRAPHIC REFERENCES)

Derry in Cook, 1976: 18-20, Derry in Cook 1977:258-299. UA/NWA Archeological Survey (1980): Leitgeb field notes Book 1:55, SBL3:10-11, SBL4:22.

8. COUNTRY OF ORIGIN/ADDRESS

USA

CODED BY

A) ANRS ID. NO.

B) SITE NAME

C) LAT. (DEG) (MIN) (SEC)
65° 29' 09"LONG. (DEG) (MIN) (SEC)
148° 40' 18"

D) THEME E) RESOURCE NACL

F) OWNERSHIP G) SIZE

H) PRESERVATION STATUS

I) CULTURAL AFFILIATION

J) BIBLIOGRAPHIC REFERENCE

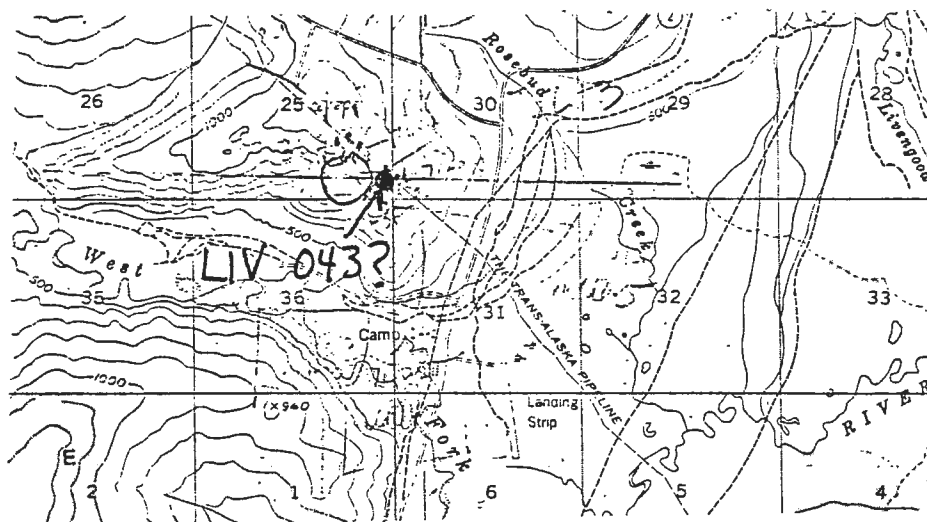
K) DATES

L) RELIABILITY M) ANRS DATE

N) N/A DATE

O) SITE CONDITION

P) SITE ENVIRONMENT

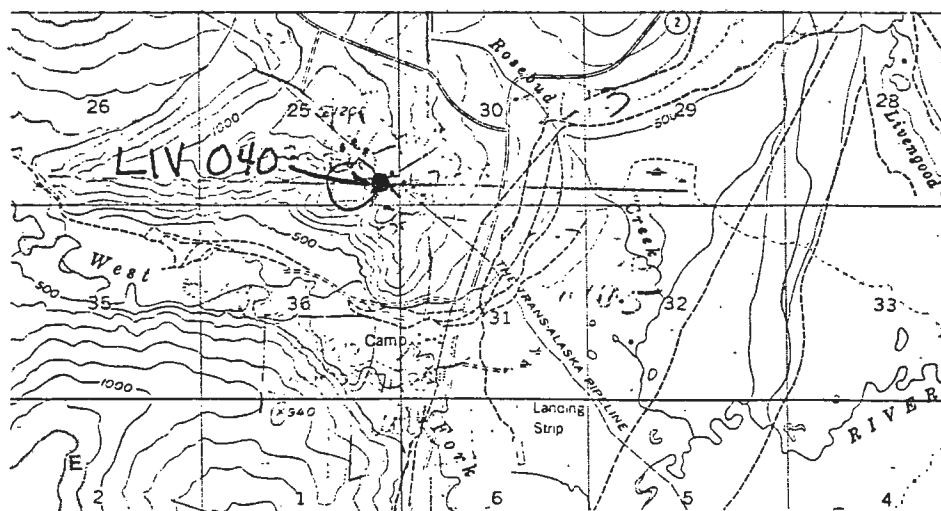


Significance: Low. Presumably this is a partially extant locus of LIV-043. Some limited data remain in test pits and on the surface.

Impact: Directly on a proposed EMS.

Mitigation: Avoid or salvage.

1. LIV 040 Addendum ANRS ID. NO.		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		30-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE NWA field # EMS 71-3B Site 3 (Tolovana 2)				3. PERTINENT DATES		CODED BY	
4. LOCATION NW¼ of the SE¼ of the SE¼ of the SE¼ of sec 25, T8N, R6W, Fairbanks Meridian, LIV B-4 Quad. ACS (Zone 4): 4,200,000' N; 701,400' E.						A) ANRS ID. NO.	
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Located on the flat crest of a bedrock ridge (Rosebud Knob), approx. 2700' E of 70-APL/AMS-1M road, and approx. 200' SW of the pipeline. Alpine meadow knoll with scattered, thin willow bushes. Site identified by wooden stake labeled Tol. 2 and by correlation with map in Anderson. (1975:17). Some flakes on surface, one flake found in new test pit. Two other new test pits on knoll were sterile. Possible burin and nine flakes recovered from two test pits done off knoll, one on E, one on W. Site subject to erosional processes as previous test pits were not filled in. Site reported upon by Derry in Cook, 1977:258-299. The report compares and contrasts Livengood chert sites and is apparently not a final report as the analysis of artifacts was not complete and therefore, "...we are not in a position to present conclusions." (p.296) More specific excavation information is available in Anderson. (1975). The site has limited research value. There was little cultural material noted on the knoll itself, in the back dirt or in the open test pits. The surrounding areas however, do contain cultural mat. and this is important as documentation that the entire area, rather than just the knolls, had been utilized. An expansion of this site could reveal add. info. on aboriginal stone use and resource strategies. Derry in Cook, 1977:258-299. Derry in Cook, 1976:10-11. Anderson, V. Sue Tolovana #2: a quarry site. Unpublished manuscript. 1975. UA/NWA Arch. Survey (1980) Teige Field Notes Book 1:54; SBL4:19; SBL3:10.						B) SITE NAME	
						C) LAT. (DEG) (MIN) (SEC) 65° 29' 10"	
						LONG. (DEG) (MIN) (SEC) 148° 40' 23"	
						D) THEME	
						E) RESOURCE NAT.	
						F) OWNERSHIP	
						G) SIZE	
						H) PRESERVATION STATUS	
						I) CULTURAL AFFILIATION	
						J) BIBLIOGRAPHIC REFERENCE	
						K) DATES	
						L) RELIABILITY	
						M) ANRS DATE	
						N) NR/NRE DATE	
						O) SITE CONDITION	
						P) SITE ENVIRONMENT	
						Q) SITE REMARKS	
6. OWNER OF PROPERTY/ADDRESS USA				Museum Acc #80-216			

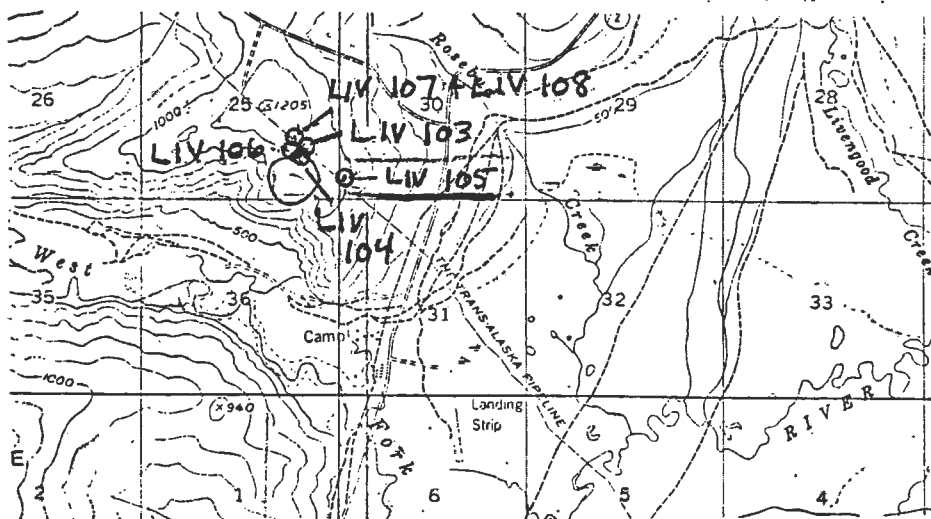


Significance: Medium. As part of the wider phenomenon of Livengood workshops and lookouts, what remains of LIV-040 has information of interest to yield and could be considered eligible for Register nomination in that wider context.

Impact: Directly on proposed EMS.

Mitigation: Avoid and fill in Alyeska test pits to curtail erosion or excavate.

1. LIV-105		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE				3. PERTINENT DATES			
EMS 71-3A Site 5 (The Animal Truck Site)							
4. LOCATION				5. FORMED BY			
Center of the western half of the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Sec 30, T8N, R5W,, Fbks. Meridian, ACS (Zone 4): 4,200,000' N; 701,900 ft E				A) AHS ID. NO.			
6. DESCRIPTION OF SITE (TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)				B) SITE NAME			
Site 100' SW of LIV-046 (Tolovana 9)* on a narrow, E-W trending bedrock knoll 1 mi SW of Rosebud Creek & 2 mi NE of the Tolovana River. Knoll completely vegetated on crest with some exposures on the steeply sloping eastern edges. Some outcrops of Livengood Chert. On west, knoll truncated by Alyeska pipe pad. Birch, spruce, willow, alder, moss/lichen veg. mat. Cultural mat. scattered sporadically up to 132' E of summit. Site 50' wide at crest, fanning out wider in E. 30cm x 30cm test pit on crest yielded 14 chert flakes. Most likely another Livengood workshop/possible quarry site. Condition of site good, as it has a vegetation cover and has not been potted or previously excavated. NWA intends to use this knoll as a material source. As of July, 1980 avoidance of the entire knoll has been recommended.				C) LAT. (DEG) (MIN) (SEC) 65° 29' 10"			
				LONG. (DEG) (MIN) (SEC) 148° 40' 12"			
				D) THEME			
				E) RESOURCE NATURE			
				F) OWNERSHIP			
				G) SIZE			
				H) PRESERVATION STATUS			
				I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
				K) DATES			
				L) RELIABILITY			
				M) AHS DATE			
				N) N/A DATE			
				O) SITE CONDITION			
				P) SITE ENVIRONMENT			
				Q) SITE REPOSITORY			
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES							
UR/NWA Archaeology Survey (1980): Leitgeb Notes Book 1:57-58/Soils' Book L4:29-33; Museum Accession #UABO-221.							
8. OWNER OF PROPERTY/ADDRESS							
Federal				*Assumed to Tolovana 9 as a 2" x 2" wooden stake labeled so was found at the site.			



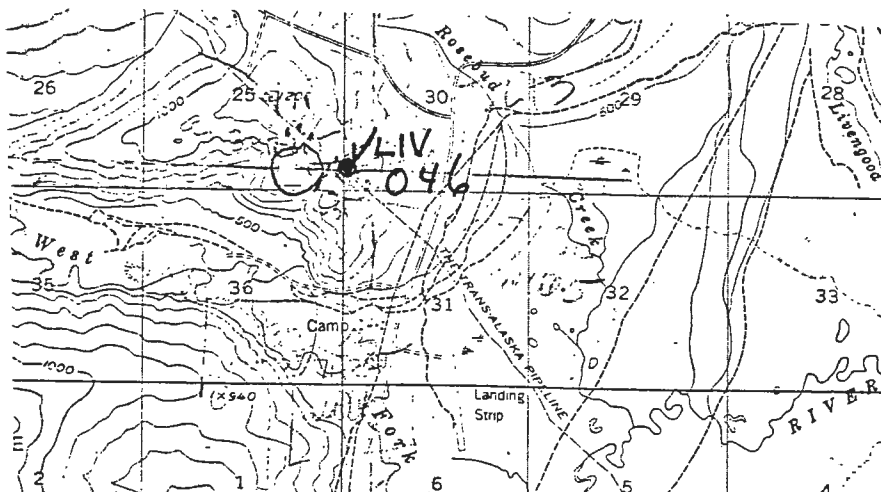
Significance: High. This site potentially eligible for Register nomination as part of the Livengood site complex. Furthermore, LIV-105 is intact.

Impact: Directly on proposed EMS.

Mitigation: Avoid or excavate.

ALASKA RESOURCES LIBRARY
U.S. Department of the Interior

1. LIV 046 Addendum AHRS ID. NO.		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE				3. PERTINENT DATES			
NWA field # 71-3A site 3 (Tolovana 9)*				Prehistoric			
4. LOCATION				5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)			
Center of the western half of the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Sec 30, T8N, R5W, Fbks Meridian, LIV B-4Quad. ACS (Zone 4): 4,200,100N; 701,950'E				Located on the flat crest of a bedrock ridge (Rosebud Knob), approx. 3100' E of 70-APL/AMS-1M, approx 50' NE of the pipeline. Previously documented by Alyeska. However, the total information on the site consists of only an AHRS card which has listed under 'Description' "Single Biface". References listed are "Alyeska Notes". Site consists of 3 knolls, knoll 1, 1A & 2. Knoll 1A has 3 one ft. + test pits; knoll 2 has 5 small exploratory holes. Site does not appear to have been excavated. Lithic scatter on all three knolls. Condition of site poor due to erosional processes. (Bare rock exposures and also eroding side walls of pits. None of the previous test pits had been filled in.) NWA intends to use this area for a possible material source. As of July, 1980, avoidance of this area has been recommended.			
6. SIGNIFICANCE				7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES			
This site did not appear to have been excavated, merely tested and perhaps slightly "potted". The potential exists for valuable information to be gathered regarding aboriginal stone working practices. (See LIV-103, 104, 107, 108).				Previous AHRS card. UA/NWA Archeological Survey (1980): Leitgeb field notes Book 1:57-58. Soils Book L4:30-33			
8. OWNER OF PROPERTY/ADDRESS				9. ASSUMED TO BE Tpl. 9 as a 2" * & 2" wooden stake so labeled was found at the site.			
USA				Museum Acc # UAB0-210			
A) AHRS ID. NO.		B) SITE NAME		C) LAT (DEG) (MIN) (SE)		LONG. (DEG) (MIN) (SE)	
				65° 29' 10"		148° 40' 12"	
D) THEME		E) RESOURCE NATL		F) OWNERSHIP		G) SIZE	
H) PRESERVATION STATUS		I) CULTURAL AFFILIATION		J) REGIONAL/GRAPHIC REFERENCE		K) DATES	
L) RELIABILITY		M) AHRS DATE		N) DATE		O) SITE CONDITION	
P) SITE ENVIRONMENT							



Significance: Medium to High. This site has potential for Register eligibility in the wider context of Livengood sites. There is little evidence of previous disturbance.

Impact: Directly on proposed EMS.

Mitigation: Avoid or excavate.

2. NAME OF SITE

3. PERTINENT DATES

(Tolovana 13) (On EMS-71-3A) Prehistoric

4. LOCATION SE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Sec 25, T8N, R6W, Fbks Meridian, Liv B-4 Quad. ACS (Zone 4): 4,200,300 ft N.; 701,700 ft E.

5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)

Located on the flat crest of a bedrock ridge (Rosebud Knob), approximately 2800' E of 70-APL/AMS-1M road, 225' NE of pipeline is a 2 X 2" wooden stake labeled TOL 13. Pounded into spongy moss vegetative mat. No exposures no excavations, no sign of any disturbance. Absolutely nothing published on LIV 050, Tol 13. Total information available is an AHRS card with the listed reference "Alyeska Notes".

6. SIGNIFICANCE

7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES

AHRS card. UA/NWA Archeological Survey (1980): Soils Book Leitgeb 3:12-13

8. OWNER OF PROPERTY/ADDRESS
USA

CODED BY

A) AHRS ID. NO.

B) SITE NAME

C) LAT. (DEG) (MIN) (SEC)

65° 29' 12"

LONG. (DEG) (MIN) (SEC)

148° 40' 18"

D) THEME E) RESOURCE STATUS

F) OWNERSHIP G) SIZE

H) PRESERVATION STATUS

I) CULTURAL AFFILIATION

J) BIBLIOGRAPHIC REFERENCE

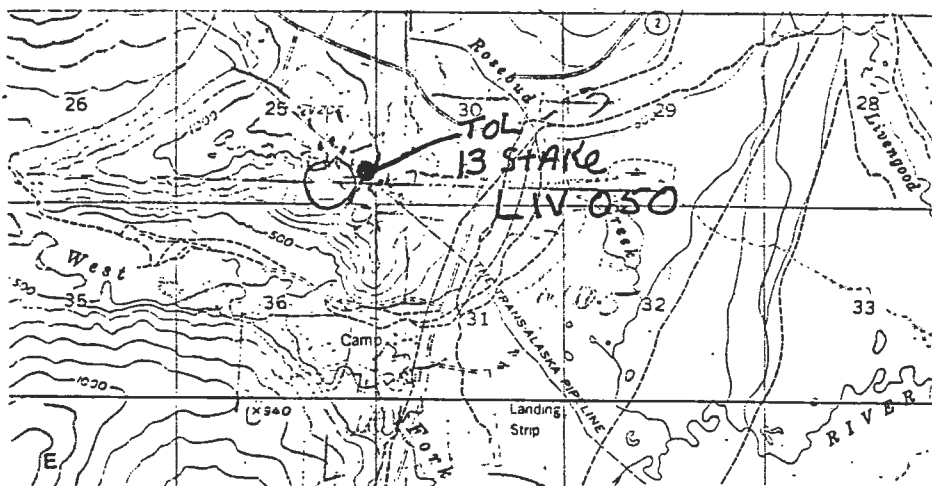
K) DATES

L) RELIABILITY M) AHRS DATE

N) NR/NRE DATE

O) SITE CONDITION

P) SITE ENVIRONMENT

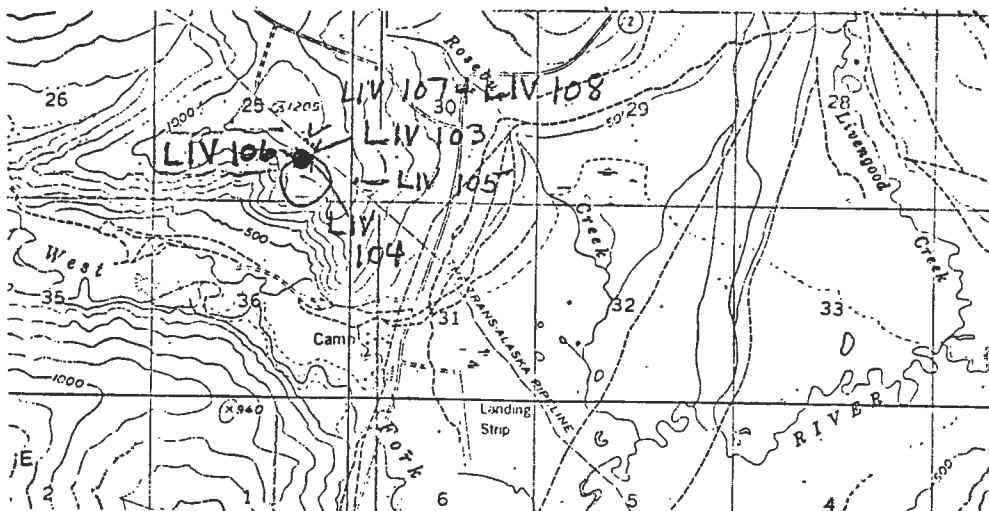


Significance: Unknown. Potentially the site is important in the wider context of Livengood sites.

Impact: Directly on proposed EMS.

Mitigation: Avoid or test further and assess.

LIV-106		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD	10-521 REV. 1972, 1976-1977	SPACE BELOW FOR ADP USE ONLY
1. NAME OF SITE		3. PERTINENT DATES		CODED BY
EMS 71-3B Site 2 (Mindibear Mound)		Unknown Prehistoric		A1 AMRS ID. NO.
2. LOCATION		NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 25, T8N, R6W, FBK5 Meridian, LIV B-4 Quad. ACS (Zone 4): 4,200,500 ft N; 700,500 ft E		B) SITE NAME
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)		A lithic scatter located on the flat crest of a E-W trending bedrock ridge, 1900 ft E of access road 70-APL/AMS-1M; 150 ft. from LIV-030 (Tolovana 1) on a bearing of 400T; datum to datum. This ridge was referred to as Rosebud Knob by Alyeska archaeologists and there are numerous other such sites in the immediate vicinity. Two surface flakes collected; 11 recovered from test pit. Chert outcrops cover an area 110ft X 40ft. Two apparent 50 X50 cm test pits on vegetated part of knoll, and two larger possible test pits on outcrop area. Did not appear to have been excavated. Small birch, tiny spruce, lichen, moss, star moss. Excellent view to S and SW. Below knob there were cottonwood, birch, spruce, willow, and diamond willow.		C1 LAT. (DEG) (MIN) (SEC) 65° 29' 15"
6. SIGNIFICANCE		Apparently not excavated as part of LIV-030, may be a new site as testing was minimal. No references have yet been discovered. Part of a prehistoric lithic/quarry reduction workshop complex (undisturbed) The potential exists for more highly valuable information to be gathered regarding aboriginal stone working practices. (See LIV- 103,104,107,108)		C2 LONG. (DEG) (MIN) (SEC) 148° 40' 45"
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES		UA/NWA Archaeology Survey (1980): Leitgeb Field Notes Book 1:53-54.		D) INHER. () RESOURCE NATURAL
8. OWNER OF PROPERTY/ADDRESS		USA		F) OWNERSHIP () SIZE
		Museum Accession # UA80-215		G) PRESERVATION STATUS
				H) CULTURAL AFFILIATION
				I) BIBLIOGRAPHIC REFERENCE
				J) DATES
				K) RELIABILITY () AMRS DATE
				L) NR/NRE DATE
				M) SIZE CONDITION
				N) SITE ENVIRONMENT
				O) SITE RESIDUARY

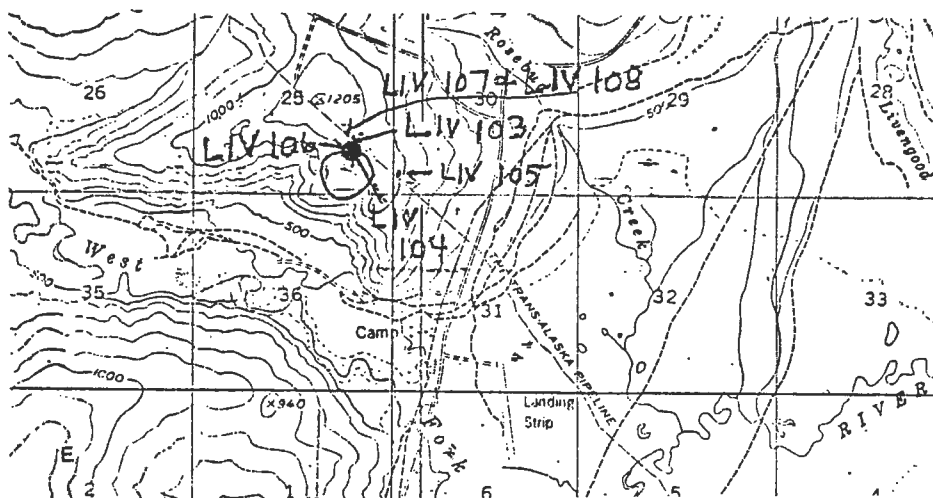


Significance: Medium to High. The site has potential for Register eligibility in the wider context of Livengood sites. The site appears intact.

Impact: Directly on proposed EMS.

Mitigation: Avoid or excavate.

LIV - 104		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977	
2. NAME OF SITE EMS 71-3B Site 6		3. PERTINENT DATES prehistoric			
4. LOCATION NW/4 of the NW/4 of the SE/4 of the SE/4 of Sec 25, T8N, R6W, Fbks Meridian, Liv B-4 Quad. ACS (Zone 4); 4,200,500' North; 700,600' East					
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION) Located on the flat crest of an E-W trending bedrock ridge 1800 ft east of access road 70-APL/AMS-1M along pipeline, ca. 120 ft east of LIV-030 (Toll.) and 15' next to the pipeline cut on its western side; may, in fact, be a 'component' of LIV-030. Numerous other sites exist in the vicinity. Site consists of one core-like fragment and a chert chunk with flake scars. The area contains numerous outcrops of "Livengood chert." Intensive visual survey revealed a small flake scatter on the veg mat. Willow, spruce, alder & birch trees are dominant vegetation with well-spaced leafy understory. NWA intends to use this area for a possible material source. As of July 1980, avoidance of this area has been recommended.					
6. SIGNIFICANCE Site is part of a prehistoric lithic quarry reduction workshop complex. At least 14 such sites have been formerly documented/excavated by Alyeska archaeologists, but the potential exists for more highly valuable information to be gathered pertaining to aboriginal stone working practices. Evidently, the entire area were utilized in prehist. times & can be considered one large locus.					
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Museum Accession #UA80-217; Leitgeb field notes Book 1:52 & 151;					
8. OWNER OF PROPERTY/ADDRESS USA					
SPACE BELOW FOR ADP USE ONLY					
CODED BY					
A) AHS ID. NO.					
B) SITE NAME					
C) LAT. (DEG) (MIN) (SEC) 65° 29' 15"					
LONG. (DEG) (MIN) (SEC) 148° 40' 40"					
D) THEME E) RESOURCE NATURE					
F) OWNERSHIP G) SIZE					
H) PRESERVATION STATUS					
I) CULTURAL AFFILIATION					
J) BIBLIOGRAPHIC REFERENCE					
K) DATES					
L) RELIABILITY (M) AHS DATE					
N) NR/NRE DATE					
O) SITE CONDITION					
P) SITE ENVIRONMENT					
Q) SITE REPOSITORY					

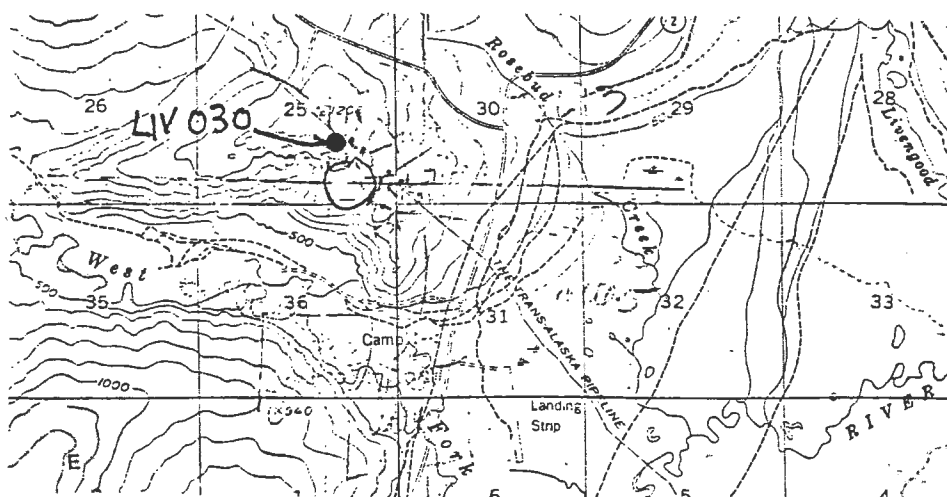


Significance: Medium to High. The site has potential for Register eligibility when considered in the wider context of Livengood sites. The site is apparently small but intact.

Impact: Directly on proposed EMS.

Mitigation: Avoid or excavate.

1. LIV 030 Addendum ANAS ID. NO.		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE NWA field # EMS 71-3B Site one (Tolovana 1)				3. PERTINENT DATES Prehistoric		CODED BY	
4. LOCATION NE¼ of the NE¼ of the SW¼ of the SE¼ of Sec 25, T8N, R6W, Fbks Meridian, LIV B-4Quad ACS (Zone 4): 4,200,600 ft. N; 700,500 ft. E.						A) ANAS ID. NO.	
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Located on the flat crest of a bedrock ridge (Rosebud Knob), approx 1600' E of 70-APL/AMS-1M road; 140' SW of pipeline. Datum stake found on site, and location correlated with map in Cook, 43 5' squares and ca 75 one ft. squares had previously been excavated. Situated on knoll, approx 400' NE/ SW and 75' wide. Entire knoll littered with lithic scatter. vast number of flakes, many retouched, and some artifacts present in back dirt and in test pits. Two new test pits yielded material in situ. Site condition very poor as previous test pits had not been backfilled, allowing erosional processes to begin. Site reported upon by Derry in Cook, 1977:258-299. The report compares and contrasts Livengood chert sites and is apparently not a final report as the analysis of artifacts was not complete, and therefore "...we are not in a position to present conclusions." (p. 296)						B) SITE NAME	
6. EXPLANATION Despite the former archaeological activities - which have been only marginally documented - and the questionable provenience of certain 'discarded'/non-collected cultural materials, considerable research potential exists for understanding aboriginal lithic reduction techniques						C) LAT. (DEC) (MIN) (SE) 65° 29' 15"	
7. RELEVANT PRINTED, TAPED, WRITTEN, PHOTOGRAPHIC REFERENCES UA/NWA Archeological Survey (1980): Leitgeb Field Notes Book 1:50-52; Soils Book L3:4-9; Soils Book L4:16-17. Derry in Cook, 1977:258-299. Derry in Cook, 1976:10-11.						LONG. (DEC) (MIN) (SE) 148° 40' 45"	
8. OWNER OF PROPERTY/ADDRESS USA						D) THEME E) ALSCOUR NAT'L	
Museum Acc # 80-214						F) OWNERSHIP G) SIZE	
						H) PRESERVATION STATUS	
						I) CULTURAL AFFILIATION	
						J) BIBLIOGRAPHIC REFERENCE	
						K) DATES	
						L) RELIABILITY M) ANAS DATE	
						N) N/RE DATE	
						O) SITE CONDITION	
						P) SITE ENVIRONMENT	

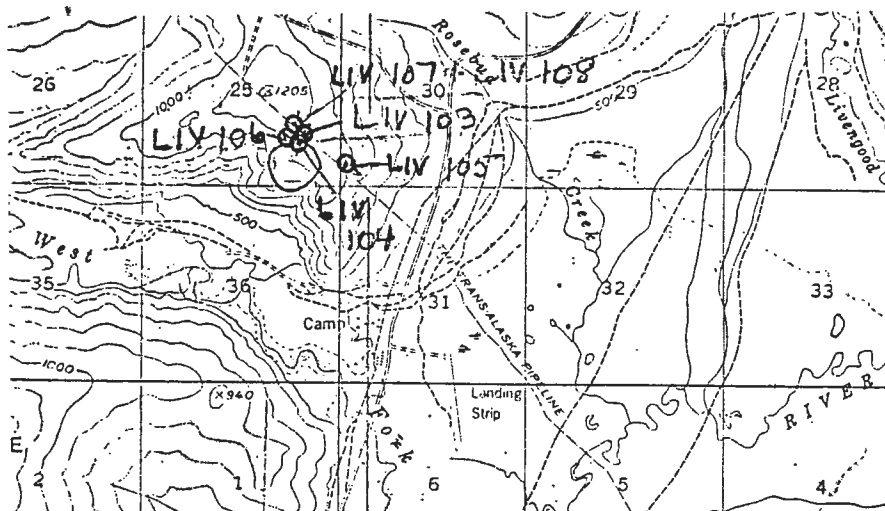


Significance: Medium. There is evidence remaining which indicates potential Register eligibility when considered in the wider (Livengood) context. Some in situ material remains.

Impact: Directly on proposed EMS.

Mitigation: Avoid and fill Alyeska test pits to curtail erosion or excavate.

1. LIV-107		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE		3. PERTINENT DATES		CODED BY		A) AMS ED. NO.	
EMS 71-3A Site 4		Prehistoric		B) SITE NAME			
4. LOCATION		5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)		C) LAT. (DEC) (MIN) (SEC)		D) LONG. (DEC) (MIN) (SEC)	
SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 25, T8N, R6W Fairbanks Meridian, LIV-B-4 Quad. ACS (Zone 4): 4,200,800 ft N; 700,750 ft E		Located on the flat crest of a bedrock ridge, approximately 1700 ft. E of 70-APL/AMS-1M. This ridge was referred to as Rosebud Knob by Alyeska archaeologists and numerous other sites exist in the immediate vicinity. One 8cm X 4 $\frac{1}{2}$ cm black chert chunk with flake scars was found 100ft SE of 71-3A site 2 (LIV-107). Well spaced birch, spruce, labrador tea, spongy moss mat, except for knolls where the vegetation cover is lichen. NWA intends to use this area as a possible material source. As of July, 1980, avoidance has been recommended.		65° 29' 18"		148° 40' 42"	
6. SIGNIFICANCE		7. RELEVANT FACTORS, LANGUAGES, PHOTOGRAPHIC REFERENCES		D) THEME		E) RESOURCE NATURE	
Part of a prehistoric lithic/quarry reduction workshop complex. at least 14 such sites have been formerly documented/excavated by Alyeska archaeologists, but the potential exists for more highly valuable information to be gathered regarding aboriginal stone working practices. Evidently, the entire area (knoll & ridges, as well as the inter-tracts) were utilized in prehistoric time, and can be considered as a single locus.				F) OWNERSHIP		G) SIZE	
8. OWNER OF PROPERTY/ADDRESS		9. PRESERVATION STATUS		H) CULTURAL AFFILIATION		I) BIBLIOGRAPHIC REFERENCE	
USA		Museum Acc. # UA 80-220		J) DATES		K) RELIABILITY	
				L) AMS DATE		M) NWA DATE	
				N) SITE CONDITION		O) SITE ENVIRONMENT	
				P) SITE REPOSITORY			

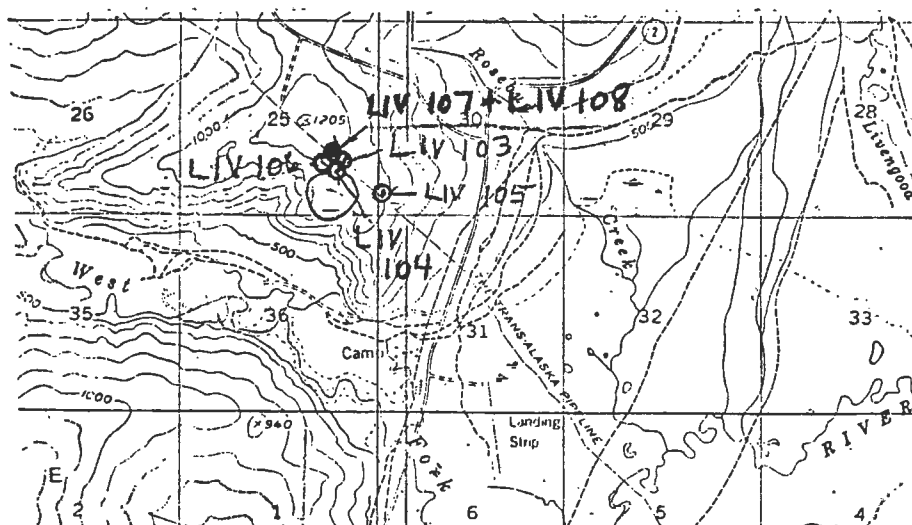


Significance: Medium. Potential for Register eligibility exists at this site when considered as part of the larger Livengood context (see LIV-103, 104, 108). Vegetative cover suggests associated in situ materials.

Impact: Directly on proposed EMS.

Mitigation: Avoid or excavate.

1. LIV-108		ALASKA HERITAGE RESOURCES SURVEY REPORT CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE		3. PERTINENT DATES		4. COORDINATES		5. OTHER DATA	
EMS 71-3A Site 1		unknown prehistoric		LAT. (DEG) (MIN) (SEC) 65° 29' 20"		LONG. (DEG) (MIN) (SEC) 148° 40' 42"	
6. LOCATION South half of the SW/4 of the NE/4 of the SE/4 of Sec 25, T8N, R6W, Fbks Meridian, Liv B-4 Quad. ACS (Zone 4); 4,200,900 ft North; 700,550 ft. East		7. DESCRIPTION Located on the flat crest of a bedrock ridge approx. 1500 ft east of 70-APL/AMS-1M and 50' NE of Alyeska pipeline. This ridge was referred to as Rosebud Knob by Alyeska archaeologists and there are numerous other sites in the immediate vicinity. 30 flakes recovered from two test pits 20' apart. Site near a game trail, close to outcrops of chert. Well spaced spruce, birch, labrador tea, and except for knolls & outcrops area, spongy moss mat. Number of flakes and presence of chert outcrops indicates workshop/quarry site. NWA intends to use this area for a possible material source. As of July 1980, avoidance of this area has been recommended.		8. PRESERVATION STATUS		9. CULTURAL AFFILIATION	
10. SIGNIFICANCE Part of a prehistoric lithic/quarry reduction workshop complex. At least 14 such sites have been formerly excavated/documented by Alyeska archaeologists, but the potential exists for more highly valuable information to be gathered pertaining to aboriginal stone working practices. Evidently the entire area was utilized in prehist. times & can be considered one lrg locus.		11. BIBLIOGRAPHIC REFERENCE		12. DATES		13. PRESERVATION STATUS	
14. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Museum Accession #UA80-218; Leitgeb field notes Book 1:56-57 and 152-153; Soils Book L4:26-27		15. LIKELIHOOD		16. AMRS DATE		17. SITE CONDITION	
18. OWNER OF PROPERTY/ADDRESS USA		19. SITE ENVIRONMENT		20. SITE DEPOSITION		21. SITE DEPOSITION	

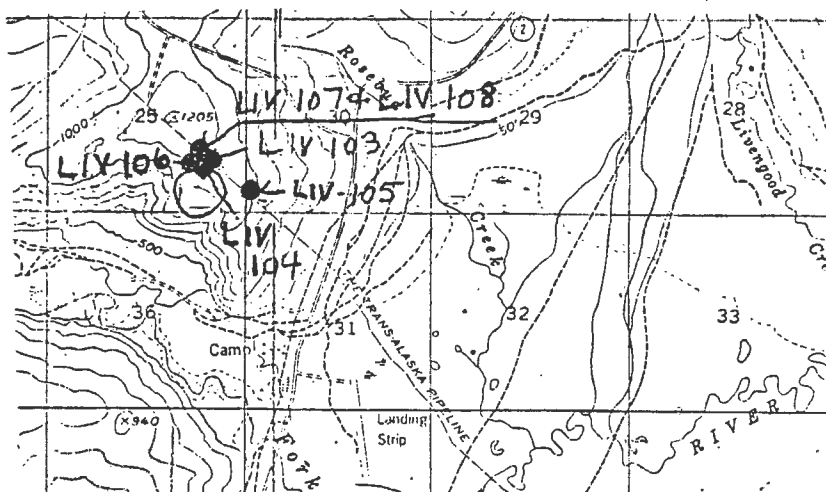


Significance: Medium to High. This site has potential for Register eligibility in the context of Livengood quarry and lookout sites. Materials are in situ.

Impact: Directly on proposed EMS.

Mitigation: Avoid or excavate.

LIV-107		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
1. NAME OF SITE		2. PERTINENT DATES		CODED BY		A) ANRS ID. NO.	
ENS 71-3A Site 2				B) SITE NAME			
3. LOCATION		4. DESCRIPTION (TOPOG. POS., TOPOG. AND OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION)		C) LAT. (DEG) (MIN) (SEC)		D) LONG. (DEG) (MIN) (SEC)	
South half of the SW/4 of the NE/4 of the SE/4 of Sec 25, T8N, R6W, Fbks Meridian, Liv B-4 Quad. ACS (Zone 4); 4,200,900' North; 700,550' East		Located on the flat crest of a bedrock ridge approx 1550'E of 70-APL/AMS-1M & 40'NE of Alyeska Pipeline. This ridge was referred to as Rosebud Knob by Alyeska archaeologists and there are numerous other sites in the immediate vicinity. Three black chert flakes were found on the surface, one in a game trail, and two others in the moss mat. Flakes found 15' apart. Well spaced spruce, birch, labrador tea, and spongy moss mat, except for knolls which had lichen cover. Two other new sites (LIV-108 & LIV-103) exist within 100' of this site. NWA intends to use this area as a possible material source. As of July 1980, avoidance of this area has been recommended.		65° 29' 20"		148° 40' 42"	
5. EXISTING AND PROPOSED DEVELOPMENTS, PHOTOGRAPHIC REFERENCES		6. BIBLIOGRAPHIC REFERENCES		E) THRE		F) RESOURCE NATURE	
Part of a prehistoric lithic/quarry reduction workshop complex. At least 14 such sites in the area have been formerly documented/excavated by Alyeska archaeologists, but the potential exists for more highly valuable information to be gathered regarding aboriginal stone working practices. Evidently the entire area was utilized in prehist. times & can be considered one large locus.		UA/NWA Archaeology Survey (1980); Leitgeb field notes Book 1:57 and 153; Soils Book L4:27-28.		G) OWNERSHIP		H) SIZE	
7. STATE OF PRESERVATION		8. PRESERVATION STATUS		I) CULTURAL AFFILIATION		J) BIBLIOGRAPHIC REFERENCE	
USA				K) DATES		L) RELIABILITY	
				M) ANRS DATE		N) STRIKE DATE	
				O) SITE LOCATION		P) SITE ENCLOSURE	
				Q) SITE MEASUREMENT		R) SITE MEASUREMENT	

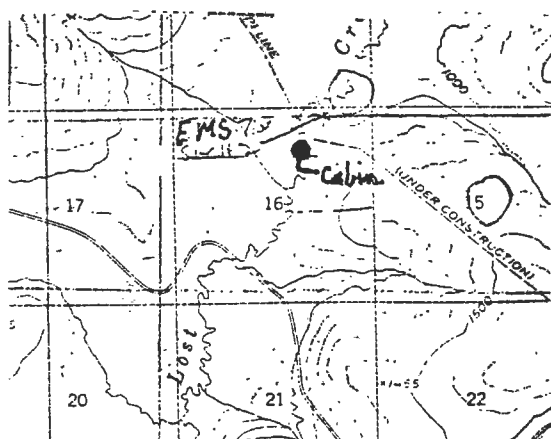


Significance: Medium. This locus has potential for Register eligibility in the context of other Livengood quarry and lookout sites. Some in situ materials are anticipated.

Impact: Directly on proposed EMS.

Mitigation: Avoid or excavate.

LIV-039		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977	
NAME OF SITE Cabin at Lost Creek		3. PERTINENT DATES Historic			
LOCATION Center of the south half of the NW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Sec 16, T8N, R6W Fairbanks Meridian, LIV-C-4 Quad. ACS (Zone 4) 4,213,500 ft N, 683,700 ft E.					
DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Cabin with walls only partially standing is located 75' W of NWA borehole 71-31. Reportedly, trees 4" in diameter are growing inside the structure. The structure is some 500' from the revised NWA centerline route in drawing number 4680-14-00-B-H-71 Rev. 6. The cabin is not in danger from proposed pipeline activities.					
SIGNIFICANCE Probably relates to early historic settlement of the Livengood area					
RELEVANT LITERATURE, FIELD NOTES, PHOTOGRAPHIC REFERENCES Verbal report from Ken Swanson of the OFI (Fairbanks) 10/80 and veri- fied by Fluor Northwest field personnel.					
COUNTRY OF ORIGIN ADDRESS USA					
SPACE BELOW FOR ADP USE ONLY					
Coded by					
A) AKRS ID. NO.					
B) SITE NAME					
C) LAT. (DEG) (MIN) (SEC) 65° 31' 27"					
LONG. (DEG) (MIN) (SEC) 148° 48' 20"					
D) THEME					
E) RESOURCE NATURE					
F) OWNERSHIP					
G) SIZE					
H) PRESERVATION STATUS					
I) CULTURAL AFFILIATION					
J) BIBLIOGRAPHIC REFERENCE					
K) DATES					
L) RELIABILITY					
M) AKRS DATE					
N) NLSR DATE					
O) SITE CONDITION					
P) SITE EVALUATION					
Q) SITE RECOMMENDATION					

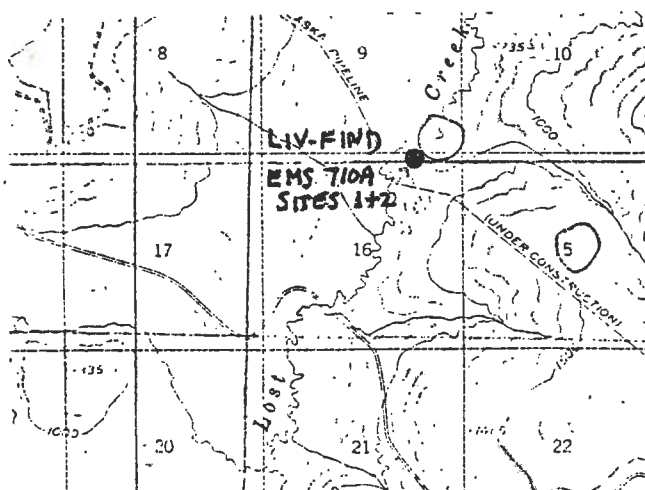


Significance: Medium to High. The site has potential for Register eligibility in relation to early historic mining activities in the area.

Impact: Indirect (500 feet from revised centerline on AS-071-REV. 6).

Mitigation: Avoid, stabilize and post. Fencing may also be advisable.

LIV-find		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
1. NAME OF SITE		2. PERTINENT DATES		CODED BY		A1. AHS ID. NO.	
EMS 71-0A Site 1		unknown				B) SITE NAME	
3. LOCATION NW/4 of the NW/4 of the NE/4 of the NE/4 of Sec 16, T8N, R6W, Fbks Meridian, Liv C-4 Quad. ACS (Zone 4); 4,214,750' North; 684,300' East.				C) LAT. (DEG) (MIN) (SEC)		65° 31' 38"	
4. DESCRIPTION OF SITE, INCLUDING TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.				LONG. (DEG) (MIN) (SEC)		148° 47' 05"	
One possible flake recovered from a trowel test. Located on a small piece of a metamorphic bedrock ridge which has been cut through by the Alyeska pipeline and a gravel pit. Two ridge "fingers" extend out to the north & flake was located on the western finger. Well spaced stunted spruce, moss/lichen vegetation mat not complete, some black patches of dried organics with bedrock and many exposures. Abundant chert present in the bedrock. Extensively tested by Alyeska on all exposed high spots, but no signs of a prior excavation. One other possible flake was located near the bottom of the ridge (see EMS-710A site 2). As intensive survey & testing revealed only 2 possible flakes, and as these were isolated finds on a truncated ridge, this area was cleared for NWA to test for use as a possible material source as of July 1980.				D) THEME		E) RESOURCE NATURE	
				F) OWNERSHIP		G) SIZE	
				H) PRESERVATION STATUS			
				I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
				K) DATES			
				L) RELIABILITY		M) AHS DATE	
				N) N/A/R DATE			
				O) SITE CONDITION			
				P) SITE ENVIRONMENT			
				Q) SITE ALIQUOT			
5. SIGNIFICANCE Practically nil, due to the very low potential for the existence of an undisturbed site. Alyeska archaeologists noted LIV-032 (Lost Creek Shelter) in this area, noting that erosion started by a cat trail may lead to rapid destruction of the site. They also dug systematic test pits to determine extent of site, and collected chert and basalt flakes. Possibly they collected the bulk of the site. Listed as nil significance when site located.							
6. OWNER OF PROPERTY/ADDRESS							
USA							
7. REFERENCES UA/NWA Archaeology Survey (1980): Leitgeb field notes Book 1:45-58; Museum Accession #UA80-205; - *Cook 1976:13-14.							



Significance: None. Present are isolated flakes without context.

Impact: Directly on proposed EMS.

Mitigation: None

LIV-032 (see LIV-Find EMS 71-0A Site 1)

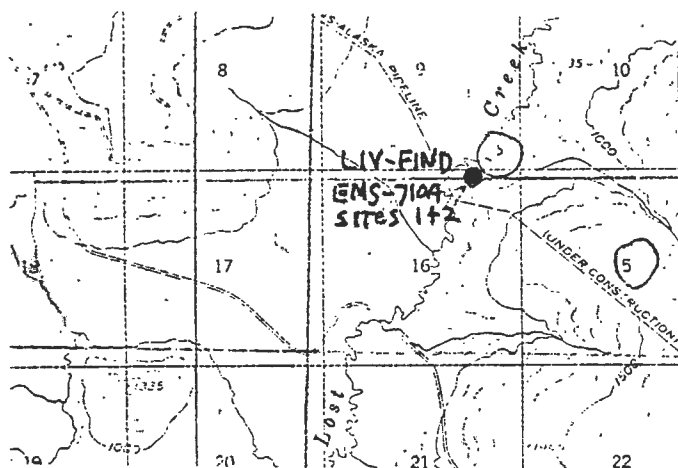
This site no longer exists.

Significance: None. The site was destroyed by Alyeska construction activities.

Impact: Directly on proposed EMS.

Mitigation: None

1. LIV-find		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE ENS 71-0A Site 2		3. PERTINENT DATES unknown		4. LOCATION NW/4 of the NW/4 of the NE/4 of the NE/4 of Sec 16, T8N, R6W, Fbks Meridian, LIV C-4 Quad. ACS (Zone 4); 4,214,750' North; 684,300' East.		CODED BY	
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Find is located on the steeply sloping west face of a small section of a bed- rock ridge of metamorphic rock that has been sliced off by the Alyeska pipe- pad. One possible flake found 25' from the bottom of the ridge. A disposal site exists at the foot of the ridge. Spruce, birch, willow, moss and lichens Flake found in exposure on steep side of hill. One possible flake was located on the ridge crest (see EMS 710A Site 1). As intensive survey & testing re- vealed only 2 possible flakes, and as these were isolated finds on a truncated ridge, this area was cleared for NWA to test for use as a possible material source as of July 1980.		6. SIGNIFICANCE Practically nil, due to the location of the flake in an eroded area on the steeply sloping side of the ridge. The flake is an isolated find and as such is of limited research value.		7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Leitgeb field notes Book 1:45-48; Museum Accession #UA80-206		8. OWNER OF PROPERTY/ALASKAS USA	
A) AHS ID. NO.		B) SITE NAME		C) LAT. (DEG) (MIN) (SEC) 65° 31' 38"		LONG. (DEG) (MIN) (SEC) 148° 47' 05"	
D) THEME		E) RESOURCE NATURE		F) OWNERSHIP (C) SIZE		G) PRESERVATION STATUS	
H) CULTURAL AFFILIATION		I) BIBLIOGRAPHIC REFERENCE		J) DATES		K) RELIABILITY (M) AHS DATE	
L) SITE CONDITION		M) SITE ENVIRONMENT		N) SITE REPOSITORY			

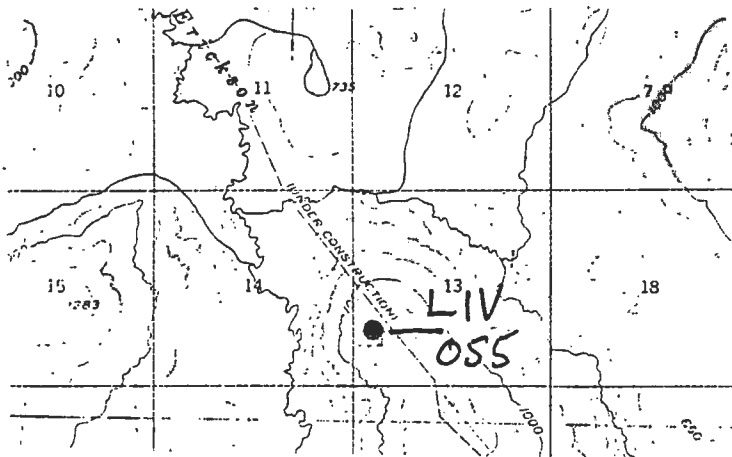


Significance: None. This find is isolated and lacks interpretable context.

Impact: Directly on proposed EMS.

Mitigation: None

LIV 055 Addendum		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
NAME OF SITE		PERTINENT DATES		CODED BY		A) AHS ID. NO.	
NWA field # EMS 69-3B Site one (Juswon)						B) SITE NAME	
LOCATION South half of the NW 1/4 of the SW 1/4 of Sec 13, T9N, R7W, Fbks Meridian LIV C-4 Quad. ACS (Zone 4): 4,242,500' N; 662,400' E.				C) LAT. (DEG) (MIN) (SEC) 65° 36' 15"		LONG. (DEG) (MIN) (SEC) 148° 55' 35"	
DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Located near the crest of a steep NW-SE trending bedrock ridge, on an "Alpine meadow" knoll. Knoll roughly 100' NW/SE and 70' NE/SW. Excavated area roughly 10M x 20M. Per Gal's location and description, this is LIV 055. No cultural material encountered, on surface, in old test pits, or in new test pits. Previous test pits not backfilled, and erosional processes are at work. NWA intends to use this area as a material source. As of July, 1980, we have given them clearance for borehole drilling.				D) THEME		E) RESOURCE NATURE	
				F) OWNERSHIP		G) SIZE	
				H) PRESERVATION STATUS			
				I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
				K) DATES			
				L) RELIABILITY		M) AHS DATE	
				N) NR/NRE DATE			
				O) SITE CONDITION			
				P) SITE ENVIRONMENT			
				Q) SITE REPOSITORY			
3. OWNER OF PROPERTY/ADDRESS USA							

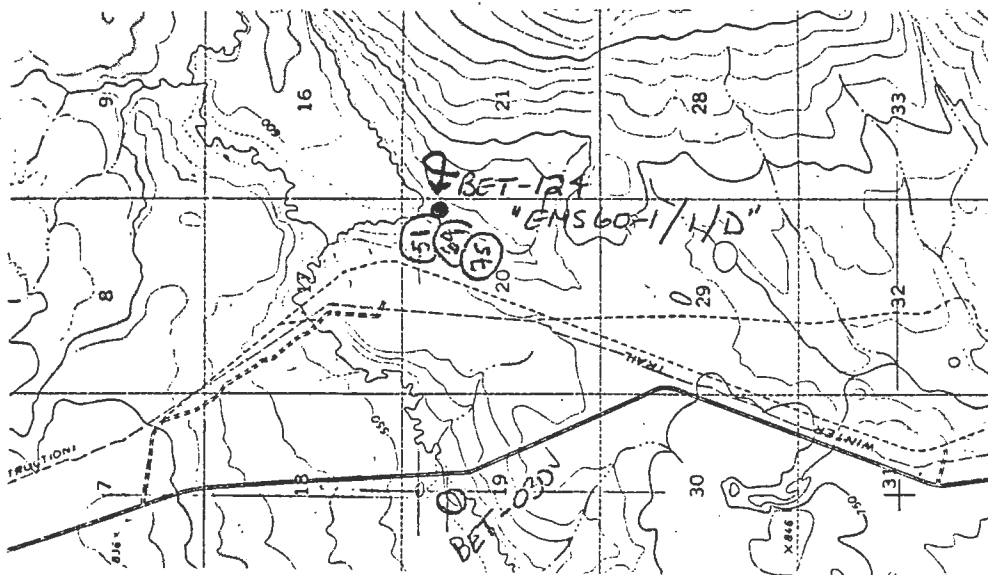


Significance: None. The site was mitigated by Alyeska archaeological salvage operations.

Impact: Directly on proposed EMS.

Mitigation: None

1. BET-124		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977	
2. NAME OF SITE		3. PERTINENT DATES			
EMS 60-1/1/D (1980 field number)		Unknown - prehistoric			
4. LOCATION SE4 of the NW4 of the NE4, Section 20, T15N, R12W, Fairbanks Meridian, BET A-1 Quad. ACS (Zone 4): 4,428,800 ft N, 481,790 ft E					
5. DESCRIPTION, DISTRIBUTION, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION					
<p>The flake scatter (2 flakes and 3 pieces of shatter) was found along the edge of the bank 15' SE of the SE corner of the existing pit, MS-82-0. The site appears to be outside of the proposed Material site. There are two Alyeska archaeological test pits (approx. 1 ft.sq.), 8' & 10' from the bank edge, probably associated with the testing of the edges of BET-073. This is one of the 3 known sites in the vicinity of the material site (BET-058, -068, -073). All three appear to have been destroyed by the exploitation of MS-82-0.</p>					
6. SIGNIFICANCE					
<p>The significance is uncertain as the scatter was encountered during backhoe monitoring, these remains were found while walking the bank edge after testing the EMS. These may be the remnants of one of the sites noted above, subsequently destroyed by Material Source exploitation.</p>					
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES					
<p>UA/NWA Archaeology Survey (1980): R. Joan Dale, Backhoe Prog. Book 2:35-36 and Backhoe clearance forms; Cook 1976:20-22; Cook 1977:533-603; Accession Number: UA80-250</p>					
8. OWNER OF PROPERTY/ADDRESS					
USA					
SPACE BELOW FOR ADP USE ONLY					
DIVIDED BY					
A) AHS ID. NO.					
B) SITE NAME					
C) LAT. (DEG) (MIN) (SEC)					
66° 07' 05"					
LONG. (DEG) (MIN) (SEC)					
150° 07' 30"					
D) THEME F) RESOURCE NATION					
F) OWNERSHIP G) SIZE					
H) PRESERVATION STATUS					
I) CULTURAL AFFILIATION					
J) BIBLIOGRAPHIC REFERENCE					
K) DATES					
L) RELIABILITY M) AHS DATE					
N) SR/ARE DATE					
O) SITE CONDITION					
P) SITE ENVIRONMENT					
Q) SITE REPOSITORY					

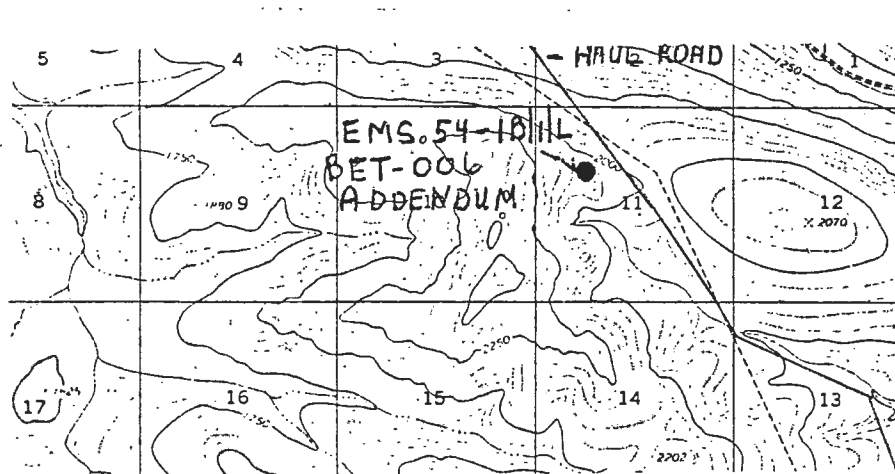


Significance: Unknown, probably low or none. The lack of materials despite testing suggests little if any information remains.

Impact: Directly on or immediately adjacent to a proposed EMS.

Mitigation: None

BET-006 Addendum AMRS ID. NO.		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977	
NAME OF SITE EMS 54-1B/1/L		PERTINENT DATES Unknown Prehistoric		SPACE BELOW FOR ADP USE ONLY	
LOCATION SW/4 of the NW/4 of the SE/4 of the NW/4 of Sec 11, T19N, R15W, Fbks Meridian, BET B-2 Quad. ACS: 4,565,500N; 396,200E (Zone 4)				CODED BY	
DESCRIPTION (CONTINUOUS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) One very thin 54 x 35 cm black obsidian flake and one 34 x 2 cm basalt flake found surficially located near a distinctive huge bedrock outcrop. The outcrop is on the flat eastern end of a roughly E-W trending ridge. In general, a high, flat plateau area with huge outcrops, gently sloping to the E in this section, but rising rapidly in the W to a very high peak. Massive exposures, with a one cm moss mat on top of gravels and scattered dwarf willows. This may be the remains of BET-006. * NWA intends to use this area as a possible material source. As intensive survey revealed only two flakes in massively exposed areas, as test pitting revealed no cultural material, & as Alyeska had already tested & possibly excavated the area, we gave clearance for testing as of July 1980.				A) AMRS ID. NO.	
				B) SITE NAME	
				C) LAT. (DEG) (MIN) (SEC) 66° 29' 33"	
				LONG. (DEG) (MIN) (SEC) 150° 42' 35"	
				D) THEME = E) RESOURCE NATURE	
				F) OWNERSHIP G) SIZE	
				H) PRESERVATION STATUS	
				I) CULTURAL AFFILIATION	
				J) BIBLIOGRAPHIC REFERENCE	
				K) DATES	
L) RELIABILITY M) AMRS DATE				N) SOURCE DATE	
				O) SITE CONDITION	
P) SITE ENVIRONMENT				Q) SITE ADJUSTMENT	
R) STATE OF RECORD ADDRESS USA					
S) REFERENCES UA/NWA Archaeology Survey (1980); Leitgeb Field Notes Book 1:101-105; Museum Accession #UA80-204 - *per Cook's location - Cook 1970:73; Cook 1971:414-415.					

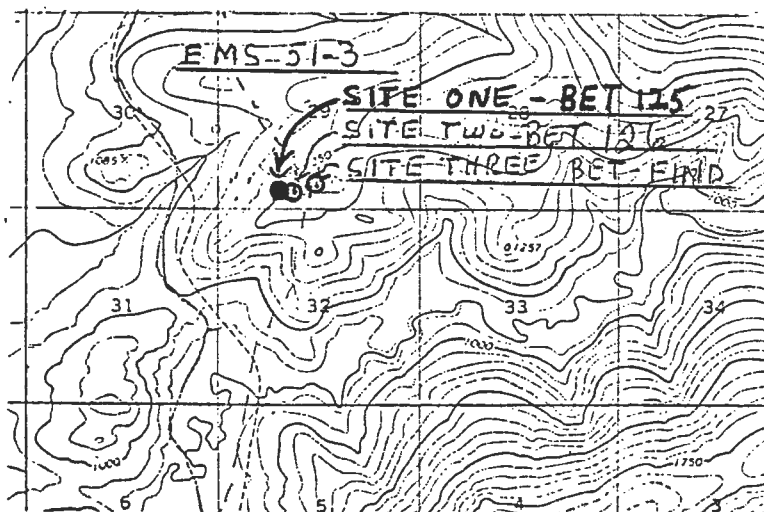


Significance: Low or none. This site is considered to have been mitigated during Alyeska operations. No information potential remains.

Impact: Directly on a proposed EMS.

Mitigation: None

1. BET-125		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE		3. PERTINENT DATES		CIVIL BY		A) ANRS ID. NO.	
EMS 51-3 Site 1 (The MCB Site)		Unknown Prehistoric				B) SITE NAME	
4. LOCATION		5. DESCRIPTION (DISTRIBUTION, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)		C) LAT. (DEG) (MIN) (SEC)		66° 41' 54"	
NE 1/4 of the SW 1/4 of the SE 1/4 of the SW 1/4 of Section 29, T22N, R14W, Fbks Meridian		BET C-2, Quad, ACS (Zone 4): 4,641,800'N; 406,900'E		LONG. (DEG) (MIN) (SEC)		150° 38' 35"	
Lookout/flaking sta. on high, flat, granitic, E-W trending ridge crest one mile N of North Fork of Bonanza Creek with stunted birch clumps. Spruce, birch, willows, berries on sides of ridge. Water sources (streams) 1000'N and 600'SW. Fairly steep ridge, 360° view. Material found in an area 8M X 4M. Surface flake scatter: 3 basalt flakes, one chert. Also chert flake and one obsidian core tool found in test pit. Site area 30-40% exposures. Site 2000' NE of BET-018 & 1200' W of BET-082.* Present condition of site poor due to erosion. Extensive testing revealed no more cultural material, so the bulk of the site has probably been collected. NWA intends to use this area as a material source, and clearance has been given for borehole testing, with a monitor required for further activity.		D) OWNER		E) RESOURCE NATURE			
Due to limited extent of site & small amount of diagnostic cultural material, site may have limited research value. Fifteen other sites are located within two miles; all of them comprising flake concentrations on promontories		F) OWNERSHIP (C) SIZE		H) PRESERVATION STATUS			
		I) CULTURAL AFFILIATION		J) BIBLIOGRAPHIC REFERENCE			
		K) DATES		L) RELIABILITY (M) ANRS DATE			
		M) SURVEY DATE		N) SITE CONDITION			
		O) SITE ENVIRONMENT		P) SITE DEPOSITARY			
6. OTHER UP AVAILABLE ADDRESS		7. SOURCE (PIN-2, LUGS-2, PHOTOGRAPHIC REFERENCES)		8. COMMENTS			
USA		UA/NWA Archaeology Survey (1980): Leitgeb Field Note Book 1:79-83; Soils Books L5:43-44; Museum Accession #UA80-211- *per Cook's locations - Cook 1970:39, Cook 1971 343-344					



Significance: Medium to Low. Surface erosion and lack of in situ materials suggests low potential for significant information yield. However, some data are present and relate to wider activities in the immediate area.

Impact: Directly on proposed EMS.

Mitigation: Avoid or salvage.

BET-126

ARCH. ID. NO.

ALASKA HERITAGE RESOURCES SURVEY
RECORD CARD10-521
REV. 1972, 1976-1977

SPACE BELOW FOR ADP USE ONLY

NAME OF SITE
EMS 51-3 Site 2

J. PERTINENT DATES

LOCATION Just south of the center of the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Sec 29, T22N,
R14W, Fbks Meridian, BET C-2 Quad, ACS:4,641,800N;407,250E ("one 4")

Lookout/flaking sta. on high, flat, E-W trending granitic ridge crest one mile N of North Fork of Bonanza Creek. 50-60% bare rock, scattered clumps of small birch, lichen vegetative mat. Narrow ridge, about 100' wide at crest, 300' wide before definite dip in slope. 360° view. Surface material: one grey chert point fragment, one black chunk, one small grey chert flake. Material found in area 2M x 1M. Nothing found in test pits. Water sources (streams) 1000' N and 600' SW. EMS 51-3 site 1 located 250' on same ridge. 2300' NE of BET-018; 1000' W of BET-082. * Present condition of site poor due to massive erosion. However, bulk of the site probably collected. NWA intends to use this area as a material source, and clearance has been granted for borehole testing, with a monitor required for further activity.

Due to limited extent of site & small amount of diagnostic cultural material, site may have limited research value. Fifteen other sites are located within 2 miles; all of them comprising flake concentrations on promontories.

RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES

UA/NWA Archaeology Survey (1980); Leitgeb Field Notes Book 1:84 & 87-89;
Museum Accession #UA80-212 - *per Cook's locations - Cook 1970:39,
Cook 1971:343-344.

OWNER OF PROPERTY/ADDRESS

USA

CODED BY

A) AHS ID. NO.

B) SITE NAME

C) LAT. (DEG.) (MIN) (SEC)

66° 41' 54"

LONG. (DEG.) (MIN) (SEC)

150° 38' 25"

D) INITIAL E) RESOURCE DATE

F) OWNERSHIP I) SIZE

N) PRESERVATION STATUS

I) CULTURAL AFFILIATION

J) BIBLIOGRAPHIC REFERENCE

K) DATES

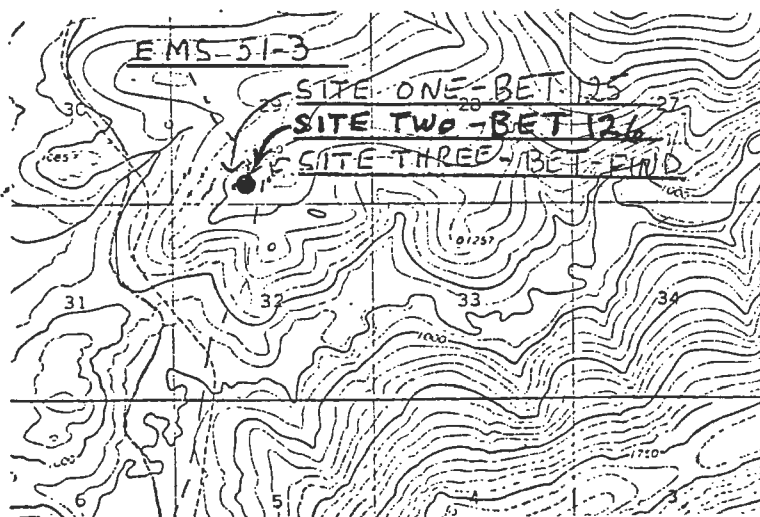
L) LIABILITY (N) AHS DATE

M) NR/SR DATE

O) SITE CONDITION

P) SITE ENVIRONMENT

Q) SITE REPOSITORY

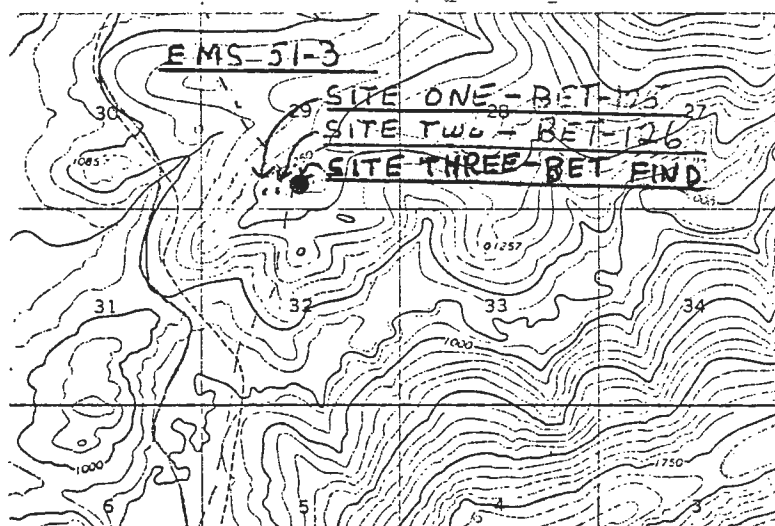


Significance: Medium to Low. Surface erosion and lack of in situ materials suggests low potential for significant information yield. However, some data are present and relate to wider activities in the immediate area.

Impact: Directly on proposed EMS.

Mitigation: Avoid or salvage.

1. BET-find (BET-082?) ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE EMS 51-3 Site 3		3. PERTINENT DATES unknown prehistoric		CODED BY	
4. LOCATION SE/4 of the NE/4 of the SE/4 of the SW/4 of Sec 29, T22N, R14W, Fbks Meridian, BET C-2 Quad.-ACS (Zone 4); 4,642,000' North; 407,900' East		5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Lookout/flaking station on high, flat, E-W trending granitic ridge crest one mile N of North Fork of Bonanza Creek. 40-50% bare rock, scattered birch clumps, moss/lichen vegetation mat. Wide, flat ridge, 500+ ft. before perceptible break to S, northern break within 200'. 700' E of EMS 51-3 site 2, 950' E of EMS 51-3 site 1 (BET-125) with a high, massive rocky prominence between site three and the other two. Massive exposures revealing only one black chert flake on surface. Nothing encountered in test pit. Present condition of site poor due to erosion. There is probably not much else there. NWA intends to use this area as a material source. The area has been cleared for borehole testing, with a monitor required for further activity.		A) AHS ID. NO.	
6. SIGNIFICANCE Due to the limited extent of the site and the lack of diagnostic cultural material, the site may have limited research value. Fifteen other sites are located within two miles; all of them comprising flake concentrations on promontories. Site 3 may possibly be the remains of BET-082 per Cook's map locations.		7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Leitgeb field notes Book 1:99-100; Museum Accession #UA80-213; Cook 1970:39; Cook 1971:343-344.		B) SITE NAME	
8. OWNER OF PROPERTY/ADDRESS USA		9. DATES		C) LAT. (DEG) (MIN) (SEC) 66° 41' 55"	
				LONG. (DEG) (MIN) (SEC) 150° 38' 05"	
				D) THEME (E) RESOURCE NATURE	
				F) OWNERSHIP (G) SIZE	
				H) PRESERVATION STATUS	
				I) CULTURAL AFFILIATION	
				J) BIBLIOGRAPHIC REFERENCE	
				K) DATES	
				L) RELIABILITY (N) AHS DATE	
				M) DATE	
				O) SITE CONDITION	
				P) SITE ENVIRONMENT	
				Q) SITE REPOSITORY	



Significance: Low or None. Erosion and the single find of a (surface) flake suggest no data remain. If this was BET-082 it may be considered mitigated.

Impact: Directly on proposed EMS.

Mitigation: None

BET-083, 018 (see BET-Find (BET-082?) EMS 51-3 Site 3)

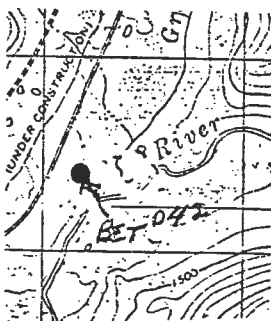
Sites completely destroyed.

Significance: None. No materials from either site remain. Published data on these loci is very limited but no additional information can be recovered.

Impact: Directly on or near a proposed EMS.

Mitigation: None

1. BET-042		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE BET-042; Alyeska # S4-28				3. PERTINENT DATES Prehistoric			
4. LOCATION NW 1/4 of the SE 1/4 of the NW 1/4, Sec. 8, T24N, R13W, Fairbanks Meridian; BET D-1 Quad. ACS: (Zone 4): 4,722,500'N; 438,300'E; Top of knoll				5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) The site is located on a knoll with a small run-off stream on the SE. The Jim River is ca 1000' to the SE. BET-042 was excavated in 1974 and it appears to be about 20m x 30m. It was difficult to tell if the site was backfilled. We located additional flake material (obsidian, chert flakes) in the excavated portion and a lanceolate obsidian point base on a nearby game trail (much of this material was collected). Despite these finds we were unable to locate new material in our tests outside of the excavated area suggesting that most of the site has in fact been removed. The site is not currently endangered by construction plans.			
6. SIGNIFICANCE Since the material has not been analyzed its significance is difficult to determine but a site as large as this should be quite important in delineating the culture history and past land use patterns in the Grayling Lake/Jim River Valley.				7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeological Survey (1980) Fieldnotes: Fetter pl18-123; Jordan p21-22; Photos Roll P-1 #26-29. Gal Alyeska Fieldnotes 1974:74-3/51-53.			
8. OWNER OF PROPERTY/ADDRESS USA Museum # UA 80-231; UA 74-44				9. COORDINATES C) LAT. (DEC) (MIN) (SE) N 66° 55' 10" LONG. (DEC) (MIN) (SE) W 150° 25' 45"			
				10) OWNERSHIP 1) SIZE			
				11) PRESERVATION STATUS			
				12) CULTURAL AFFILIATION			
				13) BIBLIOGRAPHIC REFERENCE			
				14) DATES			
				15) RELIABILITY 1) ANRS DATE			
				16) MEASURE DATE			
				17) SITE CONDITION			
				18) SITE ENVIRONMENT			

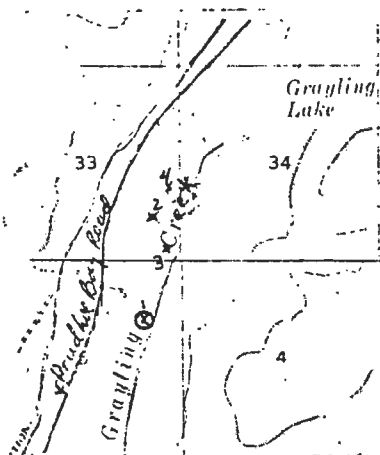


Significance: Medium. There are published data available and materials are still present but with dubious context. Register eligibility is unlikely but some information may remain of interest.

Impact: Indirect

Mitigation: None

1. BET-054		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE EMS-48-0/1/F ; BET-054; Alyeska # S4-35		3. PERTINENT DATES PREHISTORIC		CODED BY		A) AMS ID. NO.	
4. LOCATION NW 1/4 of the SE 1/4 of the NE 1/4, Sec. 5, T24N, R13W, Fairbanks Meridian; BET D-1 Quad; ACS: (Zone 4) 4,729,250'N; 441,250'E; on the SE end of a kame				B) SITE NAME		C) LAT. (DEG) (MIN) (SEC) N 66° 56' 17"	
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) The site is located on the SE end of a kame just above Grayling Creek. The site was excavated in 1974. Much of it appears to have been backfilled but parts were apparently not filled in. Erosion is actively changing the site area and has exposed many flakes in the backdirt of the excavation. We located flakes of chert (we collected none) in the backdirt. Our tests turned up nothing new which suggests that most of the site has in fact been excavated. If NWA uses the area for a proposed material source the site will finally be destroyed. It was cleared for termination by the Alyeska archaeologists. Contrary to reports about this site (by Gal) this site is not located on the valley floor.				LONG. (DEG) (MIN) (SEC) W 150° 24' 45"		D) THEME E) RESOURCE NATL	
6. OWNER OF PROPERTY/ADDRESS USA		74-4/10-11, 74-5/19-20 Museum # UA 75-173		F) OWNERSHIP G) SIZE		H) PRESERVATION STATUS	
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeological Survey (1980) Fieldnotes; Petter p123-123; Jordan p26; Villa p36; Photos Roll F-2 #21-23. Gal 1976:97; Gal Fieldnotes 1974:				I) CULTURAL AFFILIATION		J) BIBLIOGRAPHIC REFERENCE	
				K) DATES		L) RELIABILITY M) AMS DATE	
				N) NR/NRE DATE		O) SITE CONDITION	
				P) SITE ENVIRONMENT			



- 1) BET-054
- 2) BET-123; Betts site
- 3) BET-122; Gibbins site
- 4) BET-055

↑
BET- D-1 Quad

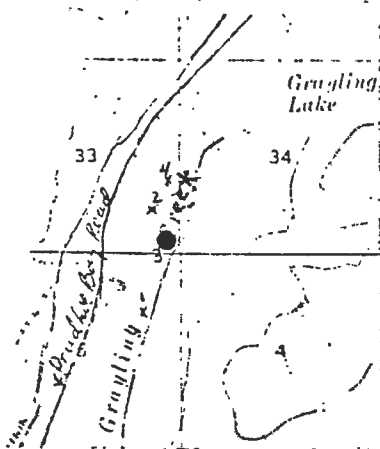
Significance: Low to Medium. Considered in the wider context of Grayling Lake human occupation this site has some potential for Register eligibility. Some data do remain and excavated (Alyeska) materials are available for restudy.

Impact: Direct

Mitigation: Avoid and backfill to curtail erosion or excavate.

1. BET-122		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977	
2. NAME OF SITE EMS 48-0/3/F; Borehole B - Gibbins Site		3. PERTINENT DATES prehistoric			
4. LOCATION SE/4 of the SE/4 of the SE/4 of Sec 33, T25N, R13W, Fbks Meridian BET D-1 Quad. ACS (Zone 4); 4,730,900' north, 442,000' east; east side of kame above Grayling Creek					
5. DESCRIPTION (ENTRANCES, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) A flake and scraper were located on the east side of a kame below which Grayling Creek flows, 130 ft east of Borehole B. The chert flake was in the back-dirt of an old (Alyeska) test pit and was not collected. The scraper was a subsurface find; it was black chert & was collected. Tests were made to locate more material over an area about 12m x 14m but nothing else was located so the status of this site is uncertain. Downslope creep, erosion and animals are affecting the area. The game trails here are exceptionally large & noticeable. Proposed NWA work in this area would cause damage. They were therefore issued a non-clearance for any work August 1980.					
6. SIGNIFICANCE The significance of this is difficult to assess. As with other kame sites in the area (BET-055, BET-026) it may take extensive testing to find the con- centration of material. In conjunction with the other sites in the Grayling Lake/Jim River Valley however, it will aid in delineating past land use patterns and culture history.					
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Fetter field notes:149-151 & 106-108; Villa field notes:37; Museum Accession #UA80-229					
8. OWNER OF PROPERTY/ADDRESS USA-Federal					

SPACE BELOW FOR ADP USE ONLY					
CODED BY					
A) AHS ID. NO.					
B) SITE NAME					
C) LAT. (DEG) (MIN) (SEC) 66° 56' 32"					
LONG. (DEG) (MIN) (SEC) 150° 24' 10"					
D) THEME		E) RESOURCE NATURE			
F) OWNERSHIP		G) SIZE			
H) PRESERVATION STATUS					
I) CULTURAL AFFILIATION					
J) BIBLIOGRAPHIC REFERENCE					
K) DATES					
L) RELIABILITY		M) AHS DATE			
N) NR/NR DATE					
O) SITE CONDITION					
P) SITE ENVIRONMENT					
Q) SITE REPOSITORY					



- 1) BET-054
- 2) BET-123; Betts site
- 3) BET-122; Gibbins site
- 4) BET-055

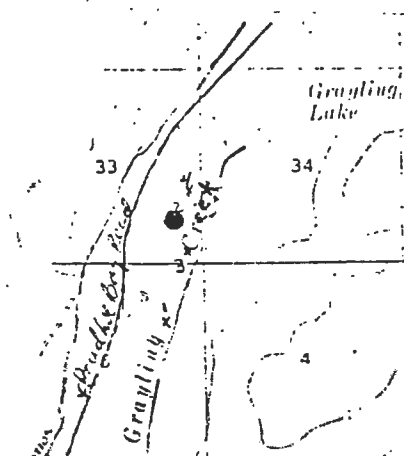
↑
BET- D-1 Quad

Significance: Unknown, possibly medium. While the presumed concentration of materials was not located it is believed to exist in situ. In the context of Grayling Lake occupation BET-122 assumes potential significance (and therefore may be Register eligible).

Impact: Directly on proposed EMS.

Mitigation: Avoid or test further and assess.

1. BET-123		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE		3. PERTINENT DATES		CODED BY			
EMS 48-0/2/F; Borehole C. Betts Memorial Site		prehistoric		A) ANRS ID. NO.			
4. LOCATION NE/4 of the NW/4 of the SE/4 of the SE/4 of Sec 33, T25N, R13W, Fbks Meridian BET D-1 Quad. ACS (Zone 4); 4,732,000' north, 442,000' east; west side of kame crest above small Lake on NW side of kame.				B) SITE NAME			
5. DESCRIPTION (CULTURAL, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)				C) LAT. (DEG) (MIN) (SEC)			
Material located 20 ft. NE of Borehole C. A black chert scraper came out of a frost heave, a large rhyolite flake was located (subsurface). An 8m x 5m area was tested but nothing else found. Both artifacts collected. Proposed NWA work in this area would damage site, and non-clearance for work in this area was issued August 1980.				66° 56' 45"			
				LONG. (DEG) (MIN) (SEC)			
				150° 24' 10"			
				D) THEME E) RESOURCE NATURE			
				F) OWNERSHIP G) SIZE			
				H) PRESERVATION STATUS			
				I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
				K) DATES			
				L) RELIABILITY M) ANRS DATE			
				N) SOURCE DATE			
				O) SITE CONDITION			
				P) SITE ENVIRONMENT			
				Q) SITE RESPONSIBILITY			
6. SIGNIFICANCE: Significance is difficult to assess. As with other kame sites in the area (BET-026, BET-055) it may take extensive testing to locate the concentration of material. In conjunction with the other sites in the Grayling Lake/Jim River Valley however it will aid in delineating past land use patterns and culture history. 7. PRESENT AND PROPOSED MANAGEMENT: UA/NWA Archaeology Survey (1980); Fetter field notes:147-148; Villa field notes:37-38; Museum Accession #UA80-227. 8. OWNER OF INTEREST: Address USA-Federal							



- 1) BET-054
- 2) BET-123; Betts site
- 3) BET-122; Gibbins site
- 4) BET-055

↑
BET. D-1 Quad

Significance: Unknown, possibly medium. While the presumed concentration of materials was not located it is believed to exist in situ. In the context of Grayling Lake occupation BET-123 assumes potential significance (and therefore may be Register eligible).

Impact: Directly on proposed EMS.

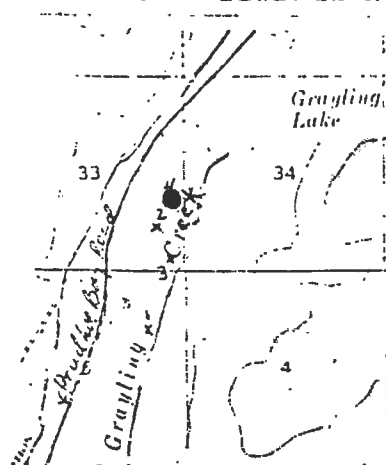
Mitigation: Avoid or test further and assess.

BET-055 Addendum		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD	10-521 REV. 1972, 1976-1977	SPACE BELOW FOR ADP USE ONLY	
NAME OF SITE		3. PERTINENT DATES		CODED BY	
EMS 48-0/4/F - Borehole D		prehistoric		A) AHS ID. NO.	
LOCATION NE/4 of the NE/4 of the SE/4 of the SE/4 of Sec 33, T25N, R13W Fbks Meridian, BET D-1 Quad. ACS (Zone 4); 4,732,500'N; 442,300'E; NE side of kame overlooking Grayling Creek.				B) SITE NAME	
A test pit dug by Gal in 1974 (30cm x 45cm) with birch logs in it was located on a kame about 2000' S of Grayling Lake. At least 12 obsidian flakes were found in the backdirt and area adjacent to this test, and 1 chert flake (all collected). About 35m S of this pit, subsurface, flakes, bone stain, hearth stone ring, charcoal-greasy soil (not enough for C14 sample), and flakes within hearth were found. No natural factors such as salifluction are affect- ing site although there are some unusually large game trails on kame. Pro- posed NWA activity here would destroy site, a non-clearance was issued for work here August 1980. No faunal material in test pit with obsidian.				C) LAT. (DEG.) (MIN) (SEC) 66° 56' 50"	
				LONG. (DEG.) (MIN) (SEC) 150° 24' 10"	
				D) OWNER	
				E) RESOURCE NATURAL	
				F) SIZE	
				G) PRESERVATION STATUS	
				H) CULTURAL AFFILIATION	
				I) BIBLIOGRAPHIC REFERENCE	
				J) DATES	
				K) RELIABILITY	
				L) AHS DATE	
				M) SITE DATE	
				N) SITE CONDITION	
				O) SITE ENVIRONMENT	
				P) SITE REPOSITORY	

6. STRUCTURE The hearth and bone stain suggest this feature may be related to the charred caribou bone found by Gal in the obsidian pit mentioned above. Hence, the 2 areas have been provisionally lumped under BET-055 but further work may alter this field designation. The site is very important for working out the culture history of the area.

7. SELECTED PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES
UA/NWA Archaeological Survey (1980); Fetter field notes:151-156; Villa field notes:38 & 47; Photos Roll F2 #24-28. New Museum Accession #UA80-228; Old Museum Accession #11475-153; Alyeska #54-36

8. OWNER OF PROPERTY/AGENCY
USA-Federal



- 1) BET-054
- 2) BET-123; Betts site
- 3) BET-122; Gibbins site
- 4) BET-055

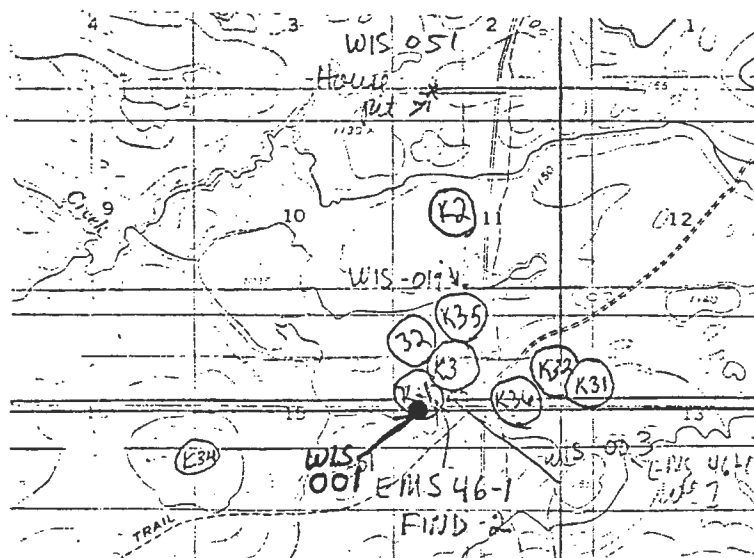
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BET. D-1 Quad

Significance: High. Potential Register eligibility is considered good based upon evidence of human occupation in the form of features and artifacts which are in situ in an interpretable context.

Impact: Directly on proposed EMS.

Mitigation: Avoid or excavate.

1. WIS 001 Addendum (K-1)		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE (K-1)		3. PERTINENT DATES		CODED BY		A) AHS ID. NO.	
4. LOCATION NWA Field # EMS-46-1 Site Four (S of EMS-46-1)				B) SITE NAME			
SW 1/4 of the SE 1/4 of the SW 1/4 of the NW 1/4 of Sec 14, T26N, R13W, Fbks Meridian, WIS A-1 Quad. ACS (Zone 4) 4,781,000 ft N; 448,700 ft E				C) LAT. (DEG) (MIN) (SEC) 67° 04' 47"			
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Located on a ground moraine overlooking a small kettle lake. Approximately 400' S of EMS 46-1. Test pits not backfilled, erosional processes are at work. No cultural material noted other than fire-cracked rocks. Banded chert present in exposed areas. Bedrock exposures in some places, possibly natural. Some exposed areas possibly started by test pits. Test pits located all along moraine, but only excavation appeared to be at WIS-001 location. Reported upon by Holmes in Cook, 1970: 11-12, plus figures following page 12. Report is essentially a listing of artifacts. There are no dates, no affinities, no conclusions drawn. This site is not mentioned again in any other Alyeska reports.				LONG. (DEG) (MIN) (SEC) 150° 21' 39"			
				D) THEME		E) RESOURCE NATURE	
				F) OWNERSHIP		G) SIZE	
				H) PRESERVATION STATUS			
				I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
				K) DATES			
				L) RELIABILITY (M) AHS DATE			
				N) MEASURE DATE			
				O) SITE CONDITION			
				P) SITE ENVIRONMENT			
				Q) SITE REPOSITORY			
6. SIGNIFICANCE As this site has been excavated already, it would have limited research value. If EMS-46-1 were to be expanded to include this moraine, new test pits should be excavated in the site area, as testing of other Alyeska excavations has located cultural material in situ. The research potential might change after new test pitting.							
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES Holmes in Cook, 1970: 11-12 and figures following page 12. UA/NWA Archeology Survey (1980): Leitzgeb Field Notes Book 1: 105-106; SBL8:3.							
8. OWNER OF PROPERTY/ADDRESS USA							

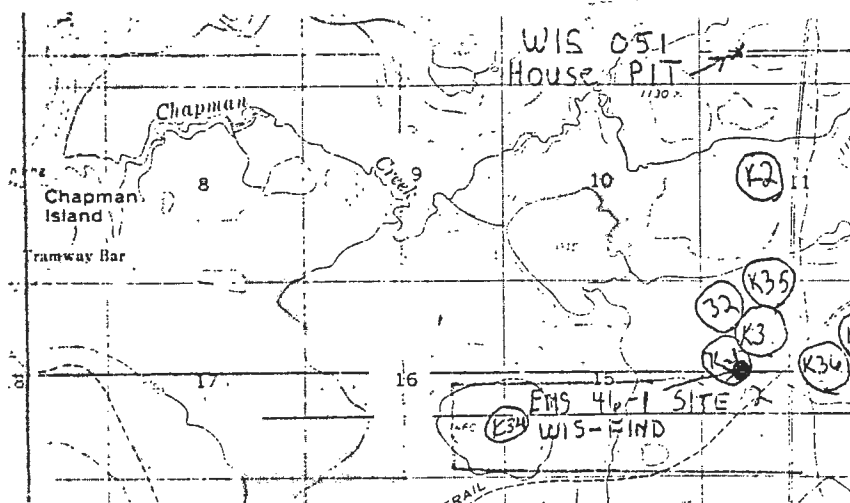


Significance: Low. Previous Alyeska excavation, present erosion and lack of published information limit but do not negate the modest information potential of WIS-001.

Impact: Directly on proposed EMS.

Mitigation: Avoid and backfill Alyeska pits to curtail erosion or salvage.

WIS-find		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD	10-521 REV. 1972, 1976-1977	SPACE BELOW FOR ADP USE ONLY
1. NAME OF SITE		3. PERTINENT DATES		4. DATED BY
EMS 46-1 Site 2		unknown		A) AHS ID. NO.
5. LOCATION SE 1/4 of the SE 1/4 of the SW 1/4 of the NW 1/4 of Section 14, T26N, R13W, Fairbanks Meridian, WIS A-1 Quad. ACS (Zone 4): 4,781,000 ft North; 449,000 feet East				B) SITE NAME
6. DESCRIPTION Isolated clear obsidian flake, found 50' below the crest of the knoll, on the south slope in a large exposed area. WIS-003 is on the same knoll, 350' distant, bearing 70° T. The knoll top is completely vegetated, while the sides have lichen patches or exposures. Vegetation consists of willow and birch clumps, spruce, moss and lichen ground cover with green leafed plants, and a knee high understory. The knolls are ground moraines of glacio-fluvial re- transported deposits of sandy gravels. Slow-moving stream at base of knoll, and small lake 300' distant, bearing 175° T. NWA intends to use the moraine as a material source. As of August, 1980, we have recommended avoidance of this ridge, primarily because of WIS-003.				C) LAT. (DEG) (MIN) (SEC) 67° 04' 48" LONG. (DEG) (MIN) (SEC) 150° 21' 28"
7. SIGNIFICANCE Geologically, this area is a Quaternary kettle moraine complex and many of the moraines contain lookout/flaking stations. There are at least seven archaeological sites within one mile of this site. The primary sig- nificance is through additional documentation of the aboriginal use of the raw materials distributed throughout the area.				D) OWNERSHIP F) SIZE
8. RELEVANT PRINTED, UNPUBLISHED, PHOTOGRAPHIC REFERENCES UA/NWA Archaeological survey (1980): Leitgeb Field Notes, Book 1:105-114; SB6:21-45; SB8:1-7; SB7:5-19				H) PRESERVATION STATUS
9. OWNER OF PROPERTY/ADDRESS USA				I) CULTURAL AFFILIATION
Museum Accession #UA80-208				J) BIBLIOGRAPHIC REFERENCE
				K) DATES
				L) LIABILITY (N) AHS DATE
				M) STRIKE DATE
				N) SITE CONDITION
				O) SITE ENVIRONMENT
				P) SITE REPOSITORY

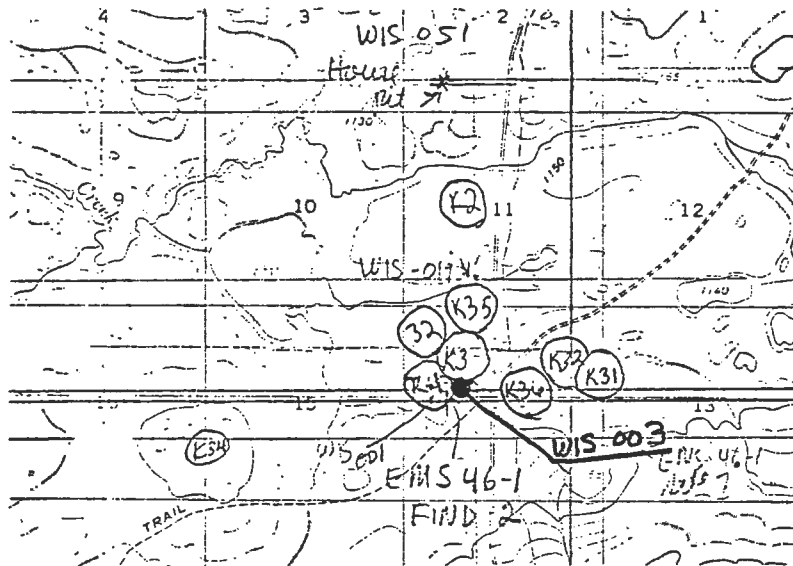


Significance: Unknown. The isolated find of WIS-Find (46-1 Site 2), an obsidian flake in area largely undisturbed by natural erosion and previous testing suggests unrevealed potential.

Impact: Directly on proposed EMS.

Mitigation: Avoid or test and assess.

1. WIS 003 Addendum		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE		3. PERTINENT DATES		CREATED BY			
NWA field # EMS 46-1 Site One				A1. AHS ID. NO.			
4. LOCATION				B1. SITE NAME			
NW 1/4 of the SW 1/4 of the SE 1/4 of the NW 1/4 of Sec 14, T26N, R 13W, Fbks Meridian, WIS A-1 Quad. ACS (Zone 4): 4,781,400 ft N; 449,400 E				C1. LAT. (DEG) (MIN) (SEC)			
				67° 04' 50"			
				LONG. (DEG) (MIN) (SEC)			
				150° 21' 29"			
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)				D1. THEME			
Located on an eastward projecting knob of a ground moraine in the Cathedral Flats area. Excavated by Alyeska archeologists. 27 one meter squares, one 70cm X 70cm square, small tests pits and two other possible pits, also one meter square. Test pits not backfilled, erosional processes at work. Clear view area, but not a prime lookout as moraine is so low. Ridges and hills to E & S, forested area to N & W. Some bare rock exposures. Surficial cultural material found included 2 unifacially retouched black chert flakes, 1 chert nodule with flake scar and 7 flakes. 3 chert flakes recovered from one of two test pits done. One chert flake also noted in Alyeska test pit on moraine west of the actual excavation area. NWA intends to use the moraine as a material source. As of August, 1980, we have recommended avoidance of this moraine.				E1. RESOURCE NATURE			
				F1. OWNERSHIP			
				G1. SIZE			
				H1. PRESERVATION STATUS			
				I1. CULTURAL AFFILIATION			
				J1. BIBLIOGRAPHIC REFERENCE			
				K1. DATES			
				L1. RELIABILITY			
				M1. AHS DATE			
				N1. SITE DATE			
				O1. SITE CONDITION			
				P1. SITE ENVIRONMENT			
				Q1. SITE REPOSITORY			
6. SIGNIFICANCE							
As this site has already been excavated and there is a final report published on it, it can probably be considered to have been mitigated. Expansion of the site would provide more cultural material, but the soil build-up is so minimal, and the excavation having been done on the flat moraine crest, the probability of important data being left undisturbed is minimal in the specific site area.							
7. BIBLIOGRAPHIC REFERENCES							
Cook 1976:33 Holmes in Cook, 1970:54 & Fig 2, following page 12. Yarborough in Cook, 1977: 720-729. UA/NWA Archeological Survey (1980): Leitgeb Field Notes Book 1: 107-108, SB6:29 & 31, SB8: 2-6, Leitgeb Book 1: 113-114.							
8. OTHER INFORMATION							
USA				Museum Accession # UA80-207			

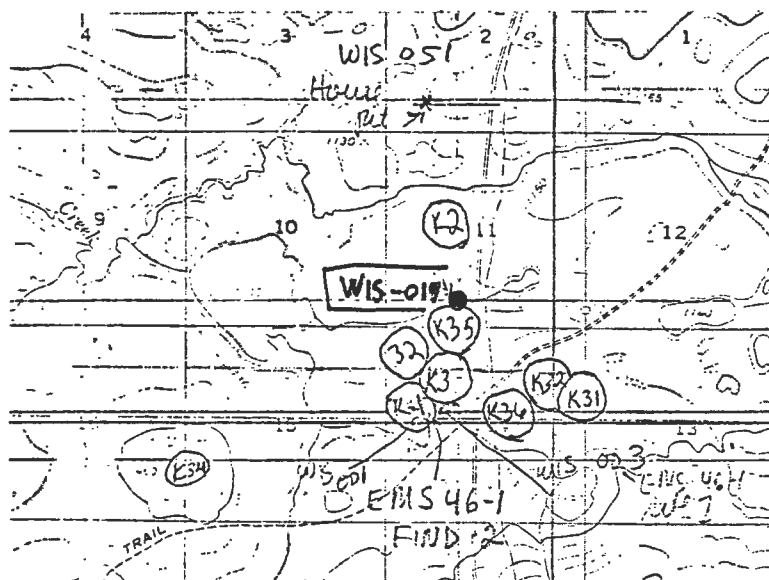


Significance: Low. Previous excavation and publication provides some information on this complex of human activity loci. Some data remain perhaps in situ.

Impact: Directly on proposed EMS.

Mitigation: Avoid or salvage.

WIS 019 Addendum		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
1. NAME OF SITE NWA field # EMS 46-1 site three				3. PERTINENT DATES			
2. LOCATION North half of the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Sec 11, T26N, R13W, Fbks Meridian, WIS A-1 Quad. ACS (Zone 4): 4,784,250 ft. N; 449,900 ft E.				4. COORDINATES LAT. (DEG) (MIN) (SEC) 67° 05' 20" LONG. (DEG) (MIN) (SEC) 150° 21' 05"			
5. DESCRIPTION (GEOLOGICAL, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Located on the NE edge of a ground moraine in the Cathedral Flats area. Site excavated by Alyeska. Site consists of four square meters. 64 chert flakes were recovered by Alyeska. One new 50cm X 50cm test pit excavated next to Alyeska pit contained 88 chert flakes. 17 flakes found on surface, on back dirt pile or in old test pits, including one microblade type flake and one bifacial trimming flake. View clear through almost 360°, but ground moraine is too low for site to be prime lookout area. Location on moraine provides dry, flat camping area above the wet swamplands. Previous test pits not backfilled, erosional phenomena is at work. NWA intends to use this moraine for a material source. As of August, 1980, we have recommended avoidance of the moraine.				6. THEMATIC RESOURCE NATURE			
7. SIGNIFICANCE There is obviously more cultural material located at this site and more raw data could be collected from an expansion of the site into the undisturbed areas. At this time, it appears that the site is a lookout/flaking station, which would have limited research value. Expansion of the site could change the research potential.				8. OWNERSHIP SIZE			
9. PRESENT PRESENT, HANDWRITTEN, PHOTOGRAPHIC REFERENCES Yarborough in Cook, 1977:734. Cook 76:32. Alyeska site status report. UA/NWA Field Notes Leitgeb Book 1:109 & 113-114; SBL6:40-41 and 45; SBL7:11-12 & 15-19.				10. PRESERVATION STATUS			
11. OWNER OF PROPERTY/ADDRESS USA				12. BIBLIOGRAPHIC REFERENCE			
13. MUSEUM ACCESSION # UA80-209				14. DATES			
15. RELIABILITY				16. AMES DATE			
17. SITE CONDITION				18. SITE ENVIRONMENT			
19. SITE REPOSITORY							



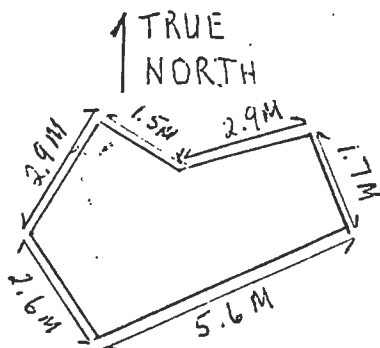
Significance: Medium. Although tested by Alyeska, our work here revealed substantial in situ materials are present with good potential to reveal information on wider land use activities in this locale. Potential for Register eligibility cannot be discounted.

Impact: Directly on proposed EMS.

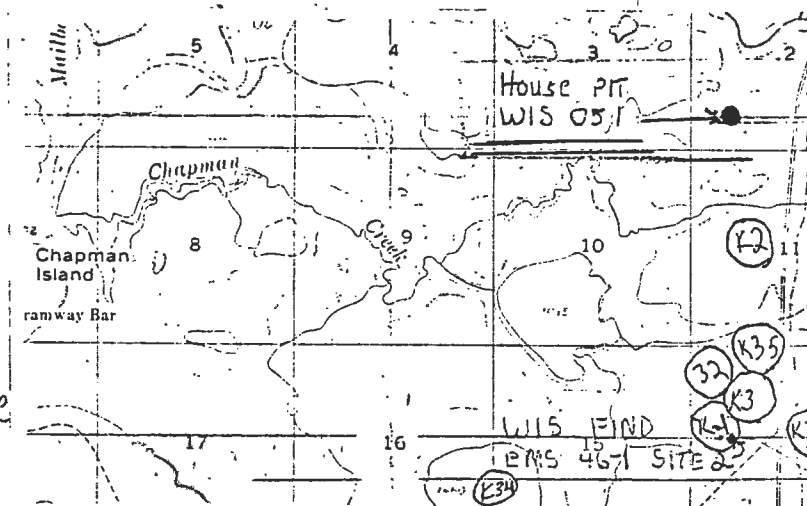
Mitigation: Avoid and backfill Alyeska pits to curtail erosion or excavate.

1. WIS-051		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977	
2. NAME OF SITE EMS 45-3/1/L (Cathedral Mtn. Rectory)		3. PERTINENT DATES probably late prehistoric to early historic			
4. LOCATION Northern half of the SW/4 of the SW/4 of Section 2, T26N, R13W, Fairbanks Meridian, WIS A-1 Quad. ACS (Zone 4): 4,789,600 ft. North; and 449,000 ft. East					
5. DESCRIPTION (TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION) See sketch on back. Probable house pit, on NW facing slope of an E-W trending ground moraine, near the western edge of the ridge. Approximately 50' above the flatlands. Small stream and standing water/grassos area to the south and west, and a small lake approximately 700' north. 1/2 mile west of the haul road. Vegetation consists of dense spruce, dwarf willows, lichens, labrador tea, and a thick, spongy moss mat. House pit area open and treeless. Only disturbance is a 50 x 50 cm test pit, 8'cm deep. NWA intends to use the moraine as possible material source. This would result in total destruction of the house pit. As of August 1980, we have recommended total avoidance of the entire moraine.					
6. SIGNIFICANCE "House pit" like those found at Aniganigurak (PSM-036) near Gal- braith Lake and resembles 'L'-type of ivruk house (iglupiaqtaqlik) reported by Ingstad (1951) at Anaktuvuk Pass (interview with paneak, a local resident). As relatively few house pits are located in the Interior, and even less in this region, valuable info. could be documented from excavation of this site.					
7. REFERENCES UA/NWA Archaeology Survey (1980): Leitgeb field notes Book 1:118, 122-128; Soils Book L9:1-19 & 41-44; Soils Book L7:20-41; Photos L Roll 2:7-8-9					
8. NUMBER OF PHOTOGRAPHS USA					

SPACE BELOW FOR ADP USE ONLY			
CODED BY			
A) ANRS ID. NO.			
B) SITE NAME			
C) LAT. (DEG)	(MIN)	(SEC)	
67°	06'	12"	
LONG. (DEG)	(MIN)	(SEC)	
150°	21'	29"	
D) THEME	E) RESOURCE NAT. REF.		
F) OWNERSHIP	G) SIZE		
H) PRESERVATION STATUS			
I) CULTURAL AFFILIATION			
J) BIBLIOGRAPHIC REFERENCE			
K) DATES			
L) CLASSIFICATION		M) ANRS DATE	
N) SITE DATE			
O) SITE LOCATION			
P) SITE EVALUATION			
Q) SITE NO. (OPTIONAL)			



SKETCH OF HOUSE PIT OUTLINE?

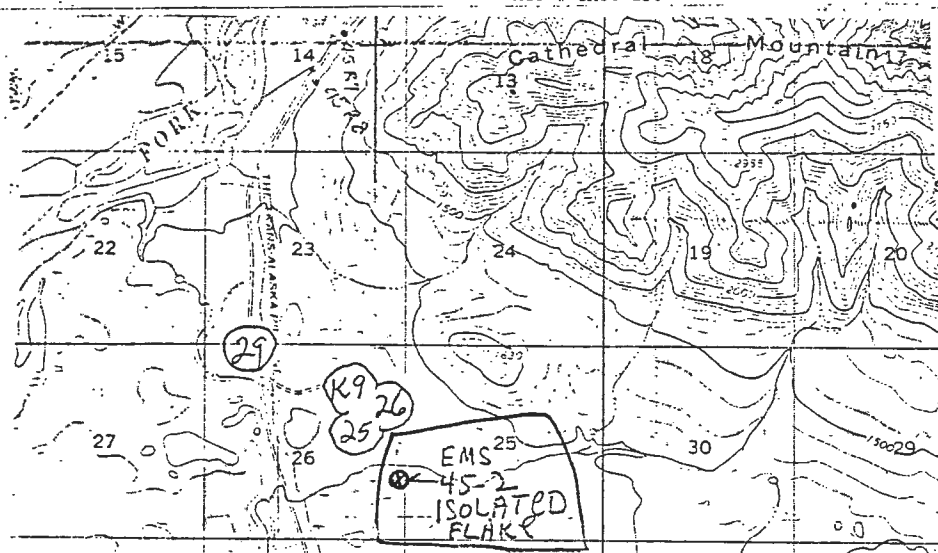


Significance: Medium to High. This house pit is undisturbed and affords an unusual opportunity for better understanding prehistoric interior land use. Potential for Register eligibility is considered likely owing to uniqueness and pristine context.

Impact: Directly on proposed EMS.

Mitigation: Avoid or excavate.

1. WIS Find		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE EMS 45-2A Site one		3. PERTINENT DATES		4. CODED BY		A) ANKS ID. NO.	
6. LOCATION Eastern half of the SE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Sec 26, T27N, R13W, Fbks meridian, WIS A-1Quad. ACS (Zone 4) 4,801,000 ft N; 453,050 ft E				B) SITE NAME		C) LAT. (DEG) (MIN) (SEC) 67° 08' 05"	
5. DESCRIPTION (CONTINUED, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) One isolated black chert flake located on a small moraine "island", 600' x 800'. Cathedral Mountain flats area, part of a Quaternary kettle moraine complex of ground moraines rising above wet lowlands. Small, scattered alder bushes, several large birch trees, some scattered small spruce trees. Stream to N, right at base of the moraine. Flake found on game trail between two previously excavated 5' squares. May be an addendum to a previous site, but cannot be identified from the report on WIS 006, WIS 010 and WIS 011, which were the three sites located on the Alyeska material source which is on this EMS. NWA intends to test this area for a material source. As no other cultural material was located, they were given clearance for borehole drilling only.				LONG. (DEG) (MIN) (SEC) 150° 19' 45"		D) THEME E) RESOURCE CAT.	
As this is an isolated find, it is of limited research value. However, this is a very high potential area and it is very likely that there is more material present in this area.				F) OWNERSHIP G) SIZE		H) PRESERVATION STATUS	
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES Cook, 1970:29-34. Cook, 1971:378-82. Cook, 1976:29-30. UA/NWA Archeological survey (1980). Leitgeb SB11:2-3				I) CULTURAL AFFILIATION		J) BIBLIOGRAPHIC REFERENCE	
8. OWNER OF PROPERTY/ADDRESS USA		Museum Acc # UA80-230		K) DATES		L) RELIABILITY M) ANKS DATE	
				N) NARS DATE		O) SITE CONDITION	
				P) SITE ENVIRONMENT		Q) SITE SIGNATURE	



Significance: Unknown. Additional materials are anticipated and Alyeska recorded several sites on this EMS.

Impact: Directly on proposed EMS.

Mitigation: Avoid or test and assess.

WIS-Find (EMS 45-1)

Flake located in rip-rap along access. Non-cultural.

Significance: None. The find cannot be considered cultural.

Impact: Directly on proposed access to EMS.

Mitigation: None

WIS-006 (see WIS-Find, EMS 45-2A Site 1)

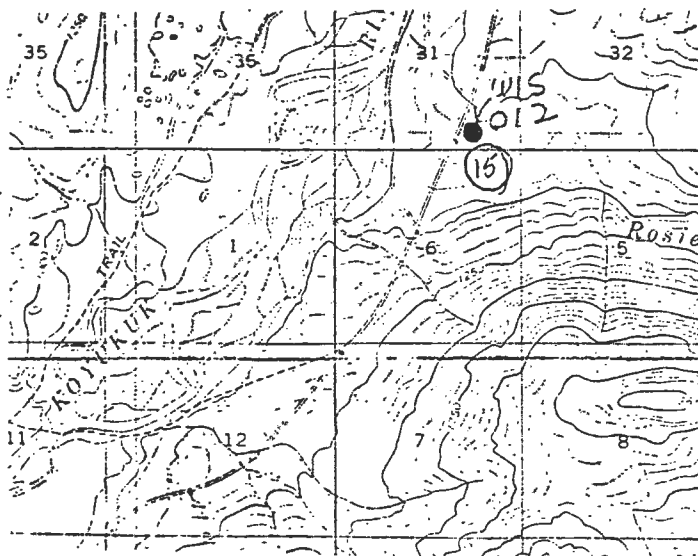
No materials remain.

Significance: None. The site no longer has extant material.

Impact: Directly on proposed EMS.

Mitigation: None

1. WIS 012 Addendum ARKS ID. NO.		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE		3. PERTINENT DATES		CODED BY			
NWA field # - Milepost 250, AS 44 (Rev 1/4-7-80)				A) ARKS ID. NO.			
4. LOCATION NW¼ of the SW¼ of the SE¼ of the SE¼ of Sec 31, T28N, R12W, Fbks Meridian, WIS A-1 Quad. ACS (Zone 4) 4,826,000N; 462,600E.				B) SITE NAME			
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)				C) LAT. (DEG) (MIN) (SEC)			
Located on a small knob of glacial till approx 1000' N of Rosie Creek. Excavation had been dug in 5' squares. Test pits not backfilled, erosional processes are at work. Good view of the Koyukuk Valley on the N through W. E view blocked by trees and mountains. Site is approx 200' E of pipeline. Intensive visual survey did not reveal any cultural material. This site is approximately 50' outside the proposed NWA centerline corridor. NWA was given clearance for an area from the Alyeska pipeline to 150' E of the pipeline. WIS 012 was noted on the clearance form with instructions to avoid the knoll it is on.				67° 12' 12"			
				LONG. (DEG) (MIN) (SEC)			
				150° 15' 53"			
				D) THEME E) RESOURCE NAME			
				F) OWNERSHIP G) SIZE			
				H) PRESERVATION STATUS			
				I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
6. SIGNIFICANCE				K) DATES			
From Gal's report, it would appear that this site was a short term campsite where a few tools were manufactured and used. No features were found. Limited research value, mainly as documentation of the use of the raw materials of the area.				L) RELIABILITY M) ARKS DATE			
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES				N) NR/AR DATE			
Gal in Cook, 1977:735-746. Cook, 1976:34. UA/NWA Archeological Survey (1980): Soils Book L9:30; SBL10:7-8.				O) SITE CONDITION			
8. OWNER OF PROPERTY/ADJULS				P) SITE ENVIRONMENT			

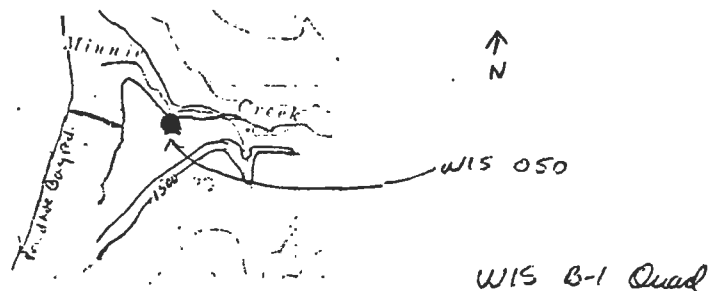


Significance: Low. The site probably has no significant additional information to reveal. Published accounts suggest WIS-012 was a small camp site.

Impact: Indirect though near the NWA route.

Mitigation: None (avoid the knoll)

1. WIS-050		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE ENS 41-3/F - Minnie Creek Gold Mine Shaft		3. PERTINENT DATES historic		4. GUIDED BY		A) AHS ID. NO.	
5. LOCATION NE/4 of the NW/4 of the NW/4 of Sec 20, T30N, R11W, Fbks Meridian, WIS B-1 Quad, ACS (Zone 4); 4,903,600' north; 492,250' east; 200' from south bank Minnie Creek.		6. DESCRIPTION, EXTENT, HISTORICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION. Site consists of a mine shaft 8' deep, 5' square, lined with logs; related trash such as "Pearl Oil" kerosene 5 gal. can; an area 100-150' from the east edge of the existing pit where trees have been cut down; this area is at least a 1000' long. The mine shaft is on the periphery of the proposed NWA material source and as such it is not endangered by constructing activity, whereas the area containing the cut trees will be threatened with destruction. The trees appear to have been used in the mine shaft and perhaps for sluicing operations on nearby Minnie Creek. The area was cleared for NWA exploration 8/80.		7. LAT. (DEG) (MIN) (SEC) 67° 24' 55"		8. LONG. (DEG) (MIN) (SEC) 150° 03' 30"	
9. SIGNIFICANCE Both the shaft and the trees are probably part of Alaska's gold mining history, the shaft probably being dug during the heyday of the Wiseman mining period.		10. RELIABILITY (N) AHS DATE		11. SITE NAME		12. SITE CONDITION	
13. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeological Survey (1980); Fetter field notes:80-82		14. PRESERVATION STATUS		15. CULTURAL AFFILIATION		16. BIBLIOGRAPHIC REFERENCE	
17. OWNER OF PROPERTY/ADDRESS USA & Wisenak Inc. Contestants		18. DATES		19. SITE ENVIRONMENT		20. SITE REPOSITORY	

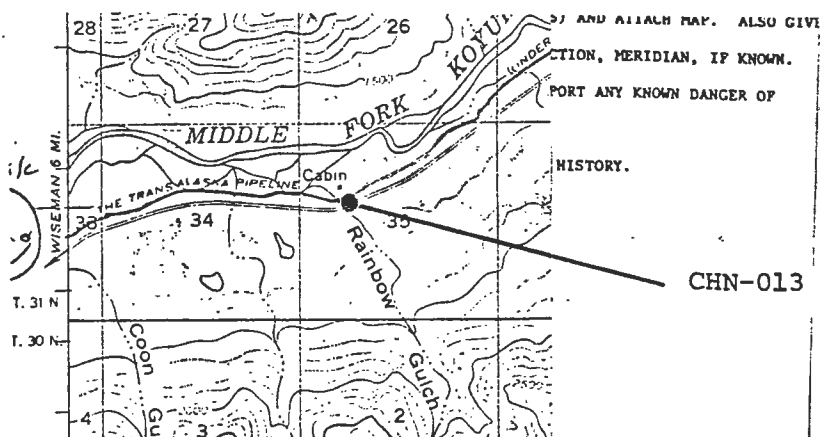


Significance: Medium. The general area contains several associated historic features relating to mining activities in the area.

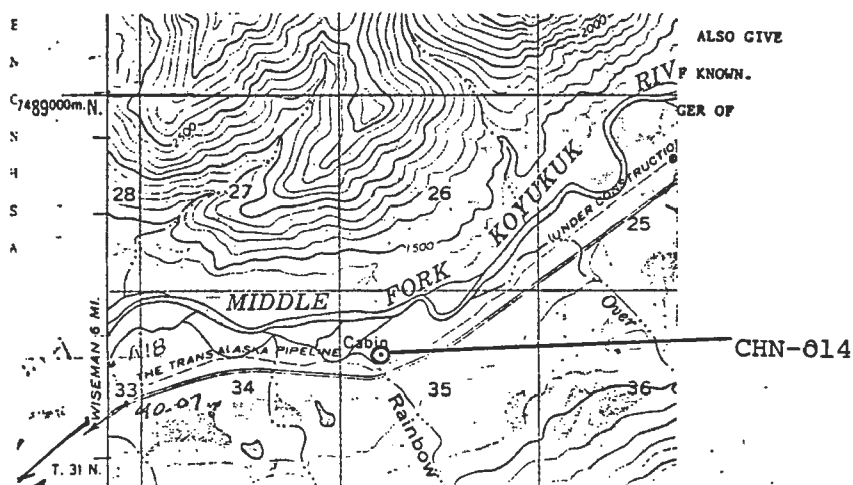
Impact: Indirect though some features lie near the proposed EMS borders.

Mitigation: Avoid

CHN-013		ALASKA HERITAGE RESOURCES SURVEY RECORD LAND	10-521 REV. 1972, 1976-1977	SPACE BELOW FOR ADP USE ONLY
1. NAME OF SITE AS 040/1/C		3. PERTINENT DATES modern ca. 1955-1965		CODED BY
2. LOCATION NW/4 of SW/4 of SE/4 of NW/4 of Sec 35, T31N, R11W Fbks Meridian, CHN B-6 Quad. ACS (Zone 4); 4,925,750' north; 507,400' east.				A) ANRS ID. NO.
4. DESCRIPTION (CONSTRUCTIONS, STRUCTURAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) General location is 55' west of haul road and 150' east of Alyeska pipeline, and 0.8 mi south of Over Creek. Located on an alluvial fan terrace edge approx. 10' above floodplain deposits of the Middle Fork Koyukuk River to the immediate west. The site appears to be a lean-to measuring about 16' NW-SE and 10'6" NE-SW orientation of long axis is N30W. Three of the sides were constructed of wooden beams roughly 4" in diameter while the SE side was open. A tripod arrangement has collapsed in on this latter side. The roofing material of this collapsed structure is still visible, composed of deciduous twigs and branches. The immediate vicinity is strewn with food tins, wire, batteries, shoes, insulators, & rope. There are also a few cut stumps & axe marks on roots seen. An underground cache is found 22' NS3W of structure. This site lies within the proposed gas line right-of-way. This site is of some value both from the standpoint of a person's adaptive strategy to this local environment and also, if the main dump can be found, consumption rates (i.e. types of foodstuffs-quality & quantity) can be obtained.				B) SITE NAME
5. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Cannon, Hanson, Des Rochers fieldnotes:1980				C) LAT. (DEG) (MIN) (SEC) 67° 28' 10"
				LONG. (DEG) (MIN) (SEC) 149° 56' 50"
				D) THEME
				E) OWNERSHIP
				F) PRESERVATION STATUS
				G) CULTURAL AFFILIATION
				H) BIBLIOGRAPHIC REFERENCE
				I) DATES
				J) RELIABILITY
				K) NR/NRE DATE
				L) SITE CONDITION
				M) SITE ENVIRONMENT
				N) SITE REPOSITORY



CHN-014		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-321 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
1. NAME OF SITE Sod House		3. PERTINENT DATES Historic/modern (1940's)		CODED BY		A1. AHS ID. NO.	
4. LOCATION W/2 of NW/4 of SE/4 of NW/4 of Sec. 35, T31N, R11W (Fairbanks Meridian), CHN B-6 Quad. ACS (Zone 4): 4,924,250'N; 507,750'E		5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION) Sod house located on floodplain deposits of the Middle Fork Koyukuk River 900'E of the River, 100'W of the Alyeska Pipeline & 2560'S of TAPS Rd. APL-3/101 RGV-40. Site not systematically surveyed due to distance from centerline. Existing sign: "Historic Site, No Trespassing". This log & sod house is in fair condition, but much of one wall has fallen away. A work bench, wood stove, kitchen utensils, cans & sled are strewn about. Site covers ca. 150' x 200'. Many cut stumps and a discrete log cutting area nearby. Site is in no apparent danger of impactation.		6. LAT. (DEG) (MIN) (SEC) 67° 28' 16"		LONG. (DEG) (MIN) (SEC) 149° 56' 56"	
7. SIGNIFICANCE No records were found on this structure despite posted notice. Site may be associated with earlier gold rush era of Wiseman area. Site has potential for providing information on historic land & resource use.		8. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Field notes of Cannon; Hanson p. 209-210; Des Rochers p. 153.		9. OWNERSHIP (1) SIZE		10. PRESERVATION STATUS	
9. COUNTRY OF PROPERTY/ADDRESS USA		11. CULTURAL AFFILIATION		12. BIBLIOGRAPHIC REFERENCE		13. DATES	
		14. RELIABILITY (1) AHS DATE		15. DATE DATE		16. SITE CONDITION	
		17. SITE ENVIRONMENT		18. SITE ENVIRONMENT		19. SITE ENVIRONMENT	

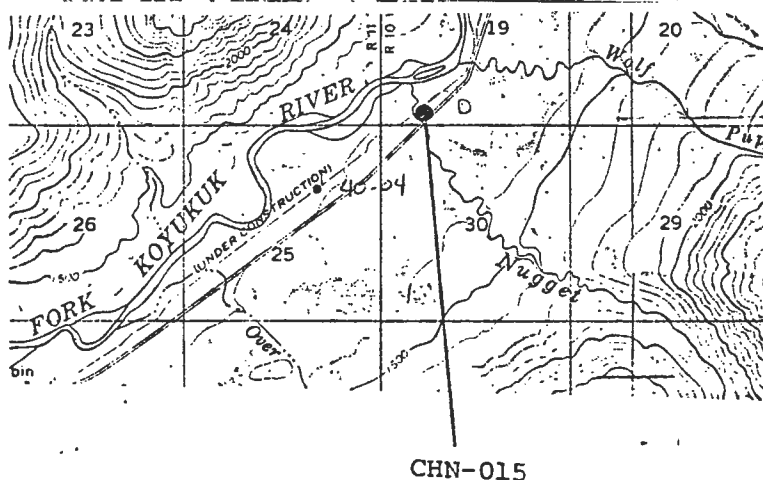


Significance: Medium to High. This sod house and associated refuse and material has potential Register eligibility for the information it contains on traditional and/or mining activities in the area.

Impact: Indirect

Mitigation: Avoid, perhaps post and fence or fully document in case of vandalism.

1. CHN-015		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE Arctic John Etalook Cabin				3. PERTINENT DATES historical/modern			
4. LOCATION SE/4 of SW/4 of SW/4 of Sec. 19, T31N, R10W (Fairbanks Meridian), CHN B-6 Quad. ACS (Zone 4): 4,931,300'N; 517,818'E				5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION) Viable sod house located on an alluvial fan 50'W of Prudhoe Bay Rd., 60'N of Nugget Creek, and 1050'E of Middle Fork Koyukuk River. House bears a sign "no trespassing" and "Arctic John Etalook F-18270, T31N/R11W, Sec 24 & 25; T31N/R10W, Sec 19 & 30. One hundred sixty acres more or less. Native allotment. This site protected under the Antiquities Act, Bureau of Indian Affairs." Site was noted and the posted notice was respected. House is along 8-5-80 proposed NWA corridor.			
6. SIGNIFICANCE Site is still in good state of preservation & is apparently still occupied by John Etalook. Native construction techniques & subsistence life style as well as ethnoarchaeological studies are possible future avenues of consideration. Ownership of land evidently in litigation.				7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeological Survey (1980); Cannon field notes.			
8. OWNER OF PROPERTY/ADDRESS Native Allotment - Arctic John Etalook (Contested ?)				CODED BY: A) AHS ID. NO. B) SITE NAME C) LAT. (DEG) (MIN) (SE) 67° 29' 29" LONG. (DEG) (MIN) (SE) 149° 52' 20" D) THEME E) RESOURCE NATURE F) OWNERSHIP G) SIZE H) PRESERVATION STATUS I) CULTURAL AFFILIATION J) BIBLIOGRAPHIC REFERENCE K) DATES L) RELIABILITY (N) AHS DATE M) DATE N) NAME DATE O) SITE CONDITION P) SITE ENVIRONMENT Q) SITE DETERMINATION			

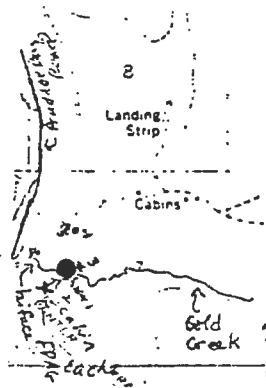


Significance: High. This cabin and associated features record traditional land use in the area.

Impact: Directly on proposed (8/5/80) centerline

Mitigation: Avoid and protect area fully.

1. CHN-009* (*card 1 of 6)		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977	
2. NAME OF SITE EMS 39-3/1/F		3. PERTINENT DATES Gold Creek Cabin 2 historic		SPACE BELOW FOR ADP USE ONLY	
4. LOCATION SW/4 of the SE/4 of the SE/4 of the NW/4 of Sec 17, T31N, R10W, Fbks Meridian; CHN C-6 Quad. ACS (Zone 4); 4,939,000'N; 522,750'E				CODED BY	
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Site is spread out within an area 1500' long and 900' wide both north & south. It contains, down on the floodplain (between the old terrace & Gold Creek) a 5.7m x 5.3m deteriorated log cabin and associated refuse such as a log cabin shaped syrup can (Log Cabin) and Edgeworth tobacco tins; five ca. 9' diameter circular prospecting pits used to search for a gold vein; & in an area extending 2500' W of cabin, 1000' S of cabin where there were numerous cut trees. (The area of cut trees & pits extends south beyond the floodplain of Gold Creek). The area was in danger of destruction because of a proposed NWA material source. A non-clearance was issued to them for this area August 1980.				A) AHS ID. NO.	
6. SIGNIFICANCE These features form part of the Gold Rush heritage of Alaska.				B) SITE NAME	
7. BIBLIOGRAPHIC REFERENCES UA/NWA Archaeological Survey (1980); Fetter field notes:156-160 & 114-117; Thorsen field notes:14-17; Villa field notes:41-46; Jordan field notes:29-36; Leitach field notes:131-137, SB 12:1-13; SB 13:1-21 Photos Roll F2 #2-20 and F1 #50-56				C) LAT. (DEG) (MIN) (SEC) 67° 30' 43"	
8. OWNER OF THE LAND/ADDRESS USA-Federal				LONG. (DEG) (MIN) (SEC) 149° 50' 15"	
				D) THEME E) RESOURCE NATURE	
				F) OWNERSHIP G) SIZE	
				H) PRESERVATION STATUS	
				I) CULTURAL AFFILIATION	
				J) BIBLIOGRAPHIC REFERENCE	
				K) DATES	
				L) RELIABILITY M) AHS DATE	
				N) SITE DATE	
				O) SITE CONDITION	
				P) SITE ENVIRONMENT	
				Q) DATE OF VISIT	



1 CHN-009
2 CHN-009
3 CHN-009
4 CHN-009
5 CHN-009
surface find - CHN-010
Cache - CHN-008
Cabin - CHN-009

A
N CHN C-6 Quad

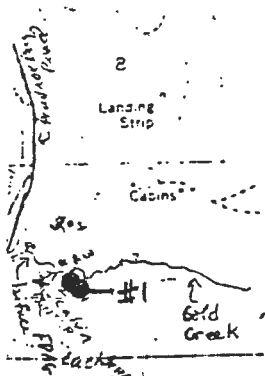
Significance: Medium to High. This cabin, refuse, cut over area, and pits relate to historic mining in the area. As a unit the group of features have significant information to reveal and may be Register eligible.

Impact: Directly on proposed EMS.

Mitigation: Avoid. Complete probing and recording would probably be very costly in terms of time.

1. CHN-009*		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD	10-521 REV. 1972, 1976-1977
2. DATE OF SITE ENS 39-3/1/F Prospecting Pit 1		3. PERTINENT DATES historic	
4. LOCATION NE/4 of the NE/4 of the SW/4 of Sec 17, T31N, R10W Fbks Meridian, CHN C-6 Quad. ACS (Zone 4); 4,938,750'N; 523,200'E			
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) See card #1			
6. SIGNIFICANCE See card #1			
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES See card #1			
8. OWNER OF PROPERTY/ADDRESS See card #1			

SPACE BELOW FOR ADP USE ONLY			
CODED BY			
A) AMRS ID. NO.			
B) SITE NAME			
C) LAT. (DEG) (MIN) (SEC) 67° 30' 39"			
LONG. (DEG) (MIN) (SEC) 149° 50' 05"			
D) THEME	E) RESOURCE NATURE		
F) OWNERSHIP	G) SIZE		
H) PRESERVATION STATUS			
I) CULTURAL AFFILIATION			
J) BIBLIOGRAPHIC REFERENCE			
K) DATES			
LIABILITY		AMRS DATE	
N) NR/NR DATE			
O) SITE CONDITION			
P) SITE ENVIRONMENT			
Q) SITE REQUISITE			

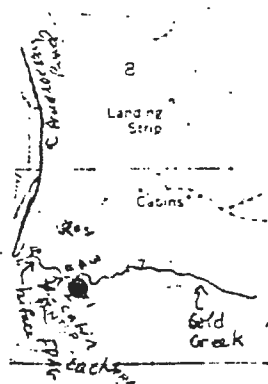


1 CHN-009
2 CHN-009
3 CHN-009
4 CHN-009
5 CHN-009

surface find - CHN-010
caches - CHN-008
cabin - CHN-009

N
N CHN C-6 Quad

1. CHN-009*		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE (*card 3 of 6)		3. PERTINENT DATES		CODED BY		A) AHS ID. NO.	
EMS 39-3/1/F Prospecting Pit 2		historic				B) SITE NAME	
4. LOCATION NE/4 of the NE/4 of the SW/4 of Sec 17, T31N, R10W Fbks Meridian, CHN C-6 Quad. ACS (Zone 4); 4,938,800'N; 523,000'E				C) LAT. (DEG) (MIN) (SEC) 67° 30' 40"		LONG. (DEG) (MIN) (SEC) 149° 50' 10"	
5. DESCRIPTION (CONTINUES, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) See card #1				D) THEME		E) RESOURCE NATURE	
				F) OWNERSHIP		G) SIZE	
				H) PRESERVATION STATUS			
				I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
				K) DATES			
				L) RELIABILITY (N) AHS DATE			
				M) DATE DATE			
				O) SITE CONDITION			
				P) SITE ENVIRONMENT			
				Q) SITE SENSITIVITY			
6. IDENTIFICATION							
See card #1							
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES							
See card #1							
8. OWNER OF PROPERTY/ADDRESS							
See card #1							



1 CHN-009
2 CHN-009
3 CHN-009
4 CHN-009
5 CHN-009

Wiface find - CHN-010
Cache - CHN-008
Cabin - CHN-009

N
N CHN C-6 Quad

1. CHN-009*		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE EMS 39-3/1/F Prospecting Pit 3		3. PERTINENT DATES historic		CODED BY		A) AHS ID. NO.	
4. LOCATION SE/4 of the SE/4 of the NW/4 of Sec 17, T31N, R10W Fbks Meridian, CHN C-6 Quad. ACS (Zone 4); 4,939,250'N; 529,000'E		5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) See card #1		C) LAT. (DEG) (MIN) (SEC) 67° 30' 44"		D) SITE NAME	
6. SIGNIFICANCE See card #1		7. RELEVANT PRINTS, MANUSCRIPT, PHOTOGRAPHIC REFERENCES See card #1		LONG. (DEG) (MIN) (SEC) 149° 50' 10"		E) RESOURCE NATURE	
8. OWNER OF PROPERTY ADDRESS See card #1		9. BIBLIOGRAPHIC REFERENCE		F) OWNERSHIP (1) SIZE		G) PRESERVATION STATUS	
		H) CULTURAL AFFILIATION		I) SITE CONDITION		J) SITE ENVIRONMENT	
		K) DATES		L) RELIABILITY (M) AHS DATE		M) SITE REMARKS	

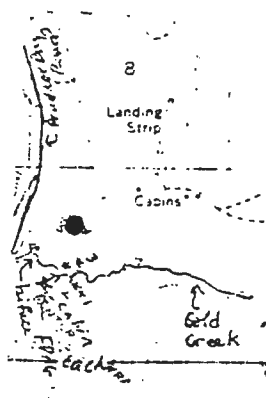


1 CHN-009
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4 CHN-009
5 CHN-009

before find - CHN-010
Cache - CHN-008
Cabin - CHN-009

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N CHN C-6 Quad

1. CHN-009* (*card 5 of 6)		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD	10-521 REV. 1972, 1976-1977	SPACE BELOW FOR ADP USE ONLY
2. NAME OF SITE EMS 39-3/1/F Prospecting Pit 4		3. PERTINENT DATES historic		CODED BY
4. LOCATION SE/4 of the NE/4 of the NW/4 of Sec 17, T31N, R10W Fbks Meridian, CHN C-6 Quad. ACS (Zone 4); 4,940,500'N; 523,000'E		5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) See card #1		A) AHS ID. NO.
				B) SITE NAME
				C) LAT. (DEG) (MIN) (SEC) 67° 30' 52"
				LONG. (DEG) (MIN) (SEC) 149° 50' 10"
6. SIGNIFICANCE See card #1		D) THEME E) RESOURCE NATURE		F) OWNERSHIP G) SIZE
				H) PRESERVATION STATUS
				I) CULTURAL AFFILIATION
				J) BIBLIOGRAPHIC REFERENCE
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES See card #1		K) DATES		L) RELIABILITY M) AHS DATE
				N) SOURCE DATE
				O) SITE CONDITION
				P) SITE ENVIRONMENT
8. OWNER OF PROPERTY/ADDRESS See card #1		Q) SITE REPOSITORY		



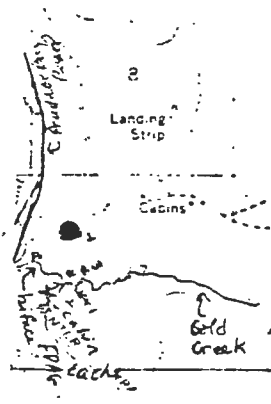
1 CHN-009
2 CHN-009
3 CHN-009
4 CHN-009
5 CHN-009

before find - CHN-010
Cache - CHN-008
Cabin - CHN-009

N
N CHN C-6 Quad

1. CHN-009*		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD	10-521 REV. 1972, 1976-1977
2. (*card 6 of 6)		3. PERTINENT DATES	
ENS 39-3/1/F Prospecting Pit 5		historic	
4. LOCATION SW/4 of the NE/4 of the NW/4 of Sec 17, T31N, R10W Fbks Meridian, CHN C-6 Quad. ACS (Zone 4); 4,940,500'N; 522,900'E			
5. DESCRIPTION (IMPRESSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)			
See card #1			
6. JUSTIFIABLE			
See card #1			
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES			
See card #1			
8. OWNER OF PROPERTY/ADDRESS			
See card #1			

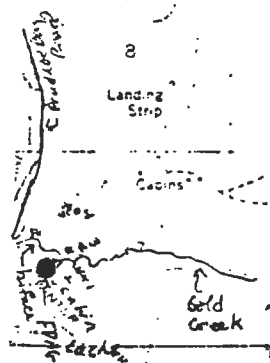
SPACE BELOW FOR ADP USE ONLY			
CODED BY			
A) AHS ID. NO.			
B) SITE NAME			
C) LAT. (DEG)	(MIN)	(SEC)	
67°	30'	52"	
LONG. (DEG)		(MIN)	(SEC)
149°		50'	15"
D) THEME	E) RESOURCE NATURE		
F) OWNERSHIP	G) SIZE		
H) PRESERVATION STATUS			
I) CULTURAL AFFILIATION			
J) BIBLIOGRAPHIC REFERENCE			
K) DATES			
L) RELIABILITY	M) AHS DATE		
N) N/A/E DATE			
O) SITE CONDITION			
P) SITE ENVIRONMENT			
Q) SITE DEPOSITION			



1 CHN-009
 2 CHN-009
 3 CHN-009
 4 CHN-009
 5 CHN-009
 before find - CHN-010
 Cache - CHN-008
 Cabin - CHN-009

N
 CHN C-6 Quad

1. CHN-008		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE EMS 39-3/3/F - Cache		3. PERTINENT DATES unknown		A) ANRS ID. NO. ...		CODED BY	
4. LOCATION SE/4 of the NW/4 of the SW/4 of Sec 17, T31N, R10W, Fbks Meridian CHN C-6 Quad. ACS (Zone 4); 4,939,000' North; 522,250' East				B) SITE NAME		C) LAT. (DEG) (MIN) (SEC) 67° 30' 42"	
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION,) A roughly circular depression (1.8m x 1.2m) was located about 700' S of Gold Creek on the east side of the Prudhoe Bay haul road. It had a moss berm around 1/2 of its perimeter. Testing within revealed a soil similar to the surrounding soil with bits of charcoal and rich black color. A buried log was also found within this area.				LONG. (DEG) (MIN) (SEC) 149° 50' 30"		D) THEME	
6. SIGNIFICANCE It is difficult to determine if this feature is prehistoric, or historic and related to the mining activity in the area.				E) RESOURCE NAT'L		F) OWNERSHIP	
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Leitgeb field notes Book 1:135-137				G) PRESERVATION STATUS		H) CULTURAL AFFILIATION	
8. OWNER OF PROPERTY/ADDRESS USA-Federal				I) BIBLIOGRAPHIC REFERENCE		J) DATES	
				K) RELIABILITY		L) ANRS DATE	
				M) NR/SRE DATE		N) SITE CONDITION	
				O) SITE ENVIRONMENT		P) SITE REPOSITORY	



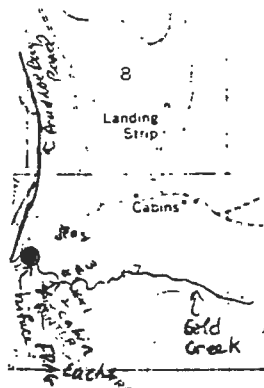
1 CHN-009
 2 CHN-009
 3 CHN-009
 4 CHN-009
 5 CHN-009
 before find - CHN-010
 Cache - CHN-008
 Cabin - CHN-009
 N
 CHN C-6 Quad

Significance: Unknown. This is probably a cultural feature and requires further testing to assess.

Impact: Directly on a proposed EMS.

Mitigation: Avoid or test and assess.

CHN-010		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE		3. PERTINENT DATES		CODED BY		A) AHS ID. NO.	
EMS 39-3/2/F - Find Location		prehistoric				B) SITE NAME	
4. LOCATION		5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION)		C) LAT. (DEG) (MIN) (SEC)		D) LONG. (DEG) (MIN) (SEC)	
SW/4 of the SW/4 of the NW/4 of Sec 17, T31N, R10W, Fbks Meridian CHN C-6 Quad. ACS (Zone 4); 4,939,500' north; 521,750' east; N bank Gold Creek terrace, 150' east of Prudhoe Bay haul road.		Chert biface frag. was located on the downslope outwash (north bank) of an old Gold Creek terrace. Further testing revealed no concentration of material in the area.		67° 30' 47"		149° 50' 42"	
The biface frag. and Gal's report (1974 field notes) of finding two flakes in different parts of the Alyeska material source (CHN-005, CHN-006) suggest the presence of a site, but whose limits are as yet unknown.				D) THEME		E) RESOURCE NAME	
				F) OWNERSHIP		G) SIZE	
				H) PRESERVATION STATUS			
				I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
				K) DATES			
				L) RELIABILITY		M) AHS DATE	
				N) NR/NRE DATE			
				O) SITE CONDITION			
				P) SITE ENVIRONMENT			
				Q) SITE REFUSORY			
6. SIGNIFICANCE		7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES					
The provenience of the biface fragment is questionable due to downslope creep.		UA/NWA Archaeology Survey (1980); Fetter field notes:160 & 114-117; Villa field notes:46; Jordan field notes:29 & 36; Museum Accession #UA80-226.					
8. OWNER OF PROPERTY/ADDRESS							
USA-Federal							



1 CHN-009
2 CHN-009
3 CHN-009
4 CHN-009
5 CHN-009

biface find - CHN-010
Cache - CHN-008
cabin - CHN-009

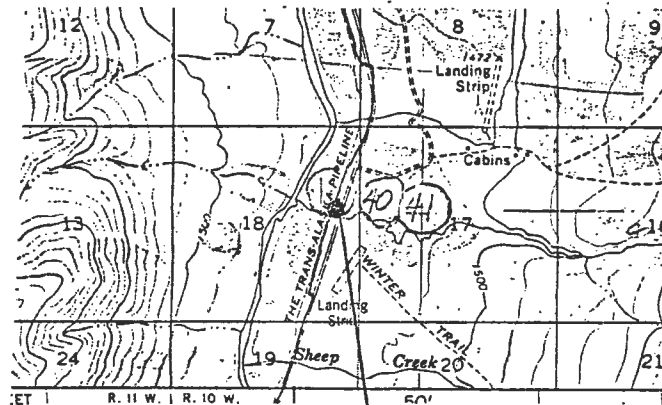
^
N CHN C-6 Quad

Significance: Unknown. Potential for a concentration of materials on the EMS is considered good based on the 1980 find and previous Alyeska finds here.

Impact: Directly on a proposed EMS.

Mitigation: Avoid or test and assess.

1. CHN-007		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE Gold Creek Cabin				3. PERTINENT DATES historic/modern			
4. LOCATION Between NW/4 and SW/4 of SE/4 of NE/4 of Sec 18, T31N, R10W (Fairbanks Meridian), CHN C-6 Quad. ACS (Zone 4): 4,939,800'N; 520,000'E				5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION) This log cabin measuring 13'4" x 11' (inside) is 100'N of Gold Creek, 15'W of Haul Rd., and 950'E of confluence of Gold Creek and Middle Fork Koyukuk River. Door on end, long axis of house S25W. One window centrally located in rear wall. Sod roofing. 2"x 8" floor planks. Center ceiling height 6'6". Stove pipe in ceiling. Remnants of 2 bed frames within & along with shelving & a table in good condition. Associated refuse dump covered by Haul Rd. Site situated on a large alluvial fan truncated by Gold Creek. Cabin is within 150'E of proposed NWA centerline & is structurally sound with only a small (4") crack in roof. Except for dump, site was avoided during pipeline construction & should be avoided in the future. Earliest name carved in cabin is Reed Kelley Jan. 19, 1936.			
6. JUSTIFICATION This site is representative of an early modern prospector's or miner's home, and may shed light in related land/resource use of that period.				7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Field notes of Cannon; Hanson p. 204-207; Des Rochers p. 145-149. Gal 74-3/91-92.			
8. OWNER OF PROPERTY/ADDRESS				9. SITE INFORMATION			
				A) AMRS ID. NO.			
				B) SITE NAME			
				C) LAT. (DEG) (MIN) (SEC) 67° 30' 48"			
				LONG. (DEG) (MIN) (SEC) 149° 50' 58"			
				D) THEME (1) RESOURCE NATURE			
				E) OWNERSHIP (2) SIZE			
				H) PRESERVATION STATUS			
				I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
				K) DATES			
				LIABILITY (M) AMRS DATE			
				N) SOURCE DATE			
				O) SITE CONDITION			
				P) SITE ENVIRONMENT			



CHN-007

Significance: Medium to High. This still viable cabin may have late historic information to offer.

Impact: Indirect but near proposed centerline.

Mitigation: Avoid, maintain?

CHN-Find/Wood (EMS 36-5)

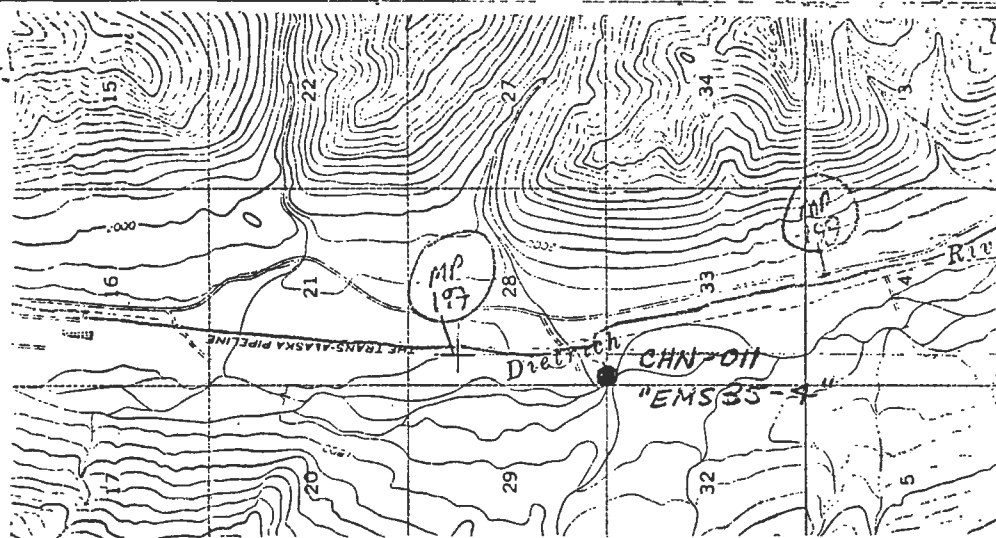
Frozen wood sample, 8 feet deep in organic layer at EMS 36-5 backhoe trench. Non-cultural.

Significance: None. There is no evidence this wood is associated with human activities.

Impact: Directly on proposed EMS.

Mitigation: None

1. CHN-011		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE				3. PERTINENT DATES			
EMS 35-4 (1980 field number)				Historic (1900-1930)			
4. LOCATION SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$, Section 28, T35N R10W, Fairbanks Meridian, CHN D-6 Quad. ACS (Zone 4): 5,052,600 ft N; 522,750 ft E							
5. DESCRIPTION (COMPOSITION, GEOGRAPHICAL & OTHER ENVIRONMENTAL FACTORS, PRESENT CONDITION AND DANGER OF DESTRUCTION.) The wooden deadfall and associated trapline segment are located on the eastern banks of the Dietrich River. The river cuts through the lower part of an alluvial fan. The deadfall is endangered by the river's active erosion of its banks. The deadfall is 2M from the present bank edge and is surrounded winter axe-cut trees (3-4 ft high). The deadfall was made in the traditional manner, utilizing an axe. The undisturbed portion of the EMS appears to have scattered adze-, axe-, and saw-cut trees; the adze-cut trees are NE of the deadfall area, approx. 200+ ft., near TP-N2(B). The vegetation consists of a fairly open spruce forest with some willows, mosses, lichens, blueberries & cranberries.							
6. SIGNIFICANCE This is an example of the aboriginal style of wooden deadfalls, similar to those used by Kutchin Indians. The wood is beginning to rot but the integrity of the structure is good.							
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980): R. Jane Dale, Backhoe Prog. Book 1:31-33; R. Joan Dale, Backhoe Prog. Book 2:106-110, Backhoe clearance forms							
8. OWNER OF PROPERTY/ADDRESS USA							
A) AHS ID. NO.				B) SITE NAME			
C) LAT (DEG) (MIN) (SEC) 67° 44' 22"				LONG. (DEG) (MIN) (SEC) 149° 50' 10"			
D) NAME				E) RESURCE NAME			
F) OWNERSHIP				G) SIZE			
H) PRESERVATION STATUS				I) CULTURAL AFFILIATION			
J) BIBLIOGRAPHIC REFERENCE				K) DATES			
L) RELIABILITY				M) AHS DATE			
N) YEAR DATE				O) SITE CONDITION			
P) SITE ENVIRONMENT				Q) SITE RESTRICTION			



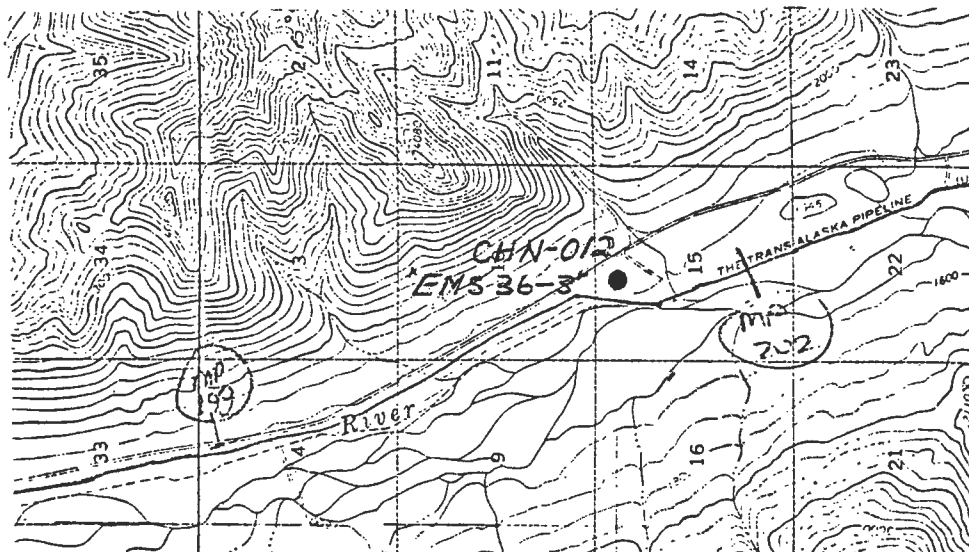
Significance: Medium. Early trapping activities may be relatable to known natives and to material culture associated with traditional activities in the area. Potential eligibility of this behavioral complex for nomination to the National Register should be considered.

Impact: Directly on proposed EMS.

Mitigation: Avoid or document and record fully.

74

1. CHN-012		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD	10-521 REV. 1972, 1978-1977	SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE		3. PERTINENT DATES		CODED BY	
EMS 36-3 (1980 field number)		Possibly Prehistoric		A) ANKS ID. NO.	
4. LOCATION Border of SE $\frac{1}{4}$ & NE $\frac{1}{4}$, border of NE $\frac{1}{4}$ & SE $\frac{1}{4}$ of the NW $\frac{1}{4}$, Section 15 T34N, R10W, Fairbanks Meridian. CHN D-6 Quad. ACS (Zone 4): 5,035,750 ft N, 530,000 ft E.				B) SITE NAME	
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) The possible house pit is on the "southern" side of a knoll just downslope of the summit, with no surficial indication of this feature. The ground cover consists of mosses, labrador tea, blueberries & cranberries with spruce & willows. Wood fragments were encountered in the semi-frozen organic silts beneath the sod and are also apparent in the permafrost zone, 12-15" down. One caribou bone frag., a right, distal humeral frag., was the only potential faunal/artifactual remain encountered. Three parallel log fragments were observed in the "west" wall, which may be possible structural members.				C) LAT. (DEG) (MIN) (SEC) 67° 46' 37"	
				LONG. (DEG) (MIN) (SEC) 149° 47' 10"	
				D) THEME (E) RESOURCE NATURE	
				F) OWNERSHIP (J) SIZE	
				H) PRESERVATION STATUS	
				I) CULTURAL AFFILIATION	
				J) BIBLIOGRAPHIC REFERENCE	
				K) DATES	
				L) RELIABILITY (M) ANKS DATE	
				N) N/A/S/E DATE	
				O) SITE CONDITION	
				P) SITE ENVIRONMENT	
				Q) SITE REVISITORY	
6. SIGNIFICANCE The significance is uncertain, as the feature was encountered during backhoe monitoring, further testing is recommended before positive determination can be made.					
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980): R. Joan Dale, Backhoe Prog. Book 2:104, Backhoe Clearance forms; Accession Number: UA80-251					
8. OWNER OF PROPERTY/ADDRESS USA					



Significance: Unknown, possibly medium to high. This site may prove to be a (prehistoric?) traditional structure with associate refuse, etc.

Impact: Directly on proposed EMS.

Mitigation: Avoid or test and assess.

CHN-Find (NWA MP 194 - AS 035)

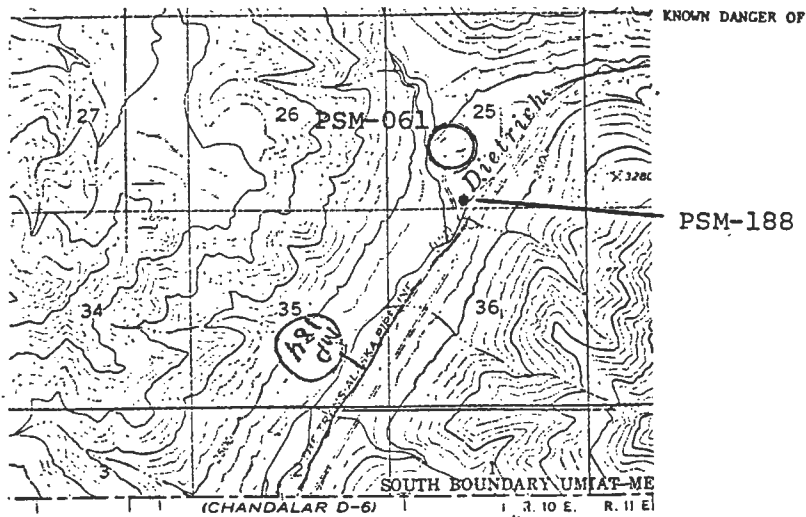
Neck of a glass bottle associated with a modern (pipeline construction?) hearth.

Significance: None. These finds are modern.

Impact: Directly on proposed centerline.

Mitigation: None

PSM-188		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1974-1977		SPACE BELOW FOR ADP USE ONLY	
1. NAME OF SITE AS 033/3/G		3. PERTINENT DATES modern		CODED BY			
2. LOCATION W side of the SE/4 of the SE/4 of the SW/4 of Sec 25, T16S, R10E Umat Meridian, PSM A-5 Quad. ACS (Zone 4); 5,126,000' north, 539,100' east				A) AHS ID. NO.			
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Site lies ca. 1.25 mi south of base of Chandalar shelf on W side of Dietrich River on flat floodplain, 100 ft from river, and ca. 750 ft N of confluence of "wetfoot" creek. Proposed Borehole 33-31 ca. 39 ft to east. Site consists of a rectilinear configuration of fallen/cut logs and poles. Several large stones nearby appear purposely placed. Five cut & stacked spruce poles ca. 6-1/2 x 3 inches are on a log pallet within confines of configuration. Structure measures ca. 16 x 16 ft. Many cut trees (buck saw & axe-cut) around. Function unknown.				B) SITE NAME			
				C) LAT. (DEG) (MIN) (SEC) 68° 01' 17"			
				LONG. (DEG) (MIN) (SEC) 149° 42' 52"			
				D) THEME E) RESOURCE NATURE			
				F) OWNERSHIP G) STATE			
				H) PRESERVATION STATUS			
				I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
				K) DATES			
				LIABILITY (N) AHS DATE			
				M) NAME DATE			
				N) SITE CONDITION			
				O) SITE ENVIRONMENT			
				P) SITE REVISIONS			
6. FUNCTION Function and cultural affiliation unknown, but appears modern. May be associated with stockpiling materials for some other structural enterprise. Overall significance is relatively low.							
7. PRESENT PREVIOUS, LOCAL, STATE, OR FEDERAL REFERENCES UA/NWA Archaeology Survey (1980); Gannon, Rintoul, Bennett, Collins, and Boring field notes; Photo (Gannon) Roll 2:13 & 14							
8. OWNER OF INTEREST/AGENCY USA							

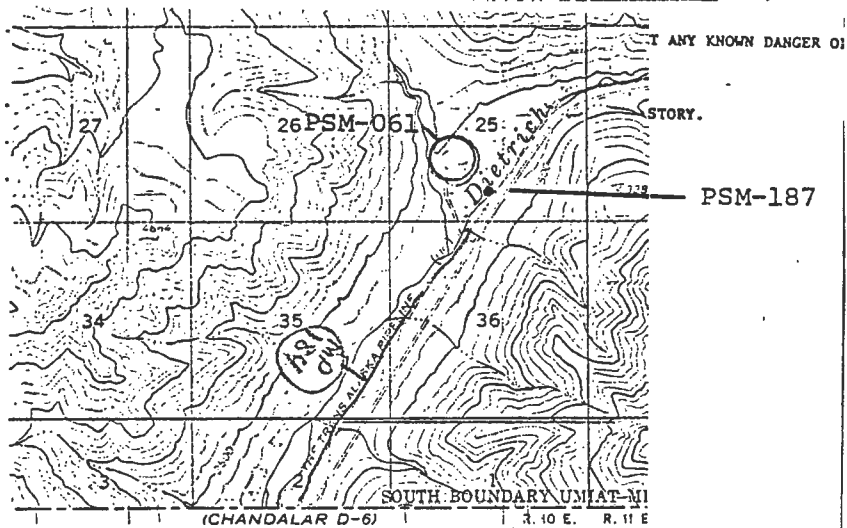


Significance: Low to none. Modern feature of unknown function.

Impact: Directly in proposed centerline.

Mitigation: None

1. PSM-187		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD	10-521 REV. 1972, 1976-1977	SPACE BELOW FOR ADP USE ONLY
2. NAME OF SITE EMS 033/2/G		3. PERTINENT DATES modern historic		CODED BY
4. LOCATION E/2 of the NE/4 of the SE/4 of the SW/4 of Sec 25, T16S, R10E Umiat Meridian PSM A-5 Quad. ACS (Zone 4); 5,126,300' north; 539,400' east.				A) AHS ID. NO.
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Site located 1.25 mi S of base of Chandalar shelf on W side of Dietrich River, on flat floodplain terrace, 1250 ft N of confluence with "wetfoot" Creek. Two components: component 'A' is a lean-to made of spruce branches lodged into large spruce trees. Bough mat inside & firepit outside. Scattered food container refuse (some modern) & stovepipe remnants. Metal stove body nearby. 175 ft to Dietrich overflow channel. Component 'B' 250 ft to NE of 'A'. Consists of a rectangular log structure (partially collapsed, decomposed and moss covered). Measures 5 x 11 ft, logs ca. 10 in. diam., cross-cut saw and axe cuts. Square-cut notches. Structure lies between 2 standing spruce and is 3 logs high on long side, 2 on short side. Function unknown, but may be a cache. Lean-to is probably a hunter's camp 10-20 years old. Log structure ('B') may be a cache, and is older, perhaps dating to gold rush era, function unknown.				B) SITE NAME
				C) LAT. (DEG) (MIN) (SEC) 68° 01' 23" LONG. (DEG) (MIN) (SEC) 149° 42' 40"
				D) THEME E) RESOURCE NATURE
				F) OWNERSHIP G) SIZE
				H) PRESERVATION STATUS
				I) CULTURAL AFFILIATION
				J) BIBLIOGRAPHIC REFERENCE
				K) DATES
				L) RELIABILITY M) AHS DATE
				N) NATURE DATE
				O) SITE CONDITION
				P) SITE ENVIRONMENT
				Q) SITE REPOSITORY
6. OWNER OF PROPERTY/ADDRESS USA				
7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Gannon, Rintoul, Bennett, Boring, and Collins field notes; Photo (Gannon) Roll 2:9-12.				



Significance: Low. The historic component consists of a possible log cache. No further associations were identified. The information potential is considered modest. Register eligibility is unlikely.

Impact: Directly on proposed EMS.

Mitigation: Avoid or salvage.

PSM-061 (see PSM-187)

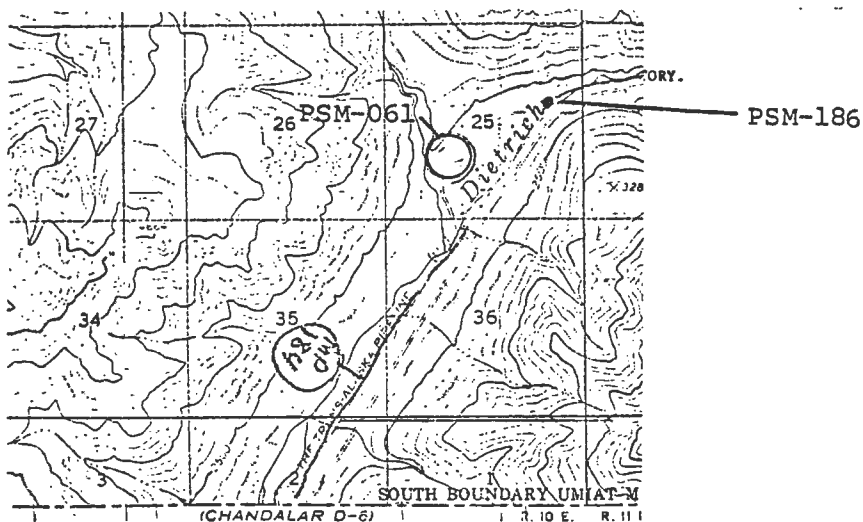
No materials remain on EMS 33-1.

Significance: None. No materials from this site remain.

Impact: Directly on proposed EMS.

Mitigation: None

PSM-186		ALASKA HERITAGE MONUMENT SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
AS-033/1/G		modern/historic unknown affiliation		CIVILIAN		CIVILIAN	
NE corner of the SW/4 of the SE/4 of the NE/4 of Sec 25, T16S, R10E Umat Meridian, PSM A-5 Quad. ACS (Zone 4); 5,128,300' north; 541,500' east.							
Site consists of 2 components located 50' from Dietrich River (W side) on flat floodplain terrace; 4000' N of confluence of "wetfoot" Creek & ca. 5750' S of base of Chandalar shelf. Component 'A' is a collapsed & partly decomposed rectangular structure (dwelling?) with 3-8' high upright poles (the 4th is fallen). Many collapsed axe-cut poles lie within, & a stove of nested 5 gal. cans is associated. Component 'B' lies 18' to NE & appears to be a tent spot; stakes & rectilinearly placed poles. 'A' measures ca. 21' x 25'; 'B' ca. 10' x 10'. Both are partially covered by soil & moss. A hitching post is ca. 50' S of 'A'. Spruce, alder, willow w/shrubby under- story dominant vegetation.							
Structures may date to later days of gold rush era, and may constitute a way station/campsite. Later/non-contemporaneous use of locale is suggested by machine-cut nails and galvanized wire on hitching post. Site lies near centerline stakes (proposed gasline) #'s 13-10, 13-11.							
UA/NWA Archaeology Survey (1980); Gannon, Rintoul, Bennett, Boring, Collins field notes; Photo (Gannon) Roll 2:1 & 2							
OWNER OF PROPERTY/ADDRESS							
USA							
CIVILIAN		CIVILIAN		CIVILIAN		CIVILIAN	
A1 AMRS ID. NO.		B1 SITE NAME		C1 LAT. (DEG) (MIN) (SEC)		D1 LONG. (DEG) (MIN) (SEC)	
				68° 01' 45"		149° 41' 54"	
E1 PRESERVATION STATUS		F1 CULTURAL AFFILIATION		G1 BIBLIOGRAPHIC REFERENCE		H1 DATES	
I1 RELIABILITY		J1 AMRS DATE		K1 SURVIVE DATE		L1 SITE CONDITION	
M1 SITE ENVIRONMENT		N1 SITE NEUTRALITY					

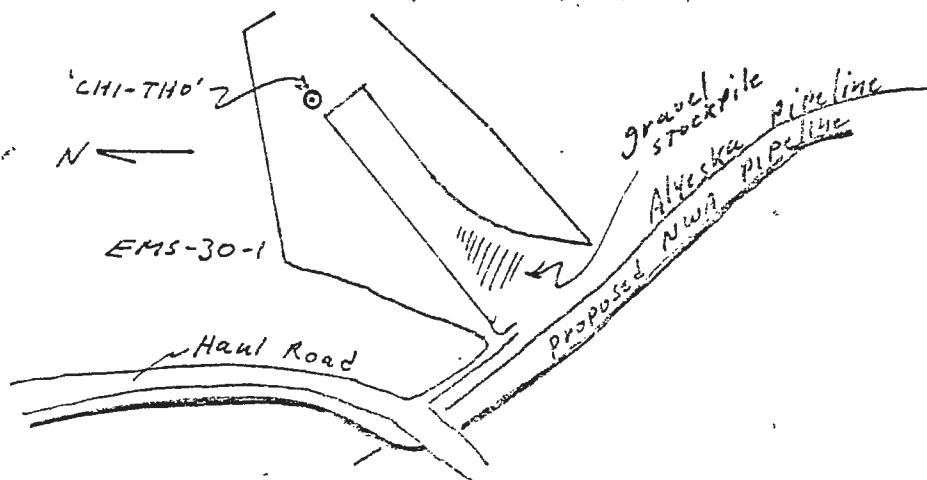


Significance: Unknown, possibly medium or high. The historic structures may relate significant information.

Impact: Directly on proposed EMS.

Mitigation: Avoid or test and assess.

1. PSM-find		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE EMS 30-1		3. PERTINENT DATES Unknown		CDED BY		A) ANRS ID. NO.	
4. LOCATION SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of the NE $\frac{1}{4}$ Section 20 T14S R12E, Umiat Meridian PSM A-4 Quad. ACS (Zone 4): 5,197,500 ft. N; 582,590 ft. E.				B) SITE NAME			
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)				C) LAT. (DEG) (MIN) (SEC) - 68° 13' 02"			
				LONG. (DEG) (MIN) (SEC) 149° 23' 30"			
				D) THEME		F) RESOURCE NATURE	
				F) OWNERSHIP		G) SIZE	
				H) PRESERVATION STATUS			
				I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
				K) DATES			
				L) RELIABILITY		M) ANRS DATE	
				N) CR. NO. DATE			
				O) SITE CONDITION			
				P) SITE ENVIRONMENT			
				Q) SITE REPRESENT			
6. SIGNIFICANCE The significance of this isolated find is uncertain; because of its location and lack of provenience.							
7. RELEVANT PSM, D. TOWN SURVEY, IMMEDIATE REFERENCES UA/NWA Archaeology Survey (1980): R. Jane Dale Book 2: 1-2.; Backhoe Program Clearance forms. Accession Number: UA80-249 Gannon 1980 field							
8. OTHER (BY COUNTRY) ACQUISITION							
U.S.A.							



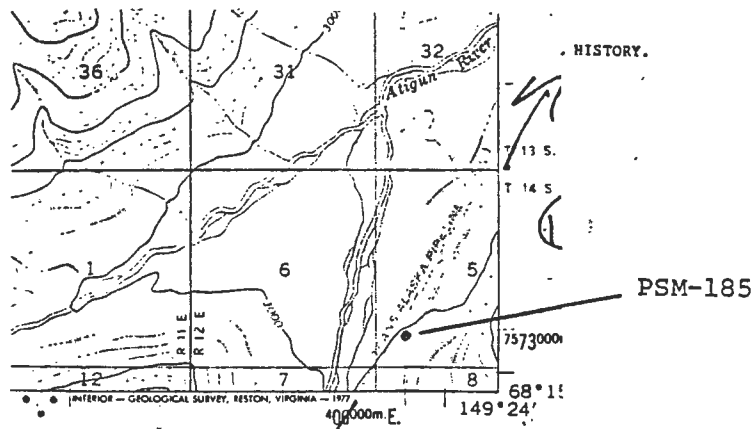
Significance: None. The isolated find cannot be interpreted.

Impact: Directly on proposed EMS.

Mitigation: None

PSM-185		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD	10-521 REV. 1972, 1976-1977
1. NAME OF SITE		3. PERTINENT DATES	
AS-029/2/c		prehistoric	
4. LOCATION NW/4 of the NE/4 of the SW/4 of the SW/4 of Sec 5, T14S, R12E, Umiat Meridian, PSM B-5 Quad. ACS (Zone 4); 5,211,000' north; 579,023' east			
5. DESCRIPTION OF SITE, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION. This small site is immediately adjacent to haul road (W side), 2.51 mi S of Alyeska access road 112 AMS-2. Site on top a small 20' high knoll (probably a landslide block) on the distal N corner of an alluvial fan. Knoll is mainly bedrock with little or no soil cover, but some grass. Surrounding area is flat, but gently N-sloping marshy with grasses and scrub willow. Site is presently intact, but has a proposed borehole (#29-37) situated on SSE edge within 6' of cultural materials: ca. 10 flakes and numerous bone fragments on and around summit area. Site limits observed measure 25' x 60'.			
6. COMMENTS Site probably served as a lookout station (fair view of surrounding country) where secondary tasks (flaking and bone rendering/eating?) were performed. Site appears to have little subsurface expression. Backhoe activities could severely disrupt context. Flakes are black chert.			
7. REFERENCES UA/NWA Archaeology Survey (1980); Gannon, Rintoul, Bennett, Collins & Boring field notes; Photo (Gannon) Roll 2:4 & 5; Museum Accession #UA80-232			
8. NAME OF PROJECT/AGENCY USA			

SPACE BELOW FOR ADP USE ONLY	
CDED BY	
A) AMS ID. NO.	
B) SITE NAME	
C) LAT. (DEG) (MIN) (SEC)	
68° 15' 15"	
LONG. (DEG) (MIN) (SEC)	
149° 25' 10"	
D) THEME	E) RESOURCE NATURE
F) OWNERSHIP	G) SIZE
H) PRESERVATION STATUS	
I) CULTURAL AFFILIATION	
J) BIBLIOGRAPHIC REFERENCE	
K) DATA	
L) RELIABILITY	M) AMS DATE
N) FIELD DATE	
O) SITE CONDITION	
P) SITE ENVIRONMENT	
Q) SITE NO. SECURITY	



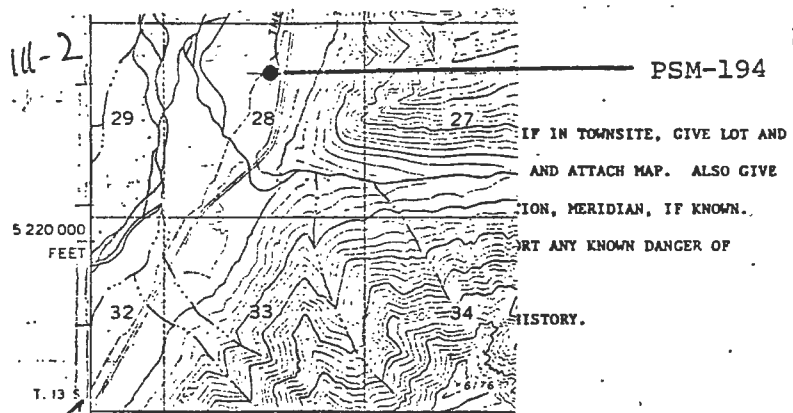
Significance: Low to medium. This small locus of stone and bone material represents a lookout. Information of interest to past land use activities is present though probably is insufficient to warrant Register eligibility.

Impact: Directly on proposed EMS.

Mitigation: Avoid or salvage.

PSM-194		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD	10-521 REV. 1972, 1976-1977
NAME OF SITE AS 029/1/C		PERMANENT DATE possible Nunamult late? prehistoric	
LOCATION E/2 of NE/4 of SE/4 of NW/4 of Sec 28, T13S R12E Umiat Meridian, PSM B-4 Quad. ACS (Zone 4); 5,224,454' north; 585,745' east.			
DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) General location is at 70' east of Alyeska pipeline, 0.33 mi north of Trevor Creek. This site consists of two stone tent rings, approx. 7' in diameter, spaced 12' apart (center to center) on a broad relatively flat poorly drained granular alluvial fan originating from the northern extension of Philip Smith Mts. to the east. These two tent rings are on a small elevated mound with runoff (ephemeral) to the immediate east and SE. A caribou ulna is found on the surface inside one of the tent rings. Five test pits were excavated; two in side one of the tent rings while the other three were placed in the vicinity near the rings. One test pit located 5' south of possible entrance to tent ring contained concentration of caribou ribs, vertebra, scapula, & epiphyses. This was mapped and left in situ.			
SIGNIFICANCE This site is intact and in an excellent state of preservation. selective testing was performed where impact could be minimized. The caribou bones in association with tent rings, offer good potential to learn more about aboriginal adaptation and resource utilization.			
RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Field notes of Cannon; Hanson:139-141, 152-153; Alloway:Book II:6-7, 12-14; Miller:60-61, 65-66; Des Rochers:99-102, 110-111; Museum Accession #UA80-241			
OWNER OF PROPERTY/ADDRESS USA			

SPACE BELOW FOR ADP USE ONLY			
CODED BY			
A) AHS ID. NO.			
B) SITE NAME			
C) LAT. (DEC) (MIN) (SEC) 68° 17' 30"			
LONG. (DEC) (MIN) (SEC) 149° 21' 52"			
D) THEME	E) RESOURCE NATURE		
F) OWNERSHIP	G) SIZE		
H) PRESERVATION STATUS			
I) CULTURAL AFFILIATION			
J) BIBLIOGRAPHIC REFERENCE			
K) DATES			
L) RELIABILITY	M) AHS DATE		
N) NR/NR DATE			
O) SITE CONDITION			
P) SITE ENVIRONMENT			
Q) SITE REPOSITORY			

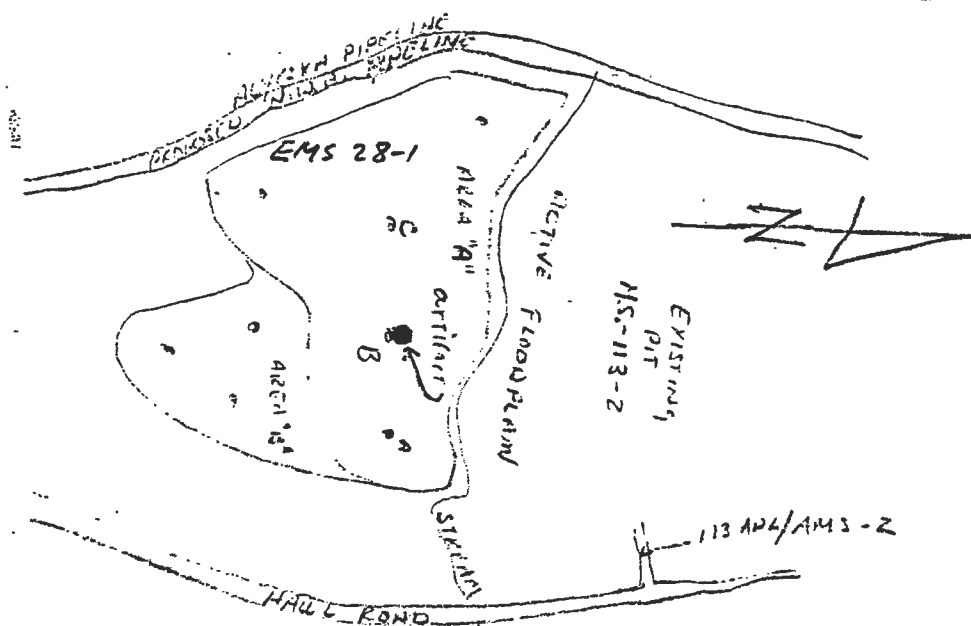


Significance: High. Two stone tent rings are intact and contain interpretable organic remains. The information potential regarding traditional land use activities warrants consideration of Register nomination.

Impact: Directly on NWA centerline.

Mitigation: Avoid or excavate/record fully.

1. PSM-find		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977	
2. NAME OF SITE EMS 28-1		3. PERTINENT DATES Unknown			
4. LOCATION SW 1/4 of the NW 1/4 of the SE 1/4 Section 28 T12S R12E, Umat Meridian PSM B-4 Quad. ACS (Zone 4): 5,254,200 ft. N; 591,500 ft E.					
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) This isolated find is a small retouch or finishing flake. The artifact was found in the backdirt of a Parka Squirrel hole approximately 5 ft. north of N2 (B). The topography of the area is a south facing side of a gently sloping alluvial fan. This slight knoll has a thick cover of 2 to 3 ft. willow bushes. The only other area with willows is the creek bed. The presence of these bushes may be directly related to a different soil chemistry, higher phosphate levels, which are associated with archaeological sites. There are approximately ten holes in the ground quirel colony, some of which have been disturbed by grizzly bears digging out squirrels.					
6. SIGNIFICANCE The significance of this isolated find is uncertain, because of its location and lack of adequate provenience.					
7. RELEVANT MONUMENT, DOCUMENT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980): R.Jane Dale Book 2:14,15,17; Backhoe Program Clearance forms; Accession Number: UA80-248					
8. OWNER OF PROPERTY/ADDRESS U.S.A.					
SPACE BELOW FOR ADP USE ONLY CODED BY _____ A1 ANRS ID. NO. _____ B1 SITE NAME _____ C1 LAT. (DEG) (MIN) (SEC) 68° 22' 20" LONG. (DEG) (MIN) (SEC) 148° 19' 20" D1 THEME _____ D2 RESOURCE NAME _____ E1 OWNERSHIP _____ E2 SIZE _____ F1 PRESERVATION STATUS _____ G1 CULTURAL AFFILIATION _____ H1 BIBLIOGRAPHIC REFERENCE _____ I1 DATES _____ J1 RELIABILITY _____ J2 ANRS DATE _____ K1 CHANGE DATE _____ L1 SITE CONDITION _____ M1 SITE ENVIRONMENT _____					

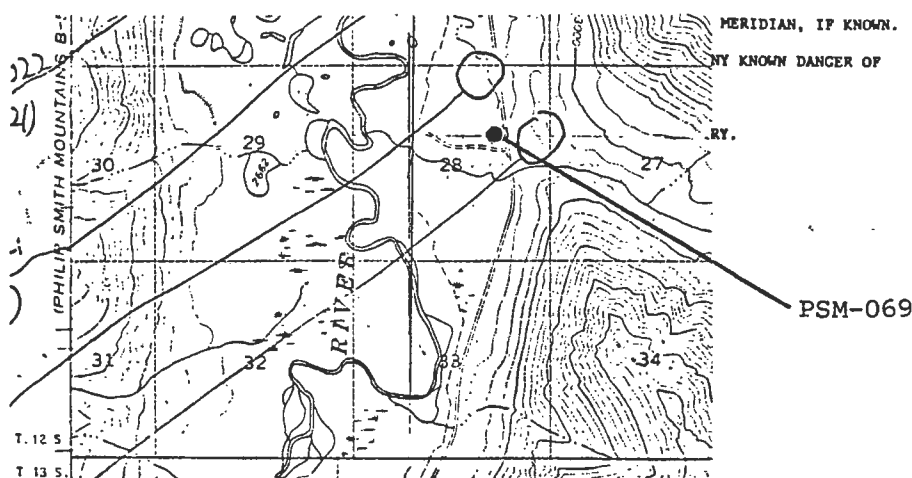


Significance: Unknown. The find could relate to additional materials.

Impact: Directly on proposed EMS.

Mitigation: Avoid or test and assess.

1. PSM-069		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE AS 028/1/C				3. PERTINENT DATES late prehistoric - early historic			
4. LOCATION SW/4 of NW/4 of SE/4 of NE/4 extending into SE/4 of NE/4 of SW/4 of NE/4 of Sec 28, T12S, R12E Umiat Meridian, PSM B-4 Quad. ACS (Zone 4); 5,255,875' north; 592,500' east.				5. PRESENT CONDITION AND DANGER OF DESTRUCTION General location is 300' north of APL/AMS-2, 70' W of haul road. This site which consists of two tent rings (possibly a third) with scattered caribou bone in association lies on a small granular alluvial fan overlying an older larger granular alluvial fan. The western-most extension of the latter fan is 8-10' above the earlier fan, which is still actively drained by Mainline spring to the north. This site was extensively tested, especially in and around the tent rings. The top of this terrace is about 18,000 ft ² in size and the caribou bones concentrate near the center with some scatter, whereas the two tent rings are found on the southern end. This site presently lies within the proposed gas line right-of-way and avoidance is recommended.			
6. ADDITIONAL COMMENTS Although this site was previously tested by Cook (1976) (one ring extensively tested, one ring partially tested & the third untouched), insufficient documentation warrants further study. The potential exists for information on aboriginal social organization, behavior patterns and resource utilization.				7. BIBLIOGRAPHIC REFERENCES JA/NWA Archaeology Survey (1980); Field notes of Des Rochers:90c-90d,89,109-110; Miller:53-54,65; Alloway:Book I:41; Hanson:123-130,152; Cook 1976:121; Museum Accession #UA80-240			
8. COUNTRY OF ORIGIN USA				9. DATES T. 12 S. 1972 T. 13 S. 1976			
10. SITE NAME				11. SITE NUMBER			
12. SITE LOCATION				13. SITE ELEVATION			
14. SITE TYPE				15. SITE STATUS			
16. SITE DESCRIPTION				17. SITE EVALUATION			
18. SITE COMMENTS				19. SITE NOTES			

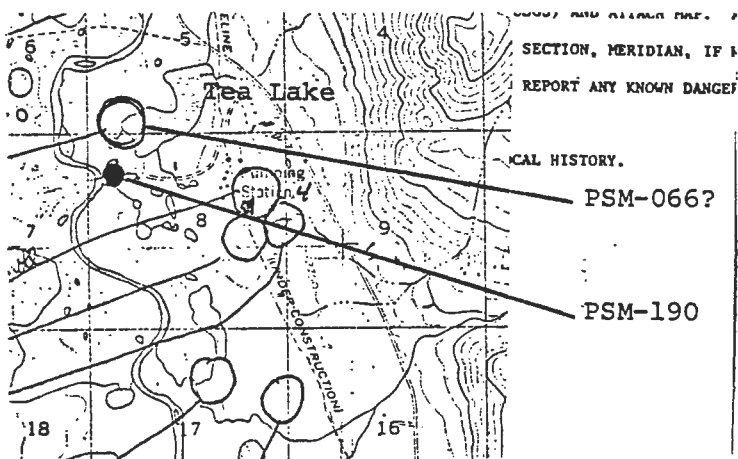


Significance: Medium to High. Despite previous (Alyeska) testing the information potential of these tent rings and associated organic remains is considerable. Register eligibility is likely.

Impact: Directly on proposed NWA centerline.

Mitigation: Avoid and preserve or excavate/record fully.

PSM-190		ANPS ID. NO.	ALASKA HERITAGE RESOURCES SURVEY RECORD CARD	10-521 REV. 1972, 1976-1977	SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE EMS 27-1B/1/G		3. PERTINENT DATES late prehistoric			CODED BY	
4. LOCATION SE/4 of the SW/4 of the NW/4 of Sec 8, T12S, R12E, Umiak Meridian, PSM B-4 Quad. ACS (Zone 4); 5,272,500' north; 584,000' east.		5. DESCRIPTION (DISTURBANCES, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Immediately west of Pump Station #4 ca. 3000', on SE end of sand dune and extending southerly ca. 700'. Sand dune next to SW corner of Tea Lake and is part of proposed EMS 27-1B. Site occupies ca. 75,000 ft ² and has 3 components: on eastern end of dune (fire cracked rocks, flakes, projectile point); near SW corner of small pump house lake (3 caribou butchering localities); and along N side of gully draining into Atigun River (butchered caribou bone). The latter locality has been potted, but subsurface materials remain. A reported 4th component reportedly potted, occurred at confluence of small gully below 3rd component and Atigun River.			6. SITE NAME	
7. SIGNIFICANCE Although parts of the site have been impacted through erosion/slumping and through vandalism (potting), undisturbed materials exist and can give insight into prehistoric butchering practices. There is a remote possibility that this may be PSM-066. Area in general is an important archaeological locus.		8. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Gannon, Boring, Collins, Rintoul & Bennett field notes; Cook 1976; Photo (Gannon) Roll 2:1; Museum Accession #UA80-235			9. LAT. (DEG) (MIN) (SEC) 68° 25' 25"	
10. OWNER OF PROPERTY/ADDRESS USA		11. PRESERVATION STATUS			12. LONG. (DEG) (MIN) (SEC) 149° 22' 45"	
		13. CULTURAL AFFILIATION			14. THEME (G) RESOURCE NATURE	
		15. BIBLIOGRAPHIC REFERENCE			16. OWNERSHIP (G) SIZE	
		17. DATES			18. PRESERVATION STATUS	
		19. RELIABILITY (N) ANPS DATE			20. SITE CONDITION	
		21. SITE ENVIRONMENT			22. SITE REPOSITORY	

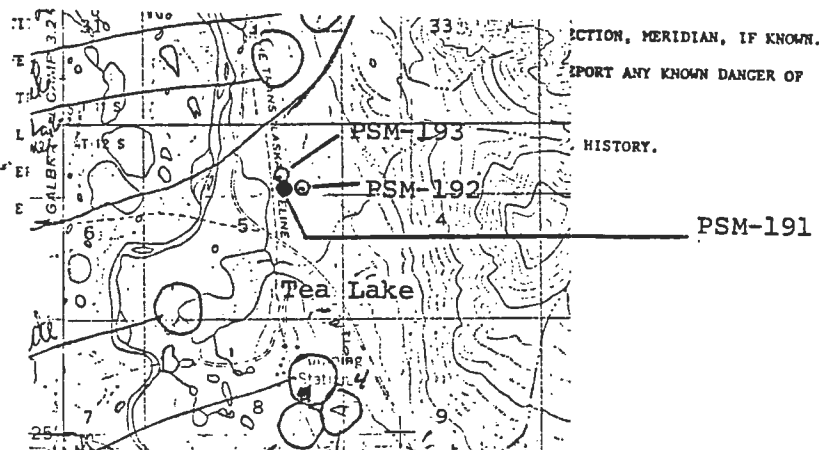


Significance: High. This series of loci has considerable informational potential in two intact, interpretable loci and one partially disturbed locus. Butchering and other practices are recorded. This site is considered to contain sufficient information to warrant Register eligibility determination.

Impact: Directly on proposed EMS.

Mitigation: Avoid or excavate.

PSM-191		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-321 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY			
1. NAME OF SITE		2. PERTINENT DATES		CODED BY		A) ANRS ID. NO.			
AS 027/1/C		prehistoric				B) SITE NAME			
3. LOCATION		SW/4 of NW/4 of SE/4 of NE/4 of Sec 5, T12S, R12E Umiat Meridian, PSM B-4 Quad. ACS (Zone 4): 5,276,909' north; 586,977' east.		C) LAT. (DEC) (MIN) (SEC)		68° 26' 05"			
4. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)		General location is S18E, 0.88 mi from Mosquito Lake; N20E, 0.38 mi from the eastern terminus of Tea Lake; and due north, 0.73 mi from large oil reservoir at Alyeska Pump Station #4. This site consists of a concentration of 29 flakes & 1 biface within an area of 100 ft ² and a very light concentration (13 flakes) scattered over the rest of this small granular debris flow in an area of 1225 ft ² . The surface terrain is relatively flat, well drained, with scattered patches of gravels and vegetation. The top of this small knoll is about 6-8' above lower fluvial/till sheet deposits to the west. There is a heavy rodent disturbance which is found 15' west of the main lithic concentration and covers an area of 325 ft ² . Four test pits were excavated as well as mapping & photos undertaken. I believe a large portion of scatter lies under the sod level. Site is 140' west of the present proposed gasline & away from direct impact.		D) LONG. (DEC) (MIN) (SEC)		149° 21' 25"		E) OWNERSHIP	
5. SIGNIFICANCE		This site, along with two others found in this local area during the 1980 field season (PSM-192 & 193) and also those by Cook (et al.) in the early 70's & TAPS offers to provide good insight into the hunting/arid related processing strategies employed by earlier peoples.		F) THEME		G) RESOURCE NATURE			
6. ALLUVIAL PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES		UA/NWA Archaeology Survey (1980); Field Notes of Hanson:162-167; Miller:71; Des Rochers:116-119; Alloway:Book II:17-18; Cannon. Museum Accession #UA80-237.		H) PRESERVATION STATUS		I) CULTURAL AFFILIATION			
7. OWNER OF PROPERTY/ADDRESS		USA		J) BIBLIOGRAPHIC REFERENCE		K) DATES			
				L) RELIABILITY		M) ANRS DATE			
				N) NR/NRE DATE					
				O) SITE CONDITION					
				P) SITE ENVIRONMENT					
				Q) SITE REPOSITORY					

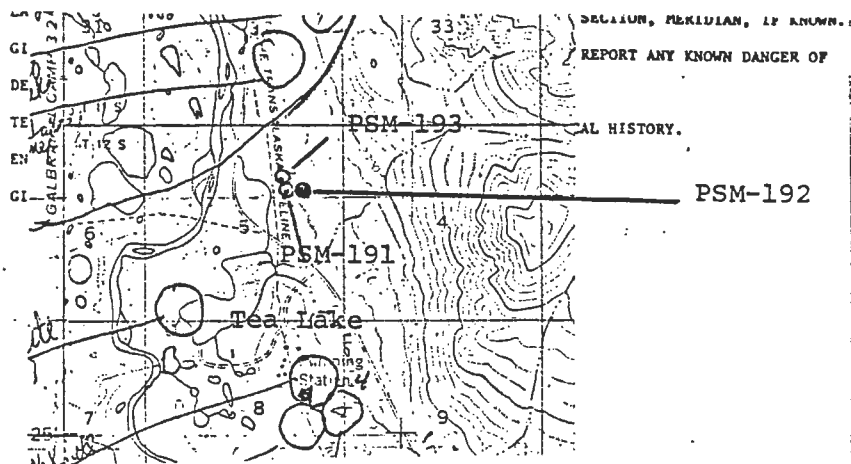


Significance: Medium to High. The site contains lithic detritus and tools in an undisturbed locality. Associated with two other nearby sites (PSM-192, PSM-193) and the various Mosquito Lake sites. The localities have potential for significant informational return and should be considered as potential Register quality.

Impact: Indirect but near the proposed centerline.

Mitigation: Avoid and protect, perhaps by fencing.

1. PSM-192		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1974-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE		3. PERTINENT DATES		4. COORDS BY		5. AHS ID. NO.	
AS 027/2/C		prehistoric					
6. LOCATION		7. DESCRIPTION, COMPOSITION, TOPOGRAPHICAL & OTHER ENVIRONMENTAL DATA, PRESENT CONDITION AND DANGER OF DISTURBANCE		8. SITE NAME		9. LAT. (DEG) (MIN) (SEC)	
SW/4 of NE/4 of SE/4 of NE/4 of Sec 5, T12S, R12E Umiat Meridian, PSM B-4 Quad. ACS (Zone 4); S,277,104' north; 587,750' east.		General location is on a knoll S27E, 0.89 mi from Mosquito Lake and N36E, 0.47 mi from Tea Lake. This site is confined primarily to the knoll top which is strewn with large boulders and appears to be a poorly sorted slide flow from the northern extension of the Philip Smith Mts. to the immediate east. The top of this knoll is about 11,000 ft ² with 4 distinct lithic concentrations. Cores uniface, bifaces, one obsidian flake as compared to a predominately chert scatter; and many associated caribou skull, axial, and extremity components with the lithic concentrations. There is a light cover of bear berry & mosses/lichens which obscure the true density of artifacts since 90% of the flakes found are from areas of barren surface vegetation/pebble patches. Very little dispersion downslope of artifacts. Avoidance of the <u>entire</u> knoll is recommended.				68° 26' 05"	
		Knoll probably contains task specific areas which could provide good information on aboriginal faunal processing techniques through time, and tie in well with the entire Mosquito Lake complex; a critically important prehistoric district.				LONG. (DEG) (MIN) (SEC) 149° 21' 14"	
						10. THEME	
						11. PRESERVATION STATUS	
						12. CULTURAL AFFILIATION	
						13. BIBLIOGRAPHIC REFERENCE	
						14. DATES	
						15. RELIABILITY (M) AHS DATE	
						16. N/S/RE DATE	
						17. SITE CONDITION	
						18. SITE ENVIRONMENT	
						19. SITE REPOSITORY	
10. OWNER OF PROPERTY/ADDRESS		11. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES					
USA		Notes of Des Rochers:139-144; Alloway:Book II:16-19; Collins:Book II:23; Cannon. Museum Accession #UA80-238					

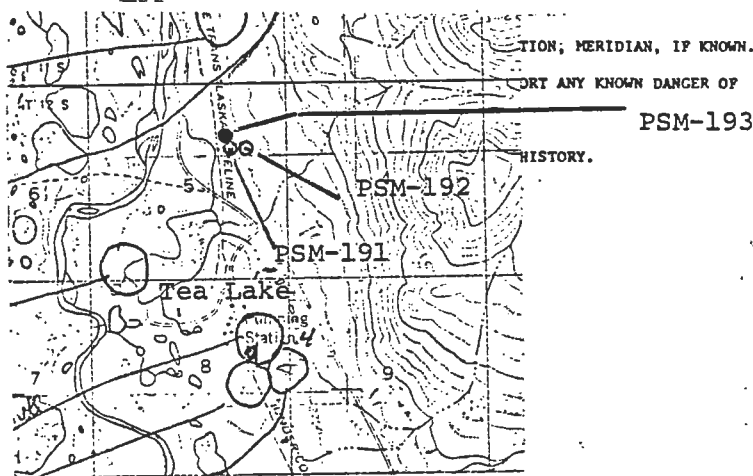


Significance: High. This large, multicomponent site contains a wide range of lithic and organic materials in good context. This site is key and in conjunction with PSM-191, 193, and other Mosquito Lake sites is clearly of Register quality.

Impact: Indirect

Mitigation: Avoid and protect.

1. PSM-193		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE AS 027/3/C		3. PERTINENT DATES prehistoric		CODED BY		A) AHS ID. NO.	
4. LOCATION NE/4 of NE/4 of SW/4 of NE/4 of Sec 5, T12S, R12E Umiat Meridian, PSM B-4 Quad. ACS (Zone 4); 5,277,382' north; 586,843' east.		5. DESCRIPTION (DISTANCES, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) General location is S18E, 0.79 mi from Mosquito Lake; N12E, 0.44 mi from eastern terminus of Tea Lake. This site consists of a light scatter (approx 50) of flakes within which a small (12 ft ²) concentration of 30 flakes was found. The rest are scattered over an area of 3300 ft ² . This site is on a granular debris flow about 15' above the fluvial deposits to the west. All of the artifacts were recovered from gravel patches which alternate with small vegetation patches, indicative of the site's surface character. Limited testing and artifact collection was performed. The site was mapped completely. A projectile point, 2 cores and a biface were found. The site is in good condition with no previous excavations seen. It is found about 330' west of the proposed gas pipeline corridor and not threatened with direct impact. However, indirect impact from vehicular disturbance must be avoided.		6. LAT. (DEG) (MIN) (SEC) 68° 26' 07"		7. LONG. (DEG) (MIN) (SEC) 149° 21' 30"	
7. PRESERVATION STATUS		8. OWNERSHIP		9. SIZE		10. RESOURCE NATURE	
11. CULTURAL AFFILIATION		12. BIBLIOGRAPHIC REFERENCE		13. DATES		14. RELIABILITY	
15. NR/RE DATE		16. SITE CONDITION		17. SITE ENVIRONMENT		18. SITE RESPONSIBILITY	
19. OWNER OF PROPERTY/ADDRESS USA		20. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Field notes of Hanson:200-203; Cannon. ; Miller:85-86; Museum Accession #80-239.					

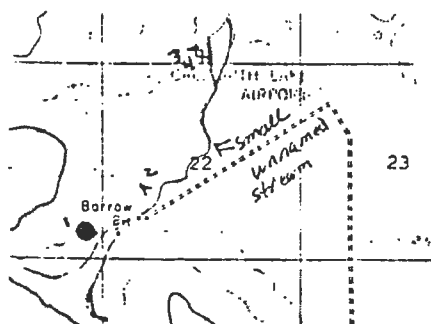


Significance: Medium. The scatter of materials should be considered in conjunction with nearby PSM-191 and PSM-192 as well as the numerous and important Mosquito Lake sites. The group has the quality to assume Register potential.

Impact: Indirect (330' west of proposed NWA centerline).

Mitigation: Avoid and protect from vehicular disturbance.

1. PSM-181		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977	
2. NAME OF SITE ENS 26-1/1/F - Theresa's Knoll		3. PERTINENT DATES prehistoric		SPACE BELOW FOR ADP USE ONLY	
4. LOCATION N/2 of the S/2 of the SE/4 of the SE/4 of Sec 21, T11S, R11E, Umiat Meridian, PSM B-5 Quad. ACS (Zone 4); 5,289,500' north; 561,250' east; NW border of Alyeska pit west of Galbraith Lake airport.		5. PRESENT CONDITION AND DANGER OF DESTRUCTION Site situated on a knoll on the northwest border of an existing pit. A small stream flows near the base of the knoll. Flakes, biface frags., possible microblade frags. (all of chert were located both surficially and subsurface). Some of each artifact type was collected. Tests backfilled and orange flag with survey data placed therein. Two main concentrations of material. Dimensions - roughly circular, 8m diameter. Current (9/80) NWA plans will not disturb site (pit area cleared for use 8/80) but the potential for secondary impact from people and machines on the site is great as the site is on the border of the proposed material source.		CODED BY	
6. SIGNIFICANCE Site is flaking station/campsite which is important to delineating the prehistoric culture history of the area. With the other sites located in the area important data concerning past land use can also be obtained.		7. BIBLIOGRAPHIC REFERENCE UA/NWA Archaeological Survey (1980); Fetter field notes:129-132 & 64-69; Jordan field notes:10-12; Villa field notes:15-16; Museum Accession #UA80-222		A) AHS ID. NO.	
8. NAME OF FEDERAL AGENCY USA-Federal				B) SITE NAME	
				C) LAT. (DEG) (MIN) (SEC) 68° 29' 10"	
				LONG. (DEG) (MIN) (SEC) 149° 32' 40"	
				D) NAME	
				E) RESOURCE NATURE	
				F) OWNERSHIP	
				G) SIZE	
				H) PRESERVATION STATUS	
				I) CULTURAL AFFILIATION	
				J) BIBLIOGRAPHIC REFERENCE	
				K) DATES	
				L) RELIABILITY	
				M) AHS DATE	
				N) VISIT DATE	
				O) SITE CONDITION	
				P) SITE ENVIRONMENT	
				Q) SITE ACCESSIBILITY	



- 1) PSM-181; Theresa's Knoll
- 2) PSM-184; Zombie Villa
- 3) PSM-183; Skywalker site
- 4) PSM-182; Spike site

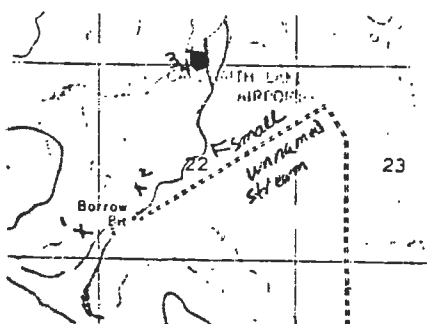
PSM B-5 Quad

Significance: Medium. The materials occur in situ in two loci and should reveal pertinent data on traditional land use activities. The quality of potential information is considered good and Register eligibility is possible.

Impact: Indirect but open to vehicular damage as it is adjacent to a proposed material source.

Mitigation: Avoid and protect, possibly by posting or fencing.

1. PSM-184		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE EMS 26-1/2/F - Zombie Villa		3. PERTINENT DATES prehistoric		CODED BY		A) ANRS ID. NO.	
4. LOCATION NE/4 of the NW/4 of the SW/4 of Sec 22, T11S, R11E, Umiat Meridian, PSM B-5 Quad. ACS (Zone 4); 5,291,250' north; 562,850' east; on a knoll NW of Galbraith airport.		5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Site situated on flat portion of knoll on north central border of an existing Alyeska pit. Only surficial materials were noted, but subsurface material may exist as well. Chert biface frags., flakes & cryptocrystalline chert point frags. found some of which were collected. Dimensions - 35m x 25m, possibly larger. Downslope creep does not seem to be affecting the site. Current NWA plans (9/80) do not endanger site directly (material source proposed was cleared 8/80) but indirect impact from people and machines could be great. Also, there is a small stream near the base of the knoll.		C) LAT. (DEG) (MIN) (SEC) 68° 29' 25"		D) LONG. (DEG) (MIN) (SEC) 149° 31' 52"	
6. SIGNIFICANCE Further work here should reveal a rather large flaking station/campsite which could provide much data about land use and culture history in this area, particularly when examined along with the other three sites located in this area.		7. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Fetter field notes:133-136; Museum Accession #UA80-223; Photos Roll F-1 #11-19.		D) THEME		E) RESOURCE NATURE	
8. OWNER OF PROPERTY/ADDRESS USA				F) OWNERSHIP		G) SIZE	
				H) PRESERVATION STATUS			
				I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
				K) DATES			
				L) RELIABILITY (H) ANRS DATE			
				M) SR/NRE DATE			
				O) SITE CONDITION			
				P) SITE ENVIRONMENT			
				Q) SITE REPOSITORY			



- 1) PSM-181; Theresa's Knoll
- 2) PSM-184; Zombie Villa
- 3) PSM-183; Skywalker site
- 4) PSM-192; Spike site

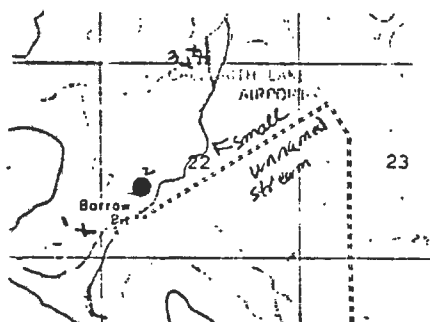
PSM B-5 Quad

Significance: Medium to High. The potential for information is good given the nature and quality of the flakes and retouched tools. Eligibility for Register nomination is likely.

Impact: Indirect but subject to impacts from vehicles.

Mitigation: Avoid and protect, possibly by posting or fencing.

PSM-182		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977	
1. NAME OF SITE		2. PERTINENT DATES			
EMS 26-1/3/F - Spike Site		prehistoric			
3. LOCATION SW/4 of the SW/4 of the SE/4 of Sec 15, T11S, R11E, Umiat Meridian, PSM B-5 Quad, ACS (Zone 4); 5,294,750' north; 564,900' east; on a knoll NW of Galbraith airport					
4. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Site located on a prominent knoll on NE border of existing Alyeska pit. A small unnamed creek flows a few hundred feet to the south of the knoll. Chert flakes (some surficial & some subsurface) were located. A few were collected. Dimensions - 15m x 15m. Tests backfilled and orange flag with survey information included. Proposed NWA activity should not endanger site but potential for secondary impact great as site on edge of proposed material source. Some downslope creep at work on the site. Material source cleared as of 8/12/80 for activity as long as the site proper is avoided.					
5. STATE COMMENTS This site appears to be a flaking station (as suggested by 4 point frags. and finishing flakes. It may also be a campsite. The material suggests it will aid in delineating the culture history of the area. Further when coupled with the other sites in the area should reveal much concerning land use patterns.					
6. RELEVANT PRINTED, MANUSCRIPT, PHOTOGRAPHIC REFERENCES UA/NWA Archaeological Survey (1980); Fetter field notes:64-69 & 137-141; Villa field notes:19-25; Photos Roll F-1 #20 & 21; Museum Accession #UA80-224					
7. OWNER OF PROPERTY/ADDRESS USA					
SPACE BELOW FOR ADP USE ONLY					
CODED BY					
A) AHS ID. NO.					
B) SITE NAME					
C) LAT. (DEG) (MIN) (SEC) 68° 30' 02"					
LONG. (DEG) (MIN) (SEC) 149° 31' 00"					
D) THEME E) RESOURCE NATURE					
F) OWNERSHIP G) SIZE					
H) PRESERVATION STATUS					
I) CULTURAL AFFILIATION					
J) BIBLIOGRAPHIC REFERENCE					
K) DATES					
L) RELIABILITY (M) AHS DATE					
N) NR/NE DATE					
O) SITE CONDITION					
P) SITE ENVIRONMENT					
Q) SITE REPOSITORY					



- 1) PSM-181; Theresa's Knoll
- 2) PSM-184; Zombie Villa
- 3) PSM-183; Skywalker site
- 4) PSM-182; Spike site

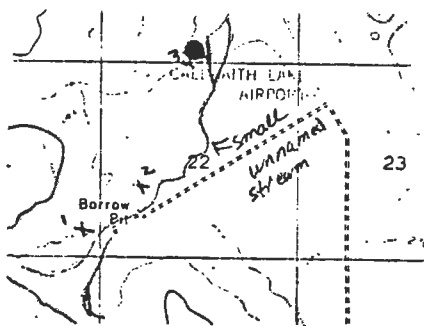
PSM B-5 Quad

Significance: Medium. This possible camp site contains sufficient informational potential in the form of diagnostic artifacts and undisturbed context to suggest Register eligibility.

Impact: Indirect, some soil creep noted.

Mitigation: Avoid

1. PSM-183		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		30-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE EMS 26-1/4/F - Skywalker Site		3. PERTINENT DATES prehistoric		CODED BY			
4. LOCATION SW/4 of the SW/4 of the SE/4 of Sec 15, T11S, R11E, Umiat Meridian PSM B-5 Quad. ACS (Zone 4); 5,294,750' North; 564,850' East; on a knoll NW of Galbraith airport		5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Site is situated on a small, low knoll north of PSM-182. A low swale separates the two sites. Material was located both surficially and at least 1 major concentration of material subsurface. Artifact types: stemmed point frags., flakes, biface frags., blades. Material: all chert or other cryptocrystalline. Samples of each type and material were collected. Tests backfilled with orange flag/survey data included. Dimensions - about 12 m x 30 m, possibly larger. Current (9/80) construction plans do not endanger site directly but potential for secondary impact by people and machines great. Downslope creep is affecting site particularly on east edge. NWA given clearance for their EMS, providing the site is not disturbed.		6. SIGNIFICANCE Intense concentration of point frags. and flakes suggest the site is an important flaking station/campsite with the potential for revealing a great deal about the prehistoric culture history and land use patterns of the area, especially along with the other sites located in the area.			
7. RESEARCH PROJECT, DATE, FIELD, PHOTOGRAPHIC REFERENCES UA/NWA Archaeology Survey (1980); Fetter field notes: 142-146 & 64-69; Photos NWA Roll F1 #22-25. Museum Accession #UA80-225.		8. NAME OF PROPERTY ADDRESS USA		9. SITE LOCATION			
				10. SITE LOCATION			
				11. SITE LOCATION			
				12. SITE LOCATION			
				13. SITE LOCATION			
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- 1) PSM-181; Theresa's Knoll
- 2) PSM-184; Zombie Villa
- 3) PSM-183; Skywalker site
- 4) PSM-182; Spike site



PSM B-5 Quad

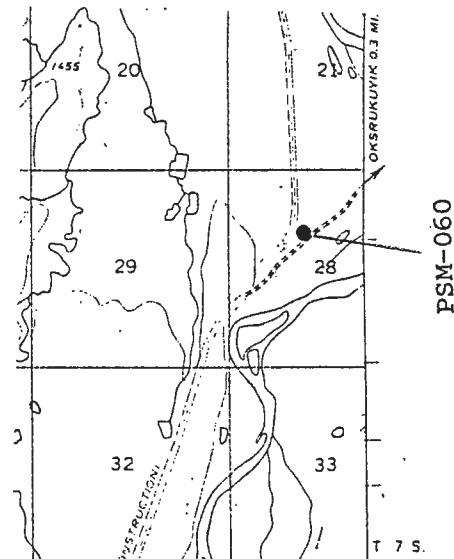
Significance: Medium to High. Diagnostic artifacts and debris from tests at this site, and association with PSM-182, indicate high information potential and likely Register eligibility.

Impact: Indirect though potential damage from soil creep on eastern edge and machinery is noted.

Mitigation: Avoid and perhaps fence or post.

PSM-060 addendum		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD	10-521 REV. 1972, 1974-1977	SPACE BELOW FOR ADP USE ONLY 93
1. NAME OF SITE Ribdon Site; BLM? Site 166; TAPS S-91, S-46.		3. PERTINENT DATES Palisades/Tuktu affil. c. 4000 B.C.		CODED BY
4. LOCATION NE/4 of SE/4 of NW/4 Sec. 28, T7S, R14E (Umiat Merid), PSM D-4 Quad. ACS (Zone 4): 5,415,450 ft N; 657,250 ft E.				A) AHS ID. NO.
5. DESCRIPTION (DESIGNATIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) Site on northern and eastern part of prominent easterly projecting old terrace of Sag. River, N end of proposed EMS-20-3A/Alyeska MS-120; 25-350' E of Haul Rd; 2-3 mi S of Pump St. 3; 250-500' N of Alyeska MS rd EXP-120. Site comprises 4 main foci: west knoll w/ 7 probable house pits; south knoll w/ possible tent ring; north bench w/ 5 areas of old arche. excavations (TAPS) + many test pits; east terrace edge w/ many test pits & 3 areas of old archae excavations. A TAPS MS penetrates site from S; remaining archae. site in mod. good preservation. 1980 testing showed numerous subsurface flakes and some bifacial implement fragments to c. 6" deep. Avoidance of area recommended.				B) SITE NAME
6. SIGNIFICANCE Of 17 formerly reported/excavated by TAPS archaeologists, only 9 excavated locales were noted in 1980 (c. 65 m ²) + the house pit area & possible tent ring. Remaining locales possibly destroyed by material site expansion/development. Enough remains, however, to yield substantial information on prehistoric social organization, land use & resource utilization. Possibility exists for a second locus (see over). (Refs: SEE OVER)				C) LAT. (DEG) (MIN) (SEC) 68° 45' 35" N LONG. (DEG) (MIN) (SEC) 148° 48' 40" W
7. INFORMATION ON PREHISTORIC, SOCIAL ORGANIZATION, LAND USE & RESOURCE UTILIZATION. Possibility exists for a second locus (see over). (Refs: SEE OVER)				D) OWNERSHIP E) RESOURCE NATURE
8. OWNER OF PROPERTY/ADDRESS USA				F) PRESERVATION STATUS
				G) CULTURAL AFFILIATION
				H) BIBLIOGRAPHIC REFERENCE
				I) DATES
				J) RELIABILITY K) AHS DATE
				L) DATE
				M) SITE CONDITION
				N) SITE ENVIRONMENT

REFS: UA/NWA Archaeology Survey (1980): Gannon, Rintoul, Boring, Collins, Bennett field notes; Photos: Gannon 1:18-24; Museum Accession #UA80-234, UA74-43, UA75-132. Slaughter field notes (Nat'l Gas Route Notes v.1:65; Alyeska Archaeol. Proj Notes (1975): Slaughter, Newell, Spearman, Barstow, Gal, Ivie, Stern, Yarborough, Dekin, Kunz, Wersoff (no clearance given to site). Alyeska Archae Proj Notes (1974) under G. Bacon: Schuster, Frizzera, Dixon, Andrasko, Allen. see also Wilkinson 1980 BLM notes. Reports of site confusing: M. Kunz (per. com. 9-25-80) mentioned 2 'Ribdon Sites', at confluence of Sag. & Ribdon Rivers (1970) - found tent ring, sod house, and another at present EMS-20-3A (1971) excavated in summer '74 & fall '75. J. Cook (per. com. 10-3-80) indicated site at EMS-20-3A is the Ribdon Site, and there is no other.



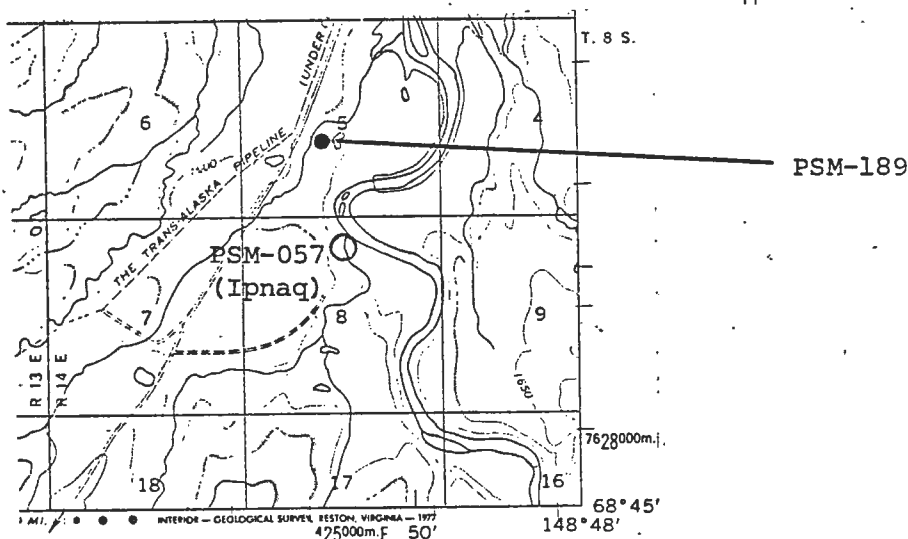
Significance: Medium. This known Alyeska site still contains a considerable amount of information in its several loci. Register eligibility is possible given the published data, extant house pits and new evidence of additional in situ subsurface materials.

Impact: Site is directly on proposed EMS.

Mitigation: Avoid or salvage*(impacted area); areas off directly impacted zones should be carefully avoided.

*Additional study may suggest scientific excavation rather than salvage is called for. The entire Ribdon site is involved.

PSM-189		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE		3. PERTINENT DATES		4. LOCATION		5. DESCRIPTION (EDRATIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION, ETC.)	
EMS 21-1/G (Mini-Masada)		prehistoric		NE/4 of the NE/4 of the SW/4 of Sec 5, T8S, R14E, Umiat Meridian, PSM D-4 Quad. ACS (Zone 4); 5,403,750' north; 652,500' east		Site lies 1.42 mi N of mile 119.4 access road, on S side of a gully on an old 30' high terrace of Sagavanirktok River, 5 mi S of Pump Station #3, and ca. 500' east of haul road (part of EMS 21-1). The gully, with a small active stream, borders site to W & N. A small island-like terrace remnant lies immediately to west. Observed primary focus of site covers ca. 4000 ft ² on N end of terrace. Site was formerly tested by Alyeska archaeologists (no report found). Surficial & subsurficial flakes & cobbles showing probable use are present. Three rehabilitated Alyeska exploratory pits are immediately to S. A few isolated flakes recovered from terrace edge N of gully as well as from the "island". Shrub willow & grasses main vegetation.	
6. COORDINATES		7. PRESERVATION STATUS		8. CULTURAL AFFILIATION		9. BIBLIOGRAPHIC REFERENCE	
Probably prehistoric campsite; possible affiliation with PSM-057 (Ipnaq site) 0.5 mi to S. Environmental setting of site well displayed, and potential exists for good data on prehistoric land use. NWA denied clearance for exploitation and exploration in site area, but a backhoe traversed site summer 1980.							
10. OTHER DATA (e.g., DATE OF SURVEY, PHOTOGRAPHIC REFERENCES)		11. DATE		12. SITE CONDITION		13. SITE ENVIRONMENT	
UA/NWA Archaeological Survey (1980); Gannon, Bennett, Collins, Rintoul & Boring field notes; Museum Accession #UA80-233.							
14. OWNER OF PROPERTY/ADDRESS		15. DATE OF VISIT		16. SITE CONDITION		17. SITE ENVIRONMENT	
U.S.A.							

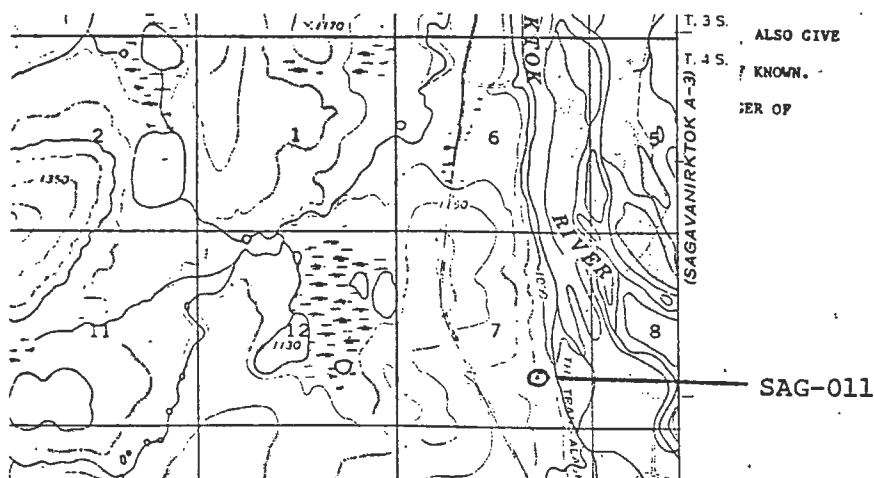


Significance: Medium. This extensive locale contains a sufficient distribution of flake remains to suggest a potentially significant informational yield. Register eligibility is defensible.

Impact: Directly on proposed EMS.

Mitigation: Avoid or excavate.

1. SAG-011		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1976-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE AS 016/1/C		3. PERTINENT DATES prehistoric		CODED BY		A) AHS ID. NO.	
4. LOCATION SE/4 of SE/4 of NW/4 of SE/4 of Sec 7, T4S, R14E (Umiat Meridian) SAG A-4 Quad. ACS (Zone 4): 5,524,172'N; 652,818'E; general location is 1250 east of haul road, 5 mi N of Charlotte Creek, 2.8 mi S of Happy Valley camp.				C) LAT. (DEG) (MIN) (SEC) 69° 06' 24"		B) SITE NAME	
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.) This site consists of a distinct concentration of chert flakes & a lighter scatter of flakes across several small knolls on an older till deposit project- ing up through frozen upland silt deposits. This knoll has a commanding view of the Sagavanirktok River floodplain to the E. The scatter covers an area of 8,000 ft ² and is primarily restricted to the summit. There is a lower, flat area which would afford protection from the prevailing winds but is poorly drained. Twenty-nine flakes & two cores were recovered from surface to 7" in depth. Very little dispersion has taken place with the majority of the flakes concentrated on the southeastern most knoll. This site is found 1250' east of the proposed gas pipeline and not in danger of impact.				LONG. (DEG) (MIN) (SEC) 148° 49' 45"		D) THEME E) RESOURCE NATURE	
6. SIGNIFICANCE This site could potentially provide insight into aboriginal pro- cessing of both land mammals, like many of the other sites in the region, & also aquatic/waterfowl resources along the Sagavanirktok River floodplain. Prehistoric tool manufacturing & use is also evident. The relationship of this site with others in the area is important; sign. prehistoric district utilized over a long period of time.				F) OWNERSHIP G) SIZE		H) PRESERVATION STATUS	
7. BIBLIOGRAPHIC REFERENCES UA/NWA Archaeological Survey (1980); Cannon, Des Rochers field notes:79-83; Hanson field notes:94-100; Miller field notes:41-43; Alloway field notes: 35 & 37; Museum Accession #UA-236				I) CULTURAL AFFILIATION		J) BIBLIOGRAPHIC REFERENCE	
8. OWNER OF PROPERTY/ADDRESS USA				K) DATES		L) RELIABILITY (N) AHS DATE	
				M) NA/SRE DATE		O) SITE CONDITION	
				P) SITE ENVIRONMENT		Q) SITE ALPHABET	

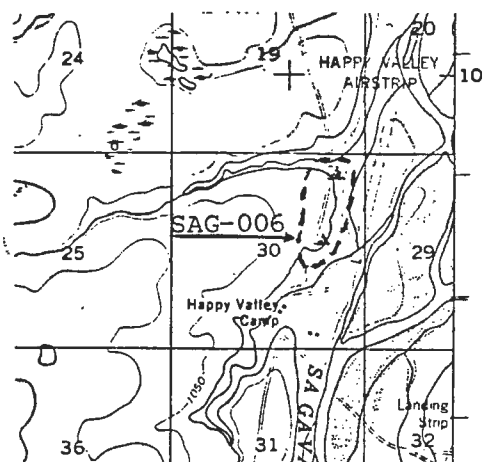


Significance: High or medium. The site has several in situ concentrations of lithic materials and should relate important information on several exploitative foci.

Impact: Indirect

Mitigation: Avoid

1. SAG-006 addendum ID. NO.		ALASKA HERITAGE RESOURCES SURVEY RECORD CARD		10-521 REV. 1972, 1978-1977		SPACE BELOW FOR ADP USE ONLY	
2. NAME OF SITE		3. PERTINENT DATES		CODED BY			
Alyeska S-9		Modern 'Eskimo; prehistoric?		A) AHSR ID. NO.			
4. LOCATION		Center of site: W $\frac{1}{2}$ of E $\frac{1}{4}$ of NE $\frac{1}{4}$, Sec. 30, T3S, R14E, Umiat Mer.; SAG A-4 Quad.; ACS (Zone 4): 5,542,400'N; 653,200'E.		B) SITE NAME			
5. DESCRIPTION (DIMENSIONS, TOPOGRAPHICAL & OTHER ENVIRONMENTAL FEATURES, PRESENT CONDITION AND DANGER OF DESTRUCTION.)		Site lies along a 2900 foot long, 50 ft high terrace remnant of Sagavanirktok River incised by Milke Cr. to north and Happy Valley Camp Cr. to south, immediately east of and adjacent to Prudhoe Bay Rd., and immediately north of Happy Valley Camp. Overlooks Sag. River valley. Limits of site vague, especially in width, but minimally between east edge and Haul Rd. Typical tundra vegetation (tussocks, grasses, scrub willow). Site may have 2 components: 1 sawed bone, possibly produced by "recent hunters" ca. 4 mi. north of H.V. Camp (Derry in Cook 1970: 95); and 3 scattered subsurface flakes found along terrace in 1980.		C) LAT. (DEG) (MIN) (SEC) 69° 09' 20" LONG. (DEG) (MIN) (SEC) 148° 49' 35"			
6. SIGNIFICANCE		Although limits of site are vague, and material collected had a scattered aspect and apparent low density, site does occupy a high potential setting: terrace overlook, fresh water, e.g. As site seems to exhibit 2 components, further examination is recommended. The proposed NWA centerline passes thru site.		D) THREH E) RESOURCE NATURE			
7. LITERATURE CITED, ZONING MAPS, BIBLIOGRAPHIC REFERENCES		UA/NWA Archaeological Survey (1980), Cannon field notes; Derry in Cook 1970:95.		F) OWNERSHIP G) SIZE			
8. ADDRESS OF PROPERTY ADDRESS		USA		H) PRESERVATION STATUS			
		UA accession #: UA80-242		I) CULTURAL AFFILIATION			
				J) BIBLIOGRAPHIC REFERENCE			
				K) DATES			
				L) RELIABILITY M) AHSR DATE			
				N) N/A/NRE DATE			
				O) SITE CONDITION			
				P) SITE ENVIRONMENT			
				Q) SITE REPOSITORY			



11. SIBLE. ALSO, IF IN TOWNSHIP, GIVE LOT AND
1:63,360 USGS) AND ATTACH MAP. ALSO GIVE
. QUARTER SECTION, MERIDIAN, IF KNOWN.
SIBLE AND REPORT ANY KNOWN DANGER OF

TE, OR LOCAL HISTORY.

ITEM.

▲ = artifact locations

Significance: Unknown. Potentially considered high.

Impact: Directly in proposed NWA centerline.

Mitigation: Avoid or test further.

Discussion

Since materials and localities will be described more fully in the final report to the sponsor and permitting agencies, only a few additional notes are provided here.

In the Livengood area we verified several reported sites. Among these is LIV-032. The site produced no additional materials and presumably was collected by Alyeska archaeologists (although they reportedly did not excavate the 15 m x 15 m shelter locus). The finds we made after careful testing in the area (two are reported above) are not considered indicative of additional materials of significance at this locality.

Sites on outcrops of Livengood chert (LIV-030-50, 103-108, cited above) have significant potential for revealing data relating to both the exploitation of animals and raw materials, and to the production or manufacture systems of peoples in the area over the millennia. Even small loci have the potential to reveal significant information, and as a group, the Livengood localities are especially important in interior Alaska.

PSM-060 reportedly was excavated by Alyeska (see Aigner and Gannon 1980, Appendices, with references) but our testing in 1980 revealed some salvageable data which are of interest remaining at the site. The several Ribdon site loci relate, for the most part, to (typological) Palisades and/or Tuktu materials; one locus relates to (typological) Denbigh. A discussion of these cultural-historic units is provided in Aigner and Gannon 1980. A reportedly associated C-14 determination of 1780 \pm 150 B.P. serves to highlight the fact that the cultural historical background of the materials called Palisades/Tuktu, if not Denbigh as well, still are open to various temporal interpretations. Cultural-ecological understanding of the remains is even more limited.

The Mosquito Lake-Atigun River area (PSM localities) has been heavily used by native peoples over the millennia. The complex of loci and sites attests to the importance of ecological factors in configuring land use activities. Our finds and record of resources in this area only highlight this point. The cultural-historic relations of the materials and the land-use activities which they represent are poorly known despite previous work (reported in Aigner and Gannon 1980, with references). Since it is likely that some resources will be subject to adverse impacts, carefully thought out research strategies for mitigation will contribute significantly to our understanding of land use activities in interior Alaska.

We recorded and recovered materials from 74 sites and find areas in the Sagavanirktok, Philip Smith Mountains, Chandalar, Wiseman, Bettles, Livengood, Big Delta, and Tanacross quadrangles. A total of 998 lithic artifacts and 365 faunal elements (including fragments) were recovered from the various sites encountered during the 1980 survey. Numerous samples of charcoal, soil and other organic materials were collected as well.

While sampling procedures were not rigidly fixed, artifacts from most sites were collected insofar as to yield a representative sample, both above and below surface, suitable for analysis, and to determine the limits of the sites. However, a general rule for sampling was to collect conservatively under the assumption that further more controlled work would follow. In many cases, it would have been possible, if not easy, to inadvertently exhaust a site of its cultural materials through sampling.

In all cases, proveniences of lithic, faunal and other samples were carefully noted and mapped so that they may be fitted into future investigative activities.

Of the lithic materials, a broad spectrum of styles and material was collected and observed (Appendix 6). Objects relegated to the class of 'waste flakes' are the most commonly occurring form, but many of these comprise blades or blade-like specimens. Sizes of the latter range from less than 1 cm to over 6 cm in length. Core fragments, chunks, and some indeterminate pieces make up the remaining portion. A number of specimens can be considered implements, comprising chiefly bifaces (including projectile points), preforms and blanks, utilized flakes and blades, possible burins, and unifacially flaked objects with probable scraper-like functions. A number of the other specimens appear to be naturally formed (e.g., frost shattered or hydraulically spalled). Preliminary inspection of the various collections reveals percussion flaking, pressure flaking manifested in primary and secondary retouch, and suggestive of both 'hard' and 'soft' hammer production. Unifacial flaking is also fairly common. The vast majority of lithic materials are composed of various types (colors and grades) of chert, varying broadly as to their isomorphism and flaking quality. A small number of pieces are obsidian.

Although these collections have not yet undergone thorough analysis, several of the more diagnostic pieces were selected for examination. Of these, twelve are shown and described in Figure 1.

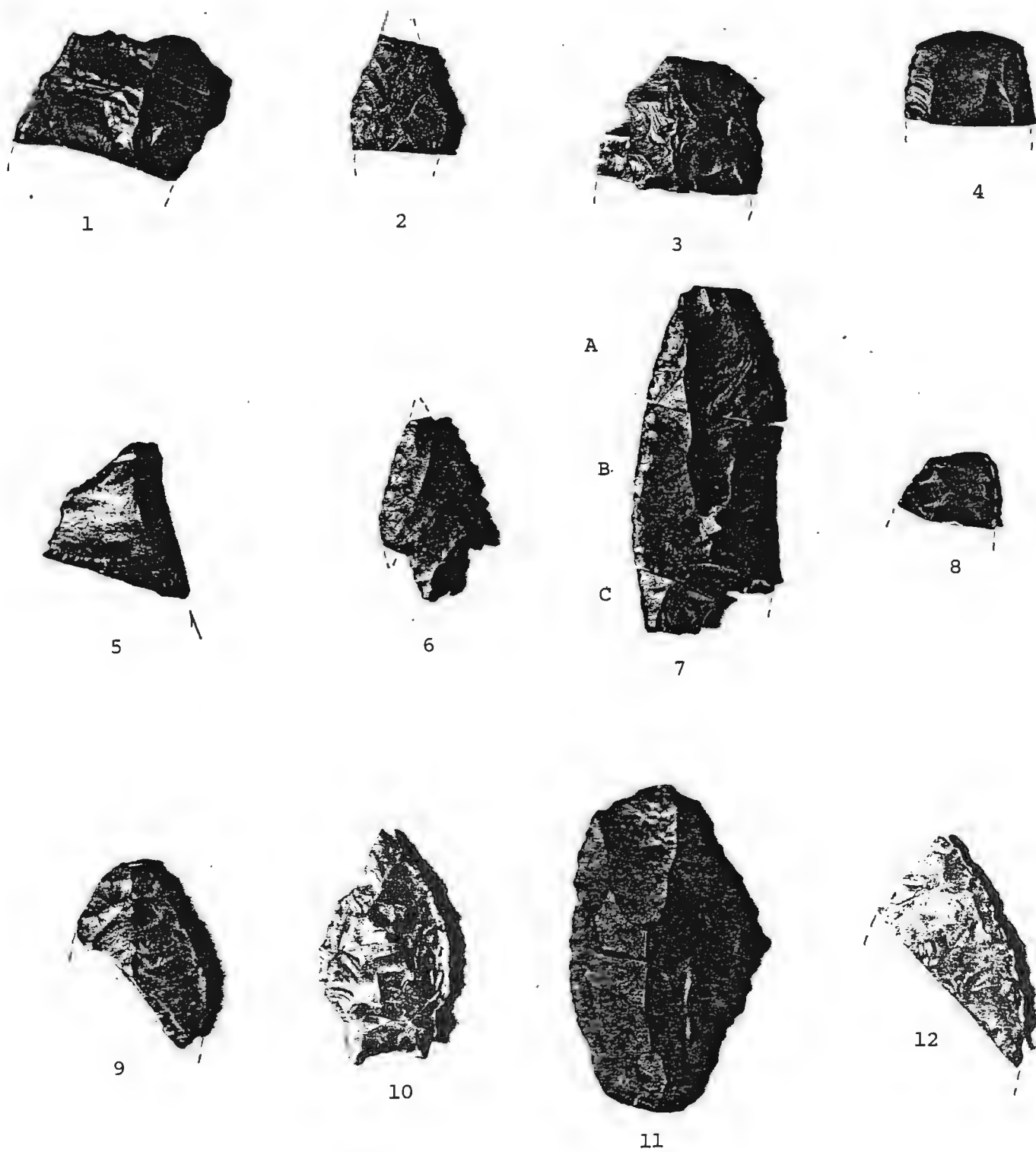


Figure 1. Selected diagnostic artifacts (actual size)

Figure 1. Selected diagnostic artifacts.

- 1) UA80-227-1 (BET-123): Black chert interior flake fragment (implement), unifacially retouched along margins. Ends terminated by snap break and hinge fracture.
- 2) UA80-225-267 (PSM-183): Blackish chert 'projectile point' midsection, convex borders, biconvex cross section. Some of retouching is diagonal parallel.
- 3) UA80-223-5 (PSM-184): Grey chert biface fragment (preform?) with transverse perverse fracture and missing tip on opposite end. Most of flaking appears to be percussive and object appears utilized.
- 4) UA80-207-2 (WIS-003): Black chert interior distal fragment of flake with peripheral unifacial edge retouch. Object has transverse snap break. One larger primary retouch scar has hinge fracture. Possible 'scraper.'
- 5) UA80-236-1 (SAG-011): Thick black chert flake fragment showing possible burin facet and marginal utilization scars.
- 6) UA80-235-1 (PSM-190): Stemmed projectile point, black chert. Bifacially flaked with primary and secondary retouch. Barbs and stem created by corner notching. One barb and tip missing. Some secondary retouch is parallel diagonal. Crude diamond cross section.
- 7) UA80-234-32A, B. C (PSM-060): Large black chert unifacially retouched blade implement in three pieces (found in situ in contiguous association). Retouch on both margins. Proximal ventral surface shows prominent lip and diffuse bulb suggesting soft hammer or pressure mode of detachment. Considered a blade due to evidence of platform preparation and arris. Transverse snap break between two proximal fragments longitudinally traversed by 4 cm - long thinning flake down midline. An incongruous scar appears on ventral side of middle fragment between the two proximal fragments suggesting retouch after breakage. Break between proximal fragments indicates hinging away from ventral surface. Distal end of middle fragment shows a hinge fracture extending onto distal fragment, indicating two breaking events.
- 8) UA80-231-3 (BET-042): Obsidian biface fragment with some edge retouch. Transverse snap break and small termination break present.
- 9) UA80-239-4 (PSM-193): Greenish grey chert biface fragment (tip or butt) with termination missing, and showing primary and secondary retouch. Diagonal helical perverse fracture is present. Some primary retouch is crudely parallel.
- 10) UA80-239-3 (PSM-193): Grey green chert projectile point with missing lateral tip, broad stemmed and corner notched. Cortex present on one face. Flaking is irregular and basal thinning is crude. Biconvex cross section.

- 11) UA80-238-7 (PSM-192): Bluish black interior flake (blade?) blank: has dorsal arris and evidence of platform preparation. Some localized preliminary marginal nibbling present (through retouch or use). 33 x 55 mm.
- 12) UA80-237-4 (PSM-191): Grey chert bifacially flaked implement 'tip' with diagonal perverse fracture (snap break). Shows preform with primary retouch and some marginal secondary retouch (probably percussive). Vague evidence of thermal alteration (potlid and differential luster) shows on surface. Plano-convex cross section.

Summary of Recommendations

Seventy-four localities were identified during the 1980 field survey along the proposed NWA route, EMS's and other facilities. These include 48 directly impacted cultural resources (27 newly identified) and 11 finds, and 15 indirectly impacted cultural resources (11 newly reported).

Of the directly impacted cultural resources, 14 newly reported and six known sites are judged to be of potential Register quality. Avoidance or scientific excavation are recommended alternatives. Four new and five known sites are directly impacted but contain insufficient data to qualify for Register nomination. Nonetheless, substantive information in the areas of assemblage completeness, manufacturing techniques and environmental data are forthcoming through salvage of these materials if they cannot be avoided. Six new and one known site are insufficiently known to permit an assessment of Register eligibility at this time. If these resources cannot be avoided then further testing and assessment are recommended. In the case of three new and nine old sites no mitigation is required. Two new sites are modern and the third has little or no information potential. In the case of nine known sites (three associated with 1980 finds described below), Alyeska work or previous construction has rendered them of no further archaeological interest.

Eleven finds directly impacted include eight non-sites. Three are potentially interpretable and further study is recommended if they cannot be avoided. One find is clearly modern and two are considered non-cultural.

Fifteen indirectly impacted localities are included in the present study. They lie near or directly adjacent to the proposed NWA centerline or EMS's. For 11 newly reported resources we recommend avoidance (which should be pro forma) and stabilization or protection (by fencing, posting, etc.) in seven cases. Preservation and/or stabilization of two known sites is recommended. The 74 cases are listed below in Table 2.

Table 2. Summary of 1980 Survey Results

AHRS Number New Sites	AHRS Number Known Sites	Quad. 1:250000 New Finds	Significance	Impact Indirect - Direct	Mitigation Alternatives	
XBD-042		TNX-find	None		Direct	No action
	LIV-041		Low*		Direct	Avoid or Salvage
	LIV-043		Low	Indirect		Avoid & Stabilize
	LIV-040		Low		Direct	Avoid or Salvage
LIV-105			Medium		Direct	Avoid & Stabilize or Excavate
			High		Direct	Avoid or Excavate
	LIV-046		Medium-High		Direct	Avoid or Excavate
	LIV-050		Unknown		Direct	Avoid or Test & Assess
LIV-106			Medium-High		Direct	Avoid or Excavate
LIV-104			Medium-High		Direct	Avoid or Excavate
	LIV-030		Medium		Direct	Avoid & Stabilize or Excavate
LIV-103			Medium-High		Direct	Avoid or Excavate
LIV-108			Medium-High		Direct	Avoid or Excavate
LIV-107			Medium		Direct	Avoid or Excavate
LIV-039			Medium-High	Indirect		Avoid/Stabilize & Post
		LIV-find #1	None		Direct	No Action
	LIV-032		None		Direct	No Action
		LIV-find #2	None		Direct	No Action
	LIV-055		None		Direct	No Action
BET-124			Unknown (None-Low)		Direct	No Action
	BET-006		None-Low		Direct	No Action
BET-125			Low-Medium(?)		Direct	Avoid or Salvage
BET-126			Low-Medium(?)		Direct	Avoid or Salvage
	BET-083		None		Direct	No Action
	BET-018		None		Direct	No Action
		BET-find/082	None-Low		Direct	No Action
	BET-082		None		Direct	No Action
	BET-042		Medium	Indirect		No Action
	BET-054		Medium		Direct	Avoid & Stabilize or Excavate
BET-122			Unknown		Direct	Avoid or Test & Assess
BET-123			Unknown		Direct	Avoid or Test & Assess
	BET-055		High		Direct	Avoid or Excavate
	WIS-001		Low		Direct	Avoid & Stabilize or Salvage
		WIS-find #2	Unknown		Direct	Avoid or Test & Assess

Table 2. Continued

AHRS Number New Sites	AHRS Number Known Sites	Quad. 1:250000 New Finds	Significance	Impact Indirect - Direct	Mitigation Alternatives
WIS-051	WIS-003	WIS-find #1/006	Low	Direct	Avoid or Salvage
	WIS-019		Medium	Direct	Avoid & Stabilize or Excavate
			Medium-High	Direct	Avoid or Excavate
			Unknown	Direct	Avoid or Test & Assess
	WIS-006	WIS-find	None	Direct	No Action
			Non-Cultural	Direct	No Action
WIS-050	WIS-012		Low	Indirect	Avoid
CHN-013			Medium	Indirect	Avoid
			Low	Direct	No Action after recording (modern)
CHN-014			Medium-High	Indirect	Avoid & Protect
CHN-015			High	Direct	Avoid & Protect
CHN-009			Medium-High	Direct	Avoid
CHN-008			Unknown	Direct	Avoid or Test & Assess
CHN-010			Unknown	Direct	Avoid or Test & Assess
	CHN-007	CHN-find/wood	Medium-High	Indirect	Avoid & Maintain
			Non-Cultural	Direct	No action
CHN-011			Medium	Direct	Avoid & Document Fully
CHN-012			Unknown	Direct	Avoid or Test & Assess
		CHN-find/MP 194	None	Direct	No Action (modern)
PSM-188			Low-None	Direct	No Action (modern)
PSM-187			Low	Direct	Avoid or Salvage
	PSM-061		None	Direct	No Action
PSM-186			Unknown (Med.-High?)	Direct	Avoid or Test & Assess
		PSM-find 30-1	None	Direct	No Action
PSM-185			Low-Medium	Direct	Avoid or Salvage
PSM-194			High	Direct	Avoid or Excavate & Record
		PSM-find 28-1	Unknown	Direct	Avoid or Test & Assess
	PSM-069		Medium	Direct	Avoid or Excavate
PSM-190			High	Direct	Avoid & Preserve or Excavate
PSM-191			Medium-High	Indirect	Avoid & Protect
PSM-192			High	Indirect	Avoid & Protect

Table 2. Continued

AHRS Number New Sites	AHRS Number Known Sites	Quad. 1:250000 New Finds	Significance	Impact Indirect - Direct	Mitigation Alternatives
PSM-193			Medium	Indirect	Avoid & Protect
PSM-181			Medium	Indirect	Avoid & Protect
PSM-184			Medium-High	Indirect	Avoid & Protect
PSM-182			Medium	Indirect	Avoid
PSM-183			Medium-High	Indirect	Avoid
	PSM-060		Medium-Low(?)	Direct	Avoid or Salvage
PSM-189			Medium-High(?)	Direct	Avoid or Excavate
SAG-011			High-Medium	Indirect	Avoid
	SAG-006		Unknown (High?)	Direct	Avoid or Test & Assess

*Low and Low-Medium, not considered Register eligible but demonstrated to possess some useful data; Medium-High, considered Register eligible as a single property or as part of a wider exploitative area or system and to contain important historic or prehistoric data. For a further brief discussion of terms, refer to the text.

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APPENDIX 1

Work Completed: Centerline Segments

<u>Segment Width 150 ft.</u>	<u>Segment Width 500 ft.</u>	<u>Work Completed</u>	<u>If Not, Reason</u>
-	0-10.2	+	
10.2-12.2	-	+	
-	12.2-24	+	
24-44	-	+	
-	44-45	+	
45-96	-	+	
125-132	-	+	
-	(149.6-150)	+	
150-247	-	+	
-	247-248.5	-	Not flagged, considered to hold high potential for cultural resources.
248.5-254	-	+	
-	499-503.6	+	
503.6-515.5	-	+	
-	515.5-519.4	+	
519.4-522	-	+	
528-528.5	-	-	Deleted as per verbal instructions from A. Cranmer
528.5-534.5	-	+	
-	534.5-537	+	
-	537-539.3	-	Partly lacking permis- sions, partly deleted as per verbal instructions from A. Cranmer
539.3-548	-	+	

Total miles assigned in W.O. = 231 miles

Total miles added in field = 0.4 miles

Total miles completed = 227.1 miles

Total miles not completed = 4.3 miles

Total miles assigned = 231.4 miles

Total miles completed = 227.1 miles

Estimated square miles = 8.7 miles

Estimated worker days = 285-290 days

Survey intensity: 33 worker days/square mile (compared to 43-46 worker days for 1978 and 1979 surveys in forested areas; 1980 segments were both forest and tundra vegetation, permitting easier survey in the latter areas).

APPENDIX 2

Summary of EMS's: 1980 Survey

<u>Intensive Walkover</u>	<u>Acres</u>	<u>Visual</u>	<u>Acres</u>	<u>Total Acres</u>	<u>Notes</u>
		1-1	88	88	
		1-2	101	101	
		1-3	63	63	
1-4	40			40	Some archaeological potential, scheduled for visual but intensively surveyed
		2-1	754	754	
		3-1	346	346	
		3-2	384	384	
		4-1	459	459	
		4-2	688	688	
		4-3A	355	355	
		4-3B	42	42	
		5-1	622	622	
		5-2	217	217	
		5-3A	158	158	
		5-3B	213	213	
		6-1	388	388	
		6-2	194	194	
		7-1	258	258	
		8-1A	121	121	
		8-1B	181	181	
		8-2	370	370	
		8-3	354	354	
		9-0	259	259	
		9-1	718	718	
		10-1A	121	121	
		10-1B	363	363	
		10-2	439	439	
		10-3	155	155	
		11-1	325	325	
11-2	98			98	
		12-1	320	320	
12-2A	37			37	Not scheduled but examined since has potential and were accessible
12-2B	10			10	
		14-1	421	421	
14-2	40	14-2	41	81	
		14-3	43	43	
		15-2	288	288	
16-1	30	16-1	80	110	Potentially no access Visual scheduled for intensive survey but inaccessible
		16-2	29	29	

Summary of EMS's - Continued

<u>Intensive .</u> <u>Walkover</u>	<u>Acres</u>	<u>Visual</u>	<u>Acres</u>	<u>Total Acres</u>	<u>Notes</u>
16-3	96			96	
		17-2	28	28	
18-1A	19			19	
		18-1B	17	17	
18-1C	112			112	
		18-1.1	94	94	
		19-1	67	67	
		19-1.1A	59	59	
		19-1.1B	133	133	
19-2A	86			86	
		19-2B	26	26	
20-3A	32			32	
20-3B	50			50	Not scheduled but done since near known site on 20-3A
21-6	246			246	
21-2	128			128	
22-1	37			37	
22-2	18			18	
24-1A	69			69	
24-1B	41			41	
25-1	75			75	
25-2	50			50	
26-0	153			153	
26-1	169			169	
27-1A	54			54	
27-1B	27			27	
27-2	56			56	
28-1A	46			46	
28-1B	15			15	
28-4A	14			14	
28-4B	8			8	
29-1A	10			10	
29-1B	21			21	
29-1C	33	29-1C	20	53	Partially inaccessible
		29-2			Examined aerial photo
29-3A	5	29-3A	15	20	
29-3B	13			13	
30-1	31			31	
30-3					Deleted from W.O.#8, no access
31-1	8			8	
31-2	8			8	
31-3A	43			43	
31-3B	39			39	
32-1	30	32-1	12	42	Partially inaccessible
32-2	111			111	
32-3	80	32-3	39	119	Partially inaccessible

Summary of EMS's - Continued

<u>Intensive Walkover</u>	<u>Acres</u>	<u>Visual</u>	<u>Acres</u>	<u>Total Acres</u>	<u>Notes</u>
33-1	21			21	Deleted from W.O.#8 but done as it was accessible & requested by L. Ericson
		34-0 to 39-1			Did not do visually in field, examined air photos
39-3	201			201	
41-1	48			48	
41-2A	54			54	
		41-2B	35	35	
41-3	31			31	
42-3	41			41	
		43-2	86	86	
		43-3	144	144	
		44-1	208	208	
		44-4	147	147	
44-5	27			27	
45-1	73			73	Scheduled as visual: added since accessible
45-2A	62			62	
45-3	191			191	
46-1	118			118	
48-0	66			66	
48-2A	28			28	
48-2B	56			56	
48-3	100			100	
48-4	139			139	
51-1A	37			37	
51-3	88			88	
52-3B	9			9	
54-1B	19			19	
55-1B	18			18	
55-2A	47			47	
60-1	85			85	
60-1.1	69			69	Not scheduled but done since near 60-1
		64-1	201	201	Cleared for hand sample only, not accessible for survey.
69-3A	14			14	Helicopter access.
69-3B	15			15	Helicopter access.
71-0A	9			9	
71-1	15			15	
71-3A	23			23	
71-3B	17			17	

Summary of EMS's - Continued

<u>Intensive Walkover</u>	<u>Acres</u>	<u>Visual</u>	<u>Acres</u>	<u>Total Acres</u>	<u>Notes</u>
GRAND TOTAL					
72	4009	52	11289	15298	
WORKERDAYS	315				
INTENSITY	50				
(workerdays/ square mile)					

Aerial photo interpretation:

EMS's 29-2
 30-2
 30-3
 30-4
 34-0
 34-2
 34-3
 34-4
 35-2.1
 36-1
 36-2
 36-4
 37-2
 38-2
 39-1

APPENDIX 3

Miscellaneous Work - 1980, Requested in Field

<u>Work</u>	<u>Acres</u>
Trench stability plot TS-A1, 1300 x 600 ft. 5 persons @ 100 ft. spacing	17.9
Trench stability plot TS-D4, 1000 x 1000 ft. 4 persons @ 100 ft. spacing	23.0
Trench stability plot TS-E4, 700 x 1200 ft. 5 persons @ 80 ft. spacing	19.3
Trench stability plot TS-I5, 1100 x 800 ft. 5 persons @ 100 ft. spacing	20.2
Trench stability plot TS-B4, 1000 x 800 ft. 5 persons @ 80 ft. spacing	18.3
Borehole 41-32 + vicinity 260 x 200 ft., 5 persons	1.2
Borehole 42-35 + vicinity 260 x 200 ft., 5 persons	1.2
Borehole 42-37 + vicinity 260 x 200 ft., 5 persons	1.2
Borehole 27-32 + vicinity 150 x 150 ft., 5 persons	0.5
Borehole 27-33 + vicinity 150 x 150 ft., 5 persons	0.5
TOTAL	103.3 ACRES

APPENDIX 4

Summary of Monitored Backhoe Trenches on EMS'sSouthern Portion - Canadian border to Yukon River; amended to W.O. #8

<u>EMS Number</u>	<u>Number of Trenches</u>
125-3	3
120-3	3
117-2	2
116-1	2
114-1	4
113-1	3
112-2	3
112-1	3
111-2	3
110-2	3
106-1	1
105-2	1
105-1	2
103-2B	2
102-1	5
99-2	3
98-2	5
98-1	3
95-5	8
92-1	5
86-3.1A	1
86-2A	2
86-2B	5
76-1	1
72-3B	2
71-0C	2
Total 26 EMS's	77 Trenches

Northern Portion - Exhibit E; W.O. #8

68-4D	4
68-4B	3
67-2	4
60-3	7
60-2	4
60-1	3
59-2	5
56-1	9
54-2	8
50-1B	8
49-3	3
49-2	3

Northern Portion - Continued

<u>EMS Number</u>	<u>Number of Trenches</u>
47-2	6
46-2C	1
46-2A	3
45-2B	4
45-2A	3
45-1	4
44-5	4
43-4	20
43-1	10
42-3	5
42-1	8
40-2B	0 access cleared but could not get through muskeg
40-2A	3
39-3	5
38-4	12
38-3	8
37-3	8
36-5	7
36-3	7
35-4	8
35-2A	4
35-2B	8
Total 34 EMS's	119 Trenches

Sites north of the area in Exhibit E; added to program in the field.

33-3	3
32-2	9
32-1	4
31-3	5
31-2	2
31-1	5
30-3	6
30-1	9
29-3	5
29-1	11
28-4A	3
28-4B	2
28-1A	4
28-1B	3
27-2	7
27-1	7
26-1A	12
26-0	2
25-1	3
24-1	4

Sites north of Exhibit E - Continued

<u>EMS Number</u>	<u>Number of Trenches</u>
22-2	3
21-2	2
21-1	2
<u>18-1A</u>	<u>1</u>
Total 24 EMS's	114 Trenches

TOTAL OF SITES: 84

TOTAL OF TRENCHES: 390

Field Changes to the Work Order:

Deleted in field:

34-1	4
38-2	3
39-4	2
40-B	7 inaccessible
41-3.1	12
41-5	12
42-2A, B, C	12
43-3	6
50-2	5
51-A	-

Added in field:

39-3	5
42-3	5
44-5	4
45-2A	3
45-2B	4
46-2A	3
46-2C	1
49-3	3
54-2	8
56-1	9
67-2	4

APPENDIX 5

Field Personnel, 1980

Jean S. Aigner, Ph.D., in general charge of the program.

Brian L. Gannon, M.A., in charge of the field crews.

Crew: P. Bennett, B.S.
L. Boring, M.A.
D. Rintoul, M.A.
J. Dale,* M.A.
N. Collins, B.A.

Brian Cannon, B.A., crew leader.

Crew: S. Alloway,* A.A.
K. Miller, B.A.
D. Hanson, B.A.
T. DesRochers, B.A.

Kathy Leitgeb, B.A., crew leader.

Crew: J. Dale,* M.A.
M. Wright, B.A.
R. Timian, B.A.
P. Rissman, M.A.

Sharon Fetter, M.A., crew leader.

Crew: L. Litwinionek,* B.A.
J. Thorsen, B.A.
J. Jordan, B.A.
R. Fox, B.A.
T. Villa, A.

*Also served as backhoe program monitors.

Other participants: B. Byington, M.A.
P. Book, Ph.D.
L. Heartfield, Ph.D.

APPENDIX 6

Artifact Catalog

SAG-011

AAS 016

Site #1

B. Cannon

Date Collected: 7-23-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
236-1		(Surface find - 47'2" N8W from datum - Lot #4 - BC) large black chert flake with possible use wear		See Figure 1
236-2		(Surface find - 130' N30E of datum - Book 3 p. 100 - Lot #5 - DH) veined chert core with battering		
236-3		(Pit #1, 8-10" below surface - S51E 81'8" from datum - Lot #6 - KM) thin grey translucent chert flake		
236-4		(Pit #1, 8-10" below surface - S51E 81'8" from datum - Lot #6 - KM) thin grey translucent chert flake		
236-5		(Pit #1, 8-10" below surface - S51E 81'8" from datum - Lot #6 - KM) thin grey translucent flake		
236-6 to 12		(Pit #1, 8-10" below surface - S51E 81'8" from datum - Lot #6 - KM) 7 small grey translucent chert flakes		
236-13		(Pit #2, 3" below surface - S56E 73'1" from datum - Lot #7 - KM) tiny grey translucent chert flake		
236-14		(Pit #4, 1" below surface, S46E 122'8" from datum - Lot #8 - TDesR) light grey opaque chert flake		
236-15		(Pit #5, 8" below surface, N4E 65'3" from datum - Lot #9 - SA) dark grey (thin) flake		
236-16		(Pit #7, 1-1/2" below surface, S46E 77-1/2" from datum - Lot #8 - KM) small grey chert flake		
236-17 to 22		(Pit #10, 3-6" in depth, S33E 36'3" from datum - Lot #11 - KM) 6 small black chert flake		

SAG-011

AAS 016

Site #1

B. Cannon

Date Collected: 7-23-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
236-23		(Pit #10, 3-6" in depth, S33E 36'3" from datum - KM - Lot #11) small black chert flake - thin		
236-24		(Pit #10, 3-6" in depth, S33E 36'3" from datum - KM - Lot #11) black chert flake		
236-25		(Pit #10, 3-6" in depth, S33E 36'33" from datum - KM - Lot #11) black chert flake		
236-26		(Pit #12, 2-6" in depth, S57E 44'6" from datum - KM - Lot #12) black chert pebble		
236-27		(Pit #13, 2" below surface, S60W 18'9" from datum - BC - Lot #13) very small black flake		
*				
236-28		(Pit #13, 2" below surface, S60W 18'9" from datum - BC - Lot #13) blade-like black chert flake		
*				
236-29		(Pit #14, 4" below surface, N40W 11'2" from datum - DH - Lot #14, note in Book 3 pp. 98-99) grey chert core fragment with battering along an edge (unifacial)		
236-30		(Pit #16, 2" deep, N58E 44'0" from datum - TDesR - Lot #15) small black chert flake		
236-31		(Pit #6, 2" deep, N58E 44'0" from datum - TDesR - Lot #15) small grey chert chunk		

*Note these are in envelop.

SAG (A-4)-006

AAS 016 - MP 87.13/April 80

B. Cannon
Date Collected: 7-18-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
242-1		(Random pit (no exact location) 3 cm below surface - 300' east of centerline; north end of terrace; lower edge towards the east - DH - Lot #1) black chert chunky flake		
242-2		(Random pit (no exact location) approximately 4 cm below surface - 200' east of centerline; near south end of terrace; east edge - DH - see permanent Book #2 pp. 77-78 - Lot #2) chunky black chert flake		
242-3		(Random pit - about 5-6 cm depth - on centerline segment south end of terrace on downslope (note Book #1 p. 34) - KM - Lot #3) thin black chert flake		

PSM-060

EMS 20-3A
Site #1

B. Cannon
Date Collected: 7-17-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
234-1		(TP #1, Alyeska Excavation Area I, BLG) small black chert flake		
234-2		(TP #1, Alyeska Excavation Area I, BLG) black chert flake		
234-3		(TP #1, Alyeska Excavation Area I, BLG) sandy-brown sand stone fragment		
234-4		(TP #1, Alyeska Excavation Area I, BLG) black chert flake		
234-5		(TP #1, Alyeska Excavation Area I, BLG) black chert flake - curved		

PSM-060 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
234-6		(TP #1, Alyeska Excavation Area I, BLG) thin black chert flake		
234-7		(TP #1, Alyeska Excavation Area I, BLG) black chert fragment		
234-8		(TP #1, Alyeska Excavation Area I, BLG) mottled grey/brown chert flake		
234-9		(Surface find, Alyeska Excavation Area I, BLG) grey chert flake		
234-10		(Surface find, Alyeska Excavation Area I, BLG) dark grey chert chunk		
234-11		(Surface find, Alyeska Excavation Area I, BLG) thin black chert flake		
234-12		(TP #2, 0-15 cm depth, Alyeska Excavation Area I, NC) grey quartzite possible flake		
234-13		(TP #2, 0-15 cm depth, Alyeska Excavation Area I, NC) translucent grey chert flake fragment		
234-14		(TP #2, 0-15 cm depth, Alyeska Excavation Area I, NC) translucent grey chert flake fragment		
234-15		(TP #2, 0-15 cm depth, Alyeska Excavation Area I, NC) thin black chert flake		
234-16		(TP #2, 0-15 cm depth, Alyeska Excavation Area I, NC) small black chert flake - curved		
234-17		(TP #2, 0-15 cm depth, Alyeska Excavation Area I, NC) thin black chert flake		

PSM-060 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
234-18		(TP #2, 0-15 cm depth, Alyeska Excavation Area I, NC) black chert fragment		
234-19		(TP #2, 0-15 cm depth, Alyeska Excavation Area I, NC) tiny black chert flake		
234-20		(TP #2, 0-15 cm depth, Alyeska Excavation Area I, NC) small, thin black chert flake		
234-21		(TP #3, Alyeska Excavation Area I, LB) light tan chert flake fragment		
234-22		(TP #3, Alyeska Excavation Area I, LB) black chert flake fragment		
234-23		(TP #3, Alyeska Excavation Area I, LB) black chert flake		
234-24		(TP #3, Alyeska Excavation Area I, LB) black chert chunk		
234-25		(TP #3, Alyeska Excavation Area I, LB) mottled brown/grey chert flake		
234-26		(TP #3, Alyeska Excavation Area I, LB) thin black chert flake		
234-27		(TP #3, Alyeska Excavation Area I, LB) small black chert flake		
234-28		(TP #3, Alyeska Excavation Area I, LB) thin, small black chert flake		
234-29		(TP #4, Alyeska Excavation Area II, PLB) translucent grey chert flake		
234-30		(TP #4, Alyeska Excavation Area II, PLB) translucent striated grey chert flake		

PSM-060 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
234-31		(TP #4, Alyeska Excavation Area II, PLB) translucent grey chert flake		
234-32A		(TP #5, Alyeska Excavation Area II, RJD) proximal end of large black chert biface trimming flake that has been unifacially worked		See Figure 1
234-32B		(Beside west side of TP #5, Alyeska Excavation Area II, RJD) medial section of large black chert biface trimming flake that has been unifacially worked		See Figure 1
234-32C		(TP #5, Alyeska Excavation Area II, RJD) distal end of large black chert biface trimming flake that has been bifacially worked		See Figure 1
234-33		(TP #5, Alyeska Excavation Area II, RJD p. 46) chalky grey chert flake		
234-34		(TP #5, Alyeska Excavation Area II, RJD p. 46) translucent grey chert flake		
234-35		(TP #5, Alyeska Excavation Area II, RJD p. 46) translucent rosey chert flake - twisted		
234-36		(TP #5, Alyeska Excavation Area II, RJD p. 46) translucent rosey/grey chert flake		
234-37		ITP #5, Alyeska Excavation Area II, RJD p. 46) tiny grey chert flake		
234-38		(TP #5, Alyeska Excavation Area II, RJD p. 46) small translucent rosey/grey chert flake		
234-39		(TP #5, Alyeska Excavation Area II, RJD p. 46) grey chert flake		

PSM-060 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
234-40		(TP #5, Alyeska Excavation Area II, RJD p. 46) translucent grey chert blade-like flake		
234-41		(TP #5, Alyeska Excavation Area II, RJD p. 46) translucent grey chert fragment		
234-42		(TP #5, Alyeska Excavation Area II, RJD p. 46) rosey/brown chert fragment		
234-43		(TP #5, Alyeska Excavation Area II, RJD p. 46) thin translucent grey chert flake		
234-44		(TP #5, Alyeska Excavation Area II, RJD p. 46) thin translucent rosey/grey chert flake		
234-45		(TP #5, Alyeska Excavation Area II, RJD p. 46) small translucent grey chert flake		
234-46		(Surface find, Alyeska Excavation Area II, RJD p. 46) large thin patinated black chert biface trimming flake		
234-47		(TP #6 (NE corner), Alyeska Excavation Area II, DR-RJD p. 46) large thin black chert biface trimming flake		
234-48		(TP #7, Alyeska Excavation Area I, NC) grey chert chunk		
234-49		(TP #7, Alyeska Excavation Area I, NC) white quartzite chunk		
234-50		(Surface find, Alyeska Excavation Area I, BLG) translucent light grey chert blade-like flake		
234-51		(Surface find, Alyeska Excavation Area I, BLG) translucent grey chert flake fragment		
234-52		(Surface find, Alyeska Excavation Area I, BLG) tan opaque chert flake		

PSM-060 continued

<u>Artifact No. UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
234-53	(Surface find - frost boil, RJD p. 37) black chert flake fragment		
234-54	(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) opaque grey chert flake - curved		
234-55	(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) translucent grey chert flake - curved		
234-56	(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) opaque grey biface trimming flake		
234-57	(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) chalky grey chert flake		
234-58	(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) opaque grey chert flake - curved		
234-59	(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) light grey blade-like biface trimming flake		
234-60	(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) light grey chert flake		
234-61	(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) translucent grey-white chert flake		
234-62	(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) black chert flake fragment		
234-63	(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) small light grey chert fragment		
234-64	(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) thin black chert flake		

PSM-060 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
234-65		(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) light grey chert flake		
234-66		(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) white/grey chert fragment		
234-67		(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) thin black chert flake		
234-68		(Surface find, 3 m W and 3 m N of TP #1, 2 and 7, terrace edge, BLG) thin translucent grey chert flake		
234-69		(TP #E, RJD) grey chert flake		
234-70		(TP #H, 15' E of TP #6, 5 and 4, RJD p. 43) chunky black chert flake		
234-71		(TP #H 15' W of TP #6, 5 and 4, RJD p. 43) black chert fragment		
234-72		(TP #K, possibly windblown flake, at edge of cat tracks, RJD p. 44) black chert fragment		
234-73		(TP #''0'', RJD p. 49) black chert flake		
234-74		(TP #''0'', RJD p. 49) black chert fragment		
234-75		(TP #'d', in test trench of possible housepit, RJD p. 52) black chert fragment		
234-76		(Found in accidentally dumped quarried gravel, RJD pp. 39-40) grey chert fragment		
234-77		(Test Trench 1, Housepit 'd', Area 1, LB, RJD p. 51) organic sample		

PSM-060 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
234-78		(Test Trench 1 (SE corner), Housepit 'd', Area 1, RJD p. 51) sample of thick compact humic mat		
234-79		(Test Trench 1 (S end), Housepit 'd', Area 1, LB, RJD p. 51) sandy humic sample		

PSM-189

EMS 21-1 (MP 114 + 3760/April 80)
Site #1

B. Gannon
Date Collected: 7-16, 7-29, 8-24-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
233-1		(1112' E of centerline, terrace edge T8S R14E section 5; NW 1/4 of NW 1/4 of SW 1/4 of NE 1/4 - TDesR, BC - Lot #69) black chert flake		
233-2		(TP #1, ridge top S of gully - NE corner of terrace) small black chert flake		
233-3		(TP #1, ridge top S of gully - NE corner of terrace) chunky black chert flake fragment		
233-4		(TP #1, ridge top S of gully - NE corner of terrace) chunk of black chert		
233-5		(TP #1, ridge top S of gully - NE corner of terrace) black chert flake with cortex		
233-6		(TP #1, ridge top S of gully - NE corner of terrace) small blade-like black chert flake		
233-7		(Surface of previous excavation - NE corner of S terrace) striated grey chert flake		
233-8		(Surface of previous excavation - NE corner of S terrace) striated grey chert chunk		

PSM-189 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
233-9		(Surface of previous excavation - NE corner of S terrace) black chert flake		
233-10		(Surface of previous excavation - NE corner of S terrace) small black chert flake		
233-11		(Surface of previous excavation - NE corner of S terrace) small black chert flake		
233-12		(Surface of previous excavation - NE corner of S terrace) small black chert chunk		
233-13		(Surface of previous excavation - NE corner of S terrace) small black chert flake fragment		
233-14		(Surface of previous excavation - NE corner of S terrace) small black chert chunk		
233-15		(Surface of previous excavation - NE corner of S terrace) small black chert flake fragment		
233-16		(Subsurface test pit N3 (A) from summer backhoe program in S terrace, RJaD) chunky black chert fragment		
233-17		(Subsurface test pit N4 (C) from summer backhoe program in N terrace, RJaD) chunky black chert fragment with cortex		

PSM-181

EMS 26-1

Site #1

Sharon Fetter

Date Collected: 7-23-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
222-1		(TP #1, Lot #1) grey (Jasper?) flake with cortex on dorsal surface - use wear along left vertical surface		
222-2		(TP #1, Lot #1) grey (Jasper?) flake fragment		
222-3		(TP #4, Lot #2) grey chert flake fragment		
222-4		(Next to TP #6, Lot #3 surface) grey chert fragment of a bifacially worked piece		
222-5		(From S-1 concentration, Lot #4) grey/black chert chunk		
222-6		(From S-1 concentration, Lot #4) grey/black striated chert chunk - possible core fragment		
222-7		(From S-1 concentration, Lot #4) grey/black striated chert flake		
222-8		(From S-1 concentration, Lot #4) grey/black striated chert flake		
222-9		(From S-1 concentration, Lot #4) grey/black striated chert flake		
222-10		(From S-1 concentration, Lot #4) sandy-grey chert flake		
222-11		(From S-1 concentration, Lot #4) two small grey/black striated chert flakes		
222-12		(S-2 concentration, Lot #5) grey chert flake		
222-13		(S-2 concentration, Lot #5) grey quartzite flake		
222-14		(S-2 concentration, Lot #5) dark grey chert flake		

PSM-181 continued

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
222-15	(S-2 concentration - Lot #5) grey chert flake		
222-16	(S-2 concentration - Lot #5) grey chert flake		
222-17	(S-2 concentration - Lot #5) grey chert flake		
222-18	(S-2 concentration - Lot #5) grey chert chunk		
222-19	(S-2 concentration - Lot #5) grey chert flake		
222-20	(S-2 concentration - Lot #5) dark grey chert flake		
222-21	(S-2 concentration - Lot #5) dark grey chert flake		
222-22	(S-2 concentration - Lot #5) grey chert flake		
222-23	(S-2 concentration - Lot #5) grey chert flake		
222-24	(Pit #7 - Artifact #A - Lot #6) large biface fragment		
222-25	(Pit #7 - Artifact #B - Lot #7) grey chert flake with unifacial retouch and heavy use wear bifacially on right lateral edge		
222-26	(Pit #7 - Lot #8) dark grey chert unifacially worked fragment with heavy lateral use wear		
222-27	(Pit #7 - Lot #9) grey chert flake fragment with cortex		
222-28	(Pit #7 - Lot #10) dark grey chert blade-like flake		
222-29	(Pit #7 - Lot #11) grey chert flake		
222-30	(Pit #7 - Lot #12) dark grey chert flake (blade-like)		

PSM-181 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
222-31		(Pit #7 - Lot #13) grey chert blade-like flake		
222-32		(Pit #7 - Lot #14, 15, 16, 17) 4 small grey chert blade-like flakes		
222-33		(Pit #7 - Lot #18) grey chert chunk possible core fragment		
222-34		(Pit #7 - Lot #18) grey chert biface trimming flake - large		
222-35		(Pit #7 - Lot #18) dark grey chert biface trimming flake - large		
222-36		(Pit #7 - Lot #18) large grey chert flake		
222-37		(Pit #7 - Lot #18) large thick grey chert flake		
222-38		(Pit #7 - Lot #18) large thin grey chert flake		
222-39		(Pit #7 - Lot #18) large thin grey chert flake fragment		
222-40		(Pit #7 - Lot #18) grey chert flake fragment		
222-41		(Pit #7 - Lot #18) grey (dark) chert flake fragment with hinge fracture		
222-42		(Pit #7 - Lot #18) grey chert flake (thin)		
222-43		(Pit #7 - Lot #18) grey chert flake fragment with hinge fracture		
222-44		(Pit #7 - Lot #18) large thin grey (dark) chert flake fragment		

PSM-181 continued

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
222-45	(Pit #7 - Lot #18) large thin grey chert flake fragment		
222-46	(Pit #7 - Lot #18) brown/grey chert flake fragment		
222-47	(Pit #7 - Lot #18) grey chert blade-like flake		
222-48	(Pit #7 - Lot #18) grey chert blade-like flake		
222-49	(Pit #7 - Lot #18) thin grey chert flake		
222-50	(Pit #7 - Lot #18) large thin grey chert flake		
222-51	(Pit #7 - Lot #18) grey chert biface trimming flakes		
222-52	(Pit #7 - Lot #18) large thin grey chert flake		
222-53	(Pit #7 - Lot #18) thin grey chert flake		
222-54	(Pit #7 - Lot #18) thin grey chert flake		
222-55	(Pit #7 - Lot #18) thin grey chert flake		
222-56	(Pit #7 - Lot #18) thin grey chert flake		
222-57	(Pit #7 - Lot #18) thin grey chert flake		
222-58	(Pit #7 - Lot #18) thin grey chert flake with curved hinge fracture		
222-59	(Pit #7 - Lot #18) thin grey chert flake		
222-60	(Pit #7 - Lot #18) thin grey chert flake		
222-61	(Pit #7 - Lot #18) grey chert flake fragment		
222-62	(Pit #7 - Lot #18) thin dark grey chert flake		

PSM-181 continued

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
222-63	(Pit #7 - Lot #18) grey chert fragment		
222-64	(Pit #7 - Lot #18) grey chert flake (curved)		
222-65	(Pit #7 - Lot #18) thin dark grey chert		
222-66	(Pit #7 - Lot #18) brown chert flake		
222-67	(Pit #7 - Lot #18) grey chert flake		
222-68	(Pit #7 - Lot #18) brown chert flake		
222-69	(Pit #7 - Lot #18) brown chert flake		
222-70	(Pit #7 - Lot #18) grey chert fragment		
222-71	(Pit #7 - Lot #18) grey chert flake fragment		
222-72	(Pit #7 - Lot #18) grey chert flake (curved)		
222-73	(Pit #7 - Lot #18) grey chert flake		
222-74	(Pit #7 - Lot #18) thin grey chert flake		
222-75	(Pit #7 - Lot #18) light grey chert flake (thin)		
222-76	(Pit #7 - Lot #18) grey chert flake fragment (curved)		
222-77	(Pit #7 - Lot #18) grey chert flake		
222-78	(Pit #7 - Lot #18) grey chert flake fragment		
222-79	(Pit #7 - Lot #18) grey chert flake fragment		
222-80	(Pit #7 - Lot #18) grey chert flake		

PSM-181 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
222-81		(Pit #7 - Lot #18) thin grey chert flake		
222-82		(Pit #7 - Lot #18) thin grey chert flake		
222-83		(Pit #7 - Lot #18) thin grey chert flake		
222-84		(Pit #7 - Lot #18) grey chert flake		
222-85		(Pit #7 - Lot #18) grey chert flake		
222-86		(Pit #7 - Lot #18) light grey chert flake		
222-87		(Pit #7 - Lot #18) grey chert flake		
222-88		(Pit #7 - Lot #18) grey chert flake with hinge fracture		
222-89		(Pit #7 - Lot #18) grey chert flake		
222-90		(Pit #7 - Lot #18) thin grey chert flake		
222-91		(Pit #7 - Lot #18) light grey chert flake (curved)		
222-92		(Pit #7 - Lot #18) thin light grey chert flake		
222-93		(Pit #7 - Lot #18) grey chert flake		
222-94		(Pit #7 - Lot #18) thin grey chert flake		
222-95		(Pit #7 - Lot #18) grey chert flake (curved)		
222-96		(Pit #7 - Lot #18) grey biface trimming flake		
222-97		(Pit #7 - Lot #18) grey chert flake		
222-98		(Pit #7 - Lot #18) thin grey chert flake		

PSM-181 continued

<u>Artifact No. UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
222-99	(Pit #7 - Lot #18) grey chert flake		
222-100	(Pit #7 - Lot #18) thin grey chert flake (slight curve)		
222-101	(Pit #7 - Lot #18) thin grey chert flake (slight curve)		
222-102	(Pit #7 - Lot #18) thin grey chert flake		
222-103	(Pit #7 - Lot #18) grey chert flake (curved)		
222-104	(Pit #7 - Lot #18) thin grey chert flake		
222-105	(Pit #7 - Lot #18) thin grey chert flake		
222-106	(Pit #7 - Lot #18) grey chert flake		
222-107	(Pit #7 - Lot #18) dark grey chert flake		
222-108	(Pit #7 - Lot #18) thin dark grey chert flake		
222-109	(Pit #7 - Lot #18) grey chert flake		
222-110	(Pit #7 - Lot #18) thin dark grey chert flake		
222-111	(Pit #7 - Lot #18) thin grey biface trimming flake		
222-112	(Pit #7 - Lot #18) grey chert flake fragment		
222-113	(Pit #7 - Lot #18) thin light grey chert flake		
222-114	(Pit #7 - Lot #18) thin dark grey chert flake		
222-115	(Pit #7 - Lot #18) light grey biface trimming flake		
222-116	(Pit #7 - Lot #18) light grey chert flake fragment (thin and curved)		

PSM-181 continued

<u>Artifact No. UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
222-117	(Pit #7 - Lot #18) thin grey biface trimming flake		
222-118	(Pit #7 - Lot #18) grey chert flake (curved)		
222-119	(Pit #7 - Lot #18) thin grey chert flake		
222-120	(Pit #7 - Lot #18) thin grey chert flake		
222-121	(Pit #7 - Lot #18) light brown flake - hinge-like fracture		
222-122	(Pit #7 - Lot #18) thin grey chert flake (curved)		
222-123	(Pit #7 - Lot #18) thin grey chert flake fragment with hinge fracture		
222-124	(Pit #7 - Lot #18) thin dark grey flake (curved)		
222-125	(Pit #7 - Lot #18) dark grey chert flake fragment		
222-126	(Pit #7 - Lot #18) light grey chert flake fragment		
222-127	(Pit #7 - Lot #18) thin grey chert flake		
222-128	(Pit #7 - Lot #18) thin dark grey chert flake		
222-129	(Pit #7 - Lot #18) light grey chert flake		
222-130	(Pit #7 - Lot #18) light grey chert flake		
222-131	(Pit #7 - Lot #18) thin grey chert flake		
222-132	(Pit #7 - Lot #18) thin grey chert flake		
222-133	(Pit #7 - Lot #18) thin grey chert flake (curved, twisted)		

PSM-181 continued

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
222-134	(Pit #7 - Lot #18) thin dark grey chert flake		
222-135	(Pit #7 - Lot #18) dark grey chert flake		
222-136	(Pit #7 - Lot #18) grey chert flake		
222-137	(Pit #7 - Lot #18) dark grey chert flake (curved, twisted)		
222-138	(Pit #7 - Lot #18) black chert flake with hinge fracture		
222-139	(Pit #7 - Lot #18) grey chert flake fragment with hinge fracture		
222-140	(Pit #7 - Lot #18) dark grey chert flake		
222-141	(Pit #7 - Lot #18) grey chert flake		
222-142	(Pit #7 - Lot #18) grey chert biface trimming flake		
222-143	(Pit #7 - Lot #18) grey chert flake		
222-144	(Pit #7 - Lot #18) grey chert flake		
222-145	(Pit #7 - Lot #18) light grey chert flake		
222-146	(Pit #7 - Lot #18) brown chert flake		
222-147	(Pit #7 - Lot #18) dark grey chert flake fragment (twisted)		
222-148	(Pit #7 - Lot #18) brown chert flake		
222-149	(Pit #7 - Lot #18) thin grey chert flake (curved)		

PSM-181 continued

<u>Artifact No. UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
222-150	(Pit #7 - Lot #18) grey chert flake (thick)		
222-151	(Pit #7 - Lot #18) thin dark grey chert flake		
222-152	(Pit #7 - Lot #18) dark grey chert flake fragment		
222-153	(Pit #7 - Lot #18) thin grey chert flake		
222-154	(Pit #7 - Lot #18) light grey chert chunk		
222-155	(Pit #7 - Lot #18) grey chert flake fragment		
222-156	(Pit #7 - Lot #18) grey chert flake (thin)		
222-157	(Pit #7 - Lot #18) thin grey flake fragment (chert)		
222-158	(Pit #7 - Lot #18) light grey chert flake (curved)		
222-159	(Pit #7 - Lot #18) grey chert flake (curved)		
222-160	(Pit #7 - Lot #18) grey chert flake fragment		
222-161	(Pit #7 - Lot #18) thin grey chert flake fragment		
222-162	(Pit #7 - Lot #18) thin light grey chert flake (twisted)		
222-163	(Pit #7 - Lot #18) dark grey chert fragment		
222-164	(Pit #7 - Lot #18) dark grey chert chunk		
222-165	(Pit #7 - Lot #18) grey chert fragment with frost spauling on ventral surface		
222-166	(Pit #7 - Lot #18) grey chert fragment (curved)		

PSM-181 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
222-167		(Pit #7 - Lot #18) grey chert flake		
222-168		(Pit #7 - Lot #18) grey chert flake fragment		
222-169		(Pit #7 - Lot #18) thin grey chert flake fragment		
222-170		(Pit #7 - Lot #18) dark grey chert flake (twisted)		
222-171		(Pit #7 - Lot #18) thin dark grey chert flake (twisted)		
222-172		(Pit #7 - Lot #18) thin dark grey chert flake		
222-173		(Pit #7 - Lot #18) thin light grey chert flake fragment		
222-174		(Pit #7 - Lot #18) light grey chert flake fragment		
222-175		(Pit #7 - Lot #18) grey chert flake fragment (twisted)		
222-176		(Pit #7 - Lot #18) thin grey chert flake fragment		
222-177		(Pit #7 - Lot #18) thin grey chert flake (curved)		
222-178		(Pit #7 - Lot #18) grey chert fragment (twisted)		
222-179		(Pit #7 - Lot #18) thin grey chert flake with hinge fracture		
222-180		(Pit #7 - Lot #18) brown chert flake fragment		
222-181		(Pit #7 - Lot #18) grey chert flake fragment		
222-182		(Pit #7 - Lot #18) thin grey chert flake		
222-183		(Pit #7 - Lot #18) light grey chert fragment (chunk)		
222-184		(Pit #7 - Lot #18) grey chert flake		

PSM-181 continued

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
222-185	(Pit #7 - Lot #18) grey chert flake chunk (curved)		
222-186	(Pit #7 - Lot #18) grey chert flake chunk		
222-187	(Pit #7 - Lot #18) thin light grey chert flake		
222-188	(Pit #7 - Lot #18) grey chert flake fragment		
222-189	(Pit #7 - Lot #18) grey chert biface trimming flake		
222-190	(Pit #7 - Lot #18) brown chert flake		
222-191	(Pit #7 - Lot #18) grey chert flake fragment (curved)		
222-192	(Pit #7 - Lot #18) thin brown chert flake		
222-193	(Pit #7 - Lot #18) grey chert flake fragment (curved)		
222-194	(Pit #7 - Lot #18) grey chert biface trimming flake		
222-195	(Pit #7 - Lot #18) thin grey chert flake		
222-196	(Pit #7 - Lot #18) thin dark grey chert flake (twisted)		
222-197	(Pit #7 - Lot #18) thin light grey chert flake fragment		
222-198	(Pit #7 - Lot #18) thin brown chert flake (curved)		
222-199	(Pit #7 - Lot #18) thin grey chert flake		
222-200	(Pit #7 - Lot #18) thin grey chert flake		
222-201	(Pit #7 - Lot #18) brown chert flake		
222-202	(Pit #7 - Lot #18) grey chert biface trimming flake		

PSM-181 continued

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
222-203	(Pit #7 - Lot #18) thin grey chert flake		
222-204	(Pit #7 - Lot #18) grey chert flake fragment		
222-205	(Pit #7 - Lot #18) thin grey chert flake (twisted)		
222-206	(Pit #7 - Lot #18) dark grey chert flake fragment		
222-207	(Pit #7 - Lot #18) curved grey chert flake fragment		
222-208	(Pit #7 - Lot #18) thin grey chert flake		
222-209	(Pit #7 - Lot #18) grey chert flake		
222-210	(Pit #7 - Lot #18) thin grey chert flake (curved)		
222-211	(Pit #7 - Lot #18) thin dark grey chert flake		
222-212	(Pit #7 - Lot #18) grey chert flake fragment (twisted)		
222-213	(Pit #7 - Lot #18) grey chert flake fragment		
222-214	(Pit #7 - Lot #18) 98 small grey flakes		

PSM-184

EMS 26-1
Site #2

S. Fetter
Date Collected: 7-22-80

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
223-1	(Artifact #G - Lot #2*) grey chert flake fragment		
223-2	(Artifact #G - Lot #2) grey chert flake fragment		
223-3	(Artifact #G - Lot #2) grey chert flake fragment		

PSM-184 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
223-4		(Artifact #G - Lot #2) grey chert flake fragment		
223-5		(Artifact #E - Lot #3) grey chert biface fragment with heavy use wear along the lateral edges - battered		See Figure 1
223-6		(Artifact #E - Lot #4) grey chert biface fragment - it may be part of the same biface as 223-5 but the grain within the raw material do not appear to be the same		
223-7		(Artifact #D - Lot #5) dark grey chert with patination - possible retouch along dorsal edge and use wear?		
223-8A		(Artifact #C - Lot #6) grey quartzite flake		
223-8B		(Artifact #C - Lot #6) grey quartzite flake fragment - right dorsal-distal lateral edge retouch and in vial		
223-9		(Artifact #F - Lot #7) large thick grey chert flake with battering along lateral edge		
223-10		(Artifact #F - Lot #8) 4 small grey quartzite flakes		
223-11		(Artifact #F - Lot #8) grey quartzite biface trimming flake		
223-12		(Artifact #F - Lot #8) grey quartzite biface trimming flake		
223-13		(Artifact #F - Lot #8) grey quartzite biface trimming flake		
223-14		(Artifact #F - Lot #8) grey quartzite biface trimming flake		
223-15		(Artifact #F - Lot #8) grey quartzite biface trimming flake		

PSM-184 continued

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
223-16	(Artifact #F - Lot #8) grey chert flake		
223-17	(Artifact #F - Lot #8) grey chert (banded) flake		
223-18	(Artifact #F - Lot #8) grey quartzite flake fragment		
223-19	(Artifact #F - Lot #8) grey quartzite flake fragment		

PSM-182

EMS 26-1
Site #3

S. Fetter
Date Collected: 7-22-80

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
224-1	(Artifact #C - Lot #1) green-grey chalky chert burin fragment		
224-2	(Artifact #F - Lot #2) light grey chalky chert flake fragment		
224-3	(Artifact #D - Lot #3) light grey chalky chert flake fragment		
224-4	(Artifact #E - Lot #4) mottled grey (chalky) chert flake - possible lateral use wear		
224-5	(Artifact #B - Lot #5) chalky grey chert flake with possible unifacial retouch		
224-6	(Artifact #A - Lot #6) chalky grey chert flake with unifacial retouch and use wear		
224-7A and 7B	(Pit #1, bottom of 2nd level - Lot #7) varigrade grey chert very large flake		

PSM-182 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
224-8		(Pit #1, bottom of 2nd level - Lot #7) light sandy brown flake		

PSM-183

EMS 26-1
Site #4

S. Fetter
Date Collected: 7-22-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
225-1		(Artifact #1 - Lot #1) thin black biface trimming flake - curved		
225-2		(Artifact #2 - Lot #2) light grey flake - twisted		
225-3		(Artifact #3 - Lot #3) grey translucent chert blade-like flake		
225-4		(Artifact #4 - Lot #4) grey chert long flake		
225-5		(Artifact #5 - Lot #5) grey-brown flake with something happening on the bottom		
225-6		(Artifact #A - Pit #A - Lot #6) grey chert blade-like flake		
225-7		(Pit #C - Lot #7) large grey chert blade-like flake*		
225-8		(Pit #C - Lot #8) large grey chert chunk fragment - twisted		
225-9		(Pit #C - Lot #8) large grey chert chunk fragment - twisted		

*This is an extremely large flake similar to UA80 224-1.

PSM-183 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
225-10		(Pit #C - Lot #8) large quite thin grey chert flake - curved		
225-11		(Pit #C - Lot #8) large grey chert chunk fragment with hinge fracture		
225-12		(Pit #C - Lot #8) large grey chert chunk fragment		
225-13		(Pit #C - Lot #8) light grey chert chunk		
225-14		(Pit #C - Lot #8) thin patinated grey chert flake - twisted with hinge fracture		
225-15		(Pit #C - Lot #8) grey chert flake		
225-16		(Pit #C - Lot #8) large grey chert chunk with hinge fracture		
225-17		(Pit #C - Lot #8) large grey chert flake fragment		
255-18		(Pit #C - Lot #8) thin grey chert flake with long thin flake removed along bottom		
255-19		(Pit #C - Lot #8) thin grey chert flake		
255-20		(Pit #C - Lot #8) patinated grey chert blade-like flake		
225-21		(Pit #C - Lot #8) thin grey chert flake - curved		
225-22		(Pit #C - Lot #8) thin grey chert blade-like flake - curved and twisted		
225-23		(Pit #C - Lot #8) thin grey chert flake		

PSM-183 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
225-24		(Pit #C - Lot #8) grey chert flake - twisted		
225-25		(Pit #C - Lot #8) grey chert flake		
225-26		(Pit #C - Lot #8) grey chert flake		
225-27		(Pit #C - Lot #8) grey chert chunk		
225-28		(Pit #C - Lot #8) light grey translucent chert flake		
225-29		(Pit #C - Lot #8) grey chert chunk		
225-30		(Pit #C - Lot #8) light grey chert flake		
225-31		(Pit #C - Lot #8) patinated grey chert flake - curved		
225-32		(Pit #C - Lot #8) thin grey chert flake		
225-33		(Pit #C - Lot #8) thin grey chert flake fragment		
225-34		(Pit #C - Lot #8) grey chert flake fragment		
225-35		(Pit #C - Lot #8) thin grey chert flake fragment		
225-36		(Pit #C - Lot #8) grey chert flake fragment		
225-37		(Pit #C - Lot #8) thin light grey chert flake fragment		
225-38		(Pit #C - Lot #8) thin grey chert flake fragment - twisted		
225-39		(Pit #C - Lot #8) patinated grey chert flake		
225-40		(Pit #C - Lot #8) brown chert flake fragment		
225-41		(Pit #C - Lot #8) light grey chert flake fragment		

PSM-183

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
225-42		(Pit #C - Lot #8) light grey translucent fragment		
225-43		(Pit #C - Lot #8) grey (patinated) chert fragment		
225-44		(Pit #C - Lot #8) black chert flake - curved		
225-45		(Pit #C - Lot #8) black chert flake fragment		
225-46		(Pit #C - Lot #8) black chert flake		
225-47		(Pit #C - Lot #8) black chert flake (thin)		
225-48		(Pit #C - Lot #8) black chert flake - curved		
225-49		(Pit #C - Lot #8) black chert flake		
225-50		(Pit #C - Lot #8) black chert fragment		
225-51		(Pit #C - Lot #8) thin grey chert flake		
225-52		(Pit #C - Lot #8) thin grey chert flake - curved		
225-53		(Pit #C - Lot #8) grey chert fragment		
225-54		(Pit #C - Lot #8) thin grey chert flake		
225-55		(Pit #C - Lot #8) grey chert fragment		
225-56		(Pit #C - Lot #8) black chert flake		
225-57		(Pit #C - Lot #8) black chert flake		
225-58		(Pit #C - Lot #8) black chert flake (blade-like)		
225-59		(Pit #C - Lot #8) black chert flake		

PSM-183

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
225-60		(Pit #C - Lot #8) black chert flake		
225-61		(Pit #C - Lot #8) thin black chert flake		
225-62		(Pit #C - Lot #8) thin black chert flake		
225-63		(Pit #C - Lot #8) black chert flake - thin and curved		
225-64		(Pit #C - Lot #8) thin black chert flake		
225-65*		(Pit #C - Lot #8) grey chert flake		
225-66		(Pit #C - Lot #8) grey chert flake fragment		
225-67		(Pit #C - Lot #8) thin grey chert (translucent) flake fragment		
225-68		(Pit #C - Lot #8) thin black chert flake		
225-69		(Pit #C - Lot #8) black chert flake - curved		
225-70		(Pit #C - Lot #8) black chert fragment - curved		
225-71		(Pit #C - Lot #8) black chert biface trimming flake		
225-72		(Pit #C - Lot #8) black chert flake - curved		
225-73		(Pit #C - Lot #8) thin black chert flake		
225-74		(Pit #C - Lot #8) black chert flake - curved		
225-75		(Pit #C - Lot #8) black chert flake		
225-76		(Pit #C - Lot #8) black chert flake		

*From this number onwards, the items will be found in envelops.

PSM-183 continued

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
225-77	(Pit #C - Lot #8) black chert flake - curved		
225-78	(Pit #C - Lot #8) black chert flake - curved		
225-79	(Pit #C - Lot #8) thin black chert flake		
225-80	(Pit #C - Lot #8) black chert flake		
225-81	(Pit #C - Lot #8) grey chert fragment		
225-82	(Pit #C - Lot #8) grey chert flake		
225-83	(Pit #C - Lot #8) black chert flake - curved		
225-84	(Pit #C - Lot #8) black chert fragment		
225-85	(Pit #C - Lot #8) grey chert flake - curved		
225-86	(Pit #C - Lot #8) black chert flake		
225-87	(Pit #C - Lot #8) grey chert flake		
225-88	(Pit #C - Lot #8) black chert flake - slight curve		
225-89	(Pit #C - Lot #8) grey chert flake		
225-90	(Pit #C - Lot #8) thin black chert flake		
225-91	(Pit #C - Lot #8) grey chert fragment		
225-92	(Pit #C - Lot #8) grey chert flake fragment		
225-93	(Pit #C - Lot #8) thin black chert flake		
225-94	(Pit #C - Lot #8) black chert flake - twisted		

PSM-183 continued

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
225-95	(Pit #C - Lot #8) thin black chert flake - twisted		
225-96	(Pit #C - Lot #8) thin black chert flake - twisted		
225-97	(Pit #C - Lot #8) thin grey chert flake		
225-98	(Pit #C - Lot #8) creamy brown chert flake - twisted		
225-99	(Pit #C - Lot #8) black chert flake - curved		
225-100	(Pit #C - Lot #8) black chert flake fragment		
225-101	(Pit #C - Lot #8) thin black chert flake		
225-102	(Pit #C - Lot #8) black chert flake		
225-103	(Pit #C - Lot #8) thin black chert flake		
225-104	(Pit #C - Lot #8) grey chert flake fragment		
225-105	(Pit #C - Lot #8) black chert flake - curved		
225-106	(Pit #C - Lot #8) thin black chert flake		
225-107	(Pit #C - Lot #8) black chert flake		
225-108	(Pit #C - Lot #8) black chert flake - curved		
225-109	(Pit #C - Lot #8) black chert flake - curved		
225-110	(Pit #C - Lot #8) black chert flake		
225-111	(Pit #C - Lot #8) black chert flake		
225-112	(Pit #C - Lot #8) black chert flake		
225-113	(Pit #C - Lot #8) grey chert flake		

PSM-183 continued

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
224-114	(Pit #C - Lot #8) grey chert flake		
225-115	(Pit #C - Lot #8) black chert blade-like flake		
225-116	(Pit #C - Lot #8) thin black chert flake		
225-117	(Pit #C - Lot #8) blade-like grey chert fragment		
225-118	(Pit #C - Lot #8) thin grey chert flake		
225-119	(Pit #C - Lot #8) thin black chert flake		
225-120	(Pit #C - Lot #8) black chert flake - curved		
225-121	(Pit #C - Lot #8) black chert fragment		
225-122	(Pit #C - Lot #8) black chert biface trimming flake		
225-123	(Pit #C - Lot #8) black chert flake - curved		
225-124	(Pit #C - Lot #8) black chert blade-like flake		
225-125	(Pit #C - Lot #8) black chert flake - curved		
225-126	(Pit #C - Lot #8) black chert flake fragment		
225-127	(Pit #C - Lot #8) grey chert biface trimming flake		
225-128	(Pit #C - Lot #8) black chert blade-like flake		
225-129	(Pit #C - Lot #8) black chert flake		
225-130	(Pit #C - Lot #8) black chert flake with hinge fracture		
225-131	(Pit #C - Lot #8) black chert biface trimming flake		

PSM-183 continued

<u>Artifact No. UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
225-132	(Pit #C - Lot #8) black chert flake fragment		
225-133	(Pit #C - Lot #8) black chert flake - curved		
225-134	(Pit #C - Lot #8) grey chert flake fragment		
225-135 to 265	(Pit #C - Lot #8) 130 very small grey/black chert flakes and flake fragments		
Note: one more flake from this test pit Artifact #300.			
225-266A	(Pit #C - Lot #9) black chert projectile point - base		
225-266B	(Pit #C - Lot #10) black chert projectile point - mid section		
225-267	(Pit #C - Lot #11) mid-section of a projectile point - black chert		See Figure 1
225-268	(Pit #C - Artifact #D - Lot #12) basal section of a black chert projectile point		
225-269	(Pit #D - Lot #13) grey chert flake - curved		
225-270	(Pit #D - Lot #13) grey chert flake - curved		
225-271	(Pit #D - Lot #13) grey chert flake		
225-272	(Pit #D - Lot #13) grey chert fragment		
225-273	(Pit #D - Lot #13) grey chert flake - curved		
225-274	(Pit #D - Lot #13) brown chert fragment		
225-275	(Pit #D - Lot #13) grey chert flake fragment		
225-276	(Pit #D - Lot #13) grey chert flake fragment		

PSM-183 continued

<u>Artifact No. UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
225-277	(Pit #D - Lot #13) grey chert flake		
225-278	(Pit #F - Lot #14) small grey chert flake		
225-279	(Pit #F - Lot #14) small grey chert flake - curved		
225-280	(Pit #F - Lot #14) small grey chert flake - curved		
225-281	(Pit #F - Lot #14) light grey chert fragment		
225-282	(Pit #F - Lot #14) grey chert flake - curved		
225-283	(Pit #F - Lot #14) dark chert flake		
225-284	(Pit #F - Lot #14) light grey translucent chert flake - curved		
225-285	(Pit #F - Lot #14) grey chert fragment		
225-286	(Pit #F - Lot #14) light grey chert flake fragment		
225-287	(Pit #F - Lot #14) grey chert fragment		
225-288	(Pit #F - Lot #14) brown chert flake fragment		
225-289	(Pit #F - Lot #14) grey chert flake		
225-290	(Pit #F - Lot #14) dark grey chert fragment		
225-291	(Pit #F - Lot #14) grey translucent chert flake		
225-292	(Pit #F - Lot #14) dark grey biface trimming flake		
225-293	(Pit #F - Lot #14) grey translucent chert flake		
225-294	(Pit #F - Lot #14) light grey chert flake		

PSM-183 continued

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
225-294	(Pit #F - Lot #14) light grey chert flake		
225-295	(Pit #F - Lot #14) light grey chert flake		
225-296	(Pit #F - Lot #14) small grey chert flake fragment - translucent brown chert flake fragment		
225-297	(Pit #F - Lot #14) brown chert flake fragment		
225-298	(Pit #F - Lot #14) tiny translucent grey chert flake		
225-299	(Pit #F - Lot #14) small translucent grey chert flake		
225-300	(Pit #C - Lot #8) grey chert flake		
225-301	(Pit #F - Lot #15) dark grey translucent chert chunky blade-like flake		
225-302	(Pit #F - Lot #16) grey chert biface trimming flake with a large portion of the edge		
225-303	(Pit #H - Lot #17) light grey chert flake		

PSM-190
EMS 27-1B

B. Gannon
Date Collected: 7-22, 7-23-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
235-1		(Surface, Area I, BLG) black chert stemmed and eared projectile point		See Figure 1
235-2		(Bank edge - confluence of a stream and the Atigun River, RJD p. 59) long bone shaft fragment		
235-3		(TP? - found above Pothunter's screen and disturbed bone concentration - just below sod layer - approximately 5 cm deep - Area II, LB) long bone shaft fragment		
235-4		(Test Trench 1 extension, surface to 5 cm depth, Area III, LB) 5 small bone fragments		

UA80 Faunal Remains

Area III - Pothunter's

	<u>Number of Individuals</u>	
	<u>Minimum</u>	<u>Maximum</u>
70 Phalanges - <u>Rangifer tarandus</u> (caribou)	3	12
13 Carpals/tarsals and 1 platella - <u>Rangifer tarandus</u> (caribou)	-	-
11 Metatarsals - <u>Rangifer tarandus</u> (caribou)	5	9
10 Metacarpals - <u>Rangifer tarandus</u> (caribou)	5	10
47 Long bone shaft fragment - <u>Rangifer tarandus</u> (caribou)	-	-
28 Long bone Epiphyseal fragment - <u>Rangifer tarandus</u> (caribou)	-	-
10 Scapula/scapulae fragments - <u>Rangifer tarandus</u> (caribou)	3	4
15 Rib and sternum fragments - <u>Rangifer tarandus</u> (caribou)	-	-
1 Immature vertebra - <u>Rangifer tarandus</u> (caribou)	1	1
21 Unidentified bone fragments	-	-

UA80 Faunal Remains

Number of Individuals	
<u>Minimum</u>	<u>Maximum</u>

Area III - Pothunter's (continued)

Small mammal bones:

3 Right femurs	3	3
3 Left humeri	3	5
2 Right humeri		
1 Right tibia	1	2
1 Left tibia		
2 Right innominates (different sizes)	3	3
1 Left innominate		
1 Left scapula	1	1
4 Complete skulls (ground squirrel)	5	8
4 Skull fragments (unidentified)		
2 Bird humeri	1	2

Possible sheep:

11 Unidentified phalanges	-	-
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Test Trench I, Area III - Surficial Bone Scatter

16 Miscellaneous bones/fragments	-	-
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PSM-191

AAS 027

Site #1

B. Cannon

Date Collected: 8-5-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
237-1		(Surface find, N44E 7'5" from datum, Lot #16) small grey chert flake		
237-2		(Surface find, N34E 12'2" from datum, Lot #17) small thin grey chert flake		
237-3		(Surface find, N40E 12'6" from datum, Lot #18) small grey chert flake		
237-4		(Surface find, N41E 13'6" from datum, Lot #19) grey chert biface tip		See Figure 1
237-5		(Surface find, N46E 15'3" from datum, Lot #20) large grey chert		
237-6		(Surface find, N60E 16'1" from datum, Lot #21) grey chert blade-like flake		
237-7		(Surface find, N66E 15'0" from datum, Lot #22) grey chert flake		
237-8		(Surface find, N70E 16'7" from datum, Lot #23) grey chert flake - curved		
237-9		(Surface find, N74E 17'9" from datum, Lot #24) grey chert flake		
237-10		(Surface find, N76E 17'5" from datum, Lot #25) grey chert flake		
237-11		(Surface find, N82E 17'2" from datum, Lot #26) thin grey chert flake		
237-12		(Surface find, N85E 18'9" from datum, Lot #27) thin grey chert flake		

PSM-191 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
237-13		(Surface find, N89E 18'8" from datum, Lot #28)		
237-14		(Surface find, S89E 19'1" from datum, Lot #29) grey chert flake		
237-15		(Surface find, S82E 24'11" from datum, Lot #30) small grey chert flake		
237-16		(Surface find, S69E 28'1" from datum, Lot #31) grey chert bifacial trimming flake		
237-17		(Surface find, S31E 4'9" from datum, Lot #32) grey chert flake		
237-18		(Surface find, S27E 28'2" from datum, Lot #33) dark grey chert flake		
237-19		(Surface find, S23W 27'1" from datum, Lot #34) long bone shaft fragment		
237-20		(Surface find, S8E 4'3" from datum, Lot #35) long bone shaft fragment		
237-21		(Surface find, N65W 2'9" from datum, Lot #30) ulna of small rodent		
237-22 to 24		(Pit #1, 1" depth, S75E 13'5" from datum, SA, Lot #37) three small grey chert flakes		
237-25		(Pit #2, 2-3" depth, N54E 9'0" from datum, SA, Lot #38) grey chert flake		
237-26		(Pit #2, 2-3" depth, N54E 9'0" from datum, SA, Lot #38) grey chert flake		
237-27 to 29		(Pit #2, 2-3" depth, N54E 9'0" from datum, SA, Lot #38) three small grey chert flakes		

PSM-192

AAS 027

Site #2

B. Cannon

Date Collected: 8-9-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
238-1		(Surface find, S06W 21'2" from datum, Lot #39) thick black chert flake		
238-2		(Surface find, S08E 19'2" from datum, Lot #40) light grey chert flake		
238-3		(Surface find, S14E 76'1" from datum, Lot #41) chunky black chert flake		
238-4		(Surface find, S09E 88'2" from datum, Lot #42) translucent grey chert flake - curved		
238-5		(Surface find, N76E 61'6" from datum, Lot #43) mottled grey chert flake		
238-6		(Surface find, N53E 54'6" from datum, Lot #44) black obsidian flake - small and thin		
238-7		(Surface find, N55E 65'4" from datum, Lot #45) unifacially retouch [right dorsal (distal and lateral) edge] blue/black chert flake with use wear		See Figure 1
238-8		(Surface find, N63E 67' from datum, Lot #46) small dark grey chert flake - curved		
238-9		(Surface find, N51E 73' from datum, Lot #47) grey chert flake		
238-10		(Surface find, N40W 33'6" from datum, Lot #48) light grey chert (translucent) flake fragment		
238-11		(Surface find, N35W 46'1" from datum, Lot #49) small grey angular debris		

PSM-192 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
238-12		(Surface find, N60W 73'1" from datum, Lot #50) small blade-like black chert flake		
238-13		(Surface find, S82W 40'3" from datum, Lot #51) small black chert nodule (probably natural)		

PSM-193

AAS 027
Site #3

B. Cannon
Date Collected: 8-9-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
239-1		(Surface find, S63W 72'3" from datum, Lot #52) veined (blue) grey chert with battered edge		
239-2		(Surface find, N28W 15'6" from datum, Lot #53) quartz chunk		
239-3		(Surface find, N22E 11'6" from datum, Lot #54) almost complete projectile point - stemmed, eared and concave base		See Figure 1
239-4		(Surface find, N26E 28'1" from datum, Lot #55) biface fragment - grey/grey banded chert		See Figure 1
239-5		(Surface find, S40E 15'6" from datum, Lot #56) core fragment with possible use wear or battering		
239-6		(Surface find, N61W 33'1" from datum, Lot #57) dark grey chert pebble with small hole in the center		
239-7		(Pit #5, 1-1/2" below surface, N29E 25'5" from datum, Lot #58) brown chert flake		

PSM-069

AAS 028

Site #1

B. Cannon

Date Collected: 7-30-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
240-1		(Found on Old Alyeska/Cook backdirt pile, S43E 66' from datum, Lot #59) small grey chert angular debris		
240-2		(Surface find, 8 cm SW of Pit #1, DKH note 118, Lot #60) burned wood		
240-3		(Pit #2, humic layer, DKH notes pp. 126-127) humic charcoal		
240-4		(Pit #2, in turf/humus, DKH notes pp. 126-127, Lot #28)		
to 28		25 bone fragments		
240-29		(Pit #19, N30E 5'2" from datum, Lot #68) bone fragment below surface		
240-Bones		Unidentified longbone shaft fragments - caribou (32) AAS 028/1/C, Lot #67 bone concentration N46E 4'5" (next to old Alyeska/Cook test pits)		
240-Bones		Possibly identifiable longbone shaft fragment - caribou (15) AAS 028/1/C, Lot #67 bone concentration N46E 4'5" (next to old Alyeska/Cook test pits)		

PSM-FIND

EMS 28-1 (Backhoe)

Site #1

R.Jane Dale

Date Collected: 8-22-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
248-1		(Backdirt of parker squirrel colony - at N #21B) mottled grey/black chert flake		

PSM-194

AAS 029

Site #1

B. Cannon

Date Collected: 8-3-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
241-1		(Pit #2, 1-2" depth, S5E 2'9" from datum, KM, Lot #63) small clear chert flake fragment		
241-2		(Surface find, S52E 12'9" from datum, located in south end of tent ring, DKH Book #3 p. 139, Lot #64) caribou ulna		
241-3A and 3B		(Surface find, S45E 12'5" from datum, located in south end of tent ring, DKH Book #3 p. 139, Lot #65) right and left mandible of a large rodent		

PSM-185

AAS 029 (MP 163 & 150/April 80)

Site #2

B. Gannon

Date Collected: 8-2, 8-5-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
232-1		(Surface find, on hill, DKH pp. 146-147) tiny grey chert flake		
232-2		(Flake scatter A, DR) small black chert flake		
232-3		(Flake scatter A, DR) black chert flake		
232-4		(Flake scatter A, DR) tiny black chert flake		
232-5		(Flake scatter A, DR) black chert flake		
232-6		(Flake scatter B, DR) grey chert flake		

PSM-FIND

EMS 30
Site #1

R. Jane Dale
Date Collected: 8-21-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
249-1		(Surface find, frost heave adjacent to Alyeska materials pit, 25' south of backhoe trench N #4(D), RJaD Book #2 pp. 1-2) possibly bifacially worked flat river cobble of granite		

CHN-FIND

AAS 035 (MP 194.26/April 80)
Site #1

B. Cannon
Date Collected: 8-7-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
245-1		(Surface find, 30' west of centerline, DH Book #4 p. 174, Lot #66) tobasco sauce bottle neck - found near modern (possible Alyeska pipeline construction) hearth		

CHN-012

EMS 36-3
Site #1

R. Jane Dale
Date Collected: 8-19-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
251-1		(Hole N5(B) distal end of caribou humerus fragment - right side, no obvious cut marks (N6) 1 tin of organic soil sample, from a depth of 8 feet		

CHN-010

EMS 39-3

Site #2

S. Fetter

Date Collected: 8-11-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
226-1		(Lot #1) banded grey chert biface fragment (large)		

WIS-FIND

EMS 45-1

Site #1

S. Alloway

Date Collected: 8-14-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
247-1		(Rip-rap on access road) bifacially worked pebble - possible tool		

WIS-FIND

EMS 45-2A

Site #1 (Knoll top of island)

K. Leitgeb

Date Collected: 8-7-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
230-1		Flake (possible) - black chert		

WIS-051

EMS 45-3

Site #1

K. Leitgeb

Date Collected: 8-9-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
246-1		(Eastern half of square) greasy soil sample from possible housepit		
246-2		Soil sample from possible housepit - may contain burned bone and charcoal		
246-3		Charcoal from possible housepit		

WIS-051 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
246-4		Charcoal sample from possible housepit		
264-5		Burned bone from possible housepit		

WIS-003 ADDENDUM

EMS 46-1
Site #1

K. Leitgeb
Date Collected: 7-29-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
207-1		(Bag #5 - surface collection) black chert retouch flake (could be part of a broken scraper)		
207-2		(Bag #6 - surface collection) black chert unifacially retouched along all edges (knife?)		See Figure 1
207-3		(Bag #7 - surface collection) striated grey-black chert flake		
207-4		(Bag #7 - surface collection) grey-black chert chunk		
207-5		(TP #1 - surface of TP - nothing in TP #1, RGT) black chert flake with possible use wear		
207-6		(TP #1 - surface of TP, RGT) grey (quartzite?) flake fragment		
207-7		(TP #1 - surface of TP, RGT) black obsidian flake		
207-8		(TP #2 - KL) black chert flake fragment		
207-9		(TP #2 - KL) 1 small black chert flake		
207-10		(TP #2 - KL) 1 small grey chert flake fragment		

WIS-FIND

EMS 46-1
Site #2

K. Leitgeb
Date Collected: 7-29-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
208-1		(Isolated find) small obsidian flake - cortex and possible use wear along both lateral edges		

WIS-019 ADDENDUM

EMS 46-1
Site #3

K. Leitgeb
Date Collected: 8-2-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
209-1		(Surface collection) grey chert micro-blade fragment - medial section		
209-2		(TP #2 - NE Quad) 1 chunk quartz criptal, 1 chunk quartz, 1 chunk black chert		
209-3*		(TP #2 - NE Quad) striated grey (black) flake		
209-4*		(TP #2 - NE Quad) grey chert flake		
209-5*		(TP #2 - NE Quad) grey chert flake fragment		
209-6		(TP #2 - NE Quad) grey and black chert flakes - one may be a "long thin microblade waste flake?" (KL on the bag) - 18 flakes		
209-7*		(TP #2 - NE Quad) black chert flake fragment		
209-8		(TP #2 - NW Quad) 6 small grey chert flake fragments and 5 small black chert flake fragments		

*These flakes were given separate numbers because they were large enough to write on.

WIS-019 ADDENDUM continued

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
209-9	(TP #2 - SW Quad) grey chert flake fragment - found in grey soil		
209-10	(TP #2 - SW Quad) grey quartzite? flake - found in grey soil		
209-11	(TP #2 - SW Quad) grey quartzite? flake - found in grey soil		
209-12	(TP #2- SW Quad) 23 grey (and a few black) chert and quartzite flake fragments - found in grey soil		
209-13	(TP #2 - SE Quad) grey chert flake fragment		
209-14	(TP #2 - SE Quad) grey chert flake fragment		
209-15	(TP #2 - SE Quad) 1 chunk of grey chert and 18 small flakes grey and black chert		
209-16	(TP #2 - SE Quad) 6 pieces of bone (Note: some may be identifiable)		

BET-123

EMS 48-0

Site #2

S. Fetter
Date Collected: 8-8-80

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
227-1	(Borehole C - TP #1, Lot #1) frost heave - bipolar lateral scraper - possible use wear along distal end		See Figure 1
227-2A	(Borehole C - TP #F2, Lot #2) large flake sand stone?		
227-2B	(Borehole C - TP #F2, Lot #2) flake fragment - it fits with 227-2A		

BET-122

EMS 48-0
Site #3

S. Fetter
Date Collected: 8-12-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
229-1A		(Borehole #B, Lot #1) black chert with cortex possibly retouched flake fragment (3 pieces total) - proximal part		
229-1B		(Borehole #B, Lot #1) medial segment of flake fragment with what Sharon refers to as a graver on distal end		
229-1C		(Borehole #B, Lot #1) distal segment of flake fragment with possible retouch along the distal edge		

BET-055

EMS 48-0
Site #4

S. Fetter
Date Collected: 8-12-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
228-1		(Borehole #D - TV's pit) 1 obsidian flake removed for INAA by John Cook		
228-2		(Borehole #D - TV's pit) 1 obsidian flake removed for INAA by John Cook		
228-3		(Borehole #D - TV's pit, Lot #3) 13 small black obsidian flakes and 1 small black chert flake		
228-4		(Borehole #D - original pit, Lot #5) blue-grey banded chert possible blade fragment - retouch along left dorsal edge		
228-5		(Borehole #D - original pit, Lot #4) blue-grey banded chert possible flake fragment		
228-6*		(Borehole #D - original pit, Lot #5) sandy colored sandstone? with frost spalls on ventral surface		

*A note was written on the bag - "white possibly fits what was left in pit".

BET-042
EMS 48-2A
Site #1

S. Fetter
Date Collected: 8-5-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
231-1		(Artifact #9, Lot #1) black obsidian flake fragment		
231-2		(Artifact #2, Lot #2) white chalky sandstone chunk		
231-3		(Artifact #3, Lot #3) black obsidian point fragment - possibly the base		See Figure 1
231-4		(Artifact #4, Lot #4) white sandstone flake		
231-5		(Artifact #10, Lot #5) quartz crystal flake fragment with possible use wear		
231-6		(Artifact #13, Lot #6) quartz crystal flake fragment		
231-7		(Artifact #14, Lot #7) large basalt biface trimming flake - heavily patinated		

BET-125
EMS 51-3
Site #1

K. Leitgeb
Date Collected: 7-23-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
211-1		RJaD - surface find - grey quartzite flake (patinated?)		
211-2		KL - surface find - grey quartzite/chert? possible flake with frost spauls		
211-3		KL - surface find - grey quartzite flake (same material as in 211-1)		
211-4		KL - surface find - grey quartzite - it may be heavily patinated chert		
211-5		(MW - Test Pit - first flake found) brown/red quartzite flake		

BET-125 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
211-6		(MW - Test Pit - 2nd flake) obsidian cortex and bifacially worked		

BET-126

EMS 51-3
Site #2

K. Leitgeb
Date Collected: 7-26-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
212-1		(KL - surface find) lateral edge of projectile point		
212-2		(KL - surface find) grey chert flake fragment		
212-3		(KL - surface find) grey-black chert chunk		

BET-FIND - Possibly 082 Addendum

EMS 51-3
Site #3

K. Leitgeb
Date Collected: 7-23-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
213-1		(Surface find, RGT) grey-black fine ground chert with hinge fracture		

BET-006 ADDENDUM

EMS 54-1B
Site #1

K. Leitgeb
Date Collected: 7-28-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
204-1		(Isolated flake - KL) basalt flake fragment		
204-2		(Isolated flake - PR) large obsidian (black) flake - broken for Cook		

BET-058

EMS 60-1

Site #1

R. J. Dale

Date Collected: 9-8-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
250-1		(River terrace edge of previously (Alyeska?) tested area at SE edge of existing materials pit) possible flake of grey igneous rock		
250-2		(River terrace edge of previously (Alyeska?) tested area at SE edge of existing materials pit) grey igneous chunk		
250-3		(River terrace edge of previously (Alyeska?) tested area at SE edge of existing materials pit) possible flake fragment of grey igneous rock		
250-4		(River terrace edge of previously (Alyeska?) tested area at SE edge of existing materials pit) flake of grey igneous rock		
250-5		(River terrace edge of previously (Alyeska?) tested area at SE edge of existing materials pit) grey igneous flake fragment		

LIV-FIND

EMS 71-0A

Site #1

K. Leitgeb

Date Collected: 7-14-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
205-1		(On top of knoll) - Lost Creek black chert flake		
Site #2				
206-1		(Lost Creek slope - 25' up from gravel pit - Area #B) grey chert fragment with cortex		

LIV-108

EMS 71-3A
Site #1

K. Leitgeb
Date Collected: 7-15-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
218-1		(Surface - half buried in moss - KL) black chert core fragment - patinated		
218-2		(NE/4 of TP #1 - MW) grey chert fragment		
218-3		(NW/4 of TP #1 - PR) grey chert flake fragment - patinated		
218-4		(SE/4 of TP #1 - RGT) two small grey chert flakes		
218-5		(SE/4 of TP #1 - RGT) coarse black chert flake fragment		
218-6		(SE/4 of TP #1 - RGT) coarse black chert flake fragment		
218-7		(SE/4 of TP #1 - RGT) black chert flake fragment		
218-8		(TP #2 - 26' from TAPS) 13 small black chert flakes		
218-9		(TP #3 - RJaD) black chert chunk		
218-10		(TP #2 - RJaD) black chert flake fragment		
218-11		(TP #2 - RJaD) black chert chunk		
218-12		(TP #2 - RJaD) black chert chunk - patinated		
218-13		(TP #2 - RJaD) black chert chunk		
218-14		(TP #2 - RJaD) grey black chert chunk		
218-15		(TP #2 - RJaD) grey black chert - patinated		
218-16		(TP #2 - RJaD) black chert flake fragment		
218-17		(TP #2 - RJaD) black chert flake fragment - patinated		

LIV-107

EMS 71-3A

Site #2

K. Leitgeb

Date Collected: 7-15-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
219-1		(60' SE of Site #1 - surface - game trail - Bag #1) black chert flake fragment		
219-2		(60' SE of Site #1 - surface - Bag #2) black chert chunk		
219-3		(60' SE of Site #1 - surface - Bag #2) black chert chunk		

LIV-046

EMS 71-3A - Tolovana 9

Site #3

K. Leitgeb

Date Collected: 7-18-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
210-1		(Knoll #1 - MW - surface collection) grey-black chert flake fragment		
210-2		(Knoll #1 - MW - surface collection) banded grey and black quartzite flake		
210-3		(Knoll #1 - MW - surface collection) black chert flake fragment		
210-4		(Knoll #1 - MW - surface collection) black chert flake fragment		
210-5		(Knoll #1 - MW - surface collection) black chert flake fragment		
210-6		(Knoll #1 - MW - surface collection) black chert flake fragment		
210-7		(Knoll #2 - PR - surface collection) grey-black chert flake		

LIV-046 continued

<u>Artifact No. UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
210-8	(Knoll #2 - PR - surface collection) black chert flake - blade-like		
210-9	(Knoll #2 - PR - surface collection) black chert flake fragment - patinated		
210-10	(Knoll #2 - PR - surface collection) black chert flake - possible lateral use wear - retouch?		
210-11	(Knoll #2 - PR - surface collection) black chert flake - retouched?		
210-12	(Knoll #1 - KL's TP #1) 3 small black chert flake fragments		
210-13	(Knoll #2 - KL's TP #2) 1 large grey chert chunk		
210-14	(Knoll #1 - RJaD's TP #1) 3 small flake fragments - one may be a small microblade fragment (grey one)		
210-15	(Knoll #1 - RJaD's TP #2 - 50' NE of KL's TP #1) banded grey-brown chert fragment		
210-16	(Knoll #1 - RJaD's TP #2 - 50' NE of KL's TP #1) black chert flake fragment		
210-17	(Knoll #1 - RJaD's TP #2 - 50' NE of KL's TP #1) black chert chunk		
210-18	(Knoll #1 - RJaD's TP #2 - 50' NE of KL's TP #1) grey chert fragment (very small)		

Sample of lichen taken from one of the knolls.

LIV-103

EMS 71-3A

Site #4

K. Leitgeb

Date Collected: 7-15-80

Artifact No. UA80

Provenience/Description

Significance

Comments

220-1 (Isolated find along TAPS - approximately 100' S of
Site #2) black chert core fragment

LIV-105

EMS 71-3A

Site #5

K. Leitgeb

Date Collected: 7-19-80

Artifact No. UA80

Provenience/Description

Significance

Comments

221-1 (Slope side - RJaD - return traverse #8-9) isolated
find - core fragment - black chert - patinated

221-2 (RJaD - isolated find #2 and #3) black chert chunk -
patinated - it looks frost shattered

221-3 (RJaD - isolated find #2 and #3) black chert chunk -
possible retouch along unpatinated edge

221-4 (RGT) grey-black chert core fragment

221-5 (RGT) grey-black chert flake

221-6 (RGT) black chert flake fragment

221-7 (RGT) grey-black flake fragment

221-8 (RGT) black chert chunk (blockish)

221-9 (RGT) black chert flake fragment - possible use
wear

221-10 (RGT) black chert core fragment

221-11 (RGT) mottled grey-black chert flake fragment

LIV-105 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
221-12		(RGT) black chert fragment		
221-13		(RGT) grey-black chert flake fragment		
221-14		(RGT) grey-black chert fragment		
221-15		(RGT) grey-black chert fragment		
221-16		(RGT) black chert fragment		
221-17		(RGT) grey-black chert chunk		

LIV-030 Addendum

EMS 71-3B
Site #1

K. Leitgeb
Date Collected: 7-14-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
214-1		(Bag #1) black chert unifacially worked chunk		
214-2		(Bag #2 - RGT) grey-black chert flake (possible use wear) - blade-like		
214-3		(Bag #3 - MW) black chert flake with lateral use wear		
214-4		(Bag #4 - RJaD - surface) black chert chunk		
214-5		(Bag #4 - RJaD - surface) black chert chunk		
214-6		(Bag #4 - RJaD - surface) black chert core fragment		
214-7		(Bag #4 - RJaD - surface) large grey-black chert flake with possible use wear		
214-8		(Bag #4 - RJaD - surface) banded grey chert flake		

LIV-030 continued

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
214-9	(Bag #4 - RJaD - surface) black chert flake		
214-10	(Bag #4 - RJaD - surface) black chert chunk - patinated		
214-11	(Bag #4 - RJaD - surface) black chert flake - patinated		
214-12	(Bag #4 - RJaD - surface) black chert core fragment		
214-13	(Bag #4 - RJaD - surface) black chert flake - patinated		
214-14	(Bag #4 - RJaD - surface) black chert fragment		
214-15	(Bag #4 - RJaD - surface) black chert fragment		
214-16	(Bag #4 - RJaD - surface) black chert flake fragment - patinated		
214-17	(Bag #4 - RJaD - surface) black chert flake - patinated - blade-like		
214-18	(Bag #4 - RJaD - surface) black chert flake fragment - possible use wear - blade-like		
214-19	(Bag #4 - RJaD - surface) black chert fragment with cortex		
214-20	(Bag #4 - RJaD - surface) black chert flake fragment - blade-like		
214-21	(Bag #4 - RJaD - surface) black chert flake fragment		
214-22	(Bag #4 - RJaD - surface) black chert flake fragment - blade-like		
214-23	(Bag #4 - RJaD - surface) black chert flake		

LIV-030 continued

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
214-24		(Bag #4 - RJaD - surface) black chert flake - blade-like		
214-25		(Bag #4 - RJaD - surface) black chert flake fragment		
214-26		(Bag #4 - RJaD - surface) black chert flake fragment		
214-27		(Bag #4 - RJaD - surface) black chert chunk - blockish		
214-28		(Bag #4 - RJaD - surface) black chert flake fragment		
214-29		(Bag #4 - RJaD - surface) black chert chunk - possible use wear along one edge		
214-30		(Bag #4 - RJaD - surface) black chert flake - use wear along lateral edge		
214-31		(Bag #4 - RJaD - surface) black chert flake - possible use wear		
214-32		(Bag #4 - RJaD - surface) black chert flake fragment - possible use wear		
214-33		(Bag #4 - RJaD - surface) black chert chunk (flake scars on dorsal surface)		
214-34		(Bag #4 - RJaD - surface) black chert flake fragment - patinated - blade-like		
214-35		(Bag #4 - RJaD - surface) black chert flake fragment		
214-36		(Bag #4 - RJaD - surface) black chert flake		
214-37		(Bag #4 - RJaD - surface) black chert flake fragment		
214-38		(Bag #4 - RJaD - surface) black chert flake fragment - small		
214-39		(Bag #5 - RGT 2nd pit) large grey-black chert flake fragment		

LIV-030 continued

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
214-40	(Bag #5 - RGT 2nd pit) black chert flake fragment with hinge fracture		
214-41	(Bag #5 - RGT 2nd pit) black chert flake - patinated		
214-42	(Bag #5 - RGT 2nd pit) black chert flake - patinated		
214-43	(Bag #5 - RGT 2nd pit) black chert flake with possible use wear.		
214-44	(Bag #5 - RGT 2nd pit) black chert flake with possible retouch		

LIV-106

EMS 71-3B
Site #2

K. Leitgeb
Date Collected: 7-15-80

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
215-1	(Flake #1 - surface collection - MW) black chert chunky flake with lateral possible use wear		
215-2	(Flake #2 - MW - surface collection) black chert flake		
215-3	(TP #1) grey chert flake fragment		
215-4	(TP #1) black chert flake fragment		
215-5	(TP #1) black chert flake fragment		
215-6	(TP #1) 6 small black chert flakes		

LIV-040 Addendum

EMS 71-3B Tolovana 2
Site #3

K. Leitgeb
Date Collected: 7-19, 8-25-80

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
216-1	(TP #23 - 1st traverse - RJaD) black chert burin - patinated		
216-2	(TP #23 - 1st traverse - RJaD) grey chert flake		
216-3	(Isolated surface - RGT) black chert flake		
216-4	(S corner of TP #1 - DKH - 5 cm) black chert flake		

LIV-104

EMS 71-3B
Site #6

K. Leitgeb
Date Collected: 7-19-80

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
217-1	(Edge of cut - 1300' from W) black chert core fragment		
217-2	(Edge of cut - 1300' from W) black chert flake - blade-like		

XBD-042

MP 517.5 - AAS 092
Site #1

K. Leitgeb
Date Collected: 7-2-80

<u>Artifact No.</u> UA80	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
	Samples from possible cache 600' NW of Alyeska gravel pit at mile post 517.5 - refer to Leitgeb Book #1 pp. 25-26 and Soils Notebook #1 p. 15		
243.1	Soil sample (dark/black soil)		
243.2	Bone sample (extremely small amount)		

TNX-FIND

AAS 118 - Test Area #8 Fault Stability Study
Site #1

R. J. Dale
Date Collected: 9-28-80

<u>Artifact No.</u>	<u>UA80</u>	<u>Provenience/Description</u>	<u>Significance</u>	<u>Comments</u>
166-1		(On proposed access route to site in bank of existing road cut - lower of 2 palaeosol in loess deposits - 53-67 cm below surface) black igneous flake		
166-2		(On proposed access route to site in bank of existing road cut - lower of 2 palaeosol in loess deposits - 53-67 cm below surface) black igneous flake		
166-3		(On proposed access route to site in bank of existing road cut - lower of 2 palaeosol in loess deposits - 53-67 cm below surface) small black igneous flake		