Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands, 2014

Colorado State University

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List of Acronyms

AAL – Arctic Aero medical Laboratory
AFB – Air Force Base
ALSIB – Alaska Siberia
AHRS – Alaska Heritage Resources Survey
BAX – Battle Area Complex
BP – Years before Present
BRTA – Black Rapids Training Area
CEMML – Center for Environmental Management of Military Lands
cm - centimeters
cmbs – centimeters below surface
CRM – Cultural Resources Manager
CRREL – Cold Regions Research and Engineering Laboratory
CRTC – Cold Regions Test Center
DOE – Determination of Eligibility
DTA – Donnelly Training Area
EIS – Environmental Impact Statement
FAI – Fairbanks
GRTA – Gerstle River Training Area
ICRMP – Integrated Cultural Resources Management Plan
JPARC – Joint Pacific Alaska Range Complex
m – meter
masl – meters above sea level
NHPA – National Historic Preservation Act
NLUR– Northern Land Use Research, Inc.
NRHP – National Register of Historic Places
RCYBP- Radio-Carbon Years Before Present
SDZ – Surface Danger Zone
SHPO – State Historic Preservation Officer
TFTA – Tanana Flats Training Area
UAMN – University of Alaska Museum of the North
USARAK – US Army Alaska
UTM – Universal Transverse Mercator
XBD – Big Delta
XMH – Mt. Hayes
YTA – Yukon Training Area

Table of Contents

Acknowledgements....ii
List of Acronyms....iii
Table of Contents....iv
List of Figures....vi
List of Tables....ix
Introduction....1
Setting and Environment....2
Historic Background....2
Prehistoric Context....2
Historic Context....7
Ladd Field National Historic Landmark....10
Fort Wainwright....11
Status of Archaeological Resources....11
2014 Cantonment Fieldwork....16
Cantonment Section 106 Activities....16
Cantonment Surveys....16
Cantonment New Sites....16
Cantonment DOEs....16
2014 Tanana Flats Training Area Fieldwork....17
TFTA Section 106 Activities....17
TFTA Surveys....17
TFTA New Sites....19
TFTA Relocated and Updated Sites....34
North Shore Blair Lake South....35
Other Relocated Sites in TFTA....76
TFTA DOEs....100
2014 Yukon Training Area Fieldwork....105
YTA Section 106 Activities....105
YTA Surveys....106
YTA New Sites....107
YTA DOEs....109
2014 Donnelly Training Area Fieldwork....116
DTA Section 106 Activities....116
DTA Surveys....116
DTA New Sites....117
DTA DOEs....139
2014 Gerstle River Training Area Fieldwork....149
GRTA Section 106 Activities....149
GRTA Surveys....149
GRTA New Sites....149

GRTA DOEs 149
2014 Black Rapids Training Area Fieldwork 150
BRTA Section 106 Activities 150
BRTA Surveys 150
BRTA New Sites 151
BRTA DOEs 151
References 152
Appendix 1: 2014 AHRS Forms 163
Appendix 2: 2014 DOE Forms 186

List of Figures

Figure 1. Fort Wainwright training lands. 2
Figure 2. Proposed JPARC access road routes. 17
Figure 3. All surveys in TFTA by year. The mint green areas were surveyed in 2014. 18
Figure 4. Sites discovered, updated, or relocated in TFTA in 2014. 19
Figure 5. FAI-02319 site map. 20
Figure 6. FAI-02319 site overview. 21
Figure 7. FAI-02319 stratigraphic profile. 21
Figure 8. FAI-02319 test pit. 22
Figure 9. FAI-02320 site map. 23
Figure 10. FAI-02320 site overview. 24
Figure 11. FAI-02320 stratigraphic profile. 24
Figure 12. FAI-02320 test pit. 25
Figure 13. FAI-02321 site map. 26
Figure 14. FAI-02321 site overview. 27
Figure 15. FAI-02321 stratigraphic profile. 28
Figure 16. FAI-02321 test pit. 28
Figure 17. FAI-02322 site map. 29
Figure 18. FAI-02322 site overview. 30
Figure 19. FAI-02322 stratigraphic profile. 30
Figure 20. FAI-02322 test pit. 31
Figure 21. FAI-02323 site map. 32
Figure 22. FAI-02323 site overview. 33
Figure 23. FAI-02323 scraper. 33
Figure 24. FAI-02323 stratigraphic profile. 34
Figure 25. FAI-02323 test pit. 34
Figure 26. North shore of Blair Lake south and location of archaeological sites from the 1979 survey (Dixon et al. 1980:105). 36
Figure 27. Location of 2013 excavation units and trench along the north shore of Blair Lake south. 40
Figure 28. Map of 2014 Blair Lakes testing area. 69
Figure 29. Stratigraphic profile for N97 E99. 70
Figure 30. FAI-00044 site map. 74
Figure 31. Site overview. 75
Figure 32. Test unit N97 E99 stratigraphic profile. 76
Figure 33. FAI-00088 site map. 77
Figure 34. FAI-00088 site overview. 78
Figure 35. FAI-00088 stratigraphic profile. 78
Figure 36. FAI-00088 test pit. 79
Figure 37. FAI-02048 site map. 80
Figure 38. FAI-02048 site overview. 81

Figure 39. FAI-02048 stratigraphic profile. 81
Figure 40. FAI-02048 test pit. 82
Figure 41. FAI-02054 site map. 83
Figure 42. FAI-02054 site overview. 84
Figure 43. FAI-02054 stratigraphic profile 84
Figure 44. FAI-02054 test pit. 85
Figure 45. FAI-02055 site map. 86
Figure 46. FAI-02055 site overview. 87
Figure 47. FAI-02055 stratigraphic profile. 87
Figure 48. FAI-02055 test pit. 88
Figure 49. FAI-02058 site map. 89
Figure 50. FAI-02058 overview. 90
Figure 51. FAI-02058 stratigraphic profile. 90
Figure 52. FAI-02058 test pit. 91
Figure 53. FAI-02059 site map. 92
Figure 54. FAI-02059 site overview. 93
Figure 55. FAI-02059 stratigraphic profile. 93
Figure 56. FAI-02059 test pit. 94
Figure 57. FAI-02061 site map. 95
Figure 58. FAI-02061 site overview. 96
Figure 59. FAI-02061 stratigraphic profile. 96
Figure 60. FAI-02061 test pit. 97
Figure 61. FAI-02062 site map. 98
Figure 62. FAI-02062 site overview. 99
Figure 63. FAI-02062 stratigraphic profile. 99
Figure 64. FAI-02062 test pit. 100
Figure 65. FAI-00052 site map. 101
Figure 66. FAI-00052 site overview. 102
Figure 67. FAI-00052 stratigraphic profile. 103
Figure 68. FAI-00052 test pit. 103
Figure 69. Section 106 projects in YTA during 2014. 105
Figure 70. All surveys in YTA by year. Mint green areas were surveyed in 2014. 106
Figure 71. XBD-00408 stout house in 2003. 107
Figure 72. XBD-00408 collapsed roof. 108
Figure 73. XBD-00408 stout house in 2011. 108
Figure 74. FAI-01556 site map. 110
Figure 75. FAI-01556 site overview. 111
Figure 76. FAI-01556 stratigraphic profile. 111
Figure 77. XBD-00105 site map. 113
Figure 78. XBD-00105 site overview. 113
Figure 79. XBD-00105 stratigraphic profile. 114
Figure 80. XBD-00105 test pit. 115
Figure 81. All surveys in DTA by year. The mint green areas were surveyed in 2014. 117

Figure 82. Sites discovered in DTA in 2014. 117
Figure 83. XMH-01511 site map. 119
Figure 84. XMH-01511 site overview. 120
Figure 85. XMH-01511 stratigraphic profile. 120
Figure 86. XMH-01511 test pit. 121
Figure 87. XMH-01512 site map. 122
Figure 88. XMH-01512 site overview. 123
Figure 89. XMH-01512 stratigraphic profile. 123
Figure 90. XMH-01512 test pit. 124
Figure 91. XMH-01530 site map. 125
Figure 92. XMH-01530 site overview. 126
Figure 93. XMH-01530 test pit. 126
Figure 94. XMH-01531 site map. 127
Figure 95. XMH-01531 site overview. 128
Figure 96. XMH-01531 stratigraphic profile. 128
Figure 97. XMH-01531 test pit. 129
Figure 98. XMH-01532 site map. 130
Figure 99. XMH-01532 site overview. 131
Figure 100. XMH-01532 test pit. 131
Figure 101. XMH-01533 site map. 132
Figure 102. XMH-01533 site overview. 133
Figure 103. XMH-01533 test pit. 133
Figure 104. XMH-01534 site map. 134
Figure 105. XMH-01534 site overview. 135
Figure 106. XMH-01534 test pit. 135
Figure 107. XMH-01535 site map. 136
Figure 108. XMH-01535 site overview. 137
Figure 109. XMH-01535 stratigraphic profile. 138
Figure 110. XMH-01535 test pit. 138
Figure 111. DTA 2014 DOE sites. 139
Figure 112. XMH-01296 site map. 140
Figure 113. XMH-01296 site overview. 141
Figure 114. XMH-01296 stratigraphic profile. 141
Figure 115. XMH-01296 test excavation. 142
Figure 116. XMH-01297 site map. 143
Figure 117. XMH-01297 site overview. 144
Figure 118. XMH-01297 stratigraphic profile. 144
Figure 119. XMH-01297 test pit. 145
Figure 120. XMH-01455 site map. 146
Figure 121. XMH-01455 site overview. 147
Figure 122. XMH-01455 stratigraphic profile. 148
Figure 123. XMH-01455 test pit. 148
Figure 124. All surveys in BRTA by year. The red area was surveyed in 2014. 150

List of Tables

Table 1. FAI-02320 accession log. 24
Table 2. FAI-02321 accession log. 27
Table 3. FAI-00044 (UA2013-75) accession log from the north shore of Blair Lake south. 42
Table 4. FAI-00044 (UA2014-63) accession log from the north shore of Blair Lake south. 53
Table 5. FAI-00052 accession log. 102

Introduction

Section 110 of the National Historic Preservation Act (NHPA: 54 U.S.C. § 470 et seq.) states that every federal agency must establish a preservation program for the identification, evaluation, and nomination of sites to the National Register, and for protection of historic properties. Although Army Regulation 200-1 requires full compliance with federal law, most Section 110 inventories and evaluations in Army training lands take place in coordination with Section 106 reviews of project undertakings. In recent years, Fort Wainwright's Cultural Resources Manager (CRM) has begun a consultation process with Range Control at Fort Wainwright and Donnelly Training Area (DTA) to establish potential development zones (PDZ) based upon projected training needs. These PDZs are located in the large tracts of military managed land outside Fort Wainwright's Main Post cantonment area with no immediate undertakings, regions that the Army plans to develop in the 2 to 10-year time range. Identification of PDZs has allowed the CRM to focus archaeological survey efforts, in addition to 106 projects, in the areas of Fort Wainwright's 1.6 million acres considered most critical.

The purpose of this report is three-fold. First, it gives a brief summary of all Army activities that took place in 2014 that required Section 106 consultation and had previously been described in detail in individual letters to the State Historic Preservation Office (SHPO). Second, it summarizes all survey efforts by the Army's cooperative partner, Colorado State University's Center for Environmental Management of Military Lands (CEMML), from 2002 to 2014. Third, it provides information on survey locations and archaeological site discoveries in Fort Wainwright and its training lands during 2014 that were not associated with Army undertakings and therefore not previously seen by the SHPO. And finally, it provides Determinations of Eligibility (DOEs) for many previously discovered sites on Army-managed lands in Alaska.

All archaeological fieldwork was conducted by CEMML employees under the direct supervision of Julie Esdale, Ph.D., an archaeologist meeting the professional standards outlined in the Secretary of the Interior's "Professional Qualifications Standards" as defined in 36 CFR § 61 Appendix A. Two crews comprised of three to five archaeologists conducted the fieldwork.

This report is organized into sections by Fort Wainwright Training Areas. Each section includes information on the Section 106 activities, areas surveyed, sites discovered, and DOEs for sites during the 2014 field season.

Setting and Environment

Fort Wainwright consists of the Main Post cantonment area and associated training lands, which include three main areas: the Yukon Training Area (YTA), the Tanana Flats Training Area (TFTA), and the DTA. These are located in central Alaska, north of the Alaska Range in the Tanana River Valley (Figure 1). The post lies 120 miles south of the Arctic Circle near the cities of Fairbanks and North Pole in the Fairbanks North Star Borough. Fort Wainwright has the northern continental climate of the Alaskan Interior, characterized by short, moderate summers; long, cold winters; and little precipitation or humidity. Average monthly temperatures in Fairbanks range from -11.5° F in January to 61.5° F in July, with an average annual temperature of 26.3° F. The record low temperature is -66° F and the record high is 98° F. Average annual precipitation is 10.4”, most of which falls as rain during summer and early fall. Average annual snowfall is 67”, with a record high of 168” during the winter of 1970-71 (Natural Resources Branch 2002).

Figure 1. Fort Wainwright training lands.

Historic Background

Prehistoric Context

Interior Alaska has been continuously inhabited for the last 14,000 years, and evidence of this continuum of human activity has been preserved within and around Fort Wainwright’s training lands. Interior Alaska’s ice-free status during the last glacial period provided a corridor connecting the Bering Land Bridge and eastern Asia to North America. This allowed small bands of nomadic peoples to colonize Alaska and the rest of the continent and began a period of

habitation in Interior Alaska that has persisted through the entire Holocene, the arrival of European traders in the late 1810s, the Klondike Gold Rush of the late 19th and early 20th centuries, and the military development of the Interior during the middle of the 20th century. Fort Wainwright's cantonment and training lands comprise a vast and still relatively unsurveyed region with areas of high potential for yielding evidence of this activity.

Alaska has long been regarded as the gateway to the Americas and has held archaeological interest as the possible location for the oldest archaeological sites in the New World. This is due to more than Alaska's proximity to Asia and ice-free condition at the end of the Pleistocene. Similarities between archaeological assemblages in Siberia and Alaska and the discovery of lanceolate projectile points in the muck deposits around Fairbanks in the early 1900s (which bore a resemblance to Clovis points of some antiquity in the American Southwest) also sparked interest in Alaska as a source area for all Native Americans.

After initial colonization, archaeologists generally divide Interior Alaska's prehistory into three broad archaeological themes: the Paleoarctic Tradition (12,000-6,000 years ago[1]), the Northern Archaic Tradition (6,000-1,000 years ago), and the Athabaskan Tradition (1,300-800 years ago) (Potter 2008). Archaeological materials from these cultures are generally limited to lithic artifacts such as projectile points, cutting tools, scrapers, waste flakes from tool manufacturing, faunal remains, and hearths.

Reconstructions of paleoecological evidence suggest that the end of the Pleistocene was marked by a warming trend in Interior Alaska that may have contributed to initial colonization of the area (Bigelow and Powers 2001). Several sites in areas surrounding Army lands demonstrate that people began living in Interior Alaska 14,000 years ago. Significant sites in the Tanana Valley dating between 14,000 and 12,000 years ago include Healy Lake (Cook 1996), Walker Road (Goebel et al. 1996), Swan Point (Holmes et al. 1996), Mead (Holmes 2001), McDonald Creek (Goebel et al. 2014), and Broken Mammoth (Holmes 1996). There are no sites in Alaska, however, that predate the oldest sites in the contiguous United States, nor do Alaska's oldest sites resemble the Clovis culture (Bigelow and Powers 2001). The Younger Dryas cooling event from 13,000 to 12,000 years ago may have led to a temporary population decline (Potter 2008) in the Interior before permanent colonization.

The Paleoarctic Tradition is a term now generally used by archaeologists to refer to the earliest settled people known from all over Alaska. It was originally defined by Anderson[2] (Anderson

[1] All dates are given in calendar years *before present*.

[2] Anderson called it the "American Palaeoarctic Tradition," but most researchers use the shortened version.

1968, 1970) as the earliest microblade-using tradition in the American Arctic, with a proposed relationship to northeast Asian, late Pleistocene cultures based on similarities in these distinctive artifact types. Archaeological evidence indicates that early settlers camped on terraces, lakeshores, buttes, and bluffs. By using these locations on high ground, they could locate and track prey that included large mammals such as mammoth and bison. Evidence from the Upward Sun River Site, located on the south side of the Tanana River between Army training areas, for example, demonstrates that hunter-gatherers in Interior Alaska were concentrating on bison and wapiti at the end of the Pleistocene (the Upward Sun River Site is also known for one of the earliest burials in the Americas [Potter 2008; Potter et al. 2008; Potter et al. 2011]). The nearby 14,000 year old McDonald Creek site on Army land had artifacts in association with bison, waterfowl, and small game (Esdale et al. 2012c, Gaines et al. 2011, and Goebel et al. 2014). It is likely that the treeless environment and nomadic nature of these peoples had a direct impact on the kinds of tools they fashioned. Stone, bone, antler, and ivory provided the most abundant material for manufacturing weapons and cutting tools. Artifacts typically associated with this culture include small stone microblades, microblade cores, bifacial projectile points, and unifacial scraping tools.

In Interior Alaska, this tradition historically included two cultural divisions called the Nenana and Denali complexes. The Nenana Complex was identified by Powers and Hoffecker from sites in the Nenana Valley (Powers and Hoffecker 1989). This complex began approximately 11,000 years ago with an artifact assemblage that included triangular or teardrop-shaped, bifacially worked projectile points ("Chindadn" points [Cook 1969, 1975; Holmes and Cook 1999]); large unifacial chopper-like tools; and flake tools. The Nenana Complex is defined as lacking microblades, microblade cores, and burins, and was proposed to predate the microblade-rich Denali Complex. Many Nenana Complex archaeological sites are located in the Tanana Valley, adjacent to Fort Wainwright training lands (Broken Mammoth [Holmes 1996; Yesner et al. 1999], Chugwater [Lively 1996], Donnelly Ridge [West 1967, 1996; Donnelly Ridge is located in the Donnelly Training Area (DTA)], Healy Lake [Cook 1989], Mead [Holmes 2007] and Swan Point [Holmes et al. 1996; Holmes 1998, 2007]).

The Denali Complex, dated roughly to 10,500 to 8,000 years ago, was originally defined by West (West 1967, 1975) and includes distinctive wedge-shaped microblade cores, core tablets and their derivative microblades, large blades, biconvex bifacial knives, certain end-scraper forms, and burins. West later defined the Denali Complex as a regional variant of the American Paleoarctic Tradition (West 1981). Denali sites in the vicinity of Fort Wainwright's training lands include Mt. Hayes (West 1996), Swan Point (Holmes et al. 1996; Holmes 1998, 2007), and Gerstle River (Potter 2001). At least one site in Tanana Flats Training Area (TFTA) (FAI-02043) has also been dated to this period.

The relationship between the proposed Nenana and Denali complexes is as of yet unresolved. As discussed above, some researchers view the Nenana Complex as a bifacial industry that predates the microblade-based Denali Complex. However, current research at sites such as Swan Point and Broken Mammoth indicates that microblades and burins were used by the earliest known cultures in Interior Alaska, with a later co-occurrence with Chindadn points—the defining artifact type of the Nenana Complex. Although some archaeologists still believe that there is a cultural distinction between the Nenana and Denali complexes (e.g., Dumond 2001), the general understanding from Interior Alaskan archaeologists is that there is a behavioral explanation for the presence or absence of microblades in different assemblages (Holmes 2001; Potter 2008; Yesner and Pearson 2002). Moreover, both Nenana and Denali technology persist in central Alaska throughout the Holocene (Bever 2006).

Site density declined in the areas around Fort Wainwright in the early Holocene, suggesting a slight depopulation during a period of climate change that initiated the widespread establishment of spruce forests (Potter 2008). The boreal forest in Interior Alaska was established by 8,000 years ago (Bigelow and Powers 2001). Sites from this time period are less well publicized than the older sites, but include Houdini Creek (circa 8,600 years old), Hurricane Bluff (c. 9,800 years old), Lucky Strike (c. 8,500 years old), Gerstle River (c. 10,000 years old), and the Campus Site (c. 7,700 years old) (Pearson and Powers 2001; Potter et al. 2007; Potter 2008). Bison, wapiti, and birds were the most important subsistence game during this period (Potter 2007, 2008).

Site density increased again after about 6,000 years ago in Interior Alaska (Potter 2008). This population increase coincides roughly with the Northern Archaic Tradition and the appearance of side-notched projectile points. Anderson originally defined the Northern Archaic Tradition to specifically address notched point-bearing stratigraphic horizons that did not contain microblades at the Onion Portage site in northern Alaska (Anderson 1968). Alaskan notched points were generally similar to Archaic-age dart points in the contiguous United States. Time has shown middle Holocene assemblages in Alaska to be quite diverse, however, and it is questionable whether this trait is related to southern forms or if it is a reliable indicator of cultural affiliation (Clark 1992; Cook and Gillispie 1986). Artifact assemblages associated with this culture can vary but generally contain myriad tools ranging from bifacial knives and microblades to end scrapers and side-notched points. Middle Holocene hunter-gatherers had a subsistence economy focused on seasonally abundant game including caribou, fish, and moose (Potter 2008). Notched point assemblages occur in many sites in Interior Alaska, including over one dozen on Army-managed lands (XBD-00277, XMH-00277, XMH-00283, XMH-00303, XMH-00309, XMH-00874, XMH-00950, XMH-01130, XMH-01168, and XMH-01300.) Several sites (XBD-00270, XMH-00915, XMH-00925), including the excavated Banjo Lake site in DTA (XMH-

00874), have also produced middle Holocene dates from hearth charcoal. The 6,300-6,700 year old dates from Banjo Lake were also associated with a microblade component (Robertson et al. 2008).

Utilization of microblade and burin-based industries appears to continue through the middle and late Holocene in Interior Alaska (Esdale 2008; Potter 2004). By the late Holocene, archaeologists see a shift from seasonal large mammal hunting with a nomadic lifestyle to a focus on seasonally over-abundant resources, use of storage, and more permanent settlements (Potter 2008b). Artifact assemblages do not drastically change until the last millennium of the Holocene when microblades disappear from the archaeological record (Potter 2008).

Linguistic evidence suggests that the Athabascan culture may have appeared in the Tanana Valley as early as 2,500 years ago. Through ethnography, oral history, and a broad array of cultural items, much has been learned about Athabascan culture and history in the region. Artifacts associated with the Athabascan culture are exceptionally diverse and include bone and antler projectile points, fishhooks, beads, buttons, birch bark trays, and bone gaming pieces. In the Upper Tanana region, copper was available and used in addition to the traditional material types to manufacture tools such as knives, projectile points, awls, ornaments, and axes (Clark 1981). A late prehistoric Athabascan occupation is recognized at several sites in and around Fort Wainwright's training lands (Andrews 1975; Andrews 1987; Cook 1989; Mishler 1986; Sheppard et al. 1991; Shinkwin 1979; Yarborough 1978). Of particular interest in this regard is a copper projectile point found in a buried context at DTA (XBD-00272) (Robertson et al. 2009).

The Athabaskan Tradition includes late prehistoric and proto-historic cultures generally believed to be the ancestors of Athabascan tribes who currently inhabit Interior Alaska. Excavated Athabaskan sites are rare, but the limited body of evidence allows for several generalizations. Raw material usage was reorganized in the Athabaskan Tradition, which de-emphasized stone tool-making and increased the emphasis on the manufacture of items from native copper and organic materials (Dixon 1985). Assemblages include ground and pecked stone artifacts and an increased use of expedient tools. There was a broadening and diversifying of the resource base at this time to include small mammal and freshwater marine animals such as fish and mollusks (McFadyen Clark 1981; McFadyen Clark 1996; Ream 1986; Sheppard et al. 1991; Shinkwin 1979). Athabaskan sites tend to occur in resource-rich areas near lakes, streams and rivers and are generally characterized by large house pit and cache pit features. Proto-historic Athabaskan assemblages include Euro-American trade goods such as glass beads and iron implements. Sites of this time period reflect an increased reliance on outside trade and include log cabins co-occurring with traditional house pits, as well as a change in site location to maximize trading opportunities (Andrews 1975; Andrews 1977; Andrews 1987; McFadyen Clark 1981; VanStone and Goddard 1981).

Athabascan settlement patterns depended greatly on the availability of subsistence resources, and Interior bands lived a nomadic lifestyle. They often traversed vast areas to support themselves and spent considerable time engaged in subsistence activities. It was often necessary for bands to divide into smaller groups to find game, and preserved fish were used as a staple of the diet in addition to fresh game (Andrews 1975).

Four Athabascan linguistic and geographic groups have inhabited the Tanana Valley: the Upper Tanana, Tanacross, Tanana, and Koyukon. Each group is further distinguished according to geographic location. Bands of the Tanana and Tanacross groups are historically associated with the geographic area that embodies Forts Wainwright and Greely. Salcha, Chena, Wood River, Goodpaster, and Healy Lake bands have inhabited the region since protohistoric times and possibly even prehistoric times (Andrews 1975). Use of the region varied from one band to the next. The Salcha, Chena, Goodpaster, and Wood River bands of the Tanana Athabascans and the Healy Lake band of the Tanacross Athabascans used certain parts of what are now Fort Wainwright and Fort Greely (McKennan 1981). Several villages have been reported on or near Fort Wainwright. One occupied by the Wood River band is said to have been located in the southern part of Fort Wainwright but has not been found (Dixon 1980; Reynolds 1986). The Blair Lakes Archaeological District (FAI-00335) on Fort Wainwright may relate to the prehistory of the Athabaskan Tradition. Euro-American historic archaeological sites are also present (Gamza 1995; Phillips 1984).

Historic Context

With the beginning of Euro-American contact in Interior Alaska in the early 19th century, trade influences and influxes of new populations began to change life in the region. Land use patterns shifted from traditional indigenous uses to activities based on Euro-American economic and political systems. Fort Wainwright's training lands fall within an area occupied at the time of Euro-American contact by Lower-Middle Tanana Athabascans, including bands described generally as the Salcha, Big Delta-Goodpaster, Wood River, and Chena bands (McKennan 1981; Andrews 1975; Mishler 1986). Historical accounts document traditional settlement patterns that were focused on a widely mobile seasonal round, with the fall caribou hunt playing a pivotal role in subsistence preparations for the winter and summer activities focused at fish camps, berry and root collecting, and in sheep hunting. These activities were frequently communal, with several local bands connected by common interest, geography, and intermarriage. Despite anthropological attempts to define boundaries for the peoples living in the lower Tanana River Valley, natural terrain served as the only definable boundary to settlement patterns (McKennan 1981).

As Euro-American traders, miners, missionaries, and explorers moved into the Tanana River Valley, the traditional life ways of local Athabascan groups were disrupted. Access to trade goods and the development of the fur trade not only affected traditional material culture, but also began to dramatically affect subsistence activities and settlement patterns. Similarly, the arrival of missionaries in the Alaskan interior profoundly influenced traditional social organization. The introduction of mission schools for Native children and the doctrine of new religious beliefs contributed to an erosion of traditional practices (McKennan 1981).

Russian fur traders began settling Interior Alaska starting in the 1810s, establishing a post at Nulato on the Yukon River and one at Taral on the Copper River. British traders established Fort Yukon in 1847. Trade goods from these posts may have passed to Tanana Athabascans and Upper Tanana Athabascans through intra-Native trade networks. Direct contact between Tanana Athabascans and white traders increased after the 1860s. With the U.S. purchase of Alaska in 1867, control of trading stations and the fur trade passed to Americans. Through the 1880s, American traders established several additional posts on the Yukon and Tanana Rivers, including locations at Nuklukayet (modern-day Tanana), Belle Isle (modern-day Eagle), and Fort Yukon.

Trade goods introduced by Euro-American settlers influenced the Native lifestyle. Clothing, staples, tools, and other necessities could be obtained through trade. Guns allowed hunters to obtain game with greater efficiency. Gradually, Athabascan Native groups began to alter their traditional nomadic patterns in favor of more permanent settlements. However, while significant, this contact would not have as dramatic an impact on the region as the discovery of gold in the Interior during the last decades of the 19th century. The towns established by Euro-American settlers at the turn of the 20th century, in response to the Klondike Gold Rush and the eventual military development of the region, would rapidly and permanently change the demography and economy of Interior Alaska.

Gold strikes in the Fortymile River region, Birch Creek area, and the Canadian Klondike began drawing miners and prospectors north in the 1880s and 1890s. In response to this gold rush, E.T. Barnette established a trading post on the Chena River in 1901. The following year, prospector Felix Pedro discovered gold nearby, and a new gold rush soon led to the founding of Fairbanks at the site of Barnette's original trading post. Most mining activities in the region occurred on creeks north of Fairbanks, with the town serving as a supply center. Agricultural and other commercial activities, such as logging, also developed to support mining activities in the Fairbanks area. Homesteads existed on parts of what is today the main post of Fort Wainwright as early as 1904.

In 1898, the discovery of gold in the Tanana uplands began a rush of Euro-American settlement into the Tanana River Valley. As the economic importance of the Tanana Valley increased, the need for reliable transportation routes and communication systems rose in tandem. Existing trails, such as the Bonnifield, Donnelly-Washburn, and Valdez-Fairbanks trails, saw increased use and development in the first decade of the 20th century. This increase in activity also resulted in the establishment of several roadhouses and posts. In 1906, Congressional appropriations led to improvement of the Valdez-Fairbanks Trail, crossing the Alaska Range south of Delta Junction, following the Tanana River to Fairbanks. Completion of the Alaska Railroad in 1923 was followed two decades later by construction of the Alaska Highway in 1942, firmly tying the Alaskan Interior to the outside.

As Fairbanks grew in the first decade of the 20th century, several agricultural homesteads were developed on lands now encompassed by sections of the Fort Wainwright cantonment. These homesteads provided Fairbanks with a variety of agricultural products and wood for fuel, but were subsumed when lands were withdrawn for the creation of Ladd Field, which later became Fort Wainwright (Price 2002).

Riverboats were the primary means of getting people and supplies into the Interior at the turn of the 20th century. The Fairbanks town site was located at the upper limit of navigation for stern-wheeler riverboats on the Chena River. Upriver from that point, residents navigated the river using shallow-draft boats in summer and sleds in winter. As commerce in the area increased, roads and trails were constructed, sometimes following earlier indigenous routes. The major overland route to the coast was the Valdez-Fairbanks Trail, which began as a military trail from Valdez to Eagle in 1899.

Transportation and communication networks, including the Alaska Railroad, were developed to serve new settlements in Interior Alaska. A branch of the railroad route was extended to Fairbanks in 1904. Roadhouses along the route catered to travelers. Some were located on what are now Fort Wainwright training lands. One property was on the Bonnifield Trail in TFTA, and two roadhouses and a seasonal tent operation existed along the Donnelly-Washburn Trail in the current DTA. Secondary routes connected Fairbanks to the surrounding mining districts.

By 1910, most of the easily accessible placer gold deposits were exhausted, and capital-intensive technologies became necessary to extract remaining deposits. These methods were not possible with the existing transportation infrastructure. The completion of the Alaska Railroad in 1923 expanded transportation options for the region, connecting Fairbanks to Seward and making large-scale dredging operations economically feasible. Aviation also became a key component of Interior transportation, beginning in earnest in the 1920s. However, it was not until 1931 that Weeks Field, originally constructed in 1923, was officially

dedicated as an airfield. Industrialized corporate activity became the hallmark of the region's mining in the remaining years before World War II.

Development in the Alaskan interior increased dramatically with the advent of World War II and subsequent military build-up in Alaska. Of particular significance was the development of airfields near Delta Junction (Fort Greely), Fairbanks (Ladd Field, later Fort Wainwright), and North Pole (Eielson Air Force Base). These locations began as Lend-Lease bases and cold weather testing centers, but soon expanded with the increased need for military support during World War II and later during the Cold War.

Full historic contexts of early mining, transportation, and homesteads on Fort Wainwright have been completed. These studies have determined that there are no properties eligible for the National Register under these contexts. Several village sites associated with the early contact period have been reported near Fort Wainwright. One was reported near Wood River Buttes, two just northwest of the installation's boundary and one near Fairbanks (Reynolds 1986). None have been reported or located on the Main Post.

Ladd Field National Historic Landmark

In 1935, Ladd Field was authorized as a small cold weather testing station that was envisioned by General H. H. Arnold. Construction began in 1939, and, by 1940, Ladd Field was operational.

Cold weather testing at Ladd Field helped to improve the aircraft and equipment used by front-line aircrews. The Cold Weather Test Detachment's experimental tests contributed to the development of aircraft design, ground procedures and personnel equipment with stateside research agencies and manufacturers. After the start of World War II, Ladd Field also served as the transfer point for the Alaska Siberia (ALSIB) Lend-Lease aid to the Soviet Union. From 1942 to the end of the war in 1945, Ladd Field saw 7,926 aircraft and associated cargo change hands. Though it was controversial, the Lend-Lease aid to the Soviet Union played some part in the eventual defeat of Nazi Germany. Ladd Field also served as an air depot for the repair and supply of aircraft under the Air Transport Command, processing thousands of passengers as well as tons of cargo and mail.

In 1984, Ladd Field was listed on the National Register of Historic Places. Ladd Field was listed as significant for three main themes: (1) cold weather testing; (2) aircraft repair, supply depot and air transfer hub; and (3) as the transfer point for aircraft and cargo transiting the ALSIB route to the Soviet Union.

In 1947, the Air Force became a separate service, and Ladd Field became known as Ladd Air Force Base (AFB). Missions flown out of Ladd AFB played a significant role in the early years of

the Cold War confrontation with the Soviet Union. Early in the Cold War, military planners decided on a heartland concept for Alaskan defense, concentrating on bases near Anchorage and Fairbanks as the strategic anchor points. Ladd AFB became the Northern Sector Headquarters for the Alaskan Air Command, and its foremost missions during the Cold War were air defense, strategic reconnaissance and arctic research.

Ladd AFB's air defense mission was part of the plan to deter the Soviet Union from taking Alaskan territory and using it as a base from which to threaten the continental United States. Ladd AFB hosted tactical fighter intercept squadrons and combat alert cells. An Air Defense Command Center located on Ladd AFB was responsible for directing air battles in Alaska's northern sector. It also provided support to segments of the Distant Early Warning Line. In the earliest years of the Cold War, Ladd AFB hosted some of the first long-range strategic aerial reconnaissance units.

Ladd AFB was also the scene of significant Cold War arctic research. The cold weather equipment testing, begun during World War II, continued through the Cold War and expanded to include the Arctic Aeromedical Laboratory (AAL). The AAL studied human adaptation to arctic and sub-arctic climates with an eye toward military applications.

In 2001, the Ladd AFB Cold War Historic District was determined eligible for the National Register of Historic Places. It was determined to be significant for its role in the early Cold War missions of the 46th/72nd Air Reconnaissance unit and for the fighter intercept squadrons stationed here.

Fort Wainwright

In 1960, Ladd AFB was transferred to the Army and was renamed Fort Jonathan Wainwright on January 1, 1961. In Alaska, Cold War missions were predominately under the command of the Air Force, with the Army providing ground force defense and logistical supply. The Army also carried out cold weather training tactics and cold weather equipment testing. The onset of the Vietnam War and its high costs drained the Army's resources; troops at Wainwright were reassigned or deployed, causing a significant decrease in the post's population. In 1986, the mission of the post changed once again with the assignment of the 6th Light Infantry Division to Fort Wainwright. Since 1986, Fort Wainwright's mission has been to support worldwide deployment.

Status of Archaeological Resources

Archaeological research on Fort Wainwright training areas has resulted in numerous technical reports (Bacon 1979; Bacon and Holmes 1979; Dixon et al. 1980; Esdale et al. 2014, 2013,

2012a, 2012b, and 2012c; Esdale and McLaren 2014, 2013; Esdale and Robertson 2007; Espenshade 2010; Bradley et al. 1973; Gaines 2009; Gaines et al. 2010, 2010; Hedman et al. 2003; Higgs et al. 1999; Holmes 1979; Johnson and Bozarth 2008; Marshal 2007; Potter 2005; Potter et al. 2000; Rabich and Reger 1978; Raymond-Yakoubian 2006; Raymond-Yakoubian and Robertson 2005; Robertson et al. 2013; Robertson 2010; Robertson et al. 2004, 2006, 2007, 2008, 2009; Staley 1993) and scientific papers (Holmes and Anderson 1986; West 1967, 1975).

Fort Wainwright and its training lands contain 673 known archaeological sites, one traditional cultural property, and four archaeological districts. Seventy-six sites are eligible for the National Register, 502 sites have not been evaluated, and 103 additional sites have been determined ineligible for the National Register. Of the eligible or un-evaluated sites, 9 are historic sites, 571 are prehistoric sites, and one is a traditional cultural property.

Archaeological surveys of the Fort Wainwright Main Post area began in 1979. Jim Dixon surveyed the north side of the Chena River and Birch Hill area, discovering and relocating several prehistoric archaeological sites (FAI-00040, 00041, 00042, 00043, 00199, and 00200) (Dixon et al. 1980). Surveys of the Main Post building areas continued in the 1980s by Julia Steele (Steele 1992, 1983) and Georgianne Reynolds (Reynolds 1983, 1985). No sites were found in these previously disturbed areas. John Cook surveyed the River Road pond in 1996 and found one site (FAI-50009), which has failed to be relocated in subsequent attempts. In 2001, the Army began partnering cultural resources surveys and evaluations with Colorado State University's Center for Environmental Management of Military Lands (CEMML). Surveys by several different principal investigators have targeted areas of construction undertakings. Two historic sites (FAI-01603 and 01604) and one additional prehistoric site (FAI-01990) were found in these investigations. In 2011 and 2012, CEMML completed survey of the entire cantonment, north and south of the Chena River, discovering three additional historic sites (FAI-02117, FAI-02197, and FAI-02198). Two sites were evaluated for the National Register in 2013 (FAI-00199 and FAI-00200). Of the 13 archaeological sites known from the Fort Wainwright cantonment, 12 have been determined not eligible and one has been determined eligible (FAI-00040) for the National Register. This total does not include any historic buildings related to the Ladd AFB Historic District, World War II, or the Cold War.

Archaeological sites were first identified in the TFTA in 1973 by Zorro Bradley and others who conducted a survey in the Blair Lakes area (Bradley et al. 1973). James Dixon continued surveys for archaeological district designations in the regions of Blair Lakes (District FAI-00335), Clear Creek Butte (District FAI-00336), and Wood River Buttes (District FAI-00337) (Dixon et al. 1980). In 1993, proposed work in the Clear Creek Butte area prompted a contract to relocate several archaeological sites (Staley 1993). These three districts have been revisited by CEMML archaeologists a few times over the last decade, and, notably, 92 new sites were found in 2009-

2010 during survey of the Wood River Buttes, Salmon Loaf, and north and east of Blair Lakes. Recent surveys have focused on the Blair Lakes region which has a long history of use dating from late glacial times to the more recent homesteading period and has also been a significant region for military training. This area hosts the second oldest archaeological site in all of Alaska, the McDonald Creek site (FAI-02043), with stone tool debris dating to 13,900 years ago (Esdale et al. 2014). In total, archaeologists have identified 165 archaeological sites in TFTA. Of these sites, 19 have been determined eligible for inclusion in the National Register and 153 remain to be evaluated for eligibility.

The road system in the YTA was the first of many areas to be investigated. Charles Holmes discovered eight sites in a 1978 road survey (Holmes 1979). John Cook conducted a DOE evaluation on one of these sites in 1979 (Cook 1979). Michael Kunz surveyed the Stuart Creek area in 1992 but discovered no archaeological sites, and Northern Land Use Research's 1999 survey of Stuart Creek and the YTA road system uncovered one historic site (Higgs et al. 1999). CEMML archaeologists have been surveying portions of YTA in conjunction with construction projects on an annual basis since 2001. Currently, North Beaver Creek, Skyline, Johnson, Quarry, Brigadier, and Manchu Roads in YTA are almost entirely surveyed, as is the area east of Skyline Road outside of the Stuart Creek Impact Area, McMahon Trench, the Manchu Range, and the majority of Training Areas 307 and 310, north and south of Manchu and Quarry Roads. Twenty-two archaeological sites have been identified in YTA. Thirteen of the sites have been determined not eligible for listing in the National Register and nine have not been evaluated. XBD-00162 will not be evaluated due to its location in a heavily used portion of the Stuart Creek Impact Area.

Archaeological investigations in what is now the DTA began in the 1960s, when Frederick West was searching for sites related to the first Americans (West 1967). He excavated the Donnelly Ridge site (XMH-00005) in 1964 and found an assemblage containing microblade core technology similar to early Holocene Denali Complex sites. Several surveys of Fort Greely and adjacent training lands in the late 1970s documented 64 new sites (Rabich and Reger 1977; Bacon 1979; Holmes 1979; Bacon and Holmes 1979). Julia Steele surveyed various locations in DTA from 1980-1983, finding four additional new sites (Steele 1980a, 1980b, 1982a, 1982b, 1983a, 1983b), and Georgianne Reynolds surveyed the Donnelly Dome area in 1988, locating one more site (Reynolds 1988). Investigations in DTA from 1992-2002 were made by D. Staley (Staley 1993), T. Gamza (Gamza 1995), A. Higgs (Higgs et al. 1999), and D. Odess (Odess 2002). Sixteen new sites were found during this decade of fieldwork, and attempts were made to relocate old sites.

Concentrated efforts to expand survey coverage of DTA East began with CEMML archaeologists in 2002. Over 200 new sites were located in the Texas Range, Donnelly Drop Zone, and Eddy

Drop Zone in the first half of the decade. In 2007, one site was found in the northernmost portion of DTA West by Ben Potter and others during survey for the Alaska Railroad Northern Rail Extension Project (Potter et al. 2007). In recent years, CEMML research aimed to evaluate many known archaeological sites in DTA for inclusion in the National Register in conjunction with use of the BAX and its SDZ. Sites have also been discovered during surveys for road and trail maintenance. Potential expansions into DTA West, west of the Delta River, prompted 2011 and 2012 surveys into new areas such as Molybdenum Ridge, where 21 new sites were discovered in 2011. Because of its remote setting, however, the archaeology of Donnelly West is still poorly understood and represents a gap in USAG FWA's inventory of cultural properties. The Cold Regions Test Center (CRTC) has also contracted with CEMML and others since the last Integrated Cultural Resources Management Plan (ICRMP) to survey areas in DTA West, east of the Little Delta River, and many new archaeological sites have been recorded (Espenshade 2010).

To date, 452 archaeological sites have been identified within DTA. Fifty-five sites have been found to be eligible for the National Register, and 63 were found not eligible. An additional 329 sites remain to be evaluated. Historic archaeology sites are poorly represented in this region, with only four currently known to exist. The Donnelly Ridge District (XMH-00388) encompasses Denali Complex sites, identified by Frederick West, south and west of Donnelly Dome. Future archaeological studies in DTA will concentrate on completing survey of 100% of the land in DTA East, conducting DOEs on archaeological sites in high traffic areas, and exploring parts of DTA West that are opening up for expansion of military training activities.

Despite its incomplete nature, the archaeological record known from DTA represents all of the currently recognized prehistoric cultures of the Alaskan Interior. Of significance is the role played by sites located on DTA in the definition of the Denali Complex of the American Paleoarctic Tradition (Anderson 1970; West 1967, 1981). The oldest date for human habitation at DTA is roughly 10,100 years at site XBD-00167 (Higgs et al. 1999); however, undisturbed stratigraphic deposits that are 12,800 to 12,930 years old indicate the potential for intact archaeological occupations of this age. Sites yielding Northern Archaic side-notched points are common (Robertson et al. 2004, 2005; Raymond-Yakoubian and Robertson 2005). At DTA, site XMH-00874 yielded an AMS date of 5720 ± 50 BP from hearth charcoal associated with a microblade component (Robertson et al. 2008). A late prehistoric Athabaskan occupation is recognized at several sites (e.g., Andrews 1975, 1987; Cook 1989; Mishler 1986; Sheppard et al. 1991; Shinkwin 1979; Yarborough 1978). Of particular interest in this regard is a copper projectile point found in a buried context at DTA at site XBD-00272 (Robertson et al. 2009). Euro-American historic archaeological sites are also present (Gamza 1995; Phillips 1984).

Survey efforts increased in 2013 in the Black Rapids Training Area (BRTA) in advance of military installation of a high-angle marksmanship range. Ten sites, eight of which were discovered during CEMML surveys in 2013, are known from this rocky landscape. Four sites have been determined ineligible for the NRHP, and all sites are small surface lithic scatters and isolated points as there is very little deposition in most of the mountainous training area. Survey continued in the training area in 2014 but no new sites were discovered.

The Gerstle River Training Area (GRTA), Tok Fuel Terminal, and Haines Fuel Terminal, also managed by Fort Wainwright, have been infrequently utilized for training activities, and very few surveys or identification of archaeological sites have occurred in these areas. CEMML archaeologists surveyed small portions of GRTA in 2011 through 2013. Three prehistoric sites (XMH-01359, XMH-01494, and XMH-01509) are known from this training area. One site, XMH-01494 was determined ineligible in 2013 (Esdale et al. 2013b). Six sites were discovered at Tok Fuel Terminal by John Cook in the early 1980s. Three of these sites have been found ineligible for the NRHP (TNX-00006, 00007, 00008). The other three sites were relocated in 2012. DOEs for these sites have not been completed. One eligible traditional cultural property is also known from this training area. One ineligible historic site is known from Haines Fuel Terminal (SKG-00043), but no surveys have been completed in this area since 2001.

2014 Cantonment Fieldwork

Cantonment Section 106 Activities

A 100% survey of Fort Wainwright's cantonment was completed in 2012. During 2014, no projects took place in areas that would impact archaeological sites and all activities were covered under Fort Wainwright's Operation and Management Programmatic Agreement with the SHPO (see Thomas 2014).

Cantonment Surveys

No archaeological surveys took place in the cantonment in 2014.

Cantonment New Sites

No new archaeological sites were discovered in the cantonment or in adjacent areas in 2014.

Cantonment DOEs

No sites were evaluated for NRHP status in the cantonment 2014.

2014 Tanana Flats Training Area Fieldwork

TFTA Section 106 Activities

There were no Section 106 undertakings in the TFTA in 2014.

TFTA Surveys

Surveys in the TFTA in 2014 were in support of the Joint Pacific Alaska Range Complex (JPARC) environmental impact statement (EIS). One of the programmatic actions in the EIS is to build an access road into the Blair Lakes impact area (Figure 2). Although no definitive undertaking has yet been proposed, data from surveys and site discoveries are planned to be used to guide potential future development away from critical cultural resources.

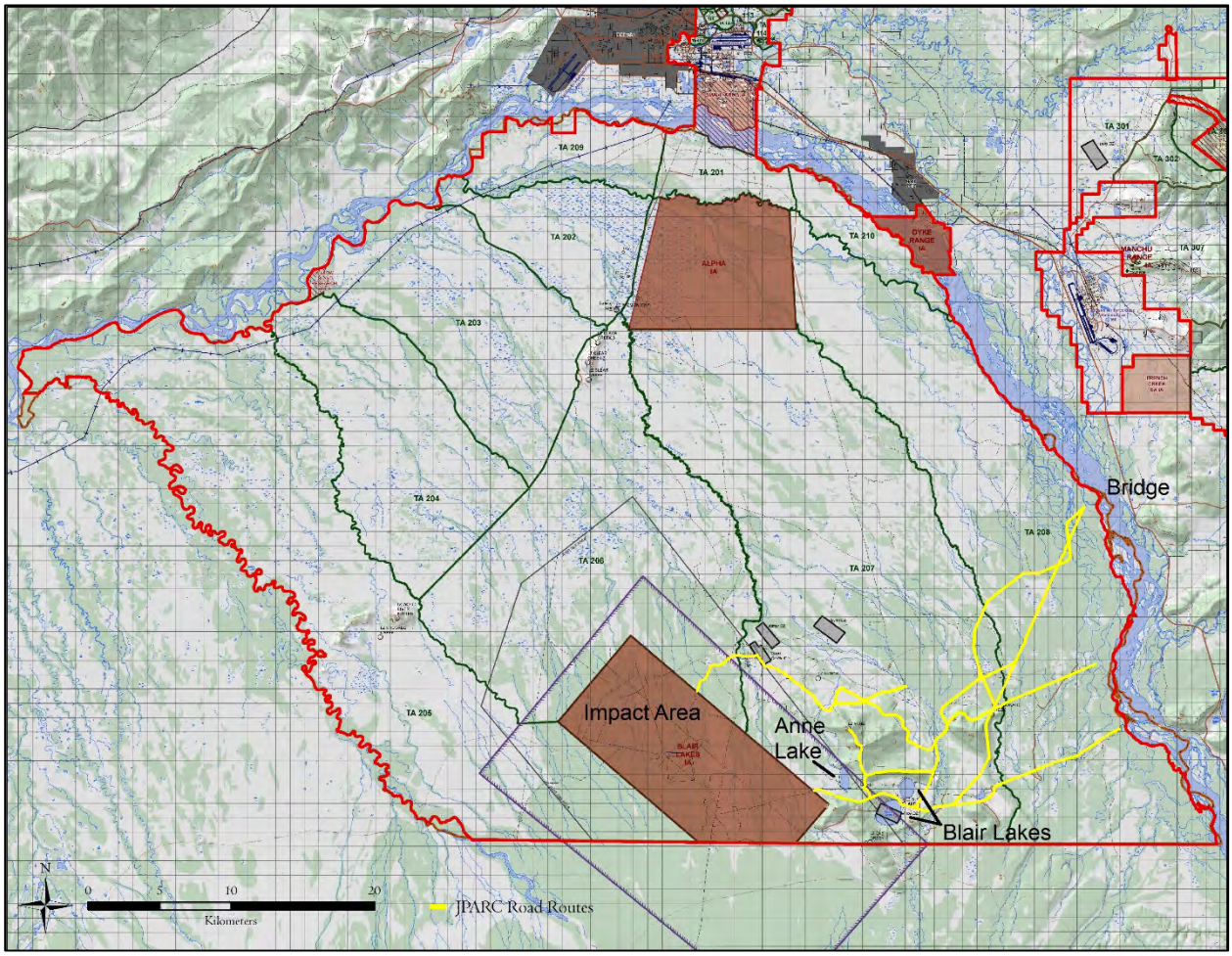

Figure 2. Proposed JPARC access road routes.

Several archaeological sites are known from the Blair Lakes region, and one archaeological district has been defined (FAI-00335). In 2009 and 2010, CEMML archaeologist Edmund Gaines conducted preliminary surveys in the southern portion of the Tanana Flats to obtain baseline data on the cultural resources in the area for potential road routes (Esdale et al. 2012c, Gaines et al. 2010). Surveys around Anne Lake, the Blair Lakes, and the vegetated terrace edge to the north and east relocated 10 of 14 sites first identified by Dixon et al. in 1980 and discovered 44 new archaeological sites. Surveys in 2013 focused specifically on the proposed road routes in the JPARC EIS, and over 3,629 acres of land were surveyed. Sixteen new sites were found in this survey, and one site was relocated.

In 2014, surveys were conducted along an existing trail leading from the Clear Creek Assault Strip to the southeast and in hills west of Blair Lakes. Five sites were found west of Blair Lakes (FAI-2319 through 2323), but no sites were found along the trail (Figure 3). As a result of fieldwork in these areas, site information was updated for eight sites (FAI-00044, 02048, 02054, 02055, 02058, 02059, 02061, and 02062) and FAI-00088 was relocated.

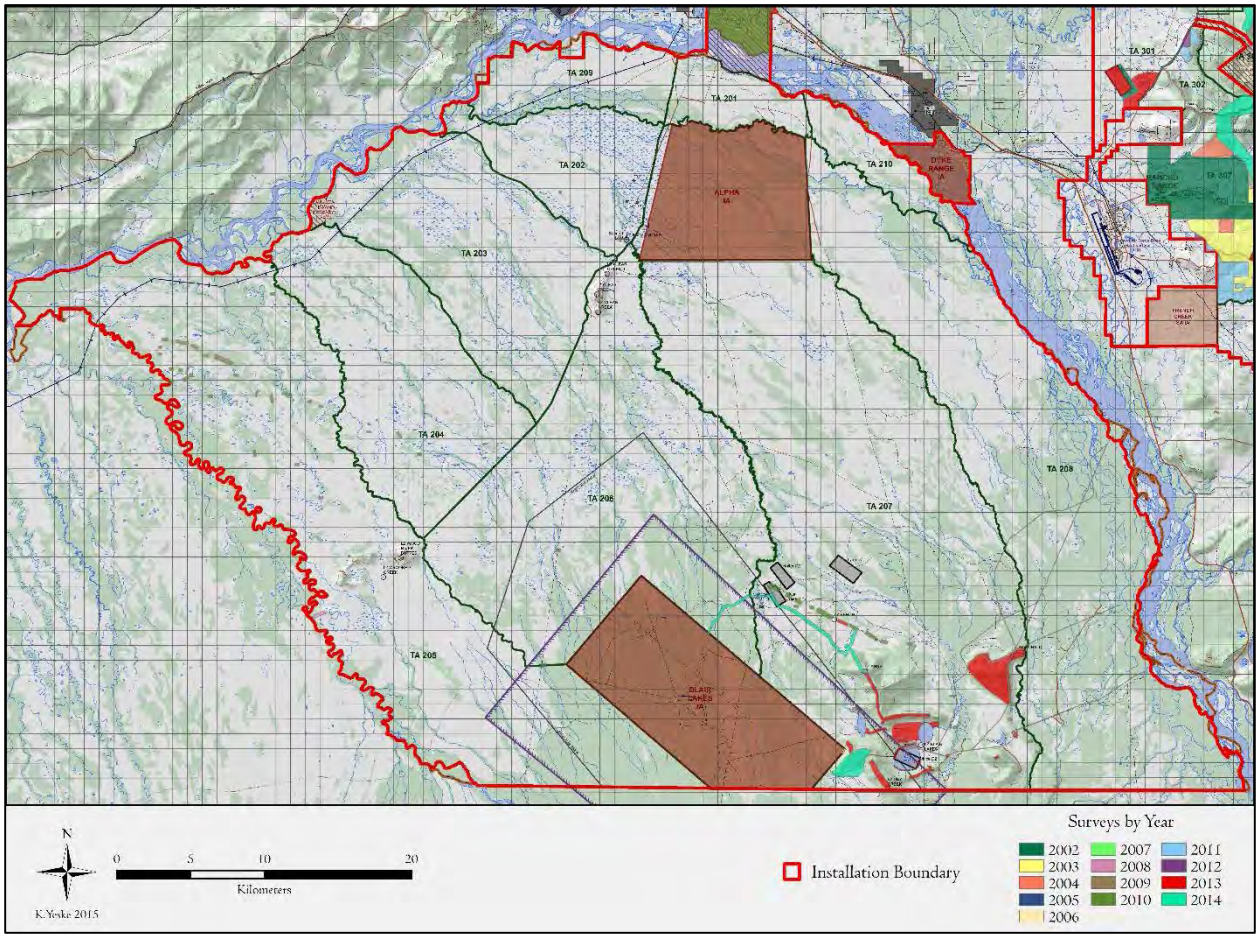

Figure 3. All surveys in TFTA by year. The mint green areas were surveyed in 2014.

TFTA New Sites

Five new sites were discovered in the TFTA in 2014. These sites are located in the hills southwest of Blair Lakes (Figure 4).

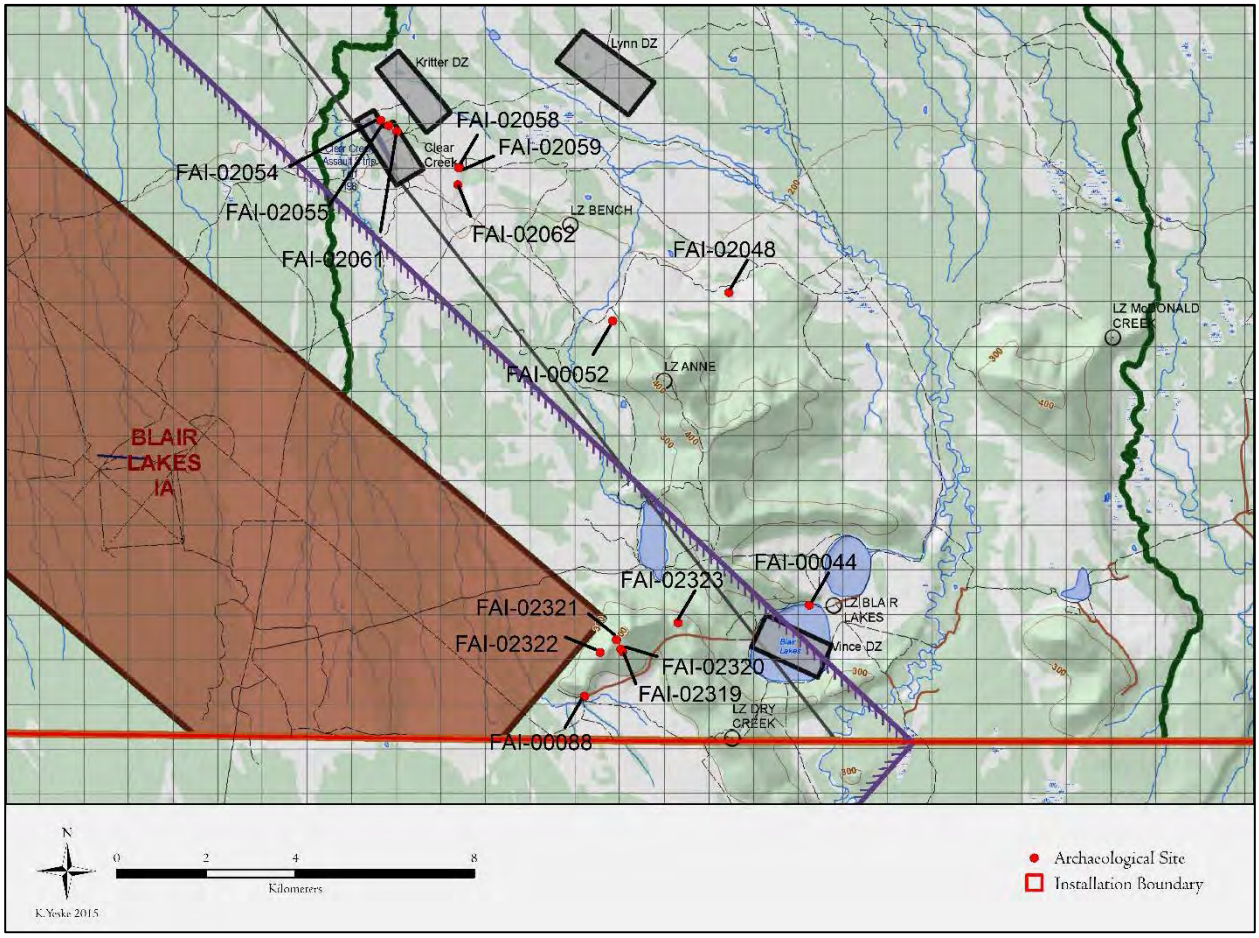

Figure 4. Sites discovered, updated, or relocated in TFTA in 2014.

FAI-02319

[redacted]

Determination of Eligibility: Not evaluated

FAI-02319 was discovered on hill 2.8 km west of the southern Blair Lake in the TFTA, 53 km south of Fairbanks (Figure 4). The site is not accessible by road. An artifact was found on an elevated bedrock outcrop on a narrow ridge running northwest-southeast. Sedimentary deposits cover an area approximately 40 x 50 m, near the apex of the hill. The nearest water source, Anne Lake, is 1.8 km to the northeast. Nearest water is 1.8 k NE, Anne Lake. Dense

vegetation prevents any visibility of the region. Holocene deposits at the top of the hill are fairly flat with slopes less than 5°. The surrounding area slopes 20-30° in all directions (Figure 5). Vegetation includes moss, lichen, low bush cranberry, and various low scrub (Figure 6). Burned deadfall surrounds the rise and vegetation obscures ground surface visibility.

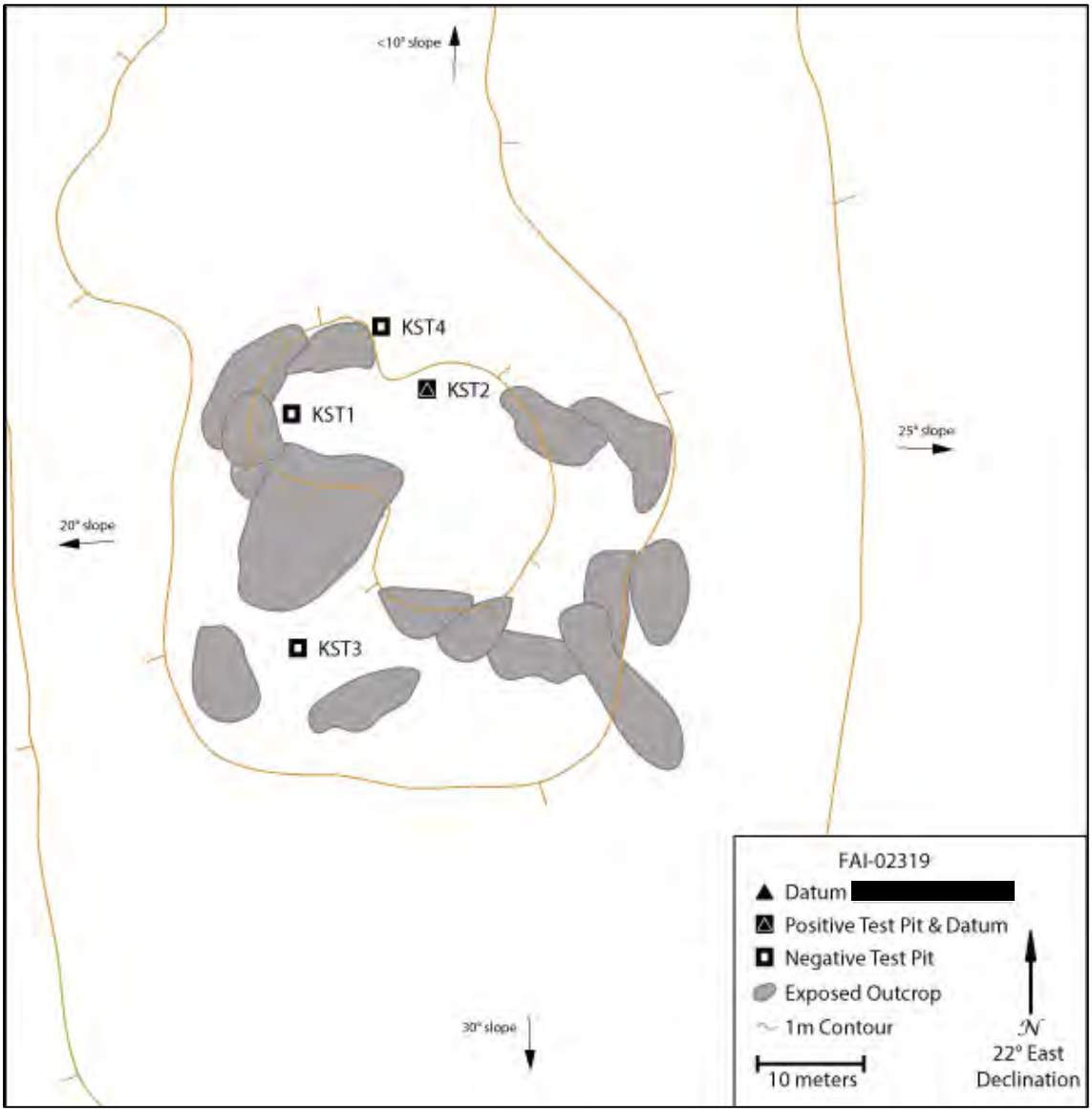

Figure 5. FAI-02319 site map.

One of five test pits was positive, containing a black chert flake fragment at 0-10 cmbs (UA2014-85-0001). Evidence of military use of the landform is seen in spent ammunition and clips scattered across hill. Uphill from this site are FAI-02320 (75 m to the northeast) and FAI-02321 (305 m to the northeast).

Thin Holocene sediments cover Birch Creek Schist bedrock at the site to a depth of less than 25 cm (Figure 7, Figure 8). All deposits are windblown silts. Weak soil development was noted in the upper 10 cm.

Figure 6. FAI-02319 site overview.

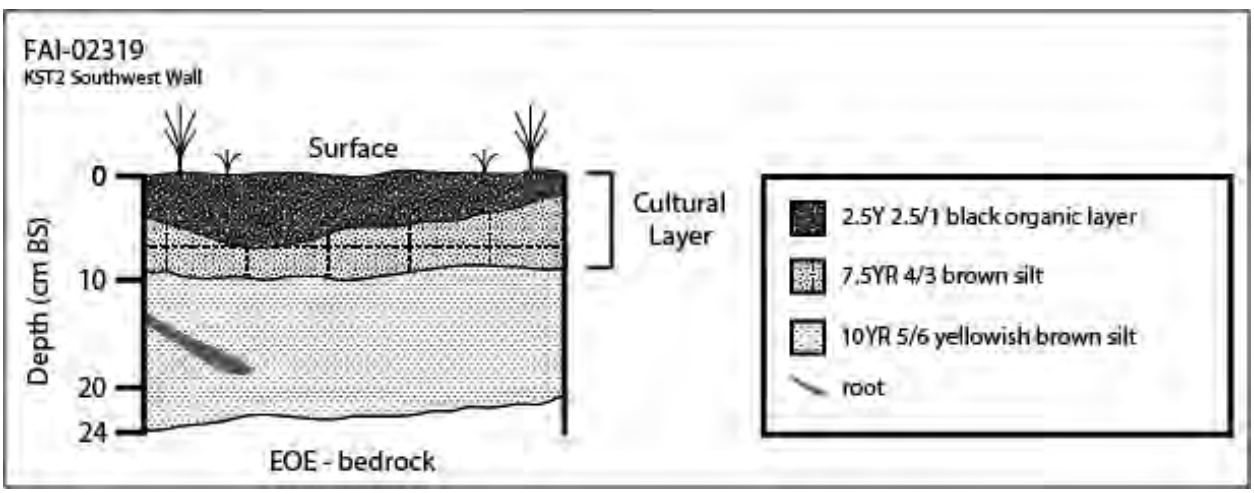

Figure 7. FAI-02319 stratigraphic profile.

Figure 8. FAI-02319 test pit.

FAI-02320

[redacted]

Determination of Eligibility: Not evaluated

FAI-02320 is located on hill 2.8 km west of the southern Blair Lake in the TFTA, 53 km south of Fairbanks (Figure 4). The site is not accessible by road. Shallow sediments overly a bedrock knoll on a northwest-southeast trending ridgeline. The area surrounding sedimentary deposits slopes 15° to the southwest and 90° to the northeast (Figure 9). The nearest water source is Anne Lake, 1.7 km to the northeast. There is no view of the surrounding area due to dense vegetation including low bush cranberry, moss, lichen, aspen, and dwarf birch (Figure 10). Surface visibility is approximately 1%. The area was burnt in the past and is covered with deadfall.

One of two test pits excavated in the sedimentary deposits was positive for cultural material. The test pit contained four flakes at a depth of 0-10 cmbs (Table 1). The test pit was excavated to mixed gravels at 21 cmbs. Also found were remnants of military activity, mainly spent ammunition and links. Three other archaeological sites are located nearby: FAI-02319 is 75 m downslope to the southeast, FAI-02321 is 230 m uphill to the northwest, and FAI-02238 is 370 m uphill to the northeast.

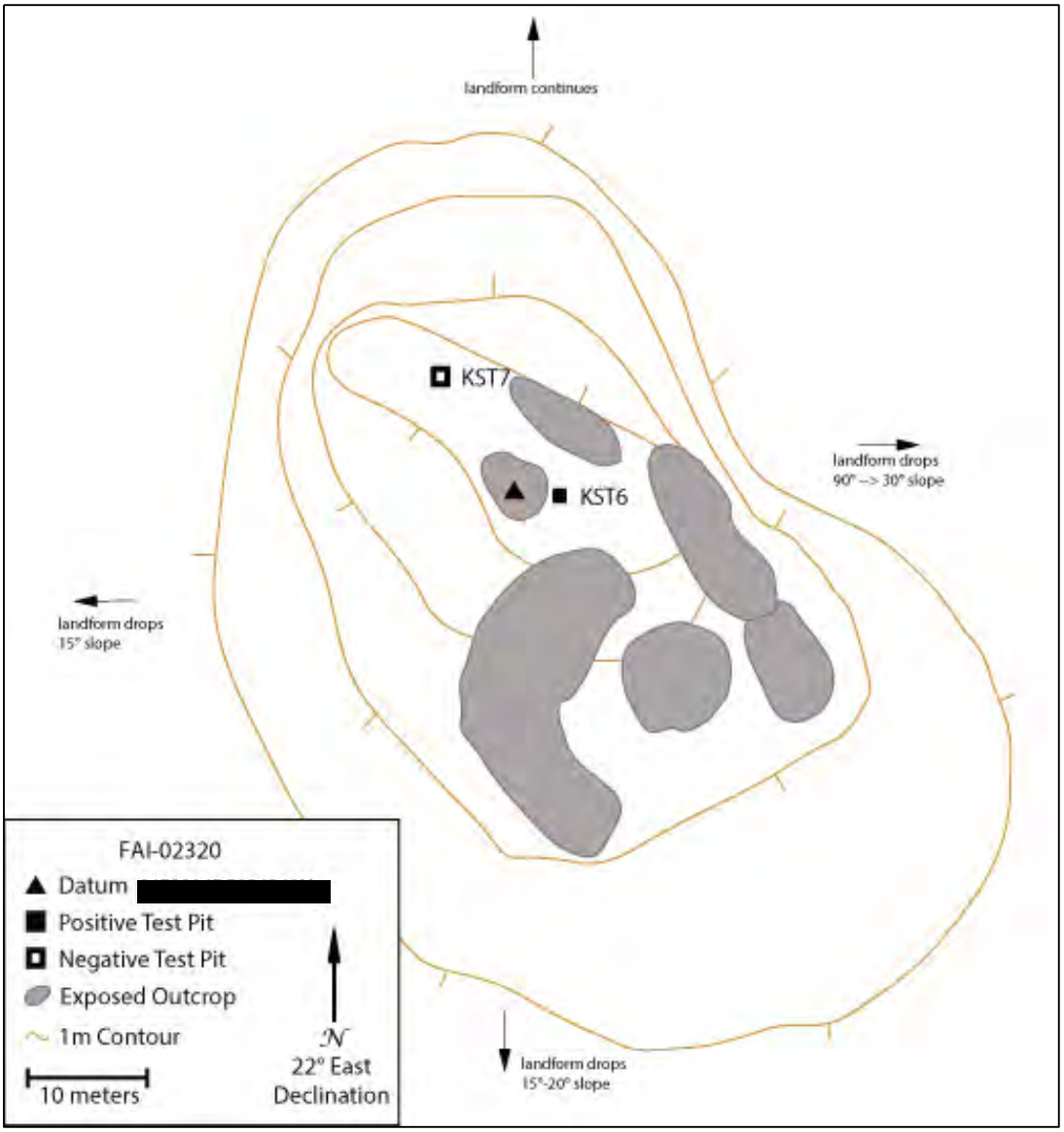

Figure 9. FAI-02320 site map.

Windblown silts shallowly overly bedrock at a depth of approximately 20 cmbs (Figure 11, Figure 12). Weak soil development was noted. The organic layer is very thin, less than 3 cm in most areas.

Figure 10. FAI-02320 site overview.

Table 1. FAI-02320 accession log.

Accession #	Provenience	Artifact Type	Raw Material
UA2014-086-0001.01	KST6 0-5 cmbs	flake fragment	black chert
UA2014-086-0001.02	KST6 0-5 cmbs	edge preparation flake	gray chert
UA2014-086-0001.03	KST6 0-5 cmbs	biface tip fragment	gray chert
UA2014-086-0002	KST6 5-10 cmbs	flake fragment	rhyolite

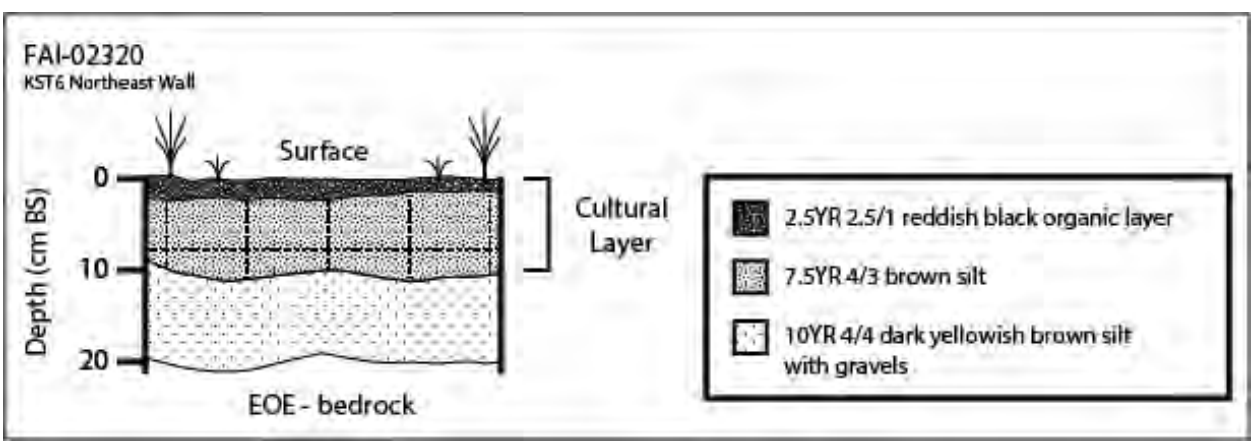

Figure 11. FAI-02320 stratigraphic profile.

Figure 12. FAI-02320 test pit.

FAI-02321

[redacted]

Determination of Eligibility: Not evaluated

FAI-02321 is located on hill 3 km west of the southern Blair Lake in the TFTA, 53 km south of Fairbanks (Figure 4). The site is not accessible by road. Artifacts were found buried at the top of a northeast-southwest trending ridgeline 1.6 km southwest of Anne Lake. The area around the site slopes gently (10°) in all directions (Figure 13). There is no view of the surrounding territory as thick aspen covers the entirety of the ridge. Moss, lichen, fireweed, dwarf birch, low bush cranberry, and low scrub are also present (Figure 14). The area is blanketed with a burnt root mat and deadfall. There is no surface visibility.

One of three test pits was positive for cultural material. Two microblades and 21 gray chert flakes, and one biface tip were recovered, and one charcoal sample was collected (Table 2). This test pit terminated at 42 cmbs at bedrock. Several sites are in the vicinity: FAI-02238 is 260 m to the northeast, and FAI-02320 and FAI-02319 are 230 m and 305 m downslope to the southeast.

Windblown silts are thicker at this site, capping bedrock with 40-45 cm of deposits (Figure 15, Figure 16). The root mat is approximately 3-6 cm in thickness. Weak soil development was noted.

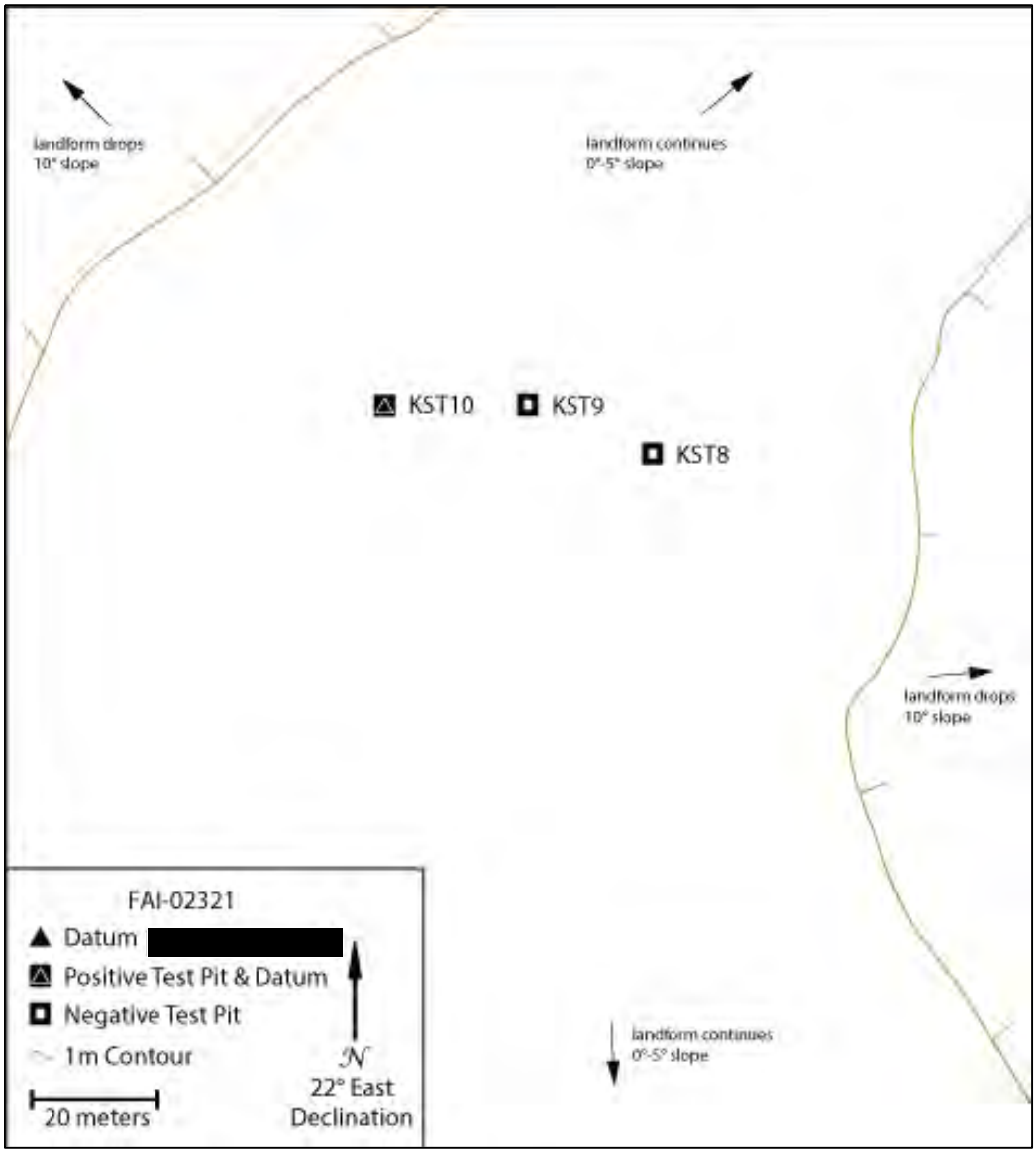

Figure 13. FAI-02321 site map.

Figure 14. FAI-02321 site overview.

Table 2. FAI-02321 accession log.

Accession #	Provenience	Quantity	Artifact Type	Raw Material
UA2014-087-0001	KST10 0-3 cmbs	1	flake fragment	gray chert
UA2014-087-0002	KST10 3-13 cmbs	1	edge preparation flake	gray chert
UA2014-087-0003.01	KST10 13-23 cmbs	3	flake fragment	gray chert
UA2014-087-0003.02	KST10 13-23 cmbs	5	edge preparation flake	gray chert
UA2014-087-0003.03	KST10 13-23 cmbs	1	alternate flake	gray chert
UA2014-087-0003.04	KST10 13-23 cmbs	1	biface blank fragment	gray chert
UA2014-087-0004	KST10 13-23 cmbs	1	microblade	gray chert
UA2014-087-0005.01	KST10 23-33 cmbs	1	bifacial pressure flake	rhyolite
UA2014-087-0005.02	KST10 23-33 cmbs	1	secondary decort flake	gray chert
UA2014-087-0005.03	KST10 23-33 cmbs	2	edge preparation flake	gray chert
UA2014-087-0005.04	KST10 23-33 cmbs	1	flake fragment	gray chert
UA2014-087-0005.05	KST10 23-33 cmbs	1	alternate flake	gray chert
UA2014-087-0006.01	KST10 31 cmbs	2	bifacial pressure flake	gray chert
UA2014-087-0006.02	KST10 31 cmbs	1	bifacial pressure flake	gray chert
UA2014-087-0007	KST10 31 cmbs	1	microblade	gray chert
UA2014-087-0008	KST10 31 cmbs	1	charcoal	charcoal

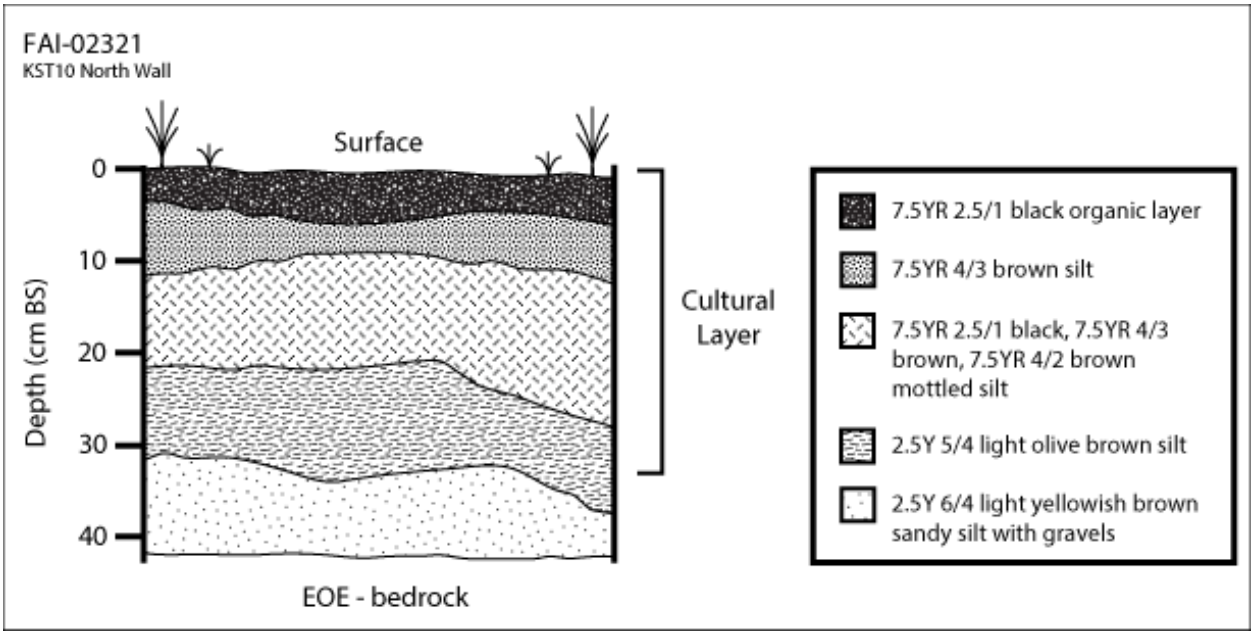

Figure 15. FAI-02321 stratigraphic profile.

Figure 16. FAI-02321 test pit.

FAI-02322

[redacted]

Determination of Eligibility: Not evaluated

FAI-02322 is located 3.4 km west of the southern Blair Lake in the TFTA, 53 km south of Fairbanks, (Figure 4. Sites discovered, updated, or relocated in TFTA in 2014.Figure 4). The site is not accessible by road. An artifact was discovered buried in deposits on a northeast-southwest trending ridgeline, 2.1 km southwest of Anne Lake. The site is a flat area slightly raised above the surrounding area that slopes 5°-30° in all directions (Figure 17). There are no views of the surrounding area because of dense vegetation including aspen, moss, lichen, and scattered small shrubs (Figure 18). There is no surface exposure on the ground.

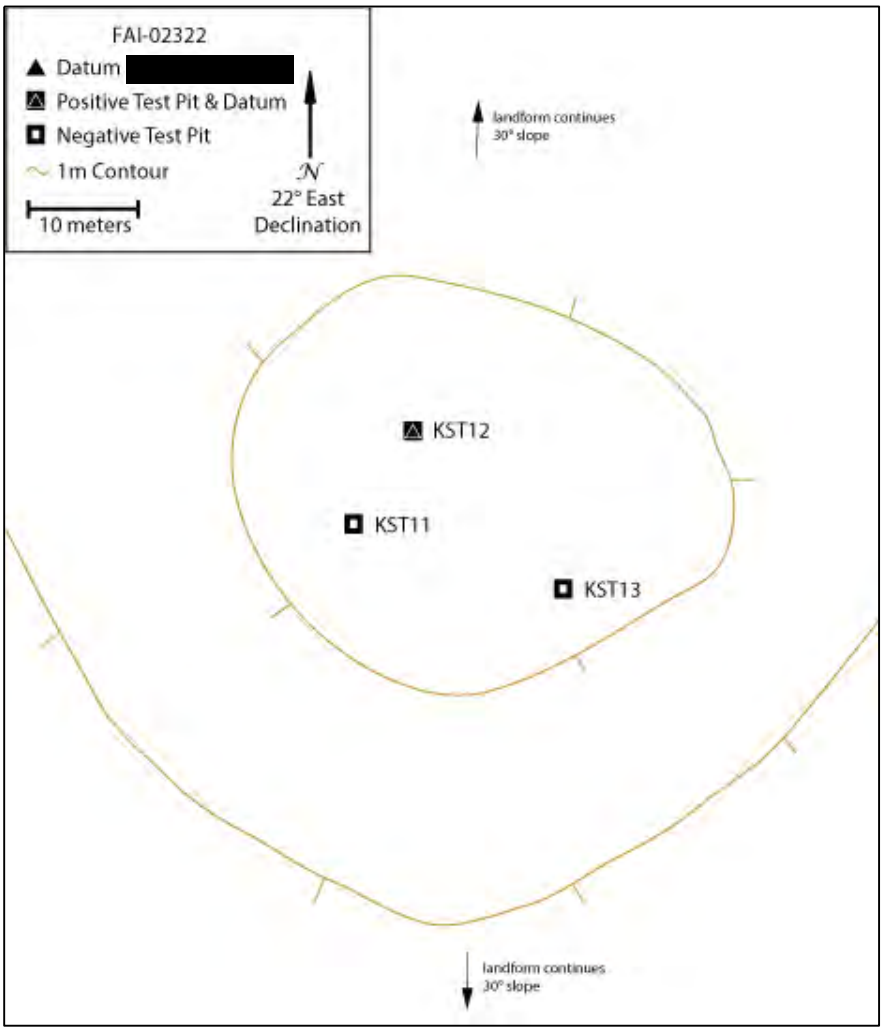

Figure 17. FAI-02322 site map.

One of three test pits excavated was positive for cultural material. One bifacial pressure flake made from obsidian was found approximately 19 cmbs (UA2014-088-001). The obsidian has been tentatively sourced to Wiki Peak by the Alaska Obsidian Database Project (Rasic pers. comm. 2015). Several sites are located in the vicinity: FAI-02321 is 460 m to the northeast, FAI-02320 is 470 m to the east, and FAI-02319 is 505 m to the east.

Windblown silts shallowly overly degrading bedrock at the site at a depth of up to 20 cm. A think organic layer overlies a 7 cm B horizon (Figure 19, Figure 20). Evidence of past military use of the site includes a plastic ammo can and scrap metal.

Figure 18. FAI-02322 site overview.

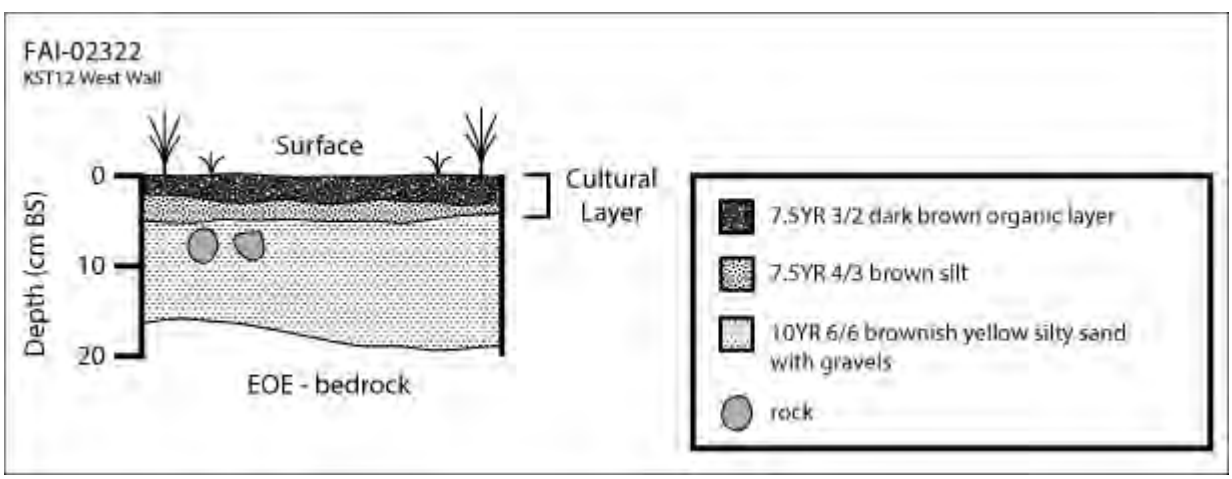

Figure 19. FAI-02322 stratigraphic profile.

Figure 20. FAI-02322 test pit.

FAI-02323

[redacted]

Determination of Eligibility: Not evaluated

FAI-02323 is located 2 km west of the southern Blair Lake in TFTA, 53 km south of Fairbanks (Figure 4).The site is not accessible by road. An artifact was discovered shallowly buried on a small rise that runs 16 m north-south and 11 m east-west approximately 1.5 m above surrounding area (Figure 21). The larger ridgetop trends northwest-southeast. The land around the site slopes gently in all directions (10°-12°). Anne Lake is 1 km to the north. There are no views of the surrounding territory and no surface visibility due to vegetation, which includes birch, moss, and lichen (Figure 22).

A single excavated test pit uncovered a large obsidian scraper (approx. 8 x 3 x 1.5 cm) with cortex was found 5 cmbs (UA2014-089-001) (Figure 23). The obsidian has been sourced to Batza Tena by the Alaska Obsidian Database Project (Rasic pers. comm. 2015). Site FAI-02238 is located 1.1 km to the west.

Windblown silts shallowly lie over degraded bedrock to a depth of about 15 cm (Figure 24, Figure 25). There is shallow deposition (15 cm) on top of outwash gravels. Week soil development is evident under a 3 cm thick organic layer.

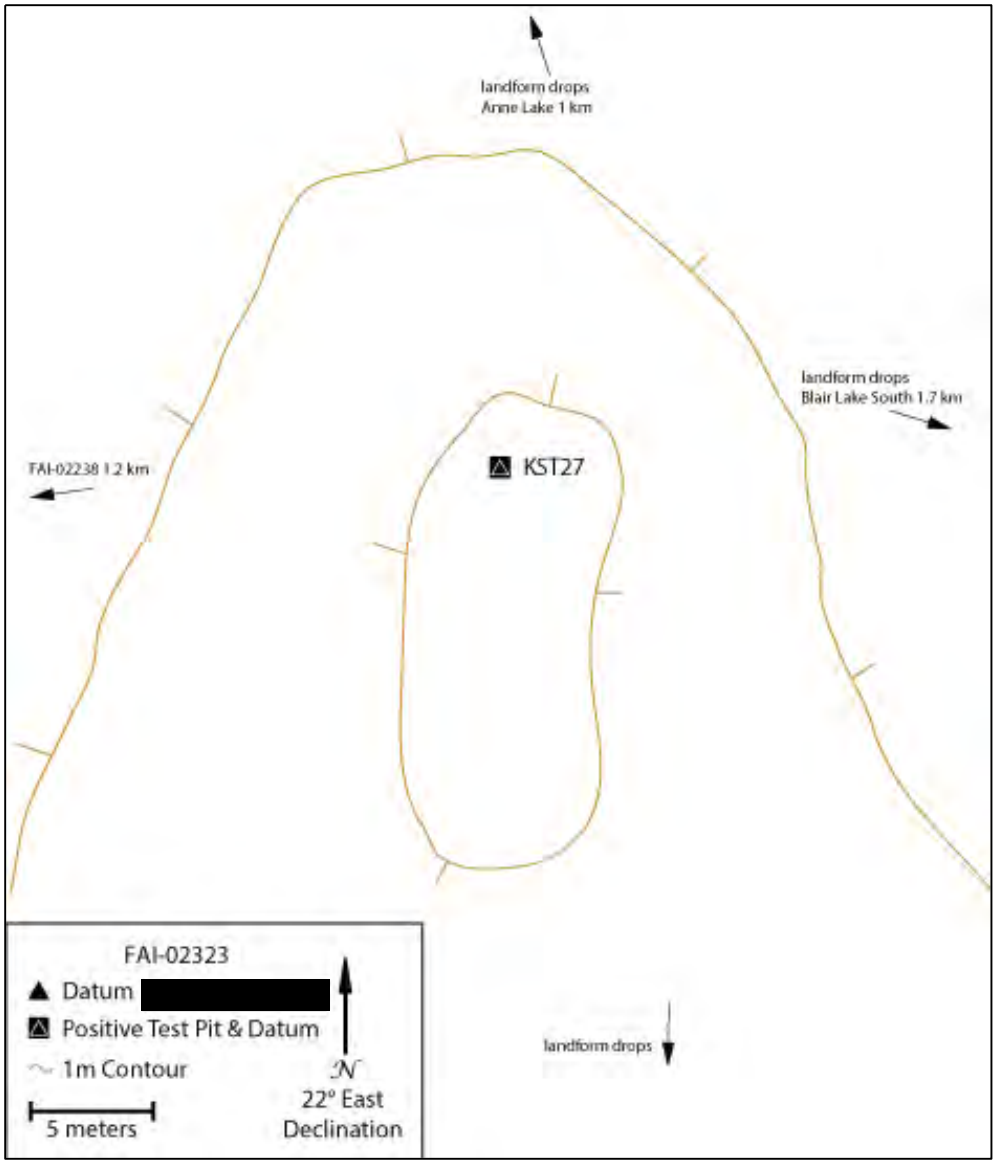

Figure 21. FAI-02323 site map.

Figure 22. FAI-02323 site overview.

Figure 23. FAI-02323 scraper.

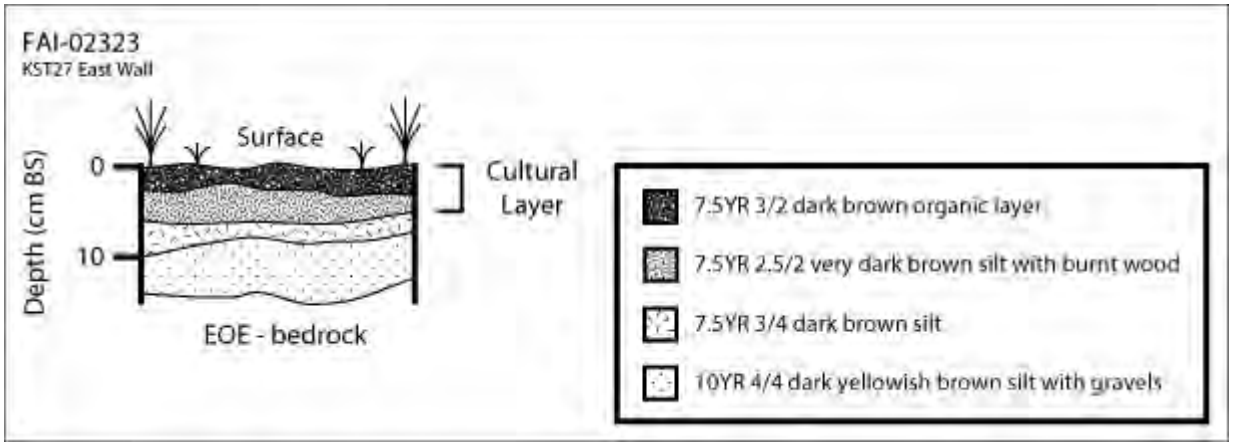

Figure 24. FAI-02323 stratigraphic profile.

Figure 25. FAI-02323 test pit.

TFTA Relocated and Updated Sites

Nine sites in the TFTA were relocated or visited for additional information about site boundaries in 2014. These sites are located around Blair Lake south and the terrace edge east of the Clear Creek Assault Strip (Figure 4).

North Shore Blair Lake South

The Blair Lakes and surrounding hills are located in the southeastern portion of the TFTA, immediately west of the Tanana River. They were named after early 20th century Pioneer Walter "Tex" Blair Lake who had a homestead on the north shore of the southern Blair Lake in the 1930's. The lakes formed during the late Pleistocene as a result either of rapid aggradation of Dry Creek, or tectonic faulting, or a combination of the two. Elevated beach ridges on the east shore of Blair Lake North indicate higher lake levels during the terminal Pleistocene or early Holocene, and on the basis of their elevation, indicate that the two lakes would have been connected during this time (Dixon et al. 1980). The hills and ridges surrounding Blair Lake are composed of metamorphic Birch Creek schist

The north shore area of the southern Blair Lake is currently of particular interest here because it is in the direct path of one of the JPARC road routes (Figure 2) and because sites in this area are the basis for the Blair Lakes Archaeological District (FAI-00335). Six sites have been delineated in a 5.5 acre area along the north shore of the southern Blair Lake (Dixon et al. 1980). During the original 1979 survey, wherever the archaeologists put in a shovel test, they found historic or prehistoric artifacts. This led to the arbitrary assignment of six different AHRS numbers (from west to east): FAI-00045, FAI-00046, FAI-00048, FAI-00054, FAI-00044, and FAI-00049 (Figure 26). Four of these sites (FAI-00044, FAI-00045, FAI-00048, and FAI-00049) are prehistoric sites yielding stone tool artifacts and faunal remains from a buried context. Two of the sites (FAI-00046, and FAI-00054) are log cabin remains, and cache pit features and early 20th Century artifacts associated with the Blair homestead. Below are the original site descriptions (from Dixon et al. 1980):

FAI-00044

[redacted]

Determination of Eligibility: Eligible (07/25/1984)

Site FAI-00044 was originally identified by Dixon et al. (1980) in an eroding cut bank located 3 m from the present shoreline of Blair Lake south. Testing conducted during the investigation recovered 227 lithic artifacts from a buried context. Most of this is lithic debitage; formal tools among the assemblage included "one bifacially worked black chert knife fragment" (Dixon et al. 1980: 108), two rhyolite microblade cores, two core tablets, a total of 25 microblades and microblade fragments, one chert and two chalcedony burin spalls. Fire cracked rocks and hundreds of calcined faunal fragments were also found. Identifiable remains in the faunal assemblage include a snowshoe hare phalange distal fragment, a distal fragment of a phalange

likely from a moose or bear, a humerus head from a snowshoe hare, a canid carpal, five large mammal long bone fragments, and one small mammal long bone fragment.

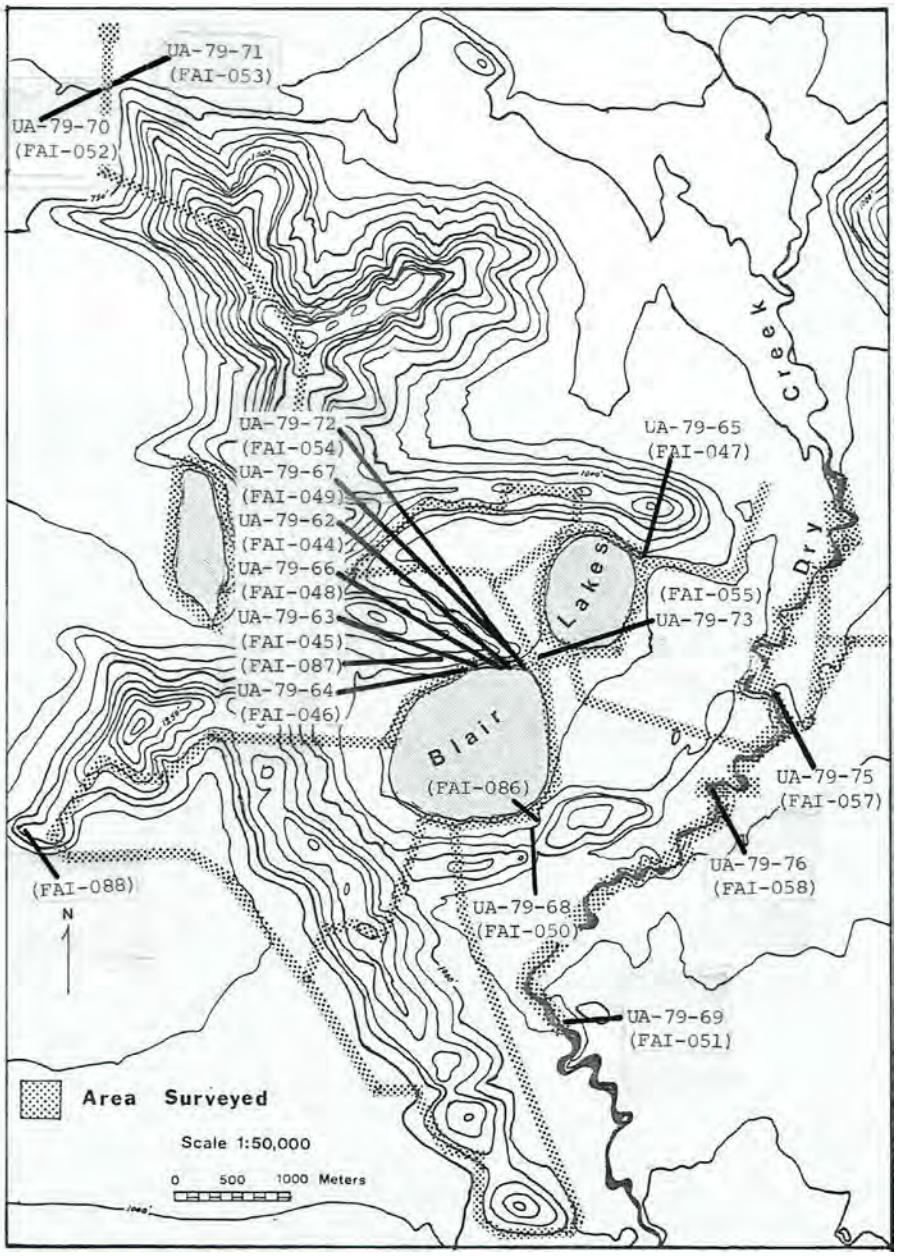

Figure 26. North shore of Blair Lake south and location of archaeological sites from the 1979 survey (Dixon et al. 1980:105).

Dixon et al. (1980: 109) were explicit that they had not clearly defined the site's boundaries and that further testing above their initial investigations would be necessary to establish the site's

spatial limits. They were also clear that the separation of individual prehistoric sites along the north shore of Blair Lake south was probably a sampling issue and it is likely that the four individual sites defined, in fact, represent one extensive, continuous, multi-component site.

At the time of the 1979 investigation, the site was reportedly being impacted by military training and natural lakeshore erosion. The site was revisited by CEMML archaeologist Edmund Gaines in 2008. He was unable to recover a site datum due to heavy vegetation growth. He reported that the erosional cut bank was stabilized and vegetated, but discovered artifacts in the lake from lake shore erosion.

FAI-00045

[redacted]

Determination of Eligibility: Eligible (07/25/1984)

Site FAI-00045 was originally identified by Dixon et al. (1980) in an eroding cut bank 6 m north and 4 m above the shoreline of Blair Lake south. Dixon et al.'s (1980) investigations produced 161 lithic artifacts from a buried context. Tool forms among the assemblage include three end scrapers, one burin spall, one straight based lanceolate projectile point fragment, two bifacial tool one of which might be a knife or projectile point, and eight flake tools. The site also contained hundreds of burnt and calcined bone fragments. Most of these were too small for species or element identification; however, some are recognizable as large mammal long bone fragments, and several fragments fit together and are caribou metacarpal or metatarsal
One radiocarbon date obtained from stratigraphic charcoal yielded an age of 1820 ± 70 BP

Phase II testing demonstrated that the site extends at least 15 m from the lakeshore; however Dixon et al. (1980: 114) state that this is a tentative conclusion and that further testing is required to firmly establish the site's boundaries. In 2008, this site was relocated and artifacts were found in the lake at the southern edge of the site.

FAI-00046

[redacted]

Determination of Eligibility: Eligible (07/25/1984)

Site FAI-00046 consists of the burnt remains of a 7 m x 6 m log structure, a 1.5 m x 1 m x .75 m pit feature, and associated early 20th debris including bricks, glass fragments, asphalt shingles,

metal light fixtures, windows screen, sections of stove pipe, nails, and other metal debris. The pit feature reportedly contained several metal cans. At the time of site discovery in 1979, remains of the original logs used in the structure were preserved only in the south wall.

The site is thought to represent historic use of the area by "Tex" Blair. Archival research revealed the Mr. Blair applied for a manufacturing claim in the same area the site was found and that he was in the area as early as 1938 (Dixon et al. 1980: 118). Site boundaries overlap with prehistoric site FAI-00045; however, the sites were given separate numbers in order to avoid confusion (Dixon et al. 1980).

This site was relocated in 2008. Metal debris was discovered but the burnt log structure was not visible, likely due to vegetation growth and further breakdown of the organic materials over the last 30 years.

FAI-00048

[redacted]

Determination of Eligibility: Eligible (07/25/1984)

Dixon et al. (1980) identified site FAI-00048 in a cut bank 4 m north and 3 m above the north shoreline of Blair Lake south. The site consisted of six flakes, one of which is retouched, and 14 burnt and calcined bone fragments found in the surface of the exposure. The bone fragments are too small for species identification, but they are recognizable as long bone fragments from medium to large mammals. Fire cracked rocks and cobbles were also noted in the exposure.

This site was relocated in 2008. Artifacts were found in the water adjacent to the site although the bank had stabilized and there was no noticeable erosion.

FAI-00049

[redacted]

Determination of Eligibility: Eligible (07/25/1984)

Dixon et al. (1980) discovered site FAI-00049 in a cut bank 4 m above and 2 m north of the north shoreline of Blair Lake south. The site consists of three flakes found on the surface of the cut bank exposure. No subsurface testing was conducted.

This site was relocated in 2008. Artifacts were found in the water adjacent to the site although the bank had stabilized and there was no noticeable erosion.

FAI-00054

[redacted]

Determination of Eligibility: Eligible (07/25/1984)

Site FAI-00054 consists of the burnt remains of two log structures, a log cache, and associated early 20th Century artifacts including porcelain fragments and tiles, a metal drill press, metal sections of stove pipe, and other metal debris. It is thought that this site represents historic use of the area by "Tex" Blair (Dixon et al. 1980: 142).

This site was relocated in 2008. Relocated artifacts included a drill press, berm features, burnt cache poles, metal debris, milled wood, bricks, and porcelain fragments.

2013 Investigations at Blair Lake South

Investigations at the Blair Lake south north shore during the 2013 and 2014 field season aimed to delineate site boundaries and acquire stratigraphic information that would shed light on where artifacts found underwater near the lake shore were coming from. This effort in both summers included a CEMML crew with assistance from a Texas A&M University field school.

Shovel testing of the northern shore of the south Blair Lake in the 2013 field season yielded artifacts in sealed and dateable context for approximately 300 hundred meters along the lake shore that warranted further archaeological exploration. To test the continuity of cultural deposits across the shore, 1x1 m tests units were excavated along the terrace edge that forms the first rise above the modern lake shore. This terrace runs east-west paralleling the modern lake shore and is heavily vegetated with white spruce, birch, willow, prickly rose, high bush cranberry, timber berry, and fireweed. Additionally, a 1x4 m test trench was established to investigate the geological profile of this lowest terrace from near its highest point to the shore of the lake (Figure 27).

All shovel test units excavated along the northern shore of the south Blair Lake in 2013 shared a generally similar geological profile. A thin o-horizon (<10 cm) capped a thick deposit (~70 cm) of variably-weathered silt units with sporadically present buried palaeosols. Underlying the large

silt units was a series of interbedded sands and silts that are presumed to be Pleistocene in age and extended for more than 2 meters in depth. Glacial outwash gravels are mapped for the area but are deeper than 3 m, and were not reached in test units. This geological characterization was greatly enhanced during the more controlled block-excavation undertaken during the 2014 field season (discussed below).

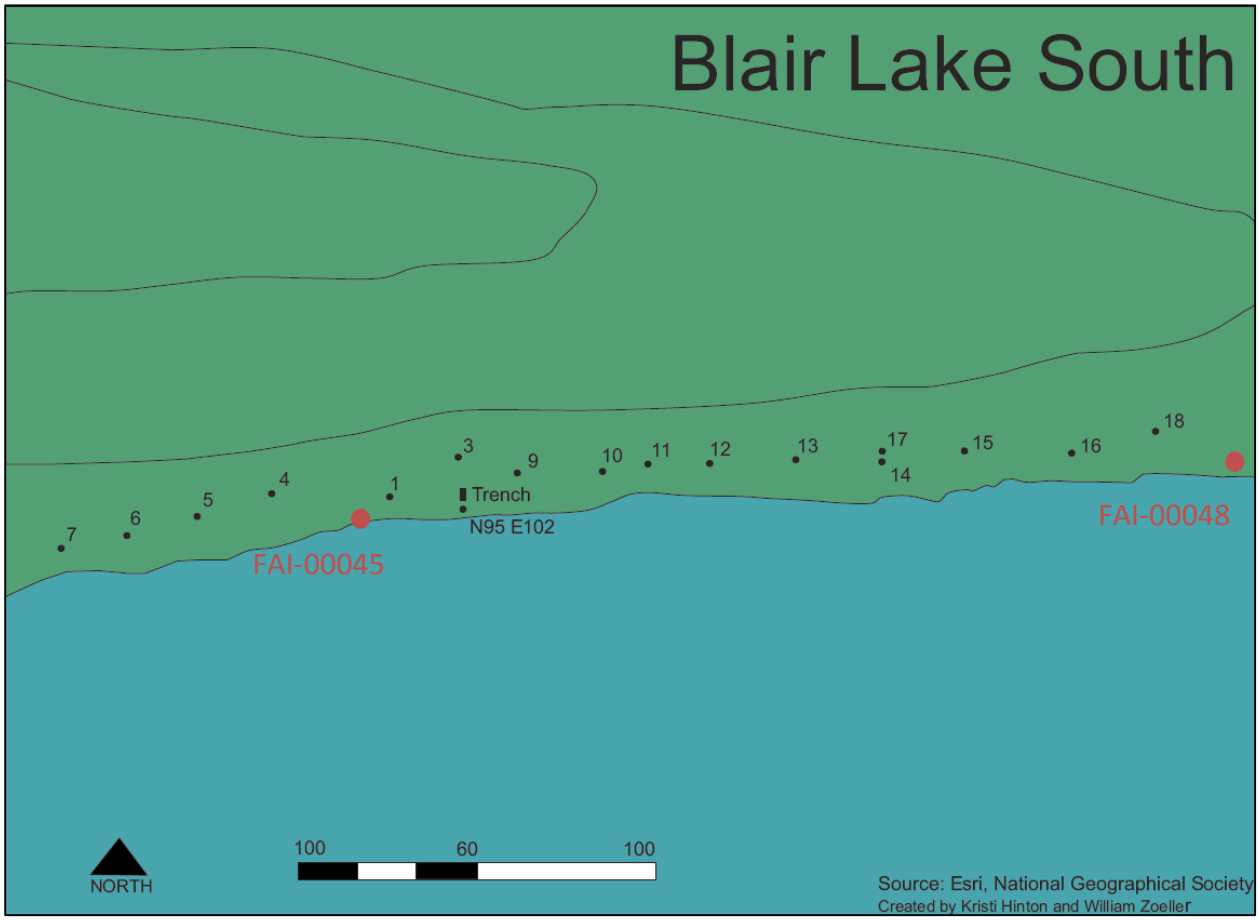

Figure 27. Location of 2013 excavation units and trench along the north shore of Blair Lake south.

Nearly every one of the 20 shovel tests excavated during the 2013 field project was positive for historic or prehistoric artifacts. At least three separate stratigraphic contexts of buried cultural materials were identified during these tests. The lowest component was comprised of a lithic assemblage dominated by core and blade technology located in a palaeosol approximately 35 cm below the modern surface. Charcoal associated with lithic materials yielded radiocarbon dates of 8220±25, 8620±40, and 8720±30 ^{14}C BP. Over one hundred lithic artifacts were recovered from this context along the tested shore line. These artifacts were largely produced on chert and obsidian, with lesser amounts of basalt, rhyolite, quartz, chalcedony, quartzite,

and gabbro present in the assemblage. More than 50 microblades and microblade fragments were recovered in this context in BL-18, as was an associated core tablet fragment. One small bifacial point was recovered from this lower context, in a different test unit than the microblades.

A middle, less well-defined, archaeological component was recovered in the silt packages overlying the buried palaeosol containing the first component. This unit extends up to the modern B-horizon. No samples for radiocarbon dating were collected from this large cultural deposit during the 2013 excavations, however subsequent excavations in 2014 were able to better isolate the geological and chronological context of these assemblages. A total of 330 artifacts were recovered from this context during the 2013 excavations. The assemblage is largely made up of bifacial debitage. Only three tools were found in this component: an end scraper, a microblade, and a biface fragment. Raw material variability in this assemblage is generally similar to that seen in the lower context, with a dominance of chert and chalcedony but also including obsidian, basalt, rhyolite, quartzite, and quartz.

The upper-most cultural component established in 2013 was located directly beneath the modern root mat and consisted of lithic artifacts, a charcoal feature, and several fire-cracked rocks. This feature was radiocarbon dated to 855±15 ^{14}C BP. One hundred eighty lithic artifacts were recovered in the upper-most loess underlying the modern root mat during the 2014 testing. The assemblage contained only two tools, a microblade and a biface fragment. The other artifacts consisted of bifacial debitage produced from chert, chalcedony, obsidian, basalt, quartz, and quartzite.

Artifacts were discovered in test units and picked up under water from the lake shore and catalogued under UA2013-75-0001 through -0464 (Table 3). Artifacts found in the lake are largely primary processing flakes and tools. It is still unclear which of the three components artifacts are eroding from but there is likely a mixture from all cultural levels.

At least one of these prehistoric cultural components was present in nearly every shovel test excavated during the 2013 field season. There was no clear horizontal spatial boundary for any of the archaeological components encountered in the survey area. More fine scale shovel testing (<20 m spacing) might uncover specific areas of activities or site delineations, but is seems more likely that the results of all the testing indicates that the north shore of Blair Lake south represents a set of massive, relatively continuous archaeological components.

Table 3. FAI-00044 (UA2013-75) accession log from the north shore of Blair Lake south.

Accession Number	Provenience	Depth (cm below datum)	Quantity	Description	Material Type
UA2013-75-0001	BLTP1	24.00	1	flake	chalcedony
UA2013-75-0002	BLTP1	24.00	1	flake	chert
UA2013-75-0003	BLTP1	26.00	1	flake	chert
UA2013-75-0004	BLTP1	28.00	1	flake	chalcedony
UA2013-75-0005	BLTP1	2-30	7	flake	chert/chalcedony
UA2013-75-0006	BLTP1	0-20	10	flake	chert
UA2013-75-0007	BLTP1	33	1	flake	chert
UA2013-75-0008	BLTP1	30-40	80	flake	chert/chalcedony
UA2013-75-0009	BLTP1	30-40	24	flake	chert
UA2013-75-0010	BLTP1	46	1	flake	chert
UA2013-75-0011	BLTP1	49	1	flake	chert
UA2013-75-0012	BLTP1	30-40	129	flake	chert/chalcedony
UA2013-75-0013	BLTP1	40-50	25	flake	chert/chalcedony
UA2013-75-0014	BLTP1	50-60	1	flake	chert
UA2013-75-0015	BLTP1	50-60	8	bone	chert
UA2013-75-0016	BLTP1	30-40	1	bone	chert
UA2013-75-0017	BLTP1	30-40	4	flake	chert/chalcedony
UA2013-75-0018	BLTP2	20-30	1	flake	chert
UA2013-75-0019	BLTP2	30-40	2	flake	chert
UA2013-75-0020	BLTP2	33	1	flake	chert
UA2013-75-0021	BLTP2	33	1	flake	chert
UA2013-75-0022	BLTP2	40-50	6	flake	chert
UA2013-75-0023	BLTP2	50-60	4	flake	chert
UA2013-75-0024	BLTP3	30-40	4	flake	chert/obsidian
UA2013-75-0025	BLTP3	40-50	12	flake	chert/obsidian
UA2013-75-0026	BLTP4	20	1	glass shard	
UA2013-75-0027	BLTP4	18	1	glass shard	
UA2013-75-0028	BLTP4	18	1	glass shard	
UA2013-75-0029	BLTP4	18	1	glass shard	
UA2013-75-0030	BLTP4	10-20	6	glass shard	
UA2013-75-0031	BLTP4	20-30	4	glass shard	
UA2013-75-0032	BLTP5	24	1	shell casing	
UA2013-75-0033	BLTP5	34-35	1	bone	
UA2013-75-0034	BLTP5	34-44	11	flake	chert/chalcedony
UA2013-75-0035	BLTP5	44-54	2	flake	chert
UA2013-75-0036	BLTP5		1	flake	chert
UA2013-75-0037	BLTP6	0-20	11	bone	
UA2013-75-0038	BLTP6	0-20	4	flake	chert/basalt

UA2013-75-0039	BLTP6	0-20	6	fcr	
UA2013-75-0040	BLTP6	21	2	fcr	
UA2013-75-0041	BLTP6	20-30	61	flake	chert/quartzite
UA2013-75-0042	BLTP6	20-30	4	fcr	
UA2013-75-0043	BLTP6	20-30	200	bone	
UA2013-75-0044	BLTP6	26	1	bone	
UA2013-75-0045	BLTP6	25	6	bone	
UA2013-75-0046	BLTP6	25	1	charcoal	
UA2013-75-0047	BLTP2	71	1	charcoal	
UA2013-75-0047	BLTP6	24	1	charcoal	
UA2013-75-0048	BLTP6	24	1	charcoal	
UA2013-75-0049	BLTP6	24	1	charcoal	
UA2013-75-0050	BLTP6	24	1	charcoal	
UA2013-75-0051	BLTP6	25	1	charcoal	
UA2013-75-0052	BLTP6	26	1	charcoal	
UA2013-75-0053	BLTP6	24	1	microblade	chert
UA2013-75-0054	BLTP6	0-30	13	flake	quartzite
UA2013-75-0055	BLTP6	30-40	3	bone	
UA2013-75-0056	BLTP6	50-60	1	flake	chert
UA2013-75-0057	BLTP6	120-130	1	bone	
UA2013-75-0058	BLTP6		1	hearth fill	
UA2013-75-0059	BLTP6		1	hearth fill	
UA2013-75-0060	BLTP6		1	hearth fill	
UA2013-75-0061	BLTP7	17-30	1	shell casing	
UA2013-75-0062	BLTP7	40-50	2	flake	chert
UA2013-75-0063	BLTP7	25.00	2	flake	quartzite
UA2013-75-0064	BLTP7	50-60	1	fcr	quartzite
UA2013-75-0065	BLTP7	28.00	1	fcr	chert
UA2013-75-0066	BLTP8	50-30	1	Chindadn pnt	chert
UA2013-75-0067	BLTP8	60-70	1	microblade	chert
UA2013-75-0068	BLTP5	34-44	1	charcoal	
UA2013-75-0069	BLTP9	0-20	1	bone	
UA2013-75-0070	BLTP9	20-30	1	bone	
UA2013-75-0071	BLTP9	24	1	bone	
UA2013-75-0072	BLTP9	24	2	bone	
UA2013-75-0073	BLTP9	24	1	bone	
UA2013-75-0074	BLTP9	26	4	bone	
UA2013-75-0075	BLTP9	29	1	bone	
UA2013-75-0076	BLTP9	30-40	1	bone	
UA2013-75-0077	BLTP9	30-40	1	flake	chert
UA2013-75-0078	BLTP9	50-60	2	flake	chert
UA2013-75-0079	BLTP10	30-40	4	flake	chert
UA2013-75-0080	BLTP10	50-60	5	flake	chert
UA2013-75-0081	BLTP10	70-80	4	flake	chert

UA2013-75-0082	BLTP10	60-70	94	flake	chert
UA2013-75-0083	BLTP11	18-21	1	flake	chert
UA2013-75-0084	BLTP11	0-20	1	shell	
UA2013-75-0085	BLTP11	20-30	2	shell casing	
UA2013-75-0086	BLTP11	20-30	3	bone	
UA2013-75-0087	BLTP11	20-30	6	flake	chert/chalcedony
UA2013-75-0088	BLTP11	33.00	1	flake	chert
UA2013-75-0089	BLTP11	30-40	9	flake	chert/chalcedony
UA2013-75-0090	BLTP11	40-50	10	flake	chert/chalcedony
UA2013-75-0091	BLTP11	30-40	1	flake	chert
UA2013-75-0092	BLTP11	50-60	2	flake	chert
UA2013-75-0093	BLTP13	0-30	1	flake	chalcedony
UA2013-75-0094	BLTP14	80	2	flake	chert
UA2013-75-0095	BLTP15	0-30	1	ground stone	
UA2013-75-0096	BLTP15	30	6	ground stone	
UA2013-75-0097	BLTP15	0-30	12	flake	obsidian/chalcedony
UA2013-75-0098	BLTP15	0-30	1	bone	
UA2013-75-0099	BLTP15	0-30	2	flake	chert
UA2013-75-0100	BLTP15	30-34	1	ground stone	
UA2013-75-0101	BLTP15	30-40	5	ground stone	
UA2013-75-0102	BLTP15	30-40	1	bone	
UA2013-75-0103	BLTP15	30-40	1	flake	chert
UA2013-75-0104	BLTP15	59.00	1	flake	rhyolite
UA2013-75-0105	BLTP15	60.00	1	flake	chert
UA2013-75-0106	BLTP16	0-30	4	fcr	
UA2013-75-0107	BLTP16	0-30	1	flake	chert
UA2013-75-0108	BLTP16	30-40	40	flake	chert
UA2013-75-0109	BLTP16	33.00	1	flake	chert
UA2013-75-0110	BLTP16	34.00	1	flake	chert
UA2013-75-0111	BLTP16	40-50	1	flake	chert
UA2013-75-0112	BLTP16	47.00	8	flake	chert
UA2013-75-0113	BLTP16	47.00	1	charcoal	
UA2013-75-0114	BLTP16	51.00	1	charcoal	
UA2013-75-0115	BLTP16	40-50	12	flake	chert
UA2013-75-0116	BLTP16	50-60	1	flake	chert/obsidian
UA2013-75-0117	BLTP16	60-70	1	flake	chert
UA2013-75-0118	BLTP17	40-50	1	flake	chert
UA2013-75-0119	BLTP18	0-30	1	cobble spall	igneous
UA2013-75-0120	BLTP18	0-30	2	shell	
UA2013-75-0121	BLTP18	0-30	25	flake	chert/chalcedony
UA2013-75-0122	BLTP18	0-30	1	scraper	chert
UA2013-75-0123	BLTP18	30-40	20	flake	chalcedony
UA2013-75-0124	BLTP18	0-40	2	flake	chalcedony
UA2013-75-0125	BLTP18	40-50	1	bone	

UA2013-75-0126	BLTP18	40-50	2	flake	chalcedony
UA2013-75-0127	BLTP18	50-60	23	flake	chalcedony
UA2013-75-0128	BLTP18	50-60	5	microblade	chert/chalcedony
UA2013-75-0129	BLTP18	60.00	1	charcoal	
UA2013-75-0130	BLTP18	62.00	1	charcoal	
UA2013-75-0131	BLTP18	61.00	1	charcoal	
UA2013-75-0132	BLTP18	58.00	1	charcoal	
UA2013-75-0133	BLTP18	60-70	86	flake	chert
UA2013-75-0134	BLTP18	60-70	31	microblade	chalcedony
UA2013-75-0135	BLTP18	60-70	1	core tablet	chalcedony
UA2013-75-0136	BLTP18	20-28	10	flake/bone	chalcedony
UA2013-75-0137	BLTP18	80-90	1	flake	chert
UA2013-75-0138	BLTP18	60-70	12	flake	chert
UA2013-75-0139	BLTP18	70-80	1	flake	chert
UA2013-75-0140	BLTP18	65.00	1	charcoal	
UA2013-75-0141	N95E102	97.34-97.20	1	flake	chert
UA2013-75-0142	N95E102	50-60	1	flake	chert
UA2013-75-0143	N95E102	60-70	1	graver	obsidian
UA2013-75-0144	N95E102	60-70	1	microblade	chalcedony
UA2013-75-0145	N95E102	70-80	2	flake	chert
UA2013-75-0146	N95E102	80-90	1	microblade	chalcedony
UA2013-75-0147	N95E102	80-90	1	flake	chert
UA2013-75-0148	N99E102	99.30	1	flake	chert
UA2013-75-0149	N99E102	99.33-99.28	1	flake	chert
UA2013-75-0150	N99E102	99.33-99.28	1	flake	chert
UA2013-75-0151	N99E102	99.28-99.23	3	flake	chert
UA2013-75-0152	N99E102	98.90	2	flake	chert
UA2013-75-0153	N99E102	99.27	1	flake	chert
UA2013-75-0154	N99E102	99.24cm	1	flake	chert
UA2013-75-0155	N99E102	99.23-99.18cm	1	flake	chert
UA2013-75-0156	N99E102	99.20	1	flake	chert
UA2013-75-0157	N99E102	99.23-99.18	1	flake	chert
UA2013-75-0158	N99E102	99.18-99.13	1	microblade	chert
UA2013-75-0159	N99E102	99.13-99.10	1	flake	chert
UA2013-75-0160	N99E102	99.05-99.00	1	flake	chert
UA2013-75-0161	N100E102	99.51-49	1	flake	chalcedony
UA2013-75-0162	N100E102	99.51 m	1	flake	chert
UA2013-75-0163	N100E102	99.55-99.50	1	flake	chert
UA2013-75-0164	N100E102	99.53-50	2	flake	chert
UA2013-75-0165	N100E102	99.52	1	flake	chert
UA2013-75-0166	N100E102	99.50-99.45	1	flake	chert
UA2013-75-0167	N100E102	99.24	1	flake	chert
UA2013-75-0168	N100E102	99.45-99.40	1	flake	chert
UA2013-75-0169	N100E102	99.49	1	flake	chert

UA2013-75-0170	N100E102	99.25-30	2	flake	chert
UA2013-75-0171	N100E102	99.38	1	flake	chert
UA2013-75-0172	N100E102	99.40-35	1	flake	chert
UA2013-75-0173	N100E102	99.36	1	flake	chert
UA2013-75-0174	N100E102	99.36	1	flake	chert
UA2013-75-0175	N100E102	99.30	1	flake	chert
UA2013-75-0176	N100E102	99.35-99.30	1	flake	chert
UA2013-75-0177	N100E102	99.40-99.35	1	flake	chert
UA2013-75-0178	N100E102	99.20-99.25	1	flake	chert
UA2013-75-0179	N100E102	99.25-20	1	flake	chert
UA2013-75-0180	N100E102	99.20-99.15	1	flake	chert
UA2013-75-0181	N100E102	99.20-15	1	flake	chert
UA2013-75-0182	N100E102	99.05	3	microblade	chert
UA2013-75-0183	N99E102	99.07	1	charcoal	
UA2013-75-0184	N99E102	98.90	1	charcoal	
UA2013-75-0185	N100E102	99.28cm	1	charcoal	
UA2013-75-0186	N101E102	99.13	1	charcoal	
UA2013-75-0187	N100E102	99.04	1	charcoal	
UA2013-75-0188	BLTP16	0-30	69	flake	chert
UA2013-75-0189 through UA2013-75-0200 not used					
UA2013-75-0201		underwater	1	flake	chert
UA2013-75-0202	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0203	[redacted]	underwater	1	biface	rhyolite
UA2013-75-0204	[redacted]	underwater	1	retouched f	obsidian
UA2013-75-0205	[redacted]	underwater	1	retouched f	basalt
UA2013-75-0206	[redacted]	underwater	1	biface	obsidian
UA2013-75-0207	[redacted]	underwater	1	scraper	chert
UA2013-75-0208	[redacted]	underwater	1	cobble spall	basalt
UA2013-75-0209	[redacted]	underwater	1	pp base	rhyolite
UA2013-75-0210	[redacted]	underwater	1	flake	chert
UA2013-75-0211	[redacted]	underwater	1	cobble spall	basalt
UA2013-75-0212	[redacted]	underwater	1	mb core	chert
UA2013-75-0213	[redacted]	underwater	1	retouched f	chalcedony
UA2013-75-0214	[redacted]	underwater	1	retouched f	chert
UA2013-75-0215	[redacted]	underwater	2	pp point tip	rhyolite/chert
UA2013-75-0216	[redacted]	underwater	1	scraper	basalt
UA2013-75-0217	[redacted]	underwater	1	flake	obsidian
UA2013-75-0218	[redacted]	underwater	3	biface	chert/basalt
UA2013-75-0219	[redacted]	underwater	1	biface	chert
UA2013-75-0220	[redacted]	underwater	1	scraper	rhyolite
UA2013-75-0221	[redacted]	underwater	1	scraper	rhyolite
UA2013-75-0222	[redacted]	underwater	2	cobble spall	chert/quartzite
UA2013-75-0223	[redacted]	underwater	2	cobble spall	basalt/rhyolite
UA2013-75-0224	[redacted]	underwater	1	scraper	rhyolite

UA2013-75-0225	[redacted]	underwater	2	flake	chert/basalt
UA2013-75-0226	[redacted]	underwater	2	flake	chert/rhyolite
UA2013-75-0227	[redacted]	underwater	5	flake/bone	basalt/chert/chalcedony
UA2013-75-0228	[redacted]	underwater	4	flake	chert/rhyolite
UA2013-75-0229	[redacted]	underwater	2	biface/scraper	chert
UA2013-75-0230	[redacted]	underwater	1	flake	chert
UA2013-75-0231	[redacted]	underwater	1	flake	basalt
UA2013-75-0232	[redacted]	underwater	1	flake	chert
UA2013-75-0233	[redacted]	underwater	1	flake	basalt
UA2013-75-0234	[redacted]	underwater	1	biface	rhyolite
UA2013-75-0235	[redacted]	underwater	2	flake	chert
UA2013-75-0236	[redacted]	underwater	2	cobble spall	basalt/rhyolite
UA2013-75-0237	[redacted]	underwater	3	flake/bone	chert/bone
UA2013-75-0238	[redacted]	underwater	1	scraper	rhyolite
UA2013-75-0239	[redacted]	underwater	2	flake	chert/rhyolite
UA2013-75-0240	[redacted]	underwater	3	biface	chert/bone
UA2013-75-0241	[redacted]	underwater	1	biface	rhyolite
UA2013-75-0242	[redacted]	underwater	1	mb core	chert
UA2013-75-0243	[redacted]	underwater	2	flake	chalcedony/rhyolite
UA2013-75-0244	[redacted]	underwater	3	biface/scraper	chert/rhyolite/bone
UA2013-75-0245	[redacted]	underwater	2	Retouched f	rhyolite/bone
UA2013-75-0246	[redacted]	underwater	1	flake	chert
UA2013-75-0247	[redacted]	underwater	1	biface	chert
UA2013-75-0248	[redacted]	underwater	1	bone	bone
UA2013-75-0249	[redacted]	underwater	2	flake	rhyolite
UA2013-75-0250	[redacted]	underwater	2	biface	chert
UA2013-75-0251	[redacted]	underwater	2	biface	chert/rhyolite
UA2013-75-0252	[redacted]	underwater	1	cobble spall	basalt
UA2013-75-0253	[redacted]	underwater	1	flake	chalcedony
UA2013-75-0254	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0255	[redacted]	underwater	1	bone	bone
UA2013-75-0256	[redacted]	underwater	4	scraper/flake	basalt/chert/chalcedony
UA2013-75-0257	[redacted]	underwater	1	scraper	rhyolite
UA2013-75-0258	[redacted]	underwater	1	flake	chert
UA2013-75-0259	[redacted]	underwater	1	scraper	chert
UA2013-75-0260	[redacted]	underwater	1	flake	chert
UA2013-75-0261	[redacted]	underwater	1	scraper	obsidian
UA2013-75-0262	[redacted]	underwater	1	biface	chert
UA2013-75-0263	[redacted]	underwater	1	flake	chert
UA2013-75-0264	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0265	[redacted]	underwater	1	retouched f	chert
UA2013-75-0266	[redacted]	underwater	1	flake	chert
UA2013-75-0267	[redacted]	underwater	1	flake	chert
UA2013-75-0268	[redacted]	underwater	1	flake	chert

UA2013-75-0269	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0270	[redacted]	underwater	1	scraper	chert
UA2013-75-0271	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0272	[redacted]	underwater	1	scraper	chert
UA2013-75-0273	[redacted]	underwater	1	flake	basalt
UA2013-75-0274	[redacted]	underwater	1	biface	rhyolite
UA2013-75-0275	[redacted]	underwater	1	core	chert
UA2013-75-0276	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0277	[redacted]	underwater	1	retouched f	chert
UA2013-75-0278	[redacted]	underwater	1	retouched f	chert
UA2013-75-0279	[redacted]	underwater	1	mb core	rhyolite
UA2013-75-0280		underwater	1	flake	rhyolite
UA2013-75-0281		underwater	1	flake	basalt
UA2013-75-0282		underwater	1	flake	rhyolite
UA2013-75-0283		underwater	1	flake	chert
UA2013-75-0284		underwater	2	flake	chert/rhyolite
UA2013-75-0285		underwater	1	flake	rhyolite
UA2013-75-0286		underwater	1	flake	rhyolite
UA2013-75-0287		underwater	1	retouched f	chert
UA2013-75-0288		underwater	1	flake	rhyolite
UA2013-75-0289		underwater	1	flake	rhyolite
UA2013-75-0290		underwater	1	flake	rhyolite
UA2013-75-0291		underwater	1	flake	basalt
UA2013-75-0292		underwater	2	biface	chert
UA2013-75-0293		underwater	2	bone	bone
UA2013-75-0294		underwater	1	retouched f	rhyolite
UA2013-75-0295		underwater	1	biface	rhyolite
UA2013-75-0296		underwater	1	flake	chert
UA2013-75-0297		underwater	1	flake	rhyolite
UA2013-75-0298		underwater	1	flake	rhyolite
UA2013-75-0299		underwater	1	burin	chert
UA2013-75-0300		underwater	1	flake	rhyolite
UA2013-75-0301		underwater	1	mb core	chert
UA2013-75-0302		underwater	1	biface	rhyolite
UA2013-75-0303		underwater	1	flake	rhyolite
UA2013-75-0304		underwater	1	biface	chert
UA2013-75-0305	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0306	[redacted]	underwater	1	scraper	quartzite
UA2013-75-0307	[redacted]	underwater	1	pp	rhyolite
UA2013-75-0308	[redacted]	underwater	1	flake	chert
UA2013-75-0309	[redacted]	underwater	1	flake	chert
UA2013-75-0310	[redacted]	underwater	1	core	chert
UA2013-75-0311	[redacted]	underwater	1	biface	chert
UA2013-75-0312	[redacted]	underwater	1	biface	chert

UA2013-75-0313	[redacted]	underwater	1	retouched f	rhyolite
UA2013-75-0314	[redacted]	underwater	1	biface	chert
UA2013-75-0315	[redacted]	underwater	1	flake	chert
UA2013-75-0316	[redacted]	underwater	1	flake	basalt
UA2013-75-0317	[redacted]	underwater	1	bone	bone
UA2013-75-0318	[redacted]	underwater	3	flake	chert/rhyolite
UA2013-75-0319	[redacted]	underwater	1	biface	rhyolite
UA2013-75-0320	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0321	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0322	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0323	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0324	[redacted]	underwater	4	flake	basalt/rhyolite
UA2013-75-0325	[redacted]	underwater	1	biface	chalcedony
UA2013-75-0326	[redacted]	underwater	1	core	rhyolite
UA2013-75-0327	[redacted]	underwater	1	biface	rhyolite
UA2013-75-0328	[redacted]	underwater	1	flake	chert
UA2013-75-0329	[redacted]	underwater	1	flake	basalt
UA2013-75-0330	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0331	[redacted]	underwater	1	flake	chert
UA2013-75-0332	[redacted]	underwater	1	flake	basalt
UA2013-75-0333	[redacted]	underwater	2	flake	chert
UA2013-75-0334	[redacted]	underwater	1	flake	chert
UA2013-75-0335	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0336	[redacted]	underwater	1	flake	basalt
UA2013-75-0337	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0338	[redacted]	underwater	1	cobble spall	basalt
UA2013-75-0339	[redacted]	underwater	2	flake	chert/rhyolite
UA2013-75-0340	[redacted]	underwater	1	scraper	chert
UA2013-75-0341	[redacted]	underwater	2	scraper	chalcedony/slate
UA2013-75-0342	[redacted]	underwater	3	biface/flake	chert/rhyolite
UA2013-75-0343	[redacted]	underwater	5	flake	chert/rhyolite
UA2013-75-0344	[redacted]	underwater	1	flake	chert
UA2013-75-0345	[redacted]	underwater	2	flake	chert/rhyolite
UA2013-75-0346	[redacted]	underwater	3	flake	chert/obsidian
UA2013-75-0347	[redacted]	underwater	3	biface/flake	chert/rhyolite
UA2013-75-0348	[redacted]	underwater	1	scraper	chert
UA2013-75-0349	[redacted]	underwater	1	pp	chert
UA2013-75-0350	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0351	[redacted]	underwater	1	retouched f	chert
UA2013-75-0352	[redacted]	underwater	1	core	chert
UA2013-75-0353	[redacted]	underwater	4	scraper/flake	chert/rhyolite
UA2013-75-0354	[redacted]	underwater	1	flake	basalt
UA2013-75-0355	[redacted]	underwater	1	flake	chert
UA2013-75-0356	[redacted]	underwater	2	core	chert

UA2013-75-0357	[redacted]	underwater	1	bone	bone
UA2013-75-0358	[redacted]	underwater	1	bone	bone
UA2013-75-0359	[redacted]	underwater	2	biface/bone	chert/bone
UA2013-75-0360	[redacted]	underwater	1	flake	chert
UA2013-75-0361	[redacted]	underwater	1	flake	chert
UA2013-75-0362	[redacted]	underwater	3	flake	chert/quartzite
UA2013-75-0363	[redacted]	underwater	2	flake	chert/rhyolite
UA2013-75-0364	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0365	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0366	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0367	[redacted]	underwater	1	biface	rhyolite
UA2013-75-0368	[redacted]	underwater	1	biface	chert
UA2013-75-0369	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0370	[redacted]	underwater	1	core	chert
UA2013-75-0371	[redacted]	underwater	2	scraper/flake	chert/obsidian
UA2013-75-0372	[redacted]	underwater	1	core	chert
UA2013-75-0373	[redacted]	underwater	2	flake	rhyolite
UA2013-75-0374	[redacted]	underwater	1	flake	chert
UA2013-75-0375	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0376	[redacted]	underwater	3	scraper/flake	obsidian/rhyolite
UA2013-75-0377	[redacted]	underwater	2	flake	rhyolite
UA2013-75-0378	[redacted]	underwater	2	burin/flake	chert
UA2013-75-0379	[redacted]	underwater	6	flake	chert/rhyolite
UA2013-75-0380	[redacted]	underwater	2	biface	chert
UA2013-75-0381	[redacted]	underwater	1	mb core	chert
UA2013-75-0382	[redacted]	underwater	2	flake	chalcedony/chert
UA2013-75-0383	[redacted]	underwater	1	mb core	rhyolite
UA2013-75-0384	[redacted]	underwater	2	flake	chert/rhyolite
UA2013-75-0385	[redacted]	underwater	3	flake	chert/rhyolite
UA2013-75-0386	[redacted]	underwater	1	retouched f	chert
UA2013-75-0387	[redacted]	underwater	2	flake	chert/rhyolite
UA2013-75-0388	[redacted]	underwater	2	flake	chert/rhyolite
UA2013-75-0389	[redacted]	underwater	2	flake	basalt/rhyolite
UA2013-75-0390	[redacted]	underwater	2	flake	rhyolite
UA2013-75-0391	[redacted]	underwater	2	flake	rhyolite
UA2013-75-0392	[redacted]	underwater	1	retouched f	basalt
UA2013-75-0393	[redacted]	underwater	4	biface/flake	basalt/chert/rhyolite
UA2013-75-0394	[redacted]	underwater	4	biface/flake	chert/rhyolite
UA2013-75-0395	[redacted]	underwater	3	flake	chert/rhyolite
UA2013-75-0396	[redacted]	underwater	6	flake	chert
UA2013-75-0397	[redacted]	underwater	3	flake	basalt/chert/quartzite
UA2013-75-0398	[redacted]	underwater	3	flake	chert/rhyolite
UA2013-75-0399	[redacted]	underwater	3	flake	chert
UA2013-75-0400	[redacted]	underwater	1	flake	rhyolite

UA2013-75-0401	[redacted]	underwater	1	pp base	chert
UA2013-75-0402	[redacted]	underwater	3	flake	chert/rhyolite
UA2013-75-0403	[redacted]	underwater	2	flake	chert
UA2013-75-0404	[redacted]	underwater	1	biface	chert
UA2013-75-0405	[redacted]	underwater	1	core tablet	chert
UA2013-75-0406	[redacted]	underwater	3	flake	chert/rhyolite
UA2013-75-0407	[redacted]	underwater	1	biface	basalt
UA2013-75-0408	[redacted]	underwater	2	flake	basalt/chert
UA2013-75-0409	[redacted]	underwater	1	scraper	chert
UA2013-75-0410	[redacted]	underwater	1	biface	rhyolite
UA2013-75-0411	[redacted]	underwater	1	pp base	chert
UA2013-75-0412	[redacted]	underwater	5	flake	chert/rhyolite
UA2013-75-0413	[redacted]	underwater	3	flake	chert/rhyolite
UA2013-75-0414	[redacted]	underwater	7	flake	chert/obsidian/rhyolite
UA2013-75-0415	[redacted]	underwater	1	biface	chert
UA2013-75-0416	[redacted]	underwater	4	flake	chert/rhyolite
UA2013-75-0417	[redacted]	underwater	1	biface	basalt
UA2013-75-0418	[redacted]	underwater	3	flake	chert/obsidian
UA2013-75-0419	[redacted]	underwater	11	flake	chert/obsidian/rhyolite
UA2013-75-0420	[redacted]	underwater	1	biface	chert
UA2013-75-0421	[redacted]	underwater	4	flake	chert/rhyolite
UA2013-75-0422	[redacted]	underwater	1	biface	basalt
UA2013-75-0423	[redacted]	underwater	3	flake	chert/rhyolite
UA2013-75-0424	[redacted]	underwater	1	retouched f	chert
UA2013-75-0425	[redacted]	underwater	1	scraper	chert
UA2013-75-0426	[redacted]	underwater	1	scraper	chert
UA2013-75-0427	[redacted]	underwater	1	pp	chert
UA2013-75-0428	[redacted]	underwater	4	cobble spall	chert/rhyolite
UA2013-75-0429	[redacted]	underwater	3	flake	basalt/chert
UA2013-75-0430	[redacted]	underwater	4	flake	basalt/chert/rhyolite
UA2013-75-0431	[redacted]	underwater	1	scraper	basalt
UA2013-75-0432	[redacted]	underwater	1	pp base	chert
UA2013-75-0433	[redacted]	underwater	2	flake	chert
UA2013-75-0434	[redacted]	underwater	1	scraper	chert
UA2013-75-0435	[redacted]	underwater	2	flake	chert
UA2013-75-0436	[redacted]	underwater	1	flake	rhyolite
UA2013-75-0437	[redacted]	underwater	1	biface	basalt
UA2013-75-0438	[redacted]	underwater	1	biface	chert
UA2013-75-0439	[redacted]	underwater	4	flake	chert/rhyolite
UA2013-75-0440	[redacted]	underwater	8	flake	basalt/chert/obsidian
UA2013-75-0441	[redacted]	underwater	10	flake	basalt/chert/rhyolite
UA2013-75-0442	[redacted]	underwater	3	flake	chert/rhyolite
UA2013-75-0443	[redacted]	underwater	1	scraper	chert
UA2013-75-0444	[redacted]	underwater	1	pp base	chert

UA2013-75-0445	[redacted]	underwater	1	flake	chert
UA2013-75-0446	[redacted]	underwater	6	flake	basalt/chert/rhyolite
UA2013-75-0447	[redacted]	underwater	1	flake	chert
UA2013-75-0448	[redacted]	underwater	1	scraper	basalt
UA2013-75-0449	[redacted]	underwater	1	retouched f	rhyolite
UA2013-75-0450	[redacted]	underwater	1	pp base	chert
UA2013-75-0451	[redacted]	underwater	1	biface	basalt
UA2013-75-0452	[redacted]	underwater	6	flake	chert/rhyolite
UA2013-75-0453	[redacted]	underwater	1	scraper	basalt
UA2013-75-0454	[redacted]	underwater	1	scraper	obsidian
UA2013-75-0455	[redacted]	underwater	3	flake	basalt/chert/rhyolite
UA2013-75-0456	[redacted]	underwater	5	flake	basalt/chert/rhyolite
UA2013-75-0457	[redacted]	underwater	1	scraper	basalt
UA2013-75-0458	[redacted]	underwater	3	flake	basalt/rhyolite
UA2013-75-0459	[redacted]	underwater	6	flake	chert/rhyolite
UA2013-75-0460	[redacted]	underwater	1	scraper	rhyolite
UA2013-75-0461	[redacted]	underwater	5	flake	chert/rhyolite
UA2013-75-0462	[redacted]	underwater	5	flake	chert/quartzite/rhyolite
UA2013-75-0463	[redacted]	underwater	3	flake	chert/rhyolite
UA2013-75-0464	[redacted]	underwater	1	biface	chert

2014 Investigations at Blair Lake South

During the 2014 field season, a CEMML crew and a Texas A&M University field school returned to the north shore of Blair Lake south to further delineate the cultural components within the stratigraphy, attempt to further clarify spatial boundaries across the terrace, and to determine which stratigraphic layers artifacts in the lake were eroding from. The team expanded excavations around a positive shovel test from the 2013 testing that contained particularly expressive stratigraphy and multiple identifiable cultural components. The shoreline survey re-examined the area surveyed during the 2013 season and resulted in the recovery of 55 tools and large debitage pieces including a microblade core, end scrapers, two lanceolate bifacial points, and one small triangular Chindadn-like biface (UA2014-63-0001 through 0671) (Table 4). At no point during the 2013 or 2014 shoreline survey efforts were artifacts documented actively eroding from the shoreline or adjacent terrace.

Table 4. FAI-00044 (UA2014-63) accession log from the north shore of Blair Lake south.

Accession Number	Provenience	Depth (cm below datum)	Description
UA2014-62-0001	N103.877E100		plastic
UA2014-62-0002	N96 E97	99.64-99.60	screen bag- flakes
UA2014-62-0003	N96 E97	99.63-99.60	screen bag- flakes
UA2014-62-0004	N96 E97	99.60-99.59	screen bag- flakes
UA2014-62-0005	N96 E97	99.60-99.59	screen bag- flakes
UA2014-62-0006	N96 E97	99.60-99.55	screen bag- flakes
UA2014-62-0007	N96.59E97.57	99.54	fcr
UA2014-62-0008	N96.63E97.54	99.54	fcr
UA2014-62-0009	N96.67E97.52	99.57	fcr
UA2014-62-0010	N96.59E97.17	99.57	fcr
UA2014-62-0011	N96.77E97.08	99.57	flake
UA2014-62-0012	N96.573E97.437	99.526	flake
UA2014-62-0013	N96.573E97.062	99.41	fcr
UA2014-62-0014	N96 E97	99.45-99.40	screen bag- flakes
UA2014-62-0015	N96.38E97.88	99.395	flake
UA2014-62-0016	N96 E97	99.40-99.35	screen bag- flakes
UA2014-62-0017	N96 E97	99.35-99.30	screen bag- flakes
UA2014-62-0018	N96.02E97.83	99.3	flake
UA2014-62-0019	N96 E97	99.35-99.30	screen bag- flakes
UA2014-62-0020	N96.77E97.44	99.33	flake
UA2014-62-0021	N96.63E97.86	99.29	retouched flake
UA2014-62-0022	N96 E97	99.30-99.25	screen bag- flakes
UA2014-62-0023	N96 E97	99.25-99.20	screen bag- flakes
UA2014-62-0024	N96 E97	99.25.99.20	screen bag- flakes
UA2014-62-0025	N96 E97	99.20-99.15	screen bag- flakes
UA2014-62-0026	N96 E97	99.15-99.10	screen bag- flakes
UA2014-62-0027	N96 E97	99.15-99.10	screen bag- flakes
UA2014-62-0028	N96.77E97.72	99.07	flake
UA2014-62-0029	N96 E97	99.10-99.05	screen bag- flakes
UA2014-62-0030	N96.62E97.87	99	flake
UA2014-62-0031	N96.6E97.24	98.91	flake
UA2014-62-0032	N95.4E97.06	99.49	shell casing
UA2014-62-0033	N95 E97	99.45-99.42	screen bag- flakes
UA2014-62-0034	N95.298E97.775	99.419	fcr
UA2014-62-0035	N95.285E97.406	99.411	fcr
UA2014-62-0036	N95.283E97.179	99.397	shell casing
UA2014-62-0037	N95.361E97.38	99.396	flake
UA2014-62-0038	N95 E97	99.40-99.37	screen bag- flakes

UA2014-62-0039	N95 E97	99.40-99.35	screen bag- flakes
UA2014-62-0040	N95.99E97.455	99.33	flake
UA2014-62-0041	N95E97	99.35-99.25	screen bag- flakes
UA2014-62-0042	N95E97	99.35-99.3	screen bag- flakes
UA2014-62-0043	N95.21E97.295	99.39	flake
UA2014-62-0044	N95.21E97.05	99.33	notched pp
UA2014-62-0045	N95E97	99.35-99.33	screen bag- flakes
UA2014-62-0046	N95E97	99.3-99.28	flake
UA2014-62-0047	N95.81E97.8	99.28	flake
UA2014-62-0048	N95.79E97.03	99.21	flake
UA2014-62-0049	N95.83E97.55	99.24	bone
UA2014-62-0050	N95E97	99.25-99.20	screen bag- flakes
UA2014-62-0051	N95E97	99.25-99.20	screen bag- flakes
UA2014-62-0052	N95E97	99.2-99.15	screen bag- bone
UA2014-62-0053	N95E97	99.20-99.15	screen bag- flakes
UA2014-62-0054	N95.93E97.07		bone
UA2014-62-0055	N95E97	99.20-99.15	screen bag- flakes
UA2014-62-0056	N95E97	99.20-99.15	screen bag- flakes
UA2014-62-0057	N95.77E97.96	99.14	microblade
UA2014-62-0058	N95.17E97.47	99.147	flake
UA2014-62-0059	N93.82E99.873	99.636	microblade
UA2014-62-0060	N93.64E99.94	99.23	flake
UA2014-62-0061	N93.02E99.13	99.17	flake
UA2014-62-0062	N93.47E99.53	99.19	fcr
UA2014-62-0063	N93E99	99.30-99.25	screen bag- flakes
UA2014-62-0064	N93.61E99.193	99.168	flake
UA2014-62-0065	N93.536E99.616	99.188	fcr
UA2014-62-0066	N99.567E99.597	99.191	fcr
UA2014-62-0067	N93.687E99.575	99.196	fcr
UA2014-62-0068	N93.705E99.585		fcr
UA2014-62-0069	N93.559E99.591	99.189	fcr
UA2014-62-0070	N93.566E99.599	99.184	fcr
UA2014-62-0071	N93.72E99.68	99.1	flake
UA2014-62-0072	N93.541E99.606	99.182	fcr
UA2014-62-0073	N93.572E99.585	99.186	fcr
UA2014-62-0074	N93.569E99.607	99.179	fcr
UA2014-62-0075	N93.569E99.607	99.183	fcr
UA2014-62-0076	N93.552E99.586	99.177	fcr
UA2014-62-0077	N93.56E99.58	99.178	fcr
UA2014-62-0078	N93.974E99.59	99.206	bone
UA2014-62-0079	N93.666E99.535	99.179	bone
UA2014-62-0080	N93.192E99.433	99.215	bone
UA2014-62-0081	N93E99	99.25-99.2	screen bag- flakes
UA2014-62-0082	N93.912E99.447	99.208	bone

UA2014-62-0083	N93.916E99.412	99.218	bone
UA2014-62-0084	N93.909E99.43	99.209	bone
UA2014-62-0085	N93.939E99.393	99.213	bone
UA2014-62-0086	N93.911E99.399	99.204	bone
UA2014-62-0087	N93.914E99.451	99.213	bone
UA2014-62-0088	N93.934E99.378	99.202	bone
UA2014-62-0089	N93.9E99.359	99.196	bone
UA2014-62-0090	N93.927E99.349	99.201	bone
UA2014-62-0091	N93.929E99.337	99.209	bone
UA2014-62-0092	N93.935E99.342	99.206	bone
UA2014-62-0093	N93.938E99.334	99.21	bone
UA2014-62-0094	N93.898E99.437	99.203	bone
UA2014-62-0095	N93.894E99.437	99.202	bone
UA2014-62-0096	N93.902E99.425	99.199	bone
UA2014-62-0097	N93.916E99.377	99.202	bone
UA2014-62-0098	N93.911E99.376	99.197	bone
UA2014-62-0099	N93.906E99.363	99.195	bone
UA2014-62-0100	N93.942E99.353	99.206	bone
UA2014-62-0101	N93.933E99.352	99.203	bone
UA2014-62-0102	N93.94E99.346	99.201	bone
UA2014-62-0103	N93.945E99.339	99.202	bone
UA2014-62-0104	N93.943E99.337	99.201	bone
UA2014-62-0105	N93.949E99.351	99.203	bone
UA2014-62-0106	N93.61E99.5	99.235	fcr
UA2014-62-0107	N93.48E99.96	99.248	flake
UA2014-62-0108	N93.915E99.4	99.215	bone
UA2014-62-0109	N93.95E99.36	99.225	bone
UA2014-62-0110	N93.94E99.35	99.224	bone
UA2014-62-0111	N93.8E99.33	99.24	bone
UA2014-62-0112	N93.73E99.42	99.245	bone
UA2014-62-0113	N93.69E99.39	99.23	
UA2014-62-0114	N93.82E99.42	99.23	bone
UA2014-62-0115	N93.98E99.38	99.245	fcr
UA2014-62-0116	N93.67E99.31	99.215	flake
UA2014-62-0117	N93E99	99.25-99.20	flake
UA2014-62-0118	N93.27E99.81	99.2	flake
UA2014-62-0119	N93E99	99.25-99.20	screen bag- flakes
UA2014-62-0120	N93.63E99.73	99.19	flake
UA2014-62-0121	N99.91E99.51	99.16	flake
UA2014-62-0122	N93.65E99.11	99.19	flake
UA2014-62-0123	N93.66E99.15	99.19	flakes
UA2014-62-0124	N93.62E99.06	99.18	flake
UA2014-62-0125	N93.56E99.26	99.18	flake
UA2014-62-0126	N93E99	99.20-99.15	flake

UA2014-62-0127	N93.23E99.23	99.215	flake
UA2014-62-0128	N93.92E99.08	99.235	flake
UA2014-62-0129	N93.58E99.61	99.54	flake
UA2014-62-0130	N93.63E99.59	99.53	flake
UA2014-62-0131	N93.71E99.05	99.24	flake
UA2014-62-0132	N93.27E99.77	99.225	flake
UA2014-62-0133	N93.67E99.84	99.135	scraper
UA2014-62-0134	N93.88E99.51	99.11	flake
UA2014-62-0135	N93.46E99.45	99.145	flake
UA2014-62-0136	N93.57E99.48	99.13	flake
UA2014-62-0137	N93.92E99.06	99.11	flake
UA2014-62-0138	N93.98E99.2	99.11	flake
UA2014-62-0139	N93.87E99.16	99.11	flakes
UA2014-62-0140	N93E99	99.15-99.10	flake
UA2014-62-0141	N93.9E99.32	99.1	flake
UA2014-62-0142	N93.88E99.26	99.1	flake
UA2014-62-0143	N93.9E99.28	99.1	flake
UA2014-62-0144	N93.53E99.25	99.1	flake
UA2014-62-0145	N93.42E99.15	99.12	flake
UA2014-62-0146	N93.33E99.69	99.145	flake
UA2014-62-0147	N93.49E99.72	99.11	flake
UA2014-62-0148	N93.42E99.52	99.11	flake
UA2014-62-0149	N93E99	99.10-99.05	screen bag- flakes
UA2014-62-0150	N93.84E99.73	99.085	flake
UA2014-62-0151	N93.91E99.64	99.08	flake
UA2014-62-0152	N93.72E99.75	99.07	flake
UA2014-62-0153	N93.96E99.89	99.08	flake
UA2014-62-0154	N93.99E99.86	99.05	flake
UA2014-62-0155	N93.72E99.48	99.09	flake
UA2014-62-0156	N93E99	99.10-99.05	screen bag- flakes
UA2014-62-0157	N93E99	99.20-99.15	flake
UA2014-62-0158	N95.61E99.68	99.41	flake
UA2014-62-0159	N95E99	L99.405 H99.45	flake
UA2014-62-0160	N95E99	99.47	shell casing
UA2014-62-0161	N95E99	99.41	shell casing
UA2014-62-0162	N95E99	99.36	plastic
UA2014-62-0163	N95E99	99.36	fcr
UA2014-62-0164	N95E99	99.369	flake
UA2014-62-0165	N95.57E99.82	99.49	shell casing
UA2014-62-0166	N99.45E99.525	99.33	flake
UA2014-62-0167	N95.18E99.73	99.18	biface
UA2014-62-0168	N95.29E99.47	99.29	flake
UA2014-62-0169	N95.49E99.35	99.21	flake
UA2014-62-0170	N95E99	99.20-99.15	flake

UA2014-62-0171	N95.14E99.08	99.19	flake
UA2014-62-0172	N95.48E99.3	99.14	flake
UA2014-62-0173	N95.9E99.94	99.15	microblade
UA2014-62-0174	N95E99	99.12	screen bag- flakes
UA2014-62-0175	N95.86E99.94	99.12	flake
UA2014-62-0176	N95E99	99.1	screen bag- flakes
UA2014-62-0177	N95.3E99.93	99.12	microblade
UA2014-62-0178	N95.19E99.87	99.12	microblade
UA2014-62-0179	N95E99	99.1	flake
UA2014-62-0180	N95E99	99.1	screen bag- flakes
UA2014-62-0181	N95.58E99.13	99.08	burin
UA2014-62-0182	N95.15E99.62	99.06	flake
UA2014-62-0183	N95.45E99.73	99.06	flake
UA2014-62-0184	N95E99	99.10-99.05	flake
UA2014-62-0185	N95.23E99.06	99.07	microblade
UA2014-62-0186	N95E99	99.10-99.05	screen bag- flakes
UA2014-62-0187	N95.98E99.87	99.1	microblade
UA2014-62-0188	N95.12E99.52	99.03	flake
UA2014-62-0189	N95E99	99.05-99.0	screen bag- flakes
UA2014-62-0190	N95.17E99.73	99.03	microblade
UA2014-62-0191	N95.16E99.55	99.04	
UA2014-62-0192	N95.26E99.53	99.02	flake
UA2014-62-0193	N95E99	99	microblade
UA2014-62-0194	N95.06E99.59	99.02	flake
UA2014-62-0195	N95.97E99.71	99.06	flake
UA2014-62-0196	N95.69E99.72	99.06	flake
UA2014-62-0197	N95.12E99.95	99.01	flake
UA2014-62-0198	N95.38E99.8	99	flake
UA2014-62-0199	N95E99	99.05	screen bag- flakes
UA2014-62-0200	N95.24E99.89	99	flake
UA2014-62-0201	N95E99	99.05	screen bag- flakes
UA2014-62-0202	N95E99.52	99.05	flake
UA2014-62-0203	N95E99		screen bag- flakes
UA2014-62-0204	N95.61E99.65	99.03	flake
UA2014-62-0205	N95.62E99.87	99.04	flake
UA2014-62-0206	N95.44E99.76	99.03	flake
UA2014-62-0207	N95.4E99.73	99.02	flake
UA2014-62-0208	N95.14E99.17	99.03	flake
UA2014-62-0209	N95.35E99.32	99.04	
UA2014-62-0210	N95E99	99.05-99.00	screen bag- flakes
UA2014-62-0211	N95E99	99.05-99.00	screen bag- flakes
UA2014-62-0212	N95E99	99.05-99.00	screen bag- flakes
UA2014-62-0213	N95E99.38	99.03	microblade core
UA2014-62-0214	N95.72E99.45	99.02	core tablet

UA2014-62-0215	N95.85E99.11	99.01	microblade
UA2014-62-0216	N95E99	99.05-99.0	screen bag- flakes
UA2014-62-0217	N95.9E99.2	99.01	rock
UA2014-62-0218	N95.8E99.38	99.02	flake
UA2014-62-0219	N95.94E99.43	99.01	flake
UA2014-62-0220	N95.8E99.38	99.02	flake
UA2014-62-0221	N95E99	99.05-99.00	screen bag- flakes
UA2014-62-0222	N97E99	99.70-99.65	screen bag- fcr
UA2014-62-0223	N97.587E99.358	99.599	flake
UA2014-62-0224	N97.883E99.122	99.621	rock
UA2014-62-0225	N97.601E99.067	99.593	flake
UA2014-62-0226	N97.286E99.099	99.58	flake
UA2014-62-0227	N97.547E99.516	99.595	flake
UA2014-62-0228	N97.975E99.482	99.597	flake
UA2014-62-0229	N97.567E99.529	99.59	flake
UA2014-62-0230	N97.719E99.95	99.597	flake
UA2014-62-0231	N97.338E99.313	99.571	flake
UA2014-62-0232	N97.273E99.126	99.544	flake
UA2014-62-0233	N97.271E99.608	99.554	flake
UA2014-62-0234	N97.564E99.315	99.562	flake
UA2014-62-0235	N97.742E99.374	99.567	flake
UA2014-62-0236	N97.811E99.413	99.569	flake
UA2014-62-0237	N97.961E99.32	99.582	flake
UA2014-62-0238	N97.726E99.052	99.563	flake
UA2014-62-0239	N97.742E99.39	99.55	flake
UA2014-62-0240	N97.812E99.398	99.55	flake
UA2014-62-0241	N97.819E99.409	99.547	flake
UA2014-62-0242	N97E99	99.60-99.55	screen bag- flakes
UA2014-62-0243	N97.621E99.739	99.56	flake
UA2014-62-0244	N97.732E99.564	99.573	flake
UA2014-62-0245	N97.92E99.82	99.6	flake
UA2014-62-0246	N97.79E99.53	99.66	flake
UA2014-62-0247	N97E99	99.70-99.65	screen bag- flakes
UA2014-62-0248	N97.27E99.07	99.55	flake
UA2014-62-0249	N97.33E99.07	99.55	flake
UA2014-62-0250	N97.36E99.12	99.55	flake
UA2014-62-0251	N97.44E99.06	99.54	flake
UA2014-62-0252	N97.18E99.28	99.53	flake
UA2014-62-0253	N97.52E99.36	99.53	flake
UA2014-62-0254	N97.5E99.36	99.53	flake
UA2014-62-0255	N97E99	99.55-99.50	screen bag- flakes
UA2014-62-0256	N97.21E99.17	99.52	flake
UA2014-62-0257	N97.3E99.08	99.51	flake
UA2014-62-0258	N97.29E99.32	99.5	flake

UA2014-62-0259	N97.15E99.18	99.51	bone
UA2014-62-0260	N97.46E99.08	99.5	flake
UA2014-62-0261	N97.13E99.49	99.52	flake
UA2014-62-0262	N97.36E99.73	99.55	flake
UA2014-62-0263	N97.26E99.66	99.54	flake
UA2014-62-0264	N97.41E99.23	99.54	flake
UA2014-62-0265	N97.36E99.7	99.54	flake
UA2014-62-0266	N97.37E99.72	99.54	flake
UA2014-62-0267	N97.38E99.63	99.53	flake
UA2014-62-0268	N97.33E99.64	99.53	flake
UA2014-62-0269	N97.18E99.95	99.52	flake
UA2014-62-0270	N97E99	99.55-99.50	screen bag- flakes
UA2014-62-0271	N97.15E99.51	99.52	flake
UA2014-62-0272	N97.19E99.59	99.52	flake
UA2014-62-0273	N97.44E99.75	99.51	flake
UA2014-62-0274	N97.42E99.5	99.5	flake
UA2014-62-0275	N97.31E99.82	99.52	flake
UA2014-62-0276	N97.77E99.4	99.55	flake
UA2014-62-0277	N97.59E99.02	99.55	flake
UA2014-62-0278	N97.99E99.44	99.54	flake
UA2014-62-0279	N97.76E99.36	99.53	flake
UA2014-62-0280	N97.6E99.05	99.54	flake
UA2014-62-0281	N97.55E99.05	99.54	flake
UA2014-62-0282	N97.55E99.46	99.52	flake
UA2014-62-0283	N97.79E99.04	99.52	flake
UA2014-62-0284	N97.8E99.1	99.52	flake
UA2014-62-0285	N97.98E99.38	99.52	flake
UA2014-62-0286	N97.79E99.46	99.51	flake
UA2014-62-0287	N97.57E99.04	99.51	flake
UA2014-62-0288	N97E99	99.55-99.50	screen bag- flakes
UA2014-62-0289	N97.56E99.4	99.51	flake
UA2014-62-0290	N97.8E99.02	99.5	flake
UA2014-62-0291	N97.63E99.63	99.55	flake
UA2014-62-0292	N97E99	99.55-99.50	screen bag- flakes
UA2014-62-0293	N97.43E99.55	99.48	flake
UA2014-62-0294	N97.13E99.13	99.48	flake
UA2014-62-0295	N97.44E99.04	99.48	flake
UA2014-62-0296	N97E99	99.50-99.45	screen bag- flakes
UA2014-62-0297	N97.18E99.22	99.45	flake
UA2014-62-0298	N97.18E99.23	99.45	flake
UA2014-62-0299	N97E99	99.50-99.45	screen bag- flakes
UA2014-62-0300	N97E99	99.50-99.45	screen bag- flakes
UA2014-62-0301	N97.52E99.61	99.45	flake
UA2014-62-0302	N97.33E99.78	99.41	charcoal

UA2014-62-0303	N97.33E99.98	99.42	charcoal
UA2014-62-0304	N97E99	99.45-99.40	screen bag- flakes
UA2014-62-0305	N97E99	99.45-99.40	screen bag- flakes
UA2014-62-0306	N97.67E99.85	99.43	biface
UA2014-62-0307	N97E99	99.45-99.40	screen bag- flakes
UA2014-62-0308	N97.33E99.86	99.35	charcoal
UA2014-62-0309	N97.2E99.76	99.32	charcoal
UA2014-62-0310	N97.77E99.85	99.33	flake
UA2014-62-0311	N97.13E99.97	99.22	charcoal
UA2014-62-0312	N97.465E99.555	99.16	microblade
UA2014-62-0313	N97E99	99.22-99.20	charcoal from feature
UA2014-62-0314	N97.18E99.98	99.22	charcoal
UA2014-62-0315	N97E99	99.20-99.15	screen bag- microblade
UA2014-62-0316	N97E99	99.25-99.20	screen bag- flakes
UA2014-62-0317	N97E99	99.15-99.10	flake
UA2014-62-0318	N97E99	99.20-99.15	screen bag- flakes
UA2014-62-0319	N97.55E99.65	99.17	microblade
UA2014-62-0320	N97E99	99.20-99.15	screen bag- flakes
UA2014-62-0321	N97.59E99.85	99.1	charcoal
UA2014-62-0322	N97E99	99.10-99.05	screen bag- flakes
UA2014-62-0323	N97.83E99.78	99.08	flake
UA2014-62-0324	N97.68E99.3	99.05	flake
UA2014-62-0325	N97.54E99.43	99.06	flake
UA2014-62-0326	N97.96E99.12	99.02	flake
UA2014-62-0327	N97.51E99.09	99.02	flake
UA2014-62-0328	N97.45E99.2	99.04	flake
UA2014-62-0329	N97.36E99.92	99.06	flake
UA2014-62-0330	N97E99	99.05-99.00	screen bag- flakes
UA2014-62-0331	N97E99	99.00-98.95	screen bag- flakes
UA2014-62-0332	N93E100	99.26-99.25	screen bag- flakes
UA2014-62-0333	N93E100	99.30-99.25	screen bag- flakes
UA2014-62-0334	N93.04E100.33	99.18	plastic
UA2014-62-0335	N93.698E100.067	99.23	fcr
UA2014-62-0336	N93.52E100.18	99.24	scraper
UA2014-62-0337	N93.144E100.201	99.203	fcr
UA2014-62-0338	N93.144E100.235	99.203	fcr
UA2014-62-0339	N93.12E100.207	99.191	fcr
UA2014-62-0340	N93.146E100.209	99.186	fcr
UA2014-62-0341	N93.137E100.227	99.186	fcr
UA2014-62-0342	N93.379E100.334	99.152	flake
UA2014-62-0343	N93E100	99.20-99.15	screen bag- flakes
UA2014-62-0344	N93.671E100.954	99.167	microblade
UA2014-62-0345	N93.115E100.785	99.208	fcr
UA2014-62-0346	N93.919E100.097	99.12	flake

UA2014-62-0347	N93E100	99.15-99.10	screen bag- burin spall
UA2014-62-0348	N93.143E100.019	99.14	microblade
UA2014-62-0349	N93.104E100.086	99.13	microblade
UA2014-62-0350	N93E100	99.15-99.10	screen bag- flakes
UA2014-62-0351	N93E100	99.15-99.10	screen bag- flakes
UA2014-62-0352	N95.76E100.1	99.42	shell casing
UA2014-62-0353	N95E100	99.36-99.35	screen bag- flakes
UA2014-62-0354	N95.4E100.78	99.37	bone
UA2014-62-0355	N95.092E100.11	99.344	bone
UA2014-62-0356	N95E100.041	99.326	bone
UA2014-62-0357	N95.84E100.69	99.34	flake
UA2014-62-0358	N95.94E100.26	99.31	flake
UA2014-62-0359	N95.37E100.75	99.28	flake
UA2014-62-0360	N95.12E100.7	99.25	flake
UA2014-62-0361	N95.19E100.2	99.24	flake
UA2014-62-0362	N95.87E100.95	99.24	flake
UA2014-62-0363	N95.41E100.2	99.25	flake
UA2014-62-0364	N95.16E100.11	99.18	flake
UA2014-62-0365	N95.26E100.27	99.17	flake
UA2014-62-0366	N95.27E100.31	99.19	charcoal
UA2014-62-0367	N95.23E100.14	99.17	flake
UA2014-62-0368	N96.16E100.065	99.17	flake
UA2014-62-0369	N95.28E100.39	99.17	flake
UA2014-62-0370	N95.01E100.16	99.15	flake
UA2014-62-0371	N95E100	99.20-99.15	screen bag- flakes
UA2014-62-0372	N95E100	99.20-99.15	screen bag- microblade
UA2014-62-0373	N95.74E100.8	99.15	charcoal
UA2014-62-0374	N95.14E100.46	99.12	flake
UA2014-62-0375	N95.36E100.21	99.1	flake
UA2014-62-0376	N95E100	99.15-99.10	screen bag- flakes
UA2014-62-0377	N95.24E100.42	99.09	microblade
UA2014-62-0378	N95.05E100.12	99.11	flake
UA2014-62-0379	N95.85E100.42	99.14	flake
UA2014-62-0380	N95.86E100.17	99.11	flake
UA2014-62-0381	N95.97E100.14	99.12	microblade
UA2014-62-0382	N95E100	99.15-99.10	screen bag- flakes
UA2014-62-0383	N95.93E100.04	99.11	microblade
UA2014-62-0384	N95.62E100.16	99.11	flake
UA2014-62-0385	N95.57E100.15	99.09	flake
UA2014-62-0386	N95.35E100.35	99.11	microblade
UA2014-62-0387	N95E100	99.15-99.10	screen bag- flakes
UA2014-62-0388	N95.81E100.95	99.09	microblade
UA2014-62-0389	N95E100	99.10-99.05	screen bag- flakes
UA2014-62-0390	N95.66E100.16	99.08	flake

UA2014-62-0391	N95.62E100.14	99.1	bone
UA2014-62-0392	N95.4E100.96	99.09	flake
UA2014-62-0393	N95.86E100.29	99.07	microblade
UA2014-62-0394	N95.65E100.25	99.07	
UA2014-62-0395	N95.61E100.15	99.06	flake
UA2014-62-0396	N95.61E100.15	99.06	flake
UA2014-62-0397	N95.69E100.36	99.06	microblade
UA2014-62-0398	N95.9E100.2	99.05	flake
UA2014-62-0399	N95.73E100.07	99.06	flake
UA2014-62-0400	N95.66E100.21	99.05	flake
UA2014-62-0401	N95.87E100.25	99.05	flake
UA2014-62-0402	N95.79E100.19	99.05	flake
UA2014-62-0403	N95.1E100.38	99.06	flake
UA2014-62-0404	N95E100	99.10-99.05	screen bag- flakes
UA2014-62-0405	N95.18E100.24	99.05	flake
UA2014-62-0406	N95.15E100.66	99.09	microblade
UA2014-62-0407	N95.3E100.52	99.05	microblade
UA2014-62-0408	N95.39E100.6	99.04	microblade
UA2014-62-0409	N95E100	99.05-99.00	screen bag- flakes
UA2014-62-0410	N95.3E100.3	99.02	flake
UA2014-62-0411	N95.27E100.45	99	rock
UA2014-62-0412	N95.2E100.16	98.99	flake
UA2014-62-0413	N95.34E100.48	99	microblade
UA2014-62-0414	N95.16E100.46	98.99	flake
UA2014-62-0415	N95E100.5	98.98	flake
UA2014-62-0416	N95.13E100.52	98.98	microblade
UA2014-62-0417	N95E100	99.05-98.98	screen bag- flakes
UA2014-62-0418	N95.92E100.82	99	flake
UA2014-62-0419	N95.91E100.83	99	flake
UA2014-62-0420	N95.89E100.88	99	flake
UA2014-62-0421	N95.8E100.8	98.99	flake
UA2014-62-0422	N95.94E100.54	99.03	flake
UA2014-62-0423	N95E100	99.05-99.00	screen bag- flakes
UA2014-62-0424	N95.95E100.88	99	flake
UA2014-62-0425	N95.86E100.71	99.01	flake
UA2014-62-0426	N95.91E100.57	99.02	flake
UA2014-62-0427	N95.8E100.51	99.02	flake
UA2014-62-0428	N95.84E100.11	99.05	flake
UA2014-62-0429	N95.74E100.21	99.05	flake
UA2014-62-0430	N95.22E100.26	99.04	flake
UA2014-62-0431	N95.78E100.18	99.05	flake
UA2014-62-0432	N95E100	99.05-99.00	screen bag- flakes
UA2014-62-0433	N95.95E100.08	99.05	flake
UA2014-62-0434	N95.82E100.09	99.04	flake

UA2014-62-0435	N95.76E100.23	99.05	flake
UA2014-62-0436	N95.52E100.25	99.03	flake
UA2014-62-0437	N95.95E100.1	99.05	flake
UA2014-62-0438	N95.94E100.07	99.04	flake
UA2014-62-0439	N95E100	99.00-98.95	microblade
UA2014-62-0440	N95.1E100.46	98.89	microblade
UA2014-62-0441	N95.71E100.28	98.97	flake
UA2014-62-0442	N95.59E100.08	98.92	flake
UA2014-62-0443	N95E100.54	99.38	flake
UA2014-62-0444	N95E100.5	99	flake
UA2014-62-0445	N96.23E100.91	99.47	shell casing
UA2014-62-0446	N96.03E100.91	99.44	shell casing
UA2014-62-0447	N96.838E100.9	99.482	flake
UA2014-62-0448	N96E100	99.46	flake
UA2014-62-0449	N96.16E100.53	99.44	scraper
UA2014-62-0450	N96E100	99.45	flake
UA2014-62-0451	N96.68E100.91	99.43	cobble spall
UA2014-62-0452	N96E100	99.40-99.35	screen bag- flakes
UA2014-62-0453	N96.69E100.41	99.4	flake
UA2014-62-0454	N96E100	99.40-99.35	screen bag- flakes
UA2014-62-0455	N97E100.31	99.39	flake
UA2014-62-0456	N96.99E100.44	99.39	flake
UA2014-62-0457	N96.68E100.07	99.37	charcoal
UA2014-62-0458	N96.74E100.35	99.36	flake
UA2014-62-0459	N96.67E100.28	99.36	charcoal
UA2014-62-0460	N96E100	99.40-99.35	screen bag- flakes
UA2014-62-0461	N96E100	99.35-99.30	screen bag- flakes
UA2014-62-0462	N96.88E100.53	99.31	flake
UA2014-62-0463	N96.23E100.76	99.325	flake
UA2014-62-0464	N96E100	99.10-99.05	screen bag- flakes
UA2014-62-0465	N96E100	99.15-99.10	screen bag- flakes
UA2014-62-0466	N96.23E100.33	99.05	flake
UA2014-62-0467	N96.05E100.15	99.055	flake
UA2014-62-0468	N96E100.2	99.05	flake
UA2014-62-0469	N96.345E100.36	99.05	flake
UA2014-62-0470	N96E100	99.10-99.05	screen bag- flakes
UA2014-62-0471	N96.22E100.68	99.05	flake
UA2014-62-0472	N96E100	99.15-99.10	screen bag- flakes
UA2014-62-0473	N95E102	99.45-99.40	screen bag- flakes
UA2014-62-0474	N95.67E102.35	99.35	flake
UA2014-62-0475	N95.42E102.25	99.35	fcr
UA2014-62-0476	N95E102	99.31	flake
UA2014-62-0477	N95E102	99.31	flake
UA2014-62-0478	N95E102	99.26	bone

UA2014-62-0479	N95E102	99.26	screen bag- bone
UA2014-62-0480	N95.03E102.26	99.34	shell casing
UA2014-62-0481	N95.075E102.52	99.35	fcr
UA2014-62-0482	N95.5-96E102.5-103	99.22-99.17	screen bag- bone
UA2014-62-0483	N95.5-96E102-102.50	99.22-99.17	screen bag- flakes
UA2014-62-0484	N95E102	99.22-99.17	screen bag- fcr
UA2014-62-0485	N95E102	99.22-99.17	microblade
UA2014-62-0486	N95E102	99.17-99.15	screen bag- flakes
UA2014-62-0487	N95E102	99.17-99	screen bag- flakes
UA2014-62-0489	N95.93E102.85	99.12	charcoal
UA2014-62-0490	N95.96E102.05	99.445	microblade
UA2014-62-0491	N95E102	99.17-99.12	flake
UA2014-62-0492	N95E102	99.12-99.07	screen bag- flakes
UA2014-62-0493	N95.6E102.1	99.12	charcoal
UA2014-62-0494	N95.4E102.16	99.11 cmbd	flake
UA2014-62-0495	N95E102	99.12-99.07	microblades
UA2014-62-0496	N95.34E102.29	99.09 cmbd	flake
UA2014-62-0497	N95E102	99.12-99.07	flake
UA2014-62-0498	N95.96E102.96	99.06	flake
UA2014-62-0499	N95E102	99.07-99.02	flake
UA2014-62-0500	N95.3E102.42	99.05	flake
UA2014-62-0501	N96.129E102.444	99.461	flake
UA2014-62-0502	N96.67E102.097	99.401	fcr
UA2014-62-0503	N96.442E102.127	99.437	cobble spall
UA2014-62-0504	N96.82E102.264	99.451	flake
UA2014-62-0505	N96E102	99.5-99.45	screen bag- flakes
UA2014-62-0506	N96.18E102.82	99.37	fcr
UA2014-62-0507	N96E102	99.45-99.4	
UA2014-62-0508	N96E102	99.45-40	screen bag- flakes
UA2014-62-0509	N96.607E102.206	99.429	bone
UA2014-62-0510	N96.719E102.046	99.413	core tablet
UA2014-62-0511	N96.476E102.093	99.379	flake
UA2014-62-0512	N96E102	99.45-99.4	bone
UA2014-62-0513	N96E102	99.4-99.35	bone
UA2014-62-0514	N96.63E102.7	99.36	bone
UA2014-62-0515	N96.53E102.38	99.35	scraper
UA2014-62-0516	N96.16E102.04	99.37	scraper
UA2014-62-0517	N96.07E102.12	99.38	bone
UA2014-62-0518	N96E102	99.37	screen bag- flakes
UA2014-62-0519	N96.03E102.14	99.36	bone
UA2014-62-0520	N96E102	99.40-99.35	screen bag- flakes
UA2014-62-0521	N96.14E102.34	99.35	bone

UA2014-62-0522	N96.48E102.76	99.34	bone
UA2014-62-0523	N96.18E102.42	99.34	flake
UA2014-62-0524	N96E102	99.35-99.30	screen bag- flakes
UA2014-62-0525	N96.98E102.62	99.36	flake
UA2014-62-0526	N96.63E102.73	99.35	bone
UA2014-62-0527	N96.68E102.7	99.3	bone
UA2014-62-0528	N96E102	99.2-99.15	screen bag- flakes
UA2014-62-0529	N96.78E102.63	99.23	flake
UA2014-62-0530	N96E102	99.25-99.2	screen bag- flakes
UA2014-62-0531	N96.38E102.65	99.14	flake
UA2014-62-0532	N96.26E102.53	99.12	flake
UA2014-62-0533	N96E102	99.15-99.10	screen bag- flakes
UA2014-62-0534	N96.46E102.96	99.12	flake
UA2014-62-0535	N96E102	99.15-99.10	screen bag- flakes
UA2014-62-0536	N96E102	99.15-99.1	screen bag- flakes
UA2014-62-0537	N96E102	99.10-99.05	screen bag- flakes
UA2014-62-0538	N96E102	99.10-99.05	screen bag- flakes
UA2014-62-0539	N96.98E102.64	99.13	microblade
UA2014-62-0540	N96E102	99.10-99.05	screen bag- flakes
UA2014-62-0541	N96E102	99.10-99.05	screen bag- flakes
UA2014-62-0542	N96E102	99.10-99.05	screen bag- flakes
UA2014-62-0543	N96E102	99.10-99.05	flake
UA2014-62-0544	N96.87E102.12	99.05	flake
UA2014-62-0545	N96.33E102.09	98.97	charcoal
UA2014-62-0546	N96E102	99-98.95	screen bag- flakes
UA2014-62-0547	N96.28E102.89	99.17	microblade
UA2014-62-0548	N96.24E100.97	99.23	microblade
UA2014-62-0549	N96E100	99.3-99.25	screen bag- flakes
UA2014-62-0550	N96E100	99.20-99.15	screen bag- flakes
UA2014-62-0551	N96E100	99.2-99.15	screen bag- flakes
UA2014-62-0552	N96.36E100.23	99.155	flake
UA2014-62-0553	N96E100	99.2-99.15	screen bag- flakes
UA2014-62-0554	N96.44E100.12	99.15	microblade
UA2014-62-0555	N96E100	99.2-99.15	screen bag- flakes
UA2014-62-0556	N96E100	99.15-99.10	screen bag- flakes
UA2014-62-0557	N96.45E100.46	99.12	flake
UA2014-62-0558	N96.49E100.49	99.12	microblade
UA2014-62-0559	N96.48E100.13	99.12	flake
UA2014-62-0560	N96.76E100.73	99.13	
UA2014-62-0561	N96.54E100.1	99.15	core tablet
UA2014-62-0562	N E	99.15-99.10	screen bag- flakes
UA2014-62-0563	N96.75E100.13	99.14	flake
UA2014-62-0564	N96.8E100.16	99.13	flake
UA2014-62-0565	N96.57E100.24	99.12	charcoal

UA2014-62-0566	N96.69E100.21	99.12	flake
UA2014-62-0567	N96E100	99.15-99.1	screen bag- flakes
UA2014-62-0568	N96.53E100.01	99.12	microblade
UA2014-62-0569	N96E100	99.15-99.1	screen bag- flakes
UA2014-62-0570	N96.615E100.35	99.1	flake
UA2014-62-0571	N96.81E100.58	99.14	flake
UA2014-62-0572	N96.93E100.87	99.12	flake
UA2014-62-0573	N96.61E100.22	99.12	flake
UA2014-62-0574	N96.96E100.83	99.12	microblade
UA2014-62-0575	N96.91E100.84	99.11	flake
UA2014-62-0576	N96.95E100.78	99.1	flake
UA2014-62-0577	N96E100	99.15-99.10	screen bag- flakes
UA2014-62-0578	N96E100	99.095	flake
UA2014-62-0579	N96.31E100.29	99.12	flake
UA2014-62-0580	N96.03E100.24	99.09	flake
UA2014-62-0581	N96E100	99.10-99.0	screen bag- flakes
UA2014-62-0582	N96.35E100.25	99.08	flake
UA2014-62-0583	N96.23E100.26	99.08	flake
UA2014-62-0584	N96.09E100.33	99.07	core tablet
UA2014-62-0585	N96E100.39	99.08	microblade core
UA2014-62-0586	N95.38E99.98	99.04	microblade
UA2014-62-0586	N96E100	99.3-99.25	screen bag- flakes
UA2014-62-0587	N96.075E99.253	99.253	flake
UA2014-62-0588	N96E99	99.20-99.15	screen bag- microblade
UA2014-62-0589	N96.115E99.19	99.058	microblade
UA2014-62-0590	N96.116E99.666	98.978	biface
UA2014-62-0591	N96.096E99.694	underwater	charcoal
UA2014-62-0592	N96E99	underwater	screen bag- flakes
UA2014-62-0593	N96.16E100.98	99.11	flake
UA2014-62-0594	N93.84E99.77	99.23	bone
UA2014-62-0595	N96.02E99.95	99.13	microblade
UA2014-62-0596	[redacted]	underwater	analysis pending
UA2014-62-0597	[redacted]	underwater	analysis pending
UA2014-62-0598	[redacted]	underwater	analysis pending
UA2014-62-0599	[redacted]	underwater	analysis pending
UA2014-62-0600	[redacted]	underwater	analysis pending
UA2014-62-0601	[redacted]	underwater	analysis pending
UA2014-62-0602	[redacted]	underwater	analysis pending
UA2014-62-0603	[redacted]	underwater	analysis pending
UA2014-62-0604	[redacted]	underwater	analysis pending
UA2014-62-0605	[redacted]	underwater	analysis pending
UA2014-62-0606	[redacted]	underwater	analysis pending
UA2014-62-0607	[redacted]	underwater	analysis pending
UA2014-62-0608	[redacted]	underwater	analysis pending

UA2014-62-0609	[redacted]	underwater	analysis pending
UA2014-62-0610	[redacted]	underwater	analysis pending
UA2014-62-0611	[redacted]	underwater	analysis pending
UA2014-62-0612	[redacted]	underwater	analysis pending
UA2014-62-0613	[redacted]	underwater	analysis pending
UA2014-62-0614	[redacted]	underwater	analysis pending
UA2014-62-0615	[redacted]	underwater	analysis pending
UA2014-62-0616	[redacted]	underwater	analysis pending
UA2014-62-0617	[redacted]	underwater	analysis pending
UA2014-62-0618	[redacted]	underwater	analysis pending
UA2014-62-0619	[redacted]	underwater	analysis pending
UA2014-62-0620	[redacted]	underwater	analysis pending
UA2014-62-0621	[redacted]	underwater	analysis pending
UA2014-62-0622	[redacted]	underwater	analysis pending
UA2014-62-0623	[redacted]	underwater	analysis pending
UA2014-62-0624	[redacted]	underwater	analysis pending
UA2014-62-0625	[redacted]	underwater	analysis pending
UA2014-62-0626	[redacted]	underwater	analysis pending
UA2014-62-0627	[redacted]	underwater	analysis pending
UA2014-62-0628	[redacted]	underwater	analysis pending
UA2014-62-0629	[redacted]	underwater	analysis pending
UA2014-62-0630	[redacted]	underwater	analysis pending
UA2014-62-0631	[redacted]	underwater	analysis pending
UA2014-62-0632	[redacted]	underwater	analysis pending
UA2014-62-0633	[redacted]	underwater	analysis pending
UA2014-62-0634	[redacted]	underwater	analysis pending
UA2014-62-0635	[redacted]	underwater	analysis pending
UA2014-62-0636	[redacted]	underwater	analysis pending
UA2014-62-0637	[redacted]	underwater	analysis pending
UA2014-62-0638	[redacted]	underwater	analysis pending
UA2014-62-0639	[redacted]	underwater	analysis pending
UA2014-62-0640	[redacted]	underwater	analysis pending
UA2014-62-0641	[redacted]	underwater	analysis pending
UA2014-62-0642	[redacted]	underwater	analysis pending
UA2014-62-0643	[redacted]	underwater	analysis pending
UA2014-62-0644	[redacted]	underwater	analysis pending
UA2014-62-0645	[redacted]	underwater	analysis pending
UA2014-62-0646	[redacted]	underwater	analysis pending
UA2014-62-0647	[redacted]	underwater	analysis pending
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UA2014-62-0649	[redacted]	underwater	analysis pending
UA2014-62-0650	[redacted]	underwater	analysis pending
UA2014-62-0651	[redacted]	underwater	analysis pending
UA2014-62-0652	[redacted]	underwater	analysis pending

UA2014-62-0653	[redacted]	underwater	analysis pending
UA2014-62-0654	[redacted]	underwater	analysis pending
UA2014-62-0655	[redacted]	underwater	analysis pending
UA2014-62-0656	[redacted]	underwater	analysis pending
UA2014-62-0657	[redacted]	underwater	analysis pending
UA2014-62-0658	[redacted]	underwater	analysis pending
UA2014-62-0659	[redacted]	underwater	analysis pending
UA2014-62-0660	[redacted]	underwater	analysis pending
UA2014-62-0661	[redacted]	underwater	analysis pending
UA2014-62-0662	[redacted]	underwater	analysis pending
UA2014-62-0663	[redacted]	underwater	analysis pending
UA2014-62-0664	[redacted]	underwater	analysis pending
UA2014-62-0665	[redacted]	underwater	analysis pending
UA2014-62-0666	[redacted]	underwater	analysis pending
UA2014-62-0667	[redacted]	underwater	analysis pending
UA2014-62-0668	[redacted]	underwater	analysis pending
UA2014-62-0669	[redacted]	underwater	analysis pending
UA2014-62-0670	back dirt		flake
UA2014-62-0671	back dirt		flake

In 2014, a block excavation was established on the northern shore of the lake that incorporated the 1x1 m shovel test BL-18 (ST18) (excavated in 2013), and a 2x2 meter block was laid in using BL-18 as the northwestern 1x1 m unit (Figure 28). The back dirt was carefully removed from BL-18 and the unit was used as a stratigraphic guide for the surrounding units. An effort was made to more precisely fit BL-18 to the newly established standardized grid, and this resulted in the slight expansion of the unit and the recovery of artifacts from a previously unknown cultural deposit resting on the top of the lowest stratigraphic unit of sand discussed in detail below. Additionally, three 2x1 m excavation units were established to the east, west, and south of the main 2x2 m excavation block. These units were positioned to leave a 1 m baulk surrounding the 2x2 m excavation block (Figure 28). These 2x1 m units were placed to facilitate the understanding of changes in stratigraphy in this small section of the northern lake shore, as well as to attempt to locate the boundaries of the multiple cultural components at the site.

The stratigraphy across the excavation area remained similar to what was initially described in 2013; however more precise excavation and documentation methodologies allowed for the identification of minute changes in the stratigraphic profiles exposed in 2014. Nine major stratigraphic units have been identified at the site. The stratigraphy presented below is from unit N97 E99, and it represents a general profile for all units excavated in 2014 (Figure 29). From the surface to approximately 5 cm below the surface there is an organic horizon containing historic cultural materials including shell casings used in military training exercises.

Underlying the O horizon, is a modern A horizon extending from approximately 5-10 cmbs. This unit caps a thick B horizon (10-35 cmbs).

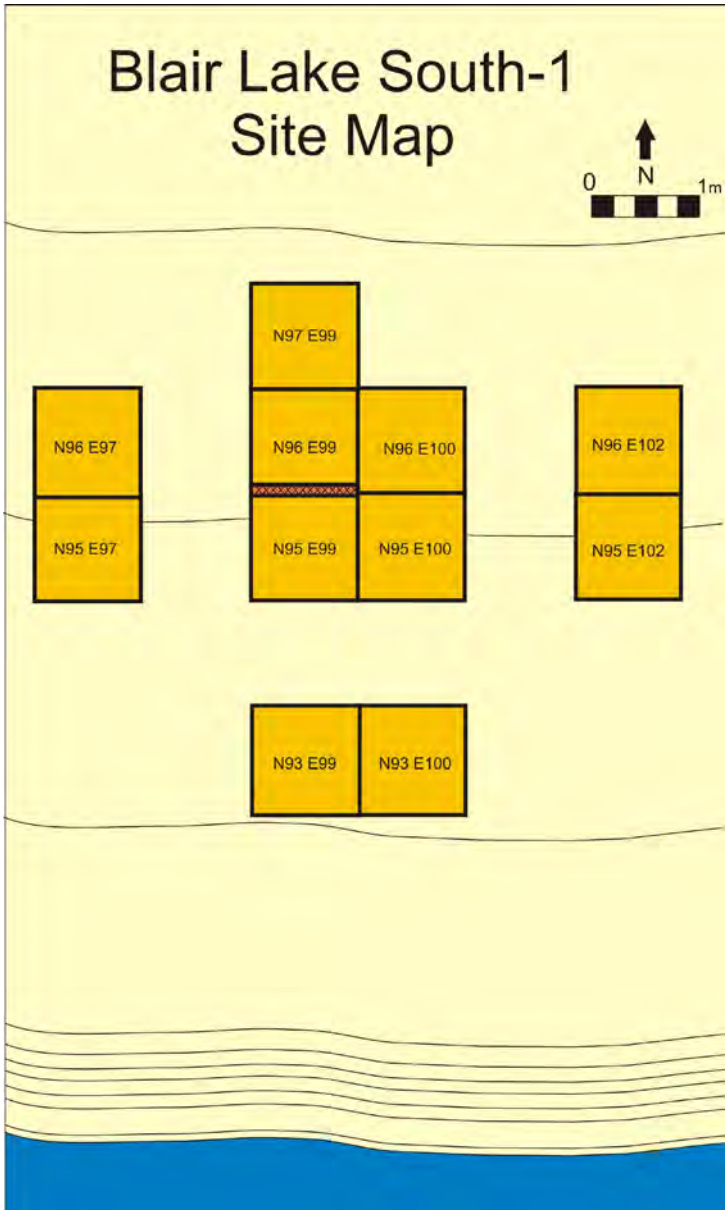

Figure 28. Map of 2014 Blair Lakes testing area.

These units are composed of weathered loess and contain two cultural occupations. Artifacts, including large cobble spalls and flakes produced on a variety of raw materials were recovered from the bottom of the modern O horizon and the uppermost portion of A horizon. This may represent an Athabaskan occupation (Component 4). A radiocarbon date from the O/A boundary in 2013 of 855+/-15 BP supports a late prehistoric component at the site.

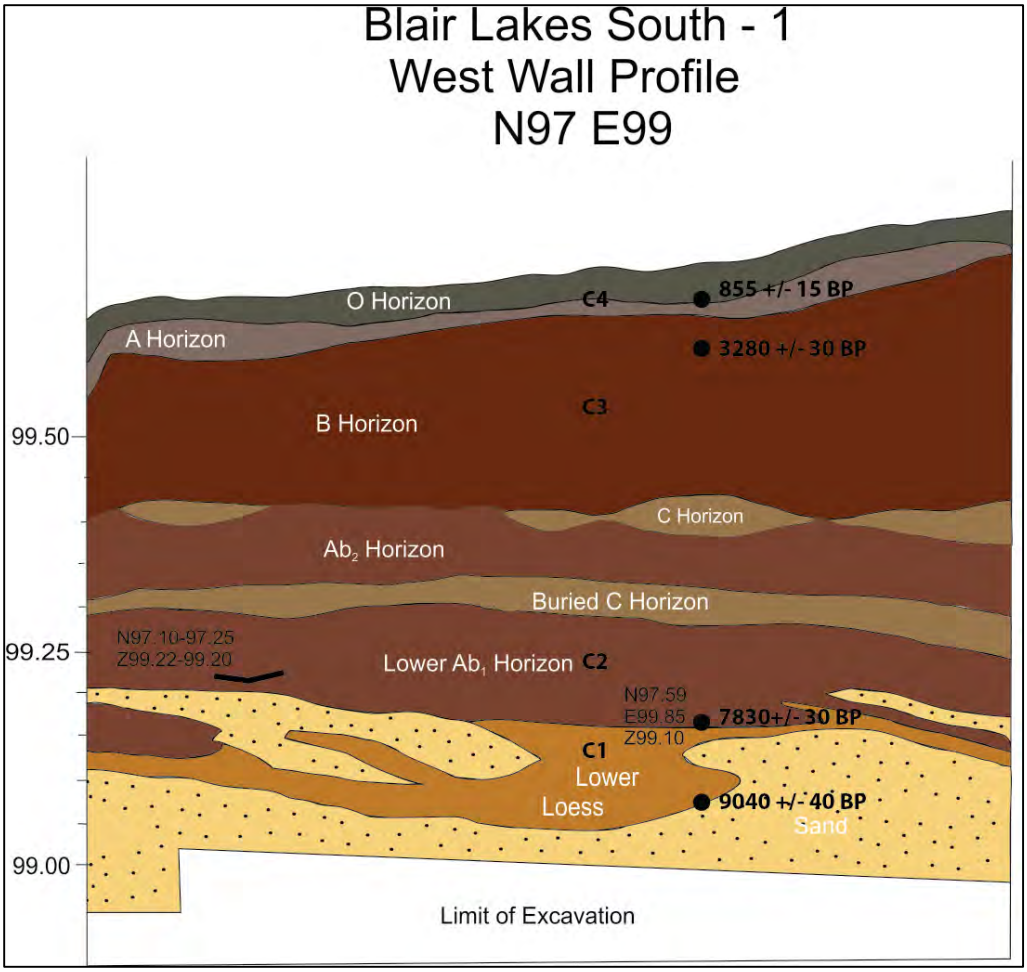

Figure 29. Stratigraphic profile for N97 E99.

A distinct Northern Archaic cultural component (Component 3), with a notched point recovered *in situ* near the contact of the A and B horizons in Unit N95 E97, and very large scrapers and associated flaking debris was encountered across the site. An age of 3280+/-30 radiocarbon years BP was calculated from charcoal associated with artifacts in the upper portion of the modern B horizon. This provides a minimum age for the Northern Archaic occupation.

The southernmost 2x1 m excavations (Units N93 E99 and N93 E100) and unit N95 E97 were abandoned during or immediately following the excavation of the modern soil due to time constraints exacerbated by intensely rainy weather that slowed down excavation progress across the site.

Below the modern B horizon is a thin and somewhat discontinuous band of sandy silt that is more strongly expressed in the northern half of the 2x2 meter block than in some of the

outlying 2x1 m excavations. In unit N97 E99, the sandy silt band extends from 30 to 34 cmbs. This stratigraphic unit is discontinuous across the site and often pinches out entirely in the southern excavation units. This stratigraphic unit seems to be culturally sterile in the larger black excavation.

Underlying the discontinuous C horizon is a pair of culturally sterile units including a 10 cm thick palaeosol and a thin silt unit. Under this unit is a buried palaeosol that is thick and identifiable across the site. This stratigraphic unit is siltier than the unit above, where it is present. This buried palaeosol is 35-50 cmbs in excavation unit N97 E99 and contains the extensive microblade production assemblage recovered at the site, as well as a possible buried hearth feature that yielded samples for radiocarbon dating this cultural component to 7840±30 ^{14}C BP. This cultural component (Component 2) is likely equivalent to the lowest component identified in 2013 which dated to 8200 radiocarbon years before present.

This buried palaeosol rests on top of a somewhat discontinuous, thin, unweathered lower loess unit that is occasionally intermingled with the lowest stratigraphic unit of course sands. The lowest loess unit is only 5 cm thick, but contains the oldest cultural component at the site. A previously undocumented cultural component was discovered while excavating this stratigraphic unit in N97 E99. This component, Component 1, contained a single black chert unifacial knife and thirty pieces of debitage produced on chert, basalt, and chalcedony. It is interesting to note that the knife was produced on a raw material similar some artifacts recovered during the 2013 recovery of artifacts from underwater along the north shore of the lake. A single chalcedony microblade was also recovered from this stratigraphic context. It is possible that this artifact was recovered from an area in the southernmost excavation units where the component 1 and 2 stratigraphic units are dramatically compressed. A sample of charcoal was taken from context associated with the knife and yielded a radiocarbon date of 9040±40 ^{14}C BP, making this new cultural component significantly older than the microblade-focused Component 2.

Underlying the buried palaeosol horizon and lowest loess unit is a thick unit of medium grained sand that extends beyond the furthest depth of excavation. In the 2013 geological test trench, this sand unit (interbedded with silt lenses) extended more than 1 meter, but was culturally sterile.

The data gathered during recent investigations is currently being analyzed as part of a PhD dissertation project by Texas A&M student Joshua Lynch. More information about the site and artifact assemblage is expected within the next two years. The 2014 further testing around ST18 on the northern shore of Blair Lake south greatly enhanced the archaeological understanding of the historic and prehistoric occupations of the lake shore as well as led to a

better understanding of the geologic processes that affected the archaeological site formation on the north shore of the southern Blair Lake. Because artifacts are found along the entire shoreline along the lake, because boundaries between the sites are not found to exist, and for easier documentation and data management, USAG FWA proposes to act on Dixon et al.'s 1980 suggestion and amalgamate all four of the prehistoric sites originally defined for the north shore (FAI-00044, FAI-00045, FAI-00048, and FAI-00049) under the same AHRS number, FAI-00044. Previously artifacts in the lake were recorded under the archaeological district number (FAI-00035). Instead, all artifacts should be in different localities of the same site (FAI-00044). Figure 30 provides the new proposed site boundaries FAI-00044. Below is a new site summary:

FAI-00044

[redacted]

Determination of Eligibility: Eligible (07/25/1984)

FAI-00044 is a multicomponent prehistoric archaeological site located on the north shore of the southern-most Blair Lake in Fort Wainwright's TFTA, 54 km south of Fairbanks. The site is large and encompasses approximately 6 acres of land 500 m along the shoreline and up to 50 m north of the shore. The southern edge of the site where it meets the lake is slowly eroding due to wave action and artifacts from multiple components (Figure 30). The landform on which the site is located is slopes gently (<5°) towards the lake where there is a 2 m high escarpment edge. The Blair Lakes hills rise to the north and west. A military landing strip is located to the east. The viewshed is entirely to the lake in the south as the whole surrounding area is heavily forested. There is no surface visibility where undisturbed deposits occur. Artifacts are found in buried context and on the lake bottom surface at the edge of the lake. The ecosystem is characterized as mixed needleleaf-broadleaf forest with an understory of young birch, some alder, shrubs and forbs (Figure 31).

This site was originally discovered during a 1979 survey by Dixon et al. (1980) and revisited for a condition assessment by CEMML in 2008. Testing to determine site boundaries and delineate cultural strata took place in 2013 and 2014 by CEMML and Texas A&M University. Four original sites have now been renamed as localities of FAI-00044 (Locality A: FAI-00045; Locality B: FAI-00048; Locality C: FAI-00044; and Locality D: FAI-00049) (Figure 30).

Four buried prehistoric cultural components have been identified at the site and documented most completely at Locality B. Component 1 is the earliest component dating to approximately 10,000 calendar years BP (C14 9040+/-40). This assemblage is buried approximately 75 cmbs is

not found in all areas across the site. Component 1 contains a unifacial knife and bifacial flaking debris.

Component 2 is found buried at 50-60 cmbs and is found in many locations across the entire site area. The component is bracket between about 8800 and 9800 calendar years BP (C14 7840+/-30 and 8720+/-30). A hearth was found in at least one locality and the assemblage in component 2 is dominated by microblade production debitage.

Component 3, found within the modern B horizon, contains the Northern Archaic assemblage at the site. A notched projectile point, scrapers, and bifacial debitage was found at this level. An upper date for the component is 3500 calendar years BP (C14 3280+/-30).

The uppermost component, component 4, is a typical Athabaskan assemblage with large cobble spall scrapers, bifacial debitage, and fire cracked rock. At least one microblade was also found in this component. An age of 900 years ago from hearth charcoal gives a late prehistoric age to the assemblage (C14 855 +/-15).

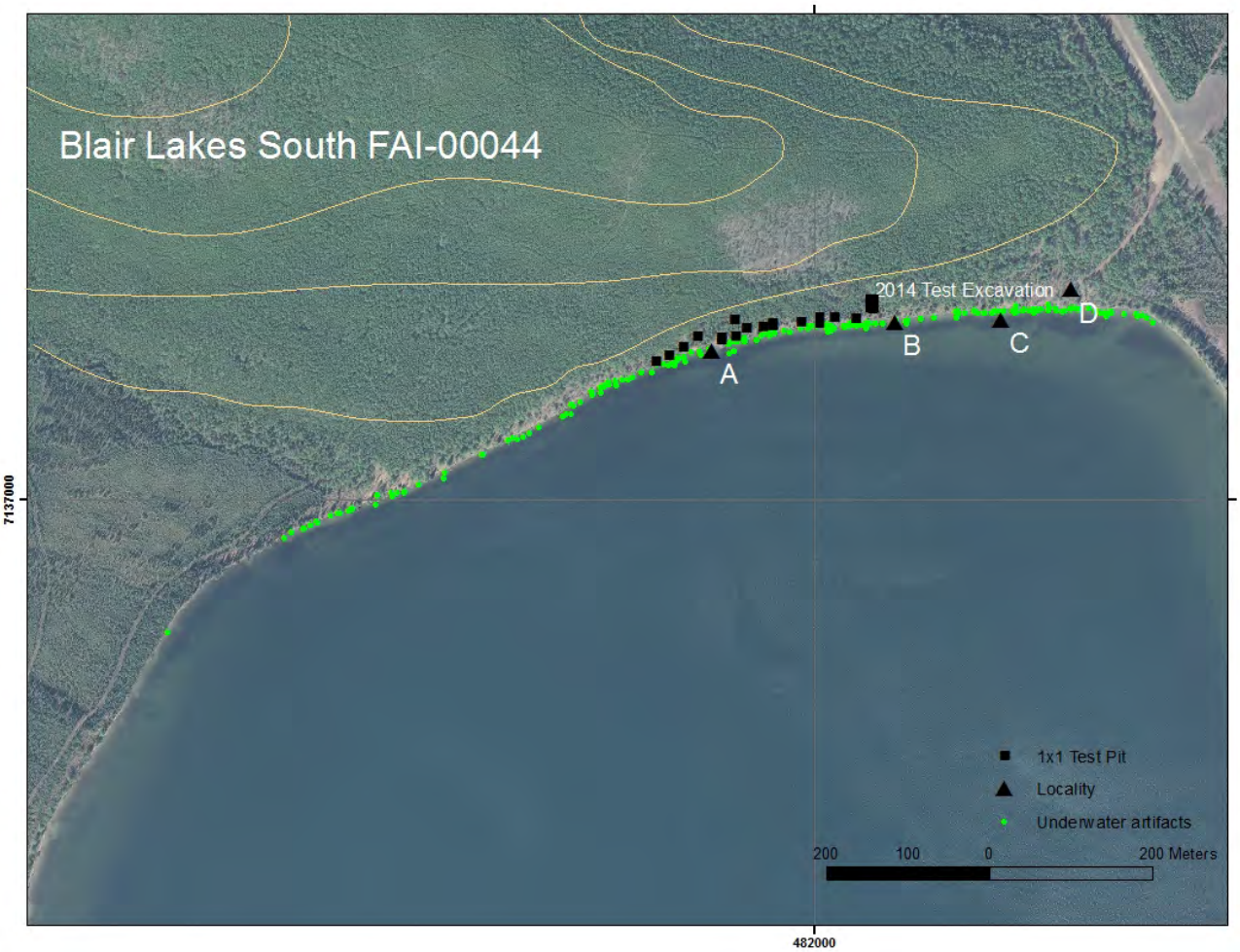

Figure 30. FAI-00044 site map.

Figure 31. Site overview.

Bone was also found in various levels at the site but has not yet been analyzed.

Sediments at the site are compose of approximately 60 cm of windblown silts over sand deposits. Artifacts from component 4 are found at the base of a thin organic layer. Component 2 artifacts are found at the base of the modern A horizon and throughout the modern B horizon. Below the modern B horizon there are two buried palaeosols separated by a thin band of unaltered loess. The lower palaeosol contains component 2. A thin discontinuous loess unit below the lowest palaeosol contained component 1 artifacts. No cultural materials were found in the sand deposit at the base of the profile (Figure 29, Figure 32).

Figure 32. Test unit N97 E99 stratigraphic profile.

FAI-00044 is a large, multicomponent, prehistoric camp that has clear stratigraphy and chronology. The site is highly significant to local cultural-historical reconstructions and our understanding of lithic technological organization and prehistoric subsistence strategies. Now that the stratigraphic problems have been clarified, detailed lithic, faunal, and spatial analyses will be conducted with the materials found in test excavations. This information will follow in a subsequent site report. Knowing the significance of the archaeology of the north shore of Blair Lake south will allow Fort Wainwright to make better management decisions regarding possible future development of all season travel routes in the vicinity and increased soldier training in the area encompassing the Blair Lakes Archaeological District (FAI-00335).

Other Relocated Sites in TFTA

FAI-00088

[redacted]

Determination of Eligibility: Not evaluated

FAI-00088 is located on hill 4 km west of Blair Lake south in TFTA, approximately 53 km south of Fairbanks (Figure 4). The site is not accessible by road. The site was originally discovered in May of 1973 during a survey for an Air Force bombing range (Frizzera 1973). Microblade fragments were found during shovel tests of a high point on the hill. Relocation of the site proved challenging because of inaccurate coordinates.

FAI-00088 was relocated in 2014 on the highest point on southernmost part of landform using the map location from the 1973 report. The site is located at 339 masl, and rises 200 m above flats to the south and 30-50 m above the ridge to the north. The site has a 180° view of the flats and foothills of the Alaska Range to the south and southeast. The sites slopes gently, 0-5° and is estimated to extend approximately 40 m x10 m based on the size of the landform (Figure 33). Surface visibility is 0% due to vegetation, including moss, lichen, sparse spruce, aspen, low bush cranberry, crowberry, rose, dwarf birch, and other low scrub (Figure 34).

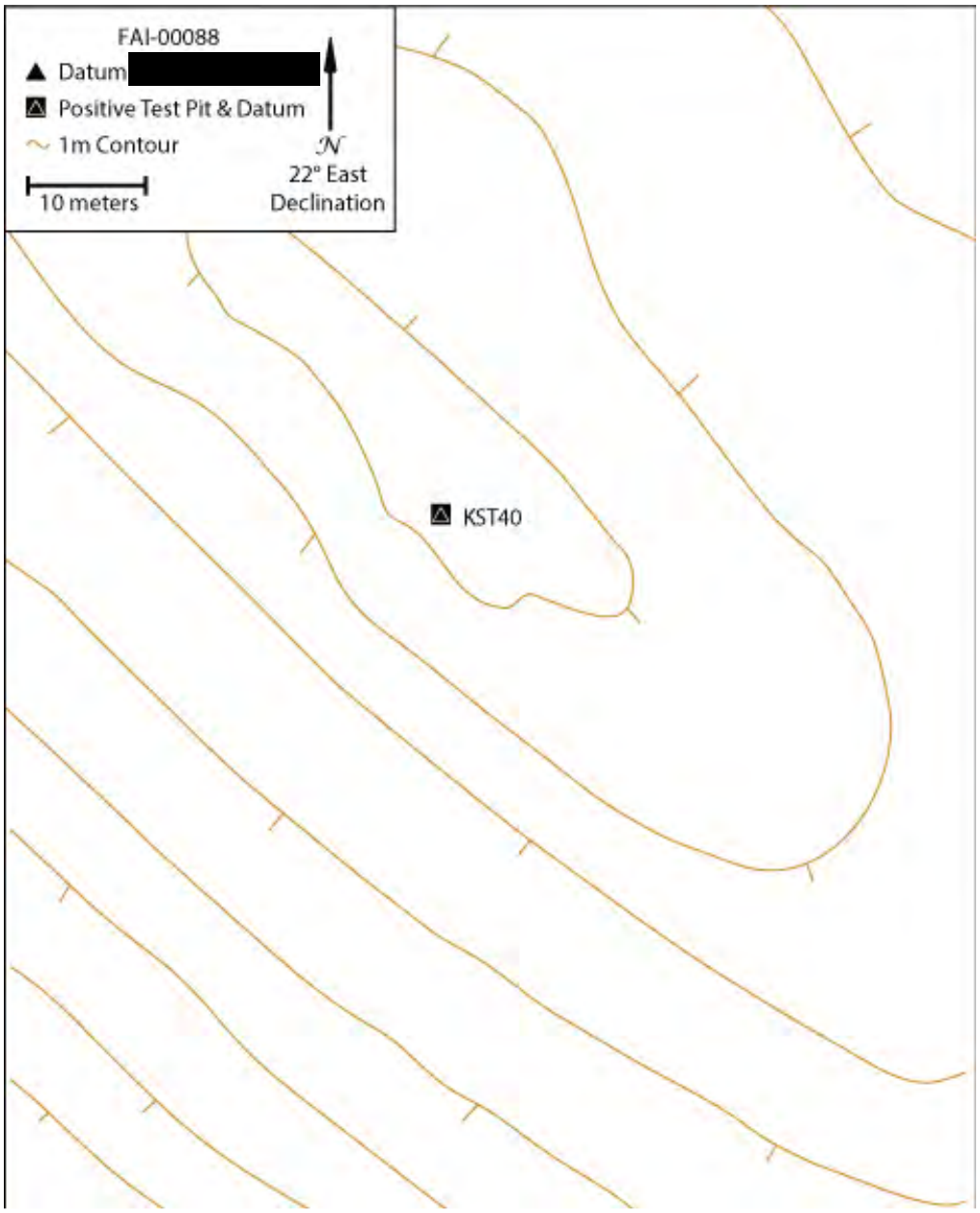

Figure 33. FAI-00088 site map.

A single test pit was excavated at the site. It contained two gray chert bifacial pressure flakes and two gray chert flake fragments within 10 cm of the surface (UA2014-90). A shallow (10 cm) organic horizon was underlain by aeolian silts. The test pit terminated at decomposing schist bedrock at 13 cmbs (Figure 35, Figure 36).

Figure 34. FAI-00088 site overview.

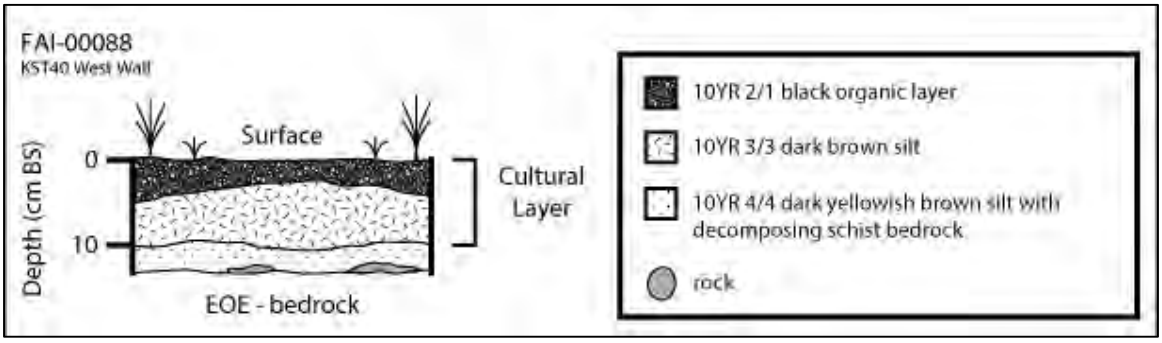

Figure 35. FAI-00088 stratigraphic profile.

Figure 36. FAI-00088 test pit.

FAI-02048

[redacted]

Determination of Eligibility: Not evaluated

FAI-02048 is located on the edge of a terrace approximately 2 km southwest of Dry Creek in TFTA approximately 50 km south of Fairbanks (Figure 4). The site was originally discovered during a 2010 survey when flakes were found in two of twelve shovel test pits (Esdale et al. 2012c). The site is on a level terrace extending approximately 60 m north to south and 40 m east to west, 221 masl. The landform drops steeply to the north and gradually to the south (Figure 37). The location of the site provides an unobstructed viewshed to the north and east. Dry Creek is the nearest watershed and seasonally wet drainage cut through the bench in closer locations. The site is heavily vegetated with spruce, aspen, birch, willow, alder, and low forbs with a dense moss and lichen ground cover (Figure 38). There is no surface exposure at the site.

The site was revisited in 9 August 2013 to determine the southern extent of the artifact distribution for the proposed JPARC trail corridor. Due to time constraints, only one shovel test was placed approximately 30 m south of the furthest south 2010 test (Figure 37, Figure 38). A single rhyolite flake was found in the test pit between 9-25 cmbs (UA2013-73-1). This discovery extends the site boundaries from the original estimate of 60 m by 40 m to 130 x 50 m, which is

a minimum of 70 m south of datum and 150 m from the terrace edge. More testing is recommended to determine the full site extent.

Site stratigraphy consists of 60 cm of aeolian silt overlying glacial outwash gravels (Figure 39, Figure 40). Soil development is very weak with a 10 cm root mat overlying a 30 cm thick B horizon over unaltered parent material.

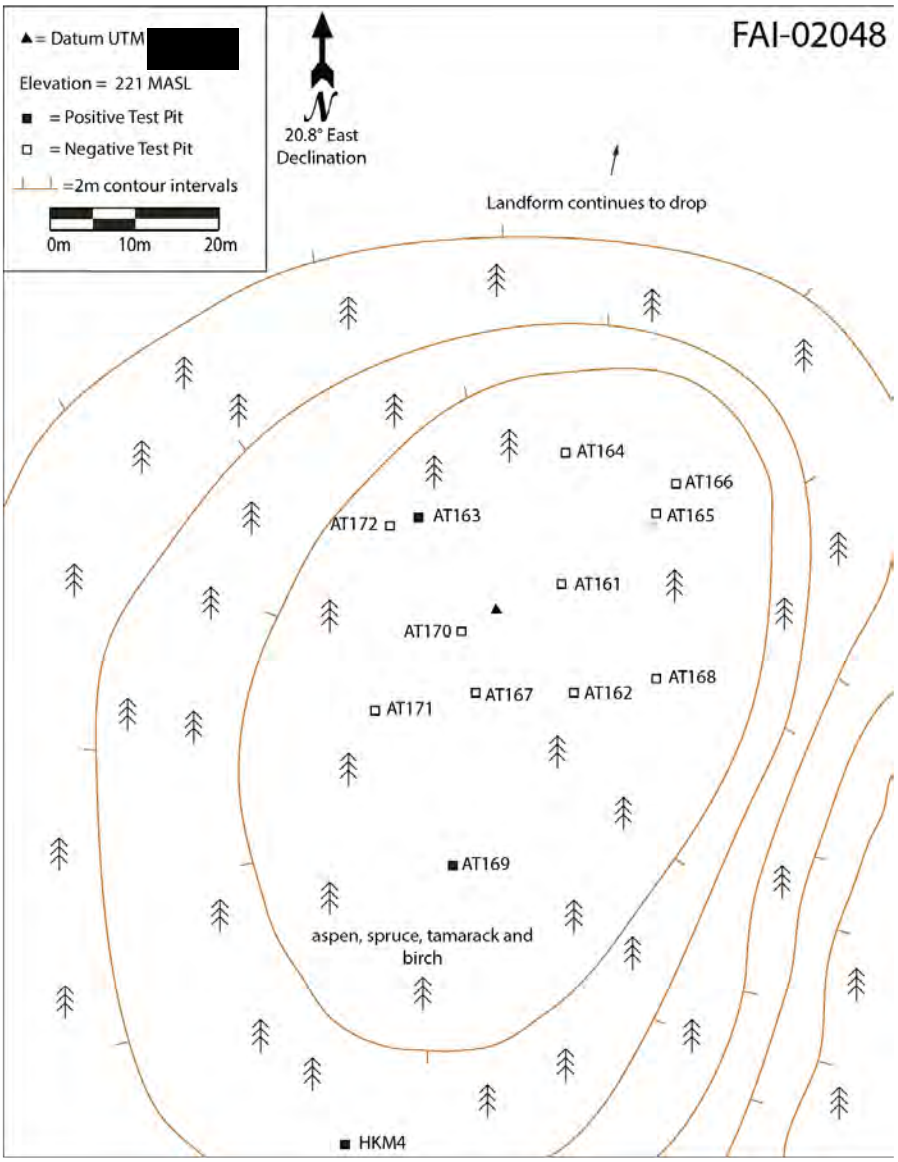

Figure 37. FAI-02048 site map.

Figure 38. FAI-02048 site overview.

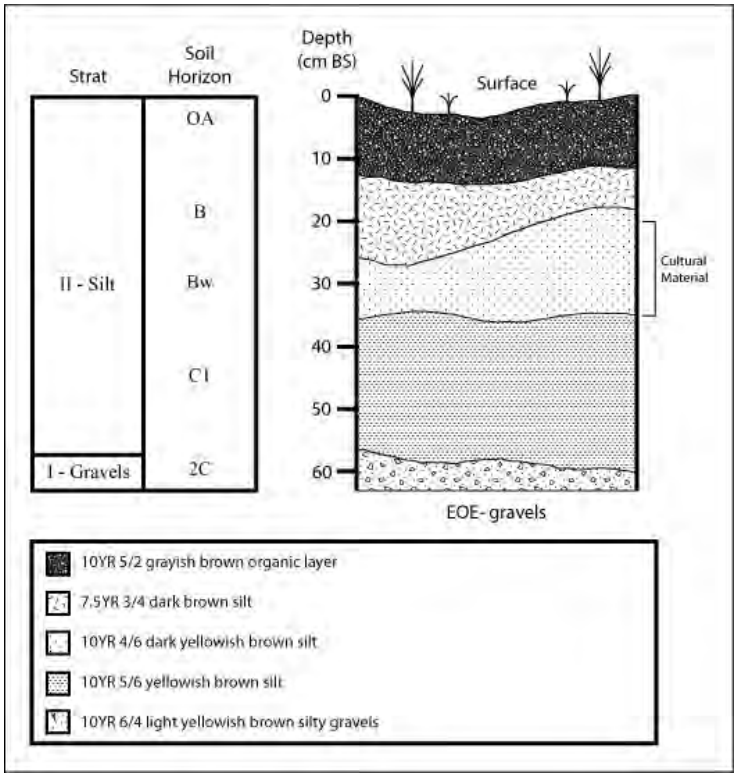

Figure 39. FAI-02048 stratigraphic profile.

Figure 40. FAI-02048 test pit.

FAI-02054

[redacted]

Determination of Eligibility: Not evaluated

FAI-02054 is on the edge of a terrace in the TFTA, approximately 40 km south of Fairbanks (Figure 4). The site was discovered in 2010 during shovel testing along the length of the terrace, northeast of Clear Creek Assault Strip. A single rhyolite flake fragment was found in one of two test pits in the area (Esdale et al. 2012c).

On 16 August 2014, two additional test pits were excavated south of the datum to determine whether or not the site extended south as far as a four-wheeler trail. Shovel tests were placed 15 and 25 m south of the datum (Figure 41, Figure 42). No additional artifacts were discovered. Test pits contained approximately 1 m of aeolian silts above glacial outwash gravels (Figure 43, Figure 44). This site does not appear to extend into the four-wheeler trail and is restricted to the edge of the terrace.

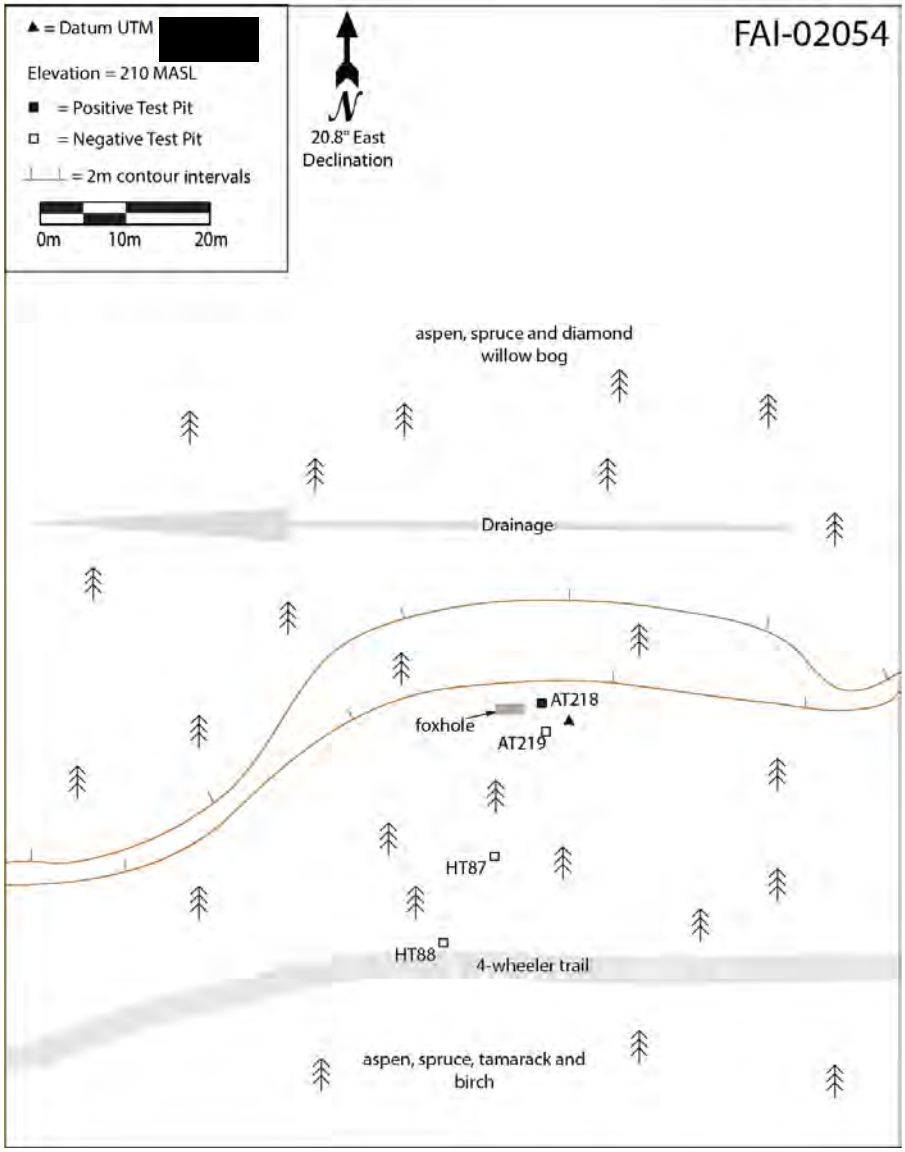

Figure 41. FAI-02054 site map.

Figure 42. FAI-02054 site overview.

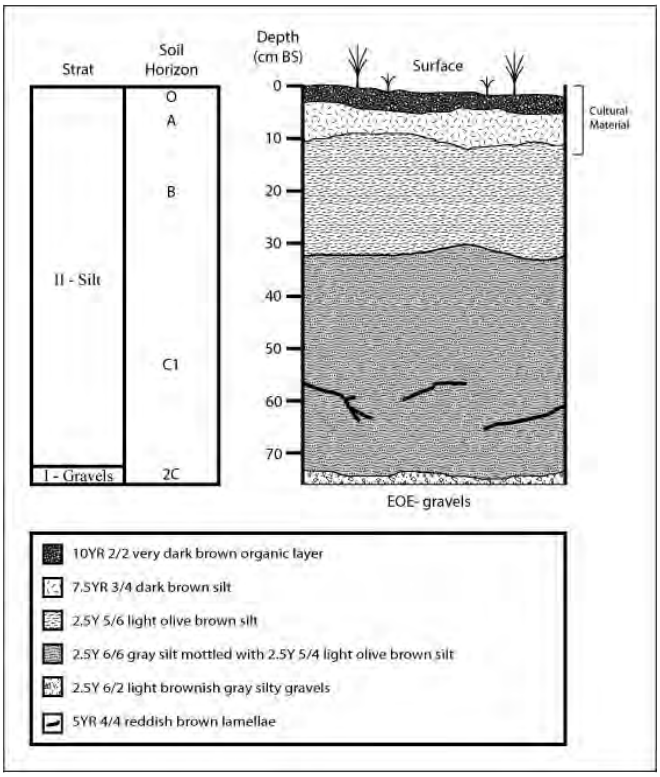

Figure 43. FAI-02054 stratigraphic profile

Figure 44. FAI-02054 test pit

FAI-02055

[redacted]

Determination of Eligibility: Not evaluated

FAI-02055 is on the edge of a terrace in the TFTA, approximately 40 km south of Fairbanks (Figure 4). The site was discovered in 2010 during shovel testing along the length of the terrace, northeast of Clear Creek Assault Strip. A single gray chert flake fragment was found in one of two test pits in the area (Esdale et al. 2012c).

On 17 August 2014, two additional test pits were excavated south of the datum to determine whether or not the site extended south as far as a four-wheeler trail. Shovel tests were placed 10 and 20 m south of the datum (Figure 45, Figure 46). No additional artifacts were discovered. Test pits contained approximately 1 m of aeolian silts above glacial outwash gravels (Figure 47, Figure 48). This site does not appear to extend into the four-wheeler trail and is restricted to the knoll on the edge of the terrace.

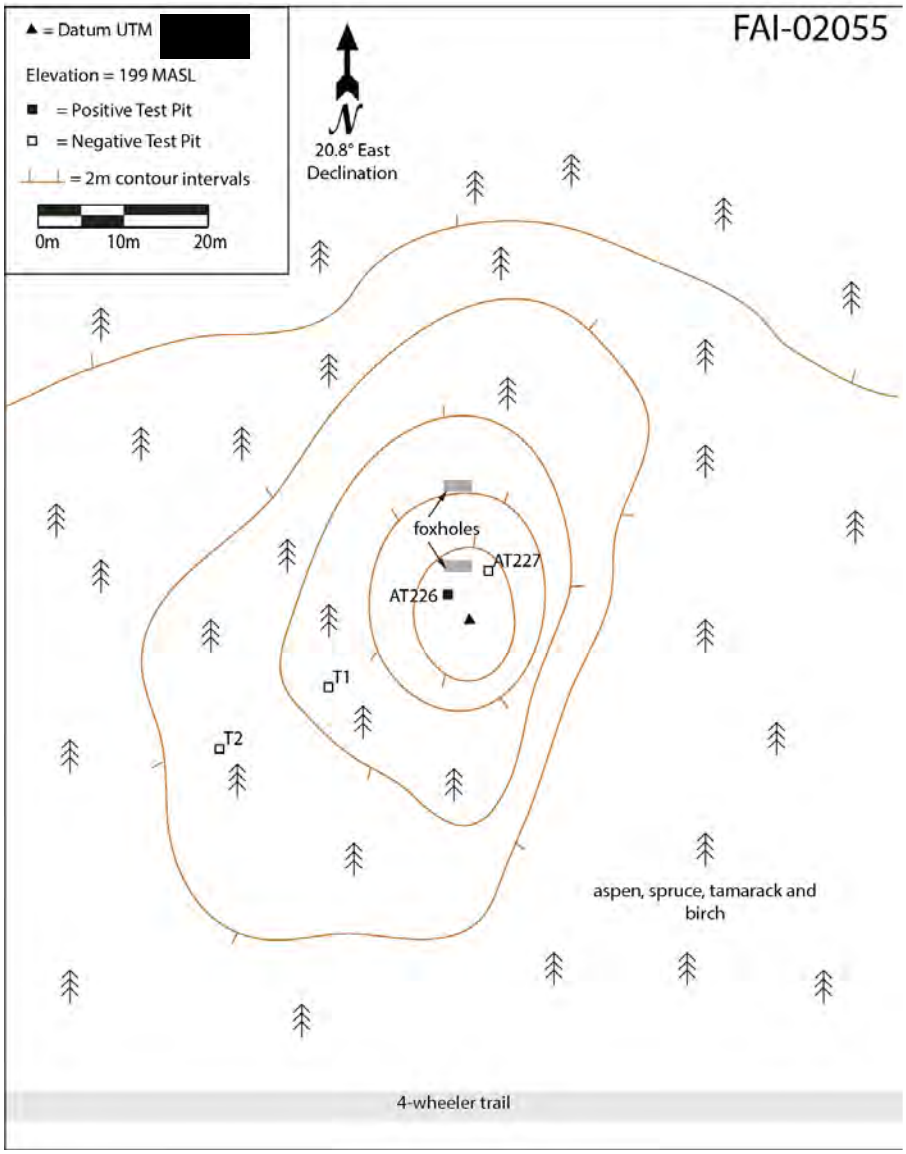

Figure 45. FAI-02055 site map.

Figure 46. FAI-02055 site overview.

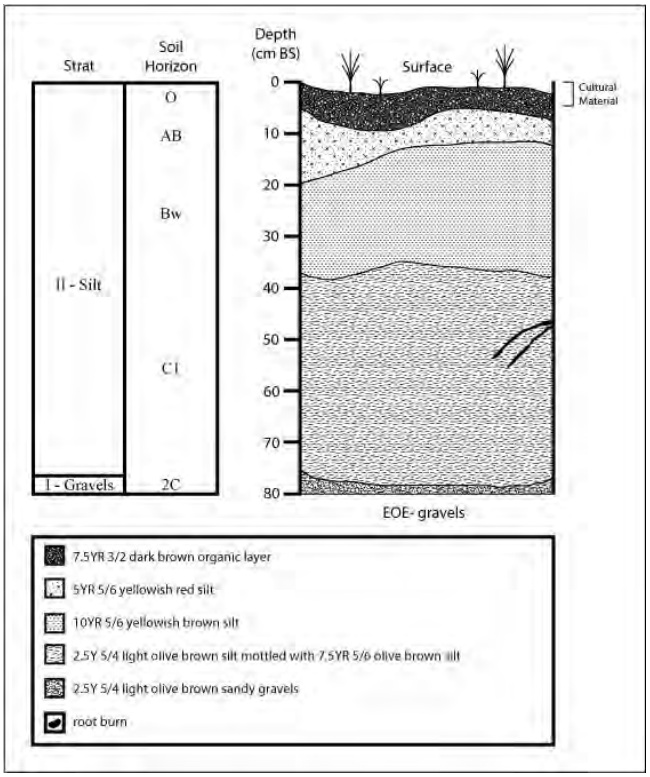

Figure 47. FAI-02055 stratigraphic profile.

Figure 48. FAI-02055 test pit.

FAI-02058

[redacted]

Determination of Eligibility: Not evaluated

FAI-02058 is on the edge of a terrace in the TFTA, approximately 42 km south of Fairbanks (Figure 4). The site was discovered in 2010 during shovel testing along the length of the terrace, northeast of Clear Creek Assault Strip. This particular site was located on a narrow point where a drainage meets the edge of the terrace. Flake and microblade fragments, bone, and charcoal was found was found in a single test pit (Esdale et al. 2012c).

The site was revisited for a boundary determination on 16 August 2014. No old shovel tests were evident on the surface and one pit was excavated within 10 m of each edge, approximately 1 m from the original site datum (Figure 49, Figure 50). No additional artifacts were discovered. Test pits contained approximately 55 cm of aeolian silts above glacial outwash gravels (Figure 51, Figure 52). Test pits were not excavated further back from the terrace edge because they would encounter FAI-02059 28 m to the east.

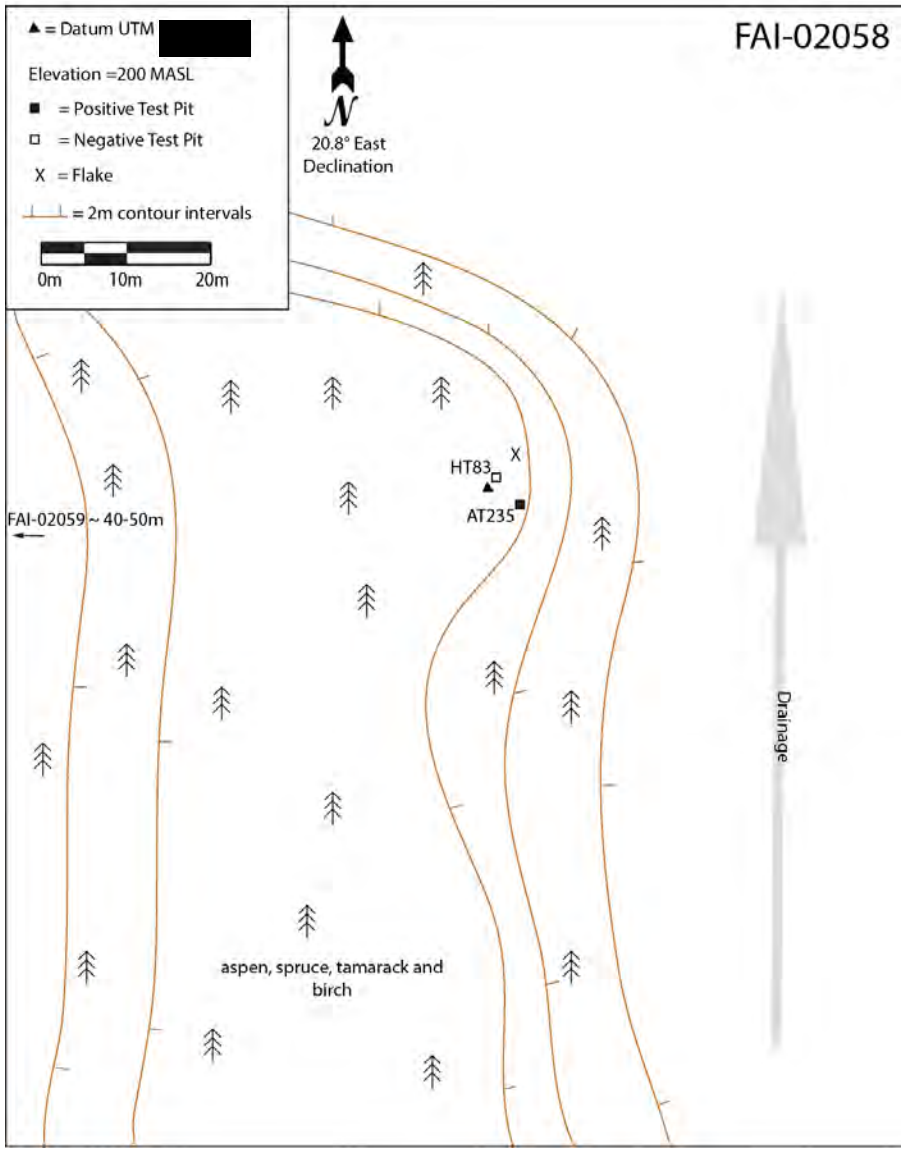

Figure 49. FAI-02058 site map.

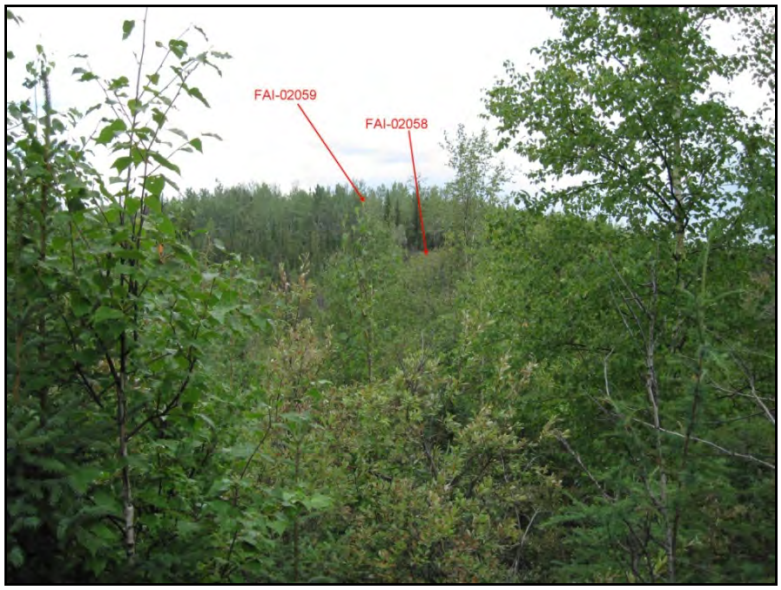

Figure 50. FAI-02058 overview.

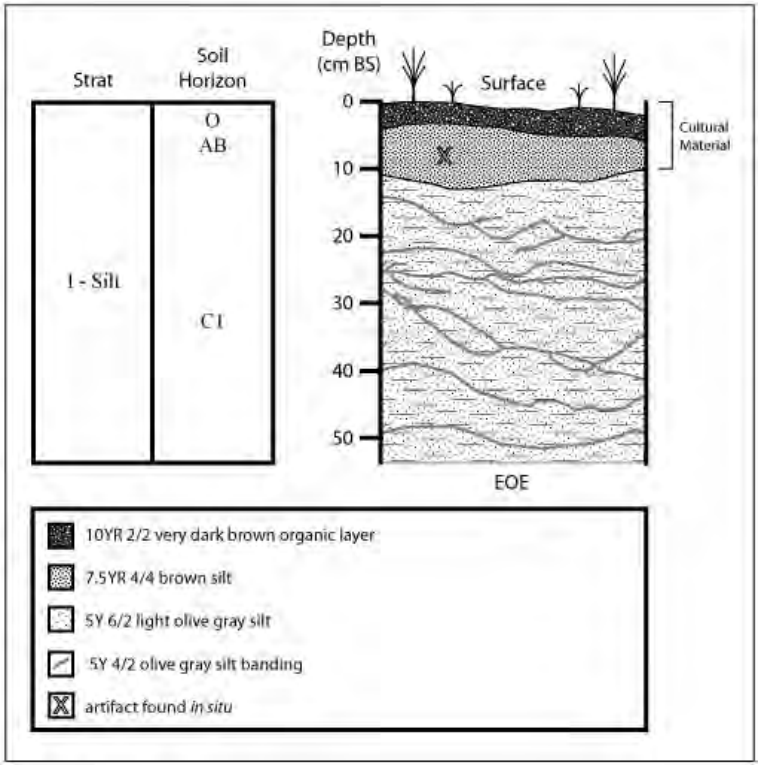

Figure 51. FAI-02058 stratigraphic profile.

Figure 52. FAI-02058 test pit.

FAI-02059

[redacted]

Determination of Eligibility: Not evaluated

FAI-02059 is on the edge of a terrace in the TFTA, approximately 42 km south of Fairbanks (Figure 4). The site was discovered in 2010 during shovel testing along the length of the terrace, northeast of Clear Creek Assault Strip. This particular site was located 20 m west and 3 m higher than FAI-02058. Flakes and tool fragments were found was found in a single test pit (Esdale et al. 2012c).

The site was revisited for a boundary determination on 16 August 2014. A positive shovel test was excavated 5m east of the unmarked datum as part of a minimal boundary determination in 2014 (Figure 53, Figure 54). Artifacts consisted of 12 gray chert and 10 tan chalcedony flakes, found from 10-30 cmbs (UA2014-083-001). Two more shovel tests, both negative, were excavated in a west-northwest line, following the slope down towards the west. Stratigraphy of shovel tests higher on the landform consisted of silts deposited over gravels, and terminated at 67 and 68 cmbs (Figure 55, Figure 56). Stratigraphy of the shovel farthest from datum consisted of silt deposits to the termination point at 101 cmbs. FAI-02059 appears limited in this direction to the landform's high spot, although more testing in all directions is recommended to establish definitive site boundaries.

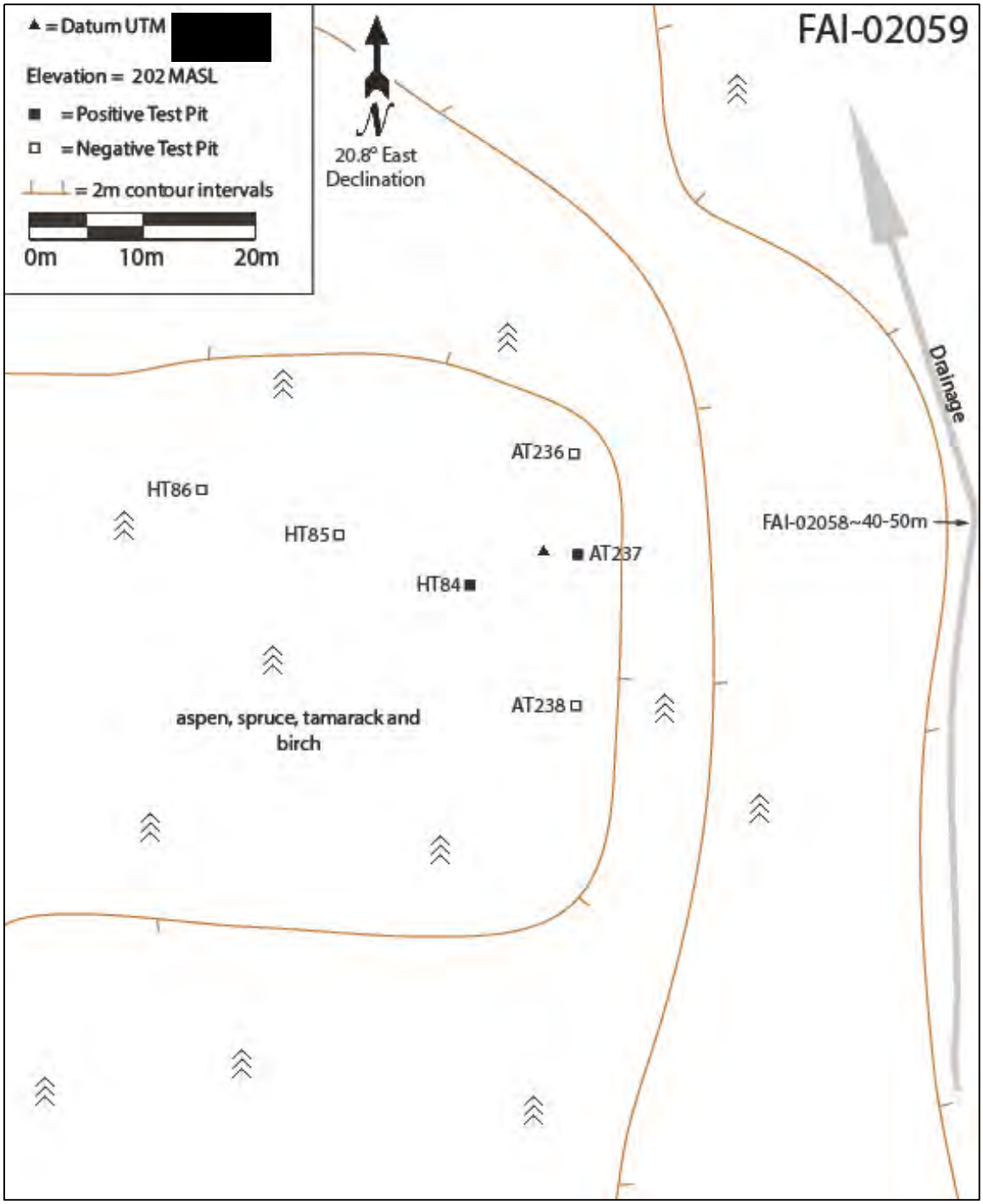

Figure 53. FAI-02059 site map.

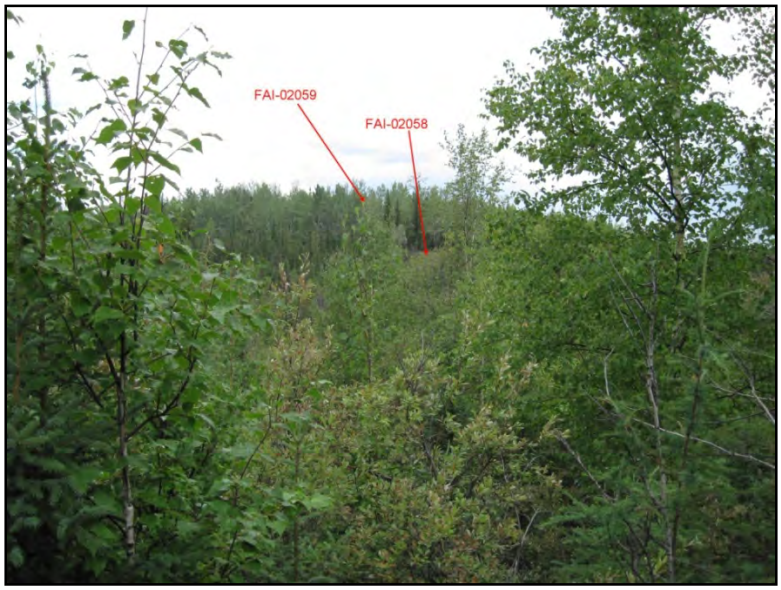

Figure 54. FAI-02059 site overview.

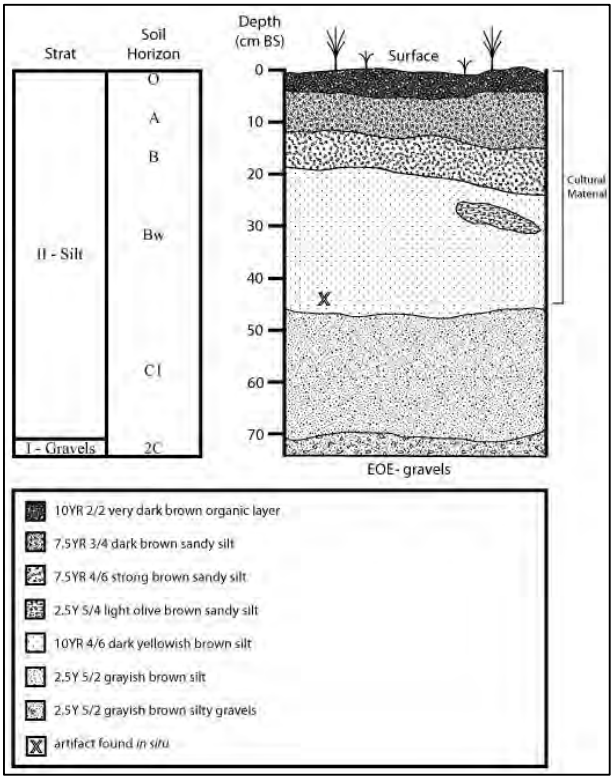

Figure 55. FAI-02059 stratigraphic profile.

Figure 56. FAI-02059 test pit.

FAI-02061

[redacted]

Determination of Eligibility: Not evaluated

FAI-02061 is on the edge of a terrace in the TFTA, approximately 42 km south of Fairbanks (Figure 4). The site was discovered in 2010 during shovel testing along the length of the terrace, northeast of Clear Creek Assault Strip. This particular site was located 225 m southeast of FAI-02055 at the northern end of the air strip. Two rhyolite flakes were found in a single test pit (Esdale et al. 2012c).

FAI-02061 was revisited on 17 August 2014 to identify its southern boundary. The site is on a terrace edge where slight drainages to the southeast and the northwest form a small point. Four shovel tests placed at 10 m intervals, beginning 10 m south of a the 2010 positive shovel test and extending in a southwest line perpendicular to the terrace edge (Figure 57, Figure 58). Seven tan rhyolite flakes and a charcoal sample were recovered from the only positive shovel test (UA2014-084-001 to 002). Shovel tests terminated at terrace gravels, 64 to 74 cmbs. Stratigraphy consisted of silt deposits over gravels (Figure 59, Figure 60). Survey findings indicate the site boundary extends a minimum of 50 m south of datum. Further testing to define site boundaries in all directions is recommended.

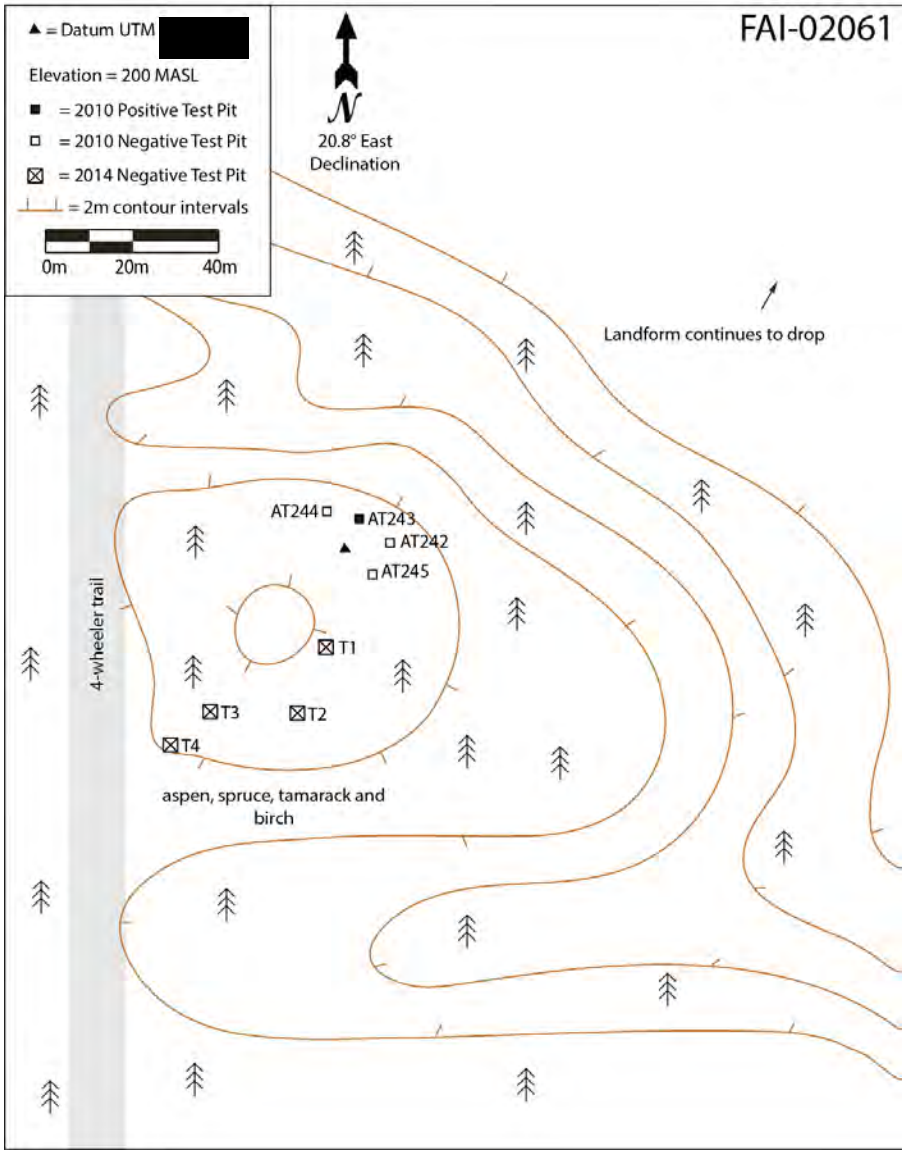

Figure 57. FAI-02061 site map.

Figure 58. FAI-02061 site overview.

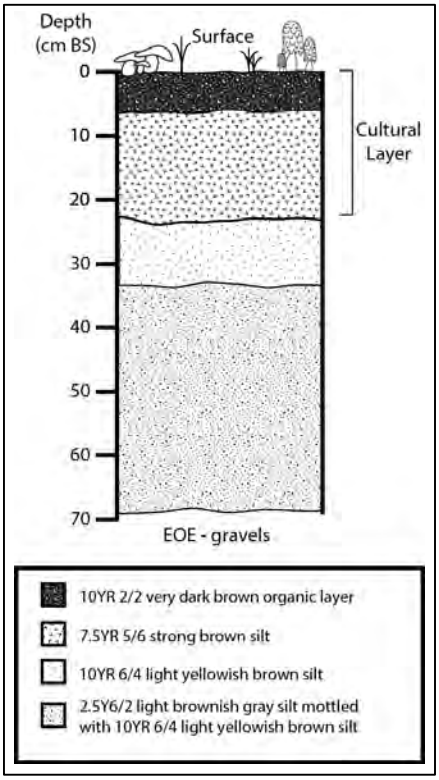

Figure 59. FAI-02061 stratigraphic profile.

Figure 60. FAI-02061 test pit.

FAI-02062

[redacted]

Determination of Eligibility: Not evaluated

FAI-02062 is on the edge of a terrace in the TFTA, approximately 43 km south of Fairbanks (Figure 4). The site was discovered in 2010 during shovel testing along the length of the terrace, southeast of Clear Creek Assault Strip. This particular site was located 360 m southwest of FAI-02060 on a small knob. Two chert flakes were found in a single test pit (Esdale et al. 2012c).

FAI-02062 was revisited on 16 August 2014 to identify its boundaries. The site is on a small knob overlooking a drainage to the east. The landform is confined, and test pits were placed to cover the landform at 8 m northwest, 8 m southwest and 20 m northwest of datum (Figure 61, Figure 62. None contained cultural materials. Shovel tests were excavated to gravels, which were encountered from 13 – 28 cmbs on the knoll and 65 cmbs in the farthest shovel test (Figure 63, Figure 64). Silts were observed above the gravels in all shovel tests. The site appears to be limited to the small 10 m x 10 m knoll.

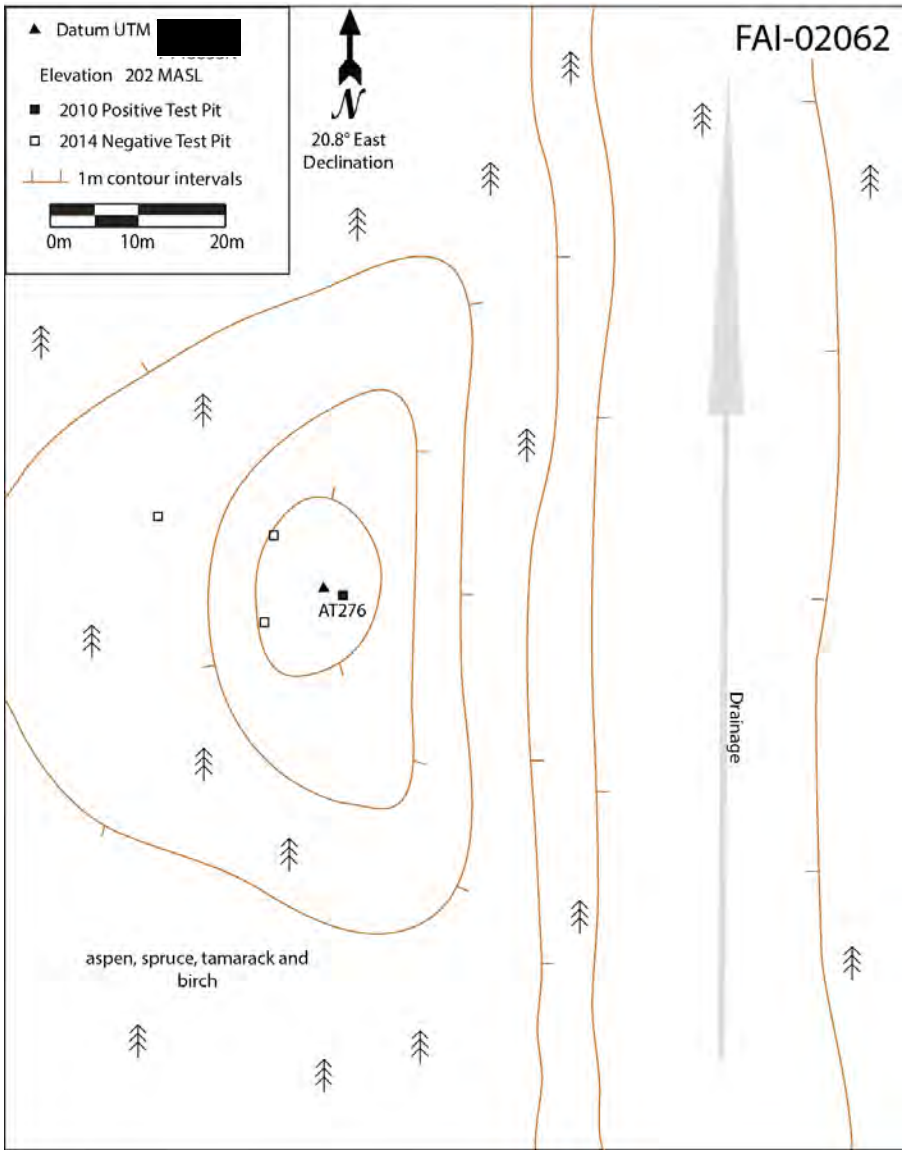

Figure 61. FAI-02062 site map.

Figure 62. FAI-02062 site overview.

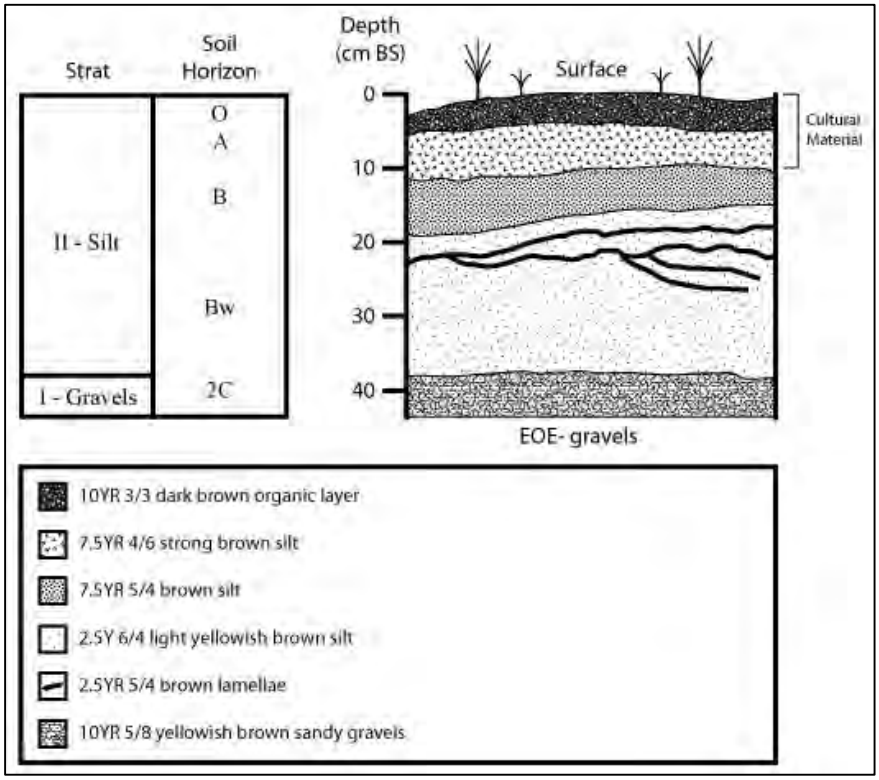

Figure 63. FAI-02062 stratigraphic profile.

Figure 64. FAI-02062 test pit.

TFTA DOEs

One site, FAI-00052, was evaluated for NRHP eligibility in the TFTA in 2014 (Figure 4). FAI-00052 was found eligible for the NRHP.

FAI-00052

[redacted]

Determination of Eligibility: Eligible

FAI-00052 was originally discovered during a 1979 survey of the Blair Lakes area by Dixon et al. (1980). This site is located on the north end of the ridge system north of Blair Lakes and the site was found on the west bank of a creek that intermittently drains Anne Lake (Dixon et al. 1980) (Figure 4). Obsidian flakes, wood, and bone fragments were discovered in six test pits.

This site was revisited on 16 August 2014 to verify its location and determine its eligibility for the NRHP. The site was found precisely at the described area from the 1980 report and several old test pits were evident on the surface (Figure 65). FAI-00052 is 46 km south of Fairbanks and 4 km north of Anne Lake, on a north-south trending hill that extends into a dry creek drainage. The site is about 3 m above the creek bed, on the west bank. The area is thinly covered with

spruce, alder, low shrubs, and deadfall (Figure 66). Fireweed, mosses, grasses, and lichen make up the ground cover. The view is 200°, mainly to the east.

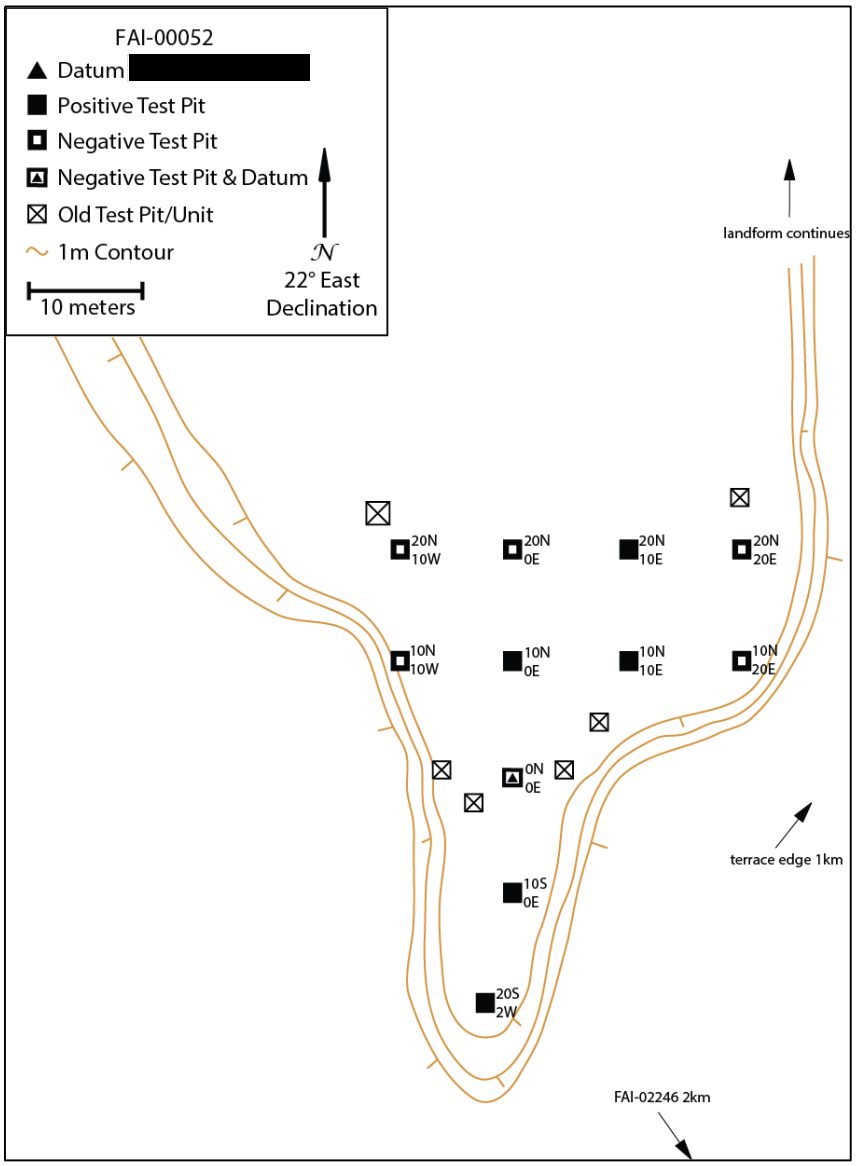

Figure 65. FAI-00052 site map.

No artifacts were found on the surface and a shovel test grid was set up over the landform (Figure 65). Artifacts were discovered in five of eleven test pits (Table 5). Twenty-one flakes made of chert and rhyolite and two obsidian microblade fragments were excavated from near surface to 45 cmbs. The obsidian was identified as originating from the Batza Tena obsidian source (Rasic pers. comm. 2015).

The majority of flakes and the two microblades were found in the two test pits at the southern end of the landform. The northern boundary of the site was not completely established with the shovel test grid and it is estimated that the site covers an area of approximately 40 m north to south and 15 m east to west.

Deposits across the creek bank were deep and test pits reached 90-120 cmbs before encountering terrace gravel (Figure 67, Figure 68). A thin organic rich 0 horizon (5 cm) overlies two weathered Bw horizons (10 cm and 20 cm thick), above unaltered silt to approximately 120 cm. The thick silt deposit is of aeolian origin.

Figure 66. FAI-00052 site overview.

Table 5. FAI-00052 accession log.

Accession #	Provenience	Quantity	Artifact Type	Raw Material
UA2014-082-0001	10E 20N, 0-10 cmbs	1	flake	chert
UA2014-082-0002	0E 10N, 0-15 cmbs	1	flake	rhyolite
UA2014-082-0003	10E 10N, 5-25 cmbs	7	flakes	chert
UA2014-082-0004	10E 10N, 30-45 cmbs	1	flake	chert
UA2014-082-0005	0E 10S, 0-10 cmbs	6	flakes	chert, rhyolite
UA2014-082-0006	0E 10S, 0-10 cmbs	1	microblade fragment	obsidian
UA2014-082-0007	0E 10S, 25-30 cmbs	1	microblade fragment	obsidian
UA2014-082-0008	0E 20S, 0-5 cmbs	5	flakes	chert, rhyolite

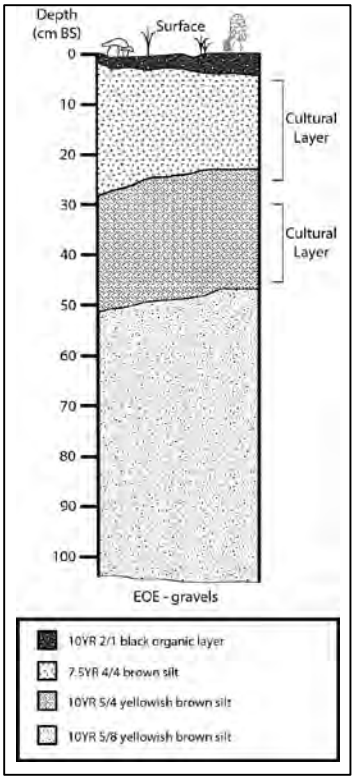

Figure 67. FAI-00052 stratigraphic profile.

Figure 68. FAI-00052 test pit.

Like many sites in the area, the thick loess cap on the surface of the landform provides a context for potentially stratified cultural deposits dating back to the end of the Pleistocene. Although the landform is small, test excavations have not uncovered all material and there is significant potential for future research. Because the site contains multiple tool production methods (bifacial reduction flakes and microblades) and of a variety of raw materials in buried context, it may be possible to date the site and contribute to a variety of research questions with further study. Raw material sourcing studies for both rhyolite and obsidian are currently taking place in Alaska, and data from the artifacts recovered here will contribute to these projects. USAG FWA finds FAI-00052 eligible for inclusion in the NRHP under criteria D because it will likely contribute to our understanding of hunter-gather raw material acquisition strategies, lithic technological organization, and cultural chronology of the area.

2014 Yukon Training Area Fieldwork

YTA Section 106 Activities

Surveys for six undertakings requiring Section 106 consultation were completed in the YTA in 2014 (Figure 69). Surveys for the North Beaver Creek Trail Reroute, North Korean Trench, North Beaver Creek Power Line, Charlie Battery Gray Water Pits, Bravo Lake Trail Maintenance, and Vegetation Maintenance Areas undertakings were completed in May, June and August of 2014. No archaeological sites were found in the project areas, and the SHPO concurred with a finding of No Historic Properties Affected on 29 August 2014.

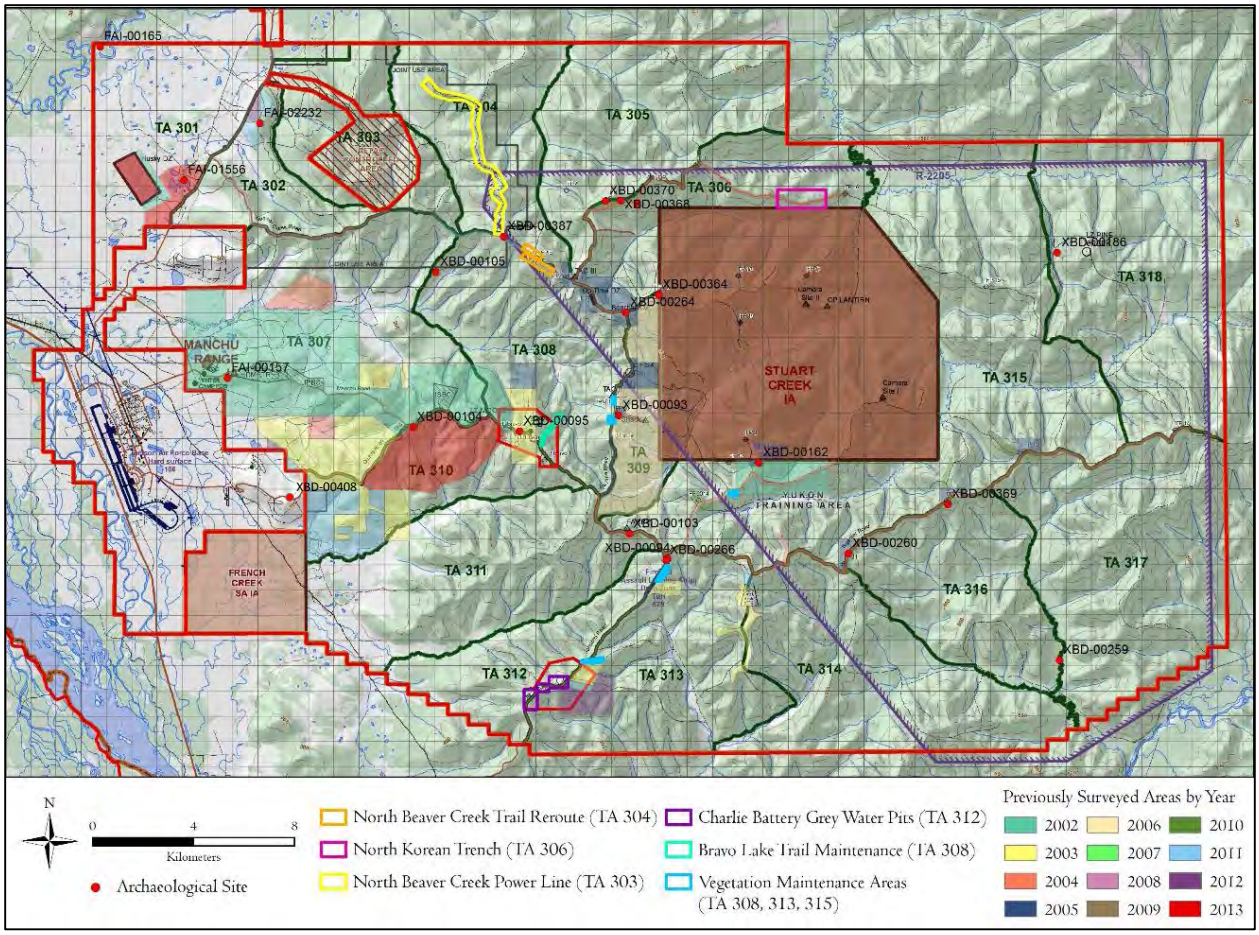

Figure 69. Section 106 projects in YTA during 2014.

YTA Surveys

A total of 1969 acres of land were surveyed for archaeological sites by CEMML crews under the direction of Julie Esdale, Ph.D., RPA. All highlighted areas in Figure 70 were covered by pedestrian transects, and shovel testing occurred on upland locations. Surveys covered 2013 burn areas, Bravo FOB, and LRAM Maintenance areas. No new archaeological sites were discovered during these surveys. FAI-00165 was relocated outside military lands and its coordinates were updated in the AHRS.

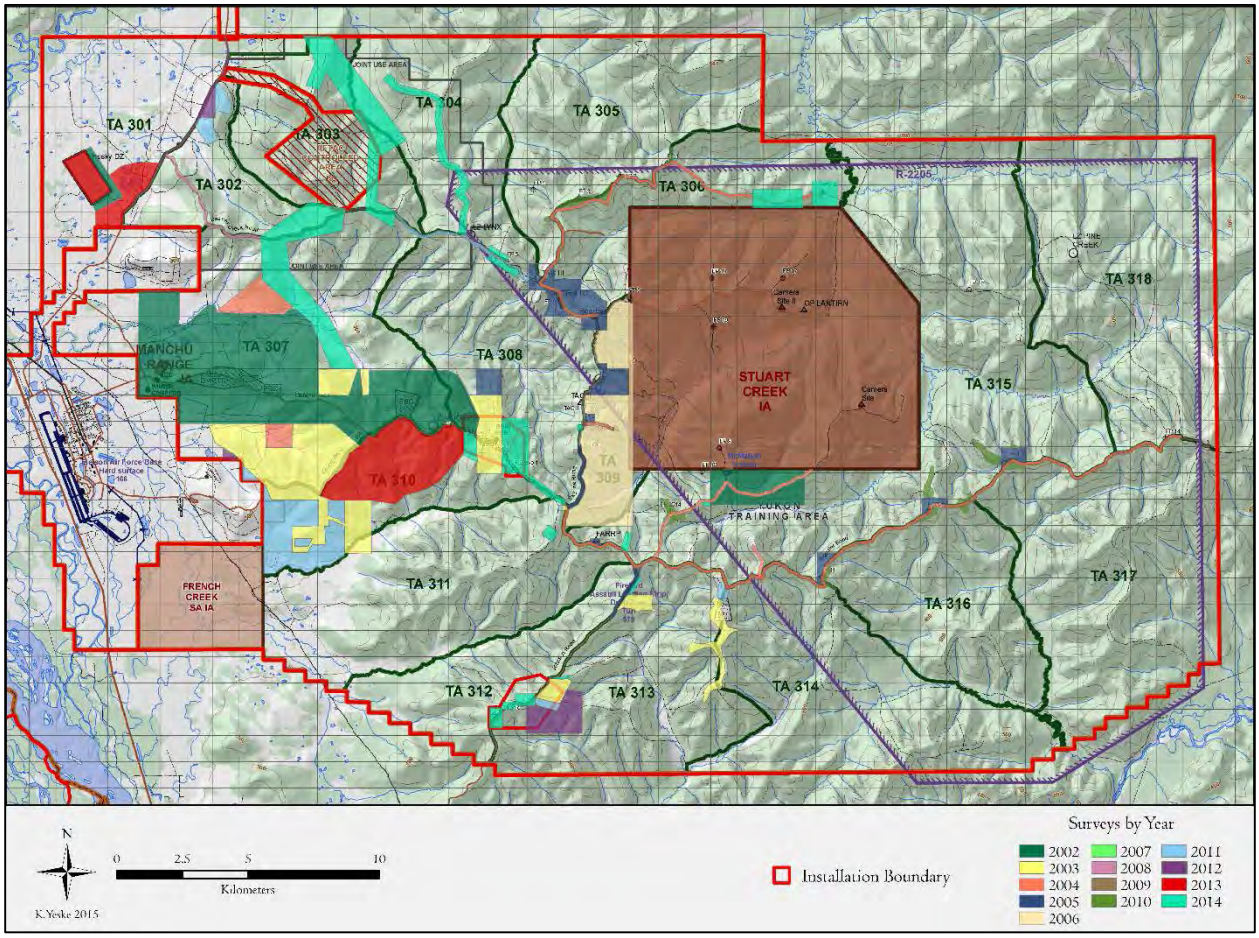

Figure 70. All surveys in YTA by year. Mint green areas were surveyed in 2014.

YTA New Sites

Although no new archaeological sites were discovered in the YTA in 2014, a known historic resource was added to the AHRS. XBD-00408 was identified in 2003 and 2011 during surveys for Army undertakings, but had not been previously recorded.

XBD-00408

[redacted]

Determination of Eligibility: Not evaluated

Site XBD-00408 is a historic site located in the western part of YTA, at the western end of Quarry Road, just east of the Eielson Air Force Base boundary, approximately 39 km east of Fairbanks (Figure 69). The building is a stout house, which is a temporary structure built during the early mobilization of World War II, resting on skids (Figure 71). It is a 2 x 4 foot wooden construction with diagonal sheathing and 1.5 pound felt tar paper on exterior walls. The floor and ceiling are tongue-in-groove hardwood, the interior walls have fiberboard covering, the insulation is aluminum foil blanket type II double layer, and there are six 40 x 40" window openings. The windows were single sash with some glazing still present. The gabled roof is collapsed and covered with hardware cloth (Figure 72). There are two breaker boxes with cloth-covered electrical lines, and two drums used as an oil fuel tank. Interior plywood cubby holes have names penciled on the framing.

Figure 71. XBD-00408 stout house in 2003.

The surrounding area was previously cleared, but has since become overgrown with alders, raspberry bushes, and various grasses (Figure 73). The stout house is just off an ATV trail. No subsurface testing was performed on the site.

Figure 72. XBD-00408 collapsed roof.

Figure 73. XBD-00408 stout house in 2011.

YTA DOEs

Two sites were evaluated for NRHP eligibility in the YTA during the 2014 field season: FAI-01556 and XBD-00105 (Figure 69). Both were found ineligible for the NRHP.

FAI-01556 Horseshoe Lake

[redacted]

Determination of Eligibility: Not Eligible

FAI-01556 is off Transmitter Road in the western portion of YTA, 30 km east of Fairbanks (Figure 69). The site is located on a 3 m high rise on the north shore of Horseshoe Lake. The surface of the hill slopes gently, from 0-8° in all directions but south. The gradient south to the lake is approximately 24°. The viewshed is 180° to the south, encompassing views of Horseshoe Lake and a hill on the opposite shore immediately south, a ridge to the east, and surrounding lowlands. The lake is the closest water source, 35 m from datum in 2014, although the shoreline varies according to annual precipitation (Figure 74). Vegetation consisting of birch, spruce, rose, horsetail, high bush cranberry, bedstraw and moss indicates an upland moist mixed forest ecosystem (Figure 75). Leaf litter and vegetation completely obscure the forest floor. The area has seen moderate recreational use as evidenced by a tree stand, 2007 bear baiting permit, halved 50 gallon barrels, fire pit, litter and a lightly used ATV trail currently under water.

The site was identified in 2002 when artifacts were recovered during Phase I subsurface testing (Hedman et al. 2002). One shovel test out of 17 total contained 5 chert and basalt flakes (UA2010-180-1 through 15). Two adjacent 1 x 1 m units were excavated later that summer. Unit B was centered over the positive shovel test. Recovered artifacts consisted of 3 bone fragments, 2 chert and 2 basalt flakes from unit A, and 79 bone fragments, 51 chert and 24 basalt flakes from unit B. The bone, likely rodent, was extremely calcined and found from 0-15 cmbs. Flakes were all of two –three raw materials and all associated with late state biface production. Artifacts were found from 0-15 cmbs and concentrated from 5-10 cmbs. The site was relocated in 2013, though continuation of DOE testing was postponed due to the Stuart Creek Fire. On 18 August 2014, DOE testing was completed with the excavation of a shovel test grid to determine horizontal site boundaries (Figure 74). Although the excavated units from 2002 were relocated, none of the 2002 shovel tests could be positively identified. In 2014, shovel tests were placed at 10 m intervals from datum, for a total of 20 shovel tests largely concentrated around the units southwest of datum. Shovel tests were excavated to a meter and terminated due to depth, well

past previously recorded cultural levels. All shovel tests were negative. As two units were already excavated in 2002, no additional ones were excavated.

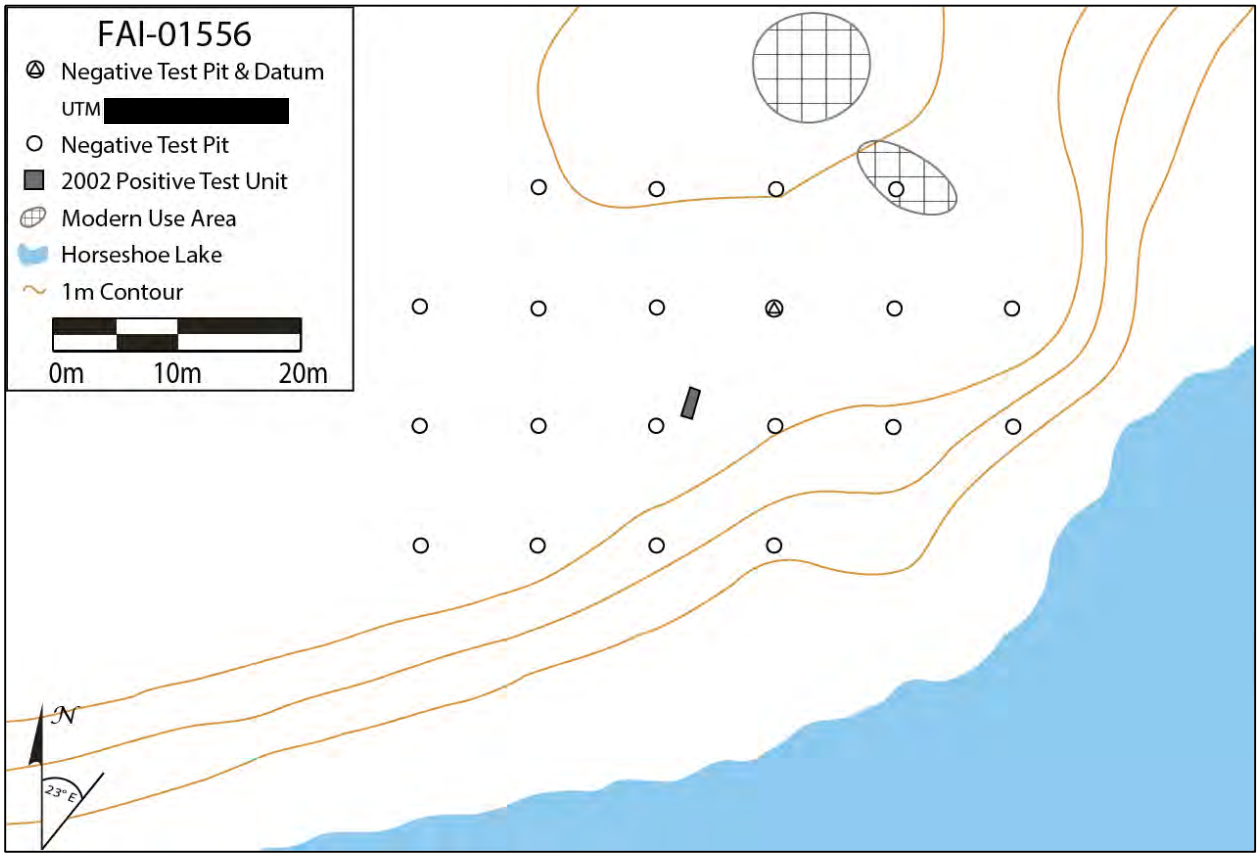

Figure 74. FAI-01556 site map.

The root mat and organic horizon (10YR2/2 very dark brown) covers the site from 5-15 cm thick over deep silts. All test pits reached 97-116 cmbs, and excavations were terminated at the length of a shovel and not because they reached bedrock. Aeolian silts made up the entire sediment profile. Two weak Bw horizons (10 cm thick 5YR4/4 reddish brown silt, and 15 cm thick 2.5Y5/1 gray silt) were found under the organic horizon and overlying unaltered silt (2.5Y5/1 gray silt) (Figure 76). Although no artifacts were found during the 2014 investigations, in 2002 artifacts were found in the root mat from 0-15 cmbs, and in the reddish brown silt layer. Soils do not appear disturbed by the recreational use.

FAI-01556 is a small lithic scatter consistent with a short-term single use site. Recovered cultural materials total 82 calcined bone fragments and 84 flakes. Only three material types (gray chert, banded chert, and basalt) are represented. The calcined bone is not datable and likely unrelated to the archaeology, and no diagnostic tools or traceable materials were found. Despite the

favorable location, the highly localized concentration of artifacts surrounded by apparently sterile soils likely mean the majority of the cultural materials have been excavated. The site is limited in contributing further to our knowledge of prehistory by the scarcity of intact cultural materials and USAG FWA finds FAI-01556 ineligible for inclusion in NRHP.

Figure 75. FAI-01556 site overview.

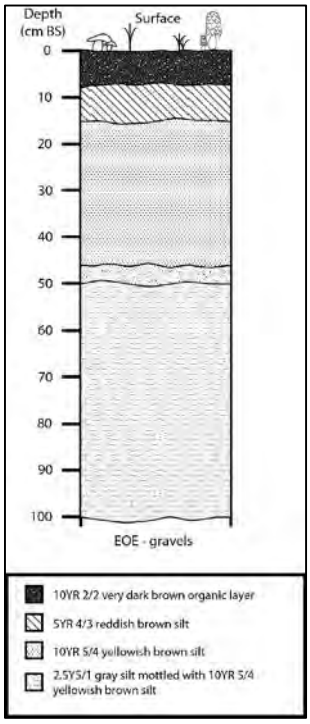

Figure 76. FAI-01556 stratigraphic profile.

XBD-00105

[redacted]

Determination of Eligibility: Not Eligible

XBD-00105 is located south of Beaver Creek road in the western portion of YTA, 42 km southeast of Fairbanks. The site was discovered on a small, slightly raised knoll with some exposed bedrock just off a trail winding down the narrow ridge (Figure 69, Figure 77). Slope is less than 5% on the knoll, with sides sloping up to 20% in all directions. The site viewshed is filled 60° to northeast by the ridgeline, while finger ridges to east and west are partially visible through the forest, along with a valley and opposing ridgeline to south. The closest water source is Moose Creek approximately 1 km to southwest. The upland moist broadleaf forest burned in 2013, leaving charred alder and birch behind (Figure 78). New growth consists of grass, moss, fireweed, raspberry, and birch and spruce saplings. Surface visibility is about 5% and concentrated in a 16 m² area of exposed bedrock. Disturbances in the area include an overgrown, formerly well-used trail running within 5 m of datum, and bulldozed areas, push piles and litter associated with the trail corridor, which averages 20 m in width along the ridgeline.

XBD-00105 was originally identified by C. Holmes during an exploratory survey (Holmes 1979a). A chert microblade core was found on the trail surface. The core was considered an isolated find and no shovel tests were excavated. On 26 August 2014, Phase II investigations were conducted to determine the site's eligibility for inclusion in the NRHP. The site was relocated at the highest point closest to the 1979 coordinates that also matched the physical description. A shovel test randomly placed on the knoll contained a single black chert flake. This shovel test was marked as the new site datum with the site coordinates (Figure 77). As the landform was less than 20 m in diameter, shovel tests were evenly spaced to cover the knoll, with an additional shovel test in the trail. Shovel tests were excavated to degrading schist bedrock. Of the five shovel tests excavated, only the first was positive for cultural material. As a lone subsurface flake was recovered in these investigations, no further work was deemed necessary.

The shovel test pits varied between 32 and 57 cm deep on the knoll and only 14 cm deep on the trail. All ended at decaying quartz and schist bedrock (Birch Creek Schist). Above the bedrock aeolian silts make up the stratigraphic profile (Figure 79, Figure 80). The soil profile generally consisted of a thin organic layer (10YR2/2 very dark brown) over a 10 cm thick Bw horizon (10YR2/2 very dark brown) over a 20 cm thick B horizon (10YR4/4 dark yellow brown). The chert flake was found in the B horizon, 15-20 cmbs. Soils on the knoll appear undisturbed despite the trail and bulldozed surface and push piles in close proximity.

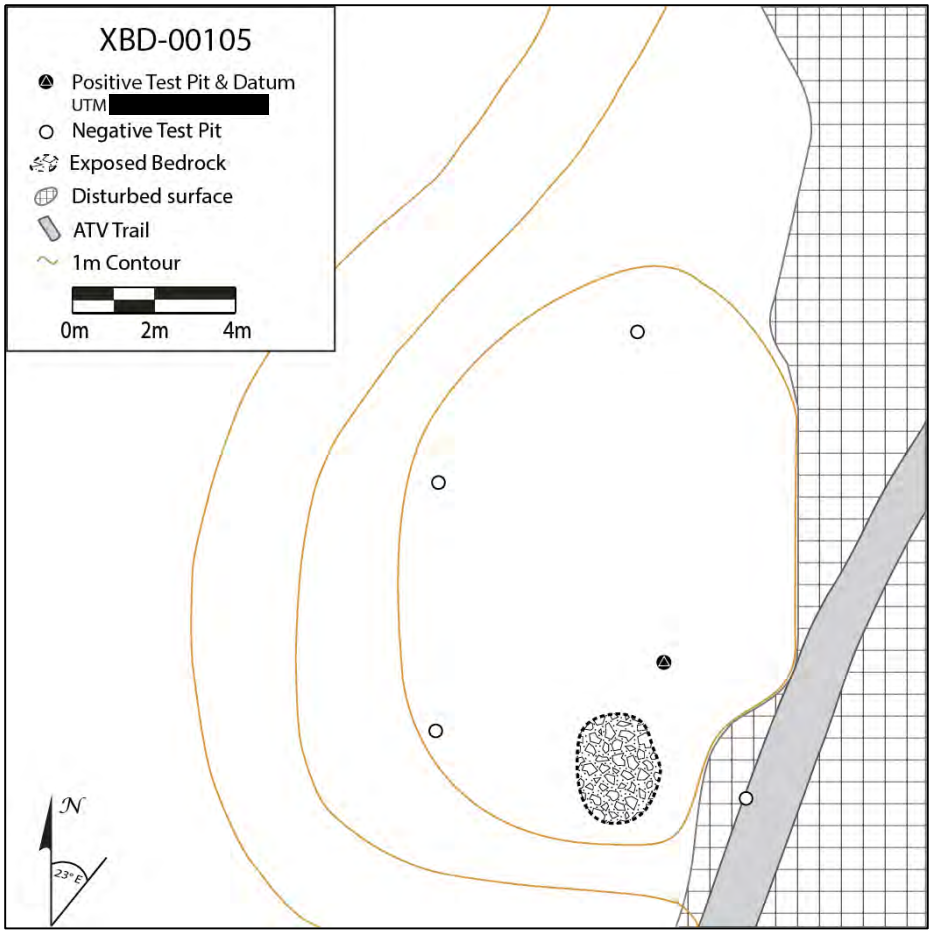

Figure 77. XBD-00105 site map.

Figure 78. XBD-00105 site overview.

Although 2014 investigation found an additional flake, XBD-00105 is only a very small site or two isolated finds. Cultural remains consist of a microblade core from a disturbed surface and a single subsurface flake, both representing one material type (black chert). No diagnostic tools, datable materials or traceable materials were found. The site is limited in contributing to our knowledge of prehistory by lack of cultural materials and USAG FWA finds XBD-00105 not eligible for inclusion in the NRHP.

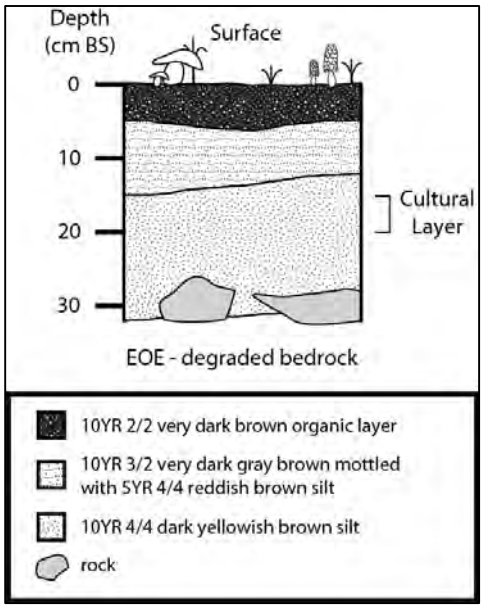

Figure 79. XBD-00105 stratigraphic profile.

Figure 80. XBD-00105 test pit.

2014 Donnelly Training Area Fieldwork

DTA Section 106 Activities

Much of the eastern portion of DTA has been thoroughly surveyed for cultural resources over the past decade. Because of that, Army undertakings and trainings are often found in previously surveyed areas and Section 106 consultation is covered by USAG FWA's Operations and Maintenance Programmatic Agreement (Thomas 2014). No new archaeological surveys were required for undertakings in DTA in 2014.

DTA Surveys

A total of 2135 acres of land were surveyed for archaeological sites by CEMML crews in DTA during the 2014 field season. All highlighted areas in Figure 81were covered by pedestrian transects, and shovel testing occurred on upland locations. Surveys were located just north of Donnelly Dome and in the southeastern portion of the BAX SDZ in DTA East.

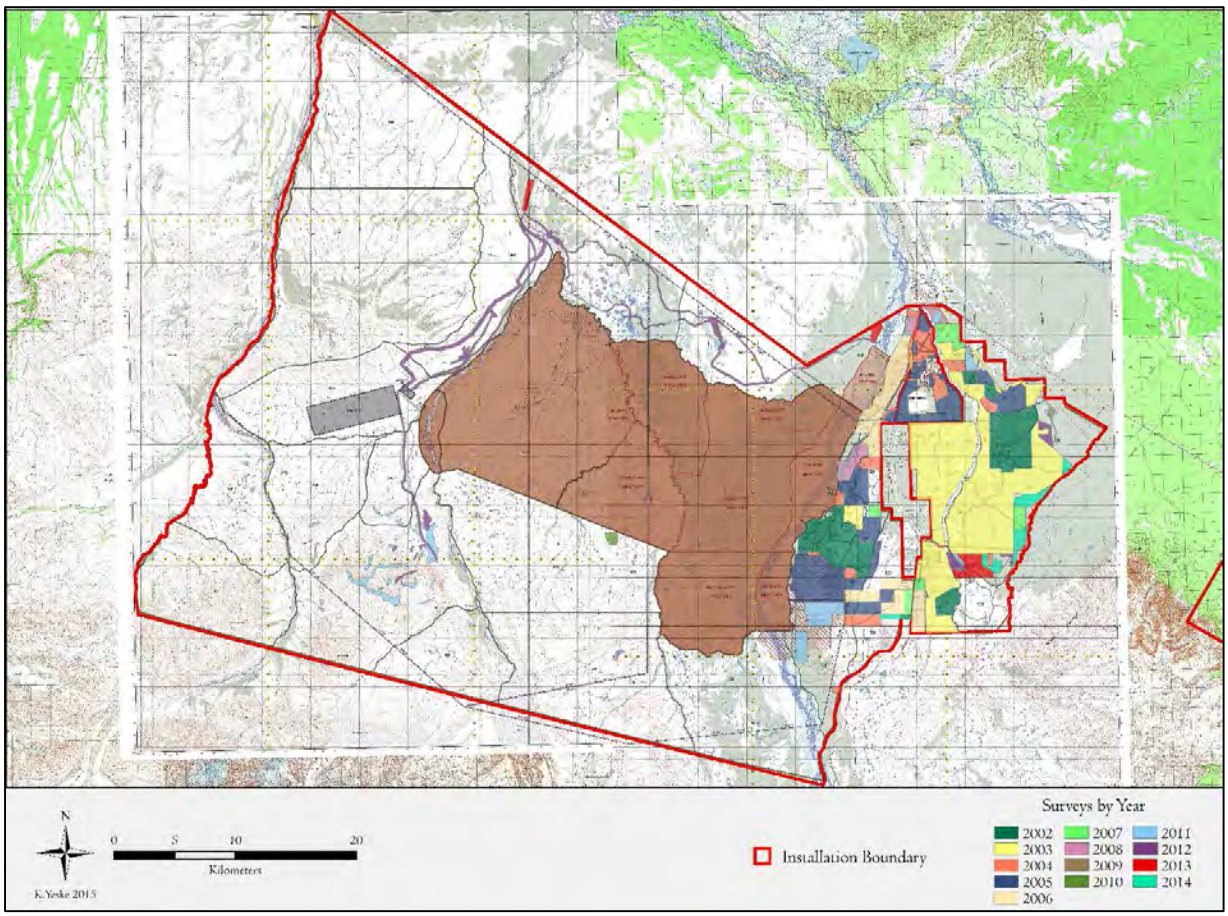

Figure 81. All surveys in DTA by year. The mint green areas were surveyed in 2014.

DTA New Sites

Three new archaeological sites were discovered during the BAX expansion surveys east of Jarvis Creek at the southern portion of 33 Mile Loop Road (XMH-01511, 01512 and 01535) (Figure 82). Five sites found during a survey in 2002 by Tanana Chiefs Conference that were not previously reported were also relocated, AHRS numbers assigned, and artifacts accessioned (XMH-01530 through 1534). Three of these sites, XMH-01530, 01531 and 01534, fall outside military lands.

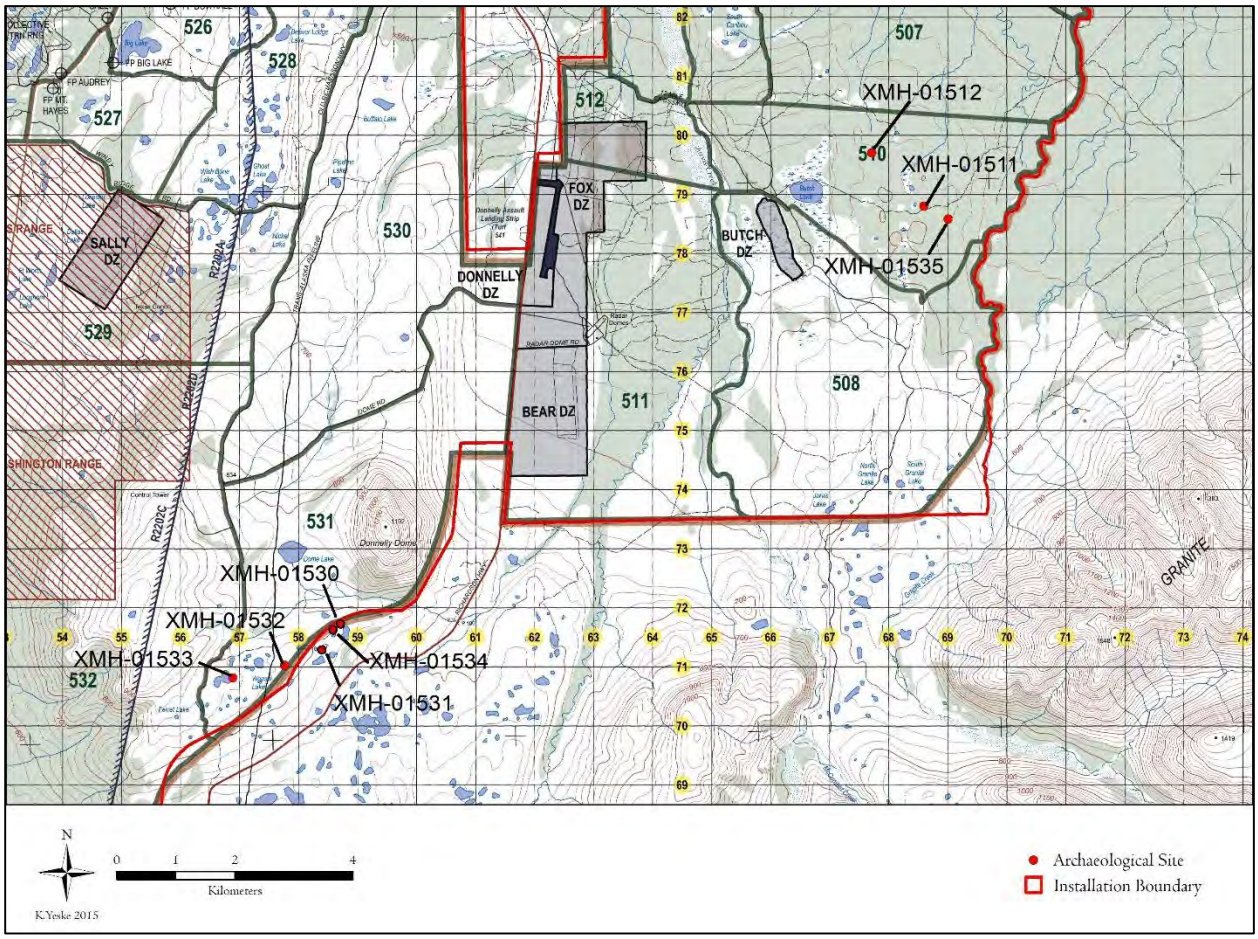

Figure 82. Sites discovered in DTA in 2014.

XMH-01511

[redacted]

Determination of Eligibility: Not Evaluated

XMH-01511 is located on a small glacial kame at the southern end of 33 Mile Loop Road, approximately 24 km south of Delta Junction (Figure 82). The knoll rises 20 m above the surrounding area, and the nearest water sources are an arid kettle lake 100 m west of the site and Butch Lake 1.5 km to the west (Figure 83). The viewshed includes the Granite Mountains to the east and Donnelly Dome and the Alaska Range to the south and west. The site is not forested and vegetation consists of crowberries, cranberries, scrub birch, and lichens (Figure 84). Several other archaeological sites are in the vicinity: XMH-01365 is 400 m to the east north east; XMH-01126 is 500 m to the north; and XMH-01378 and XMH-01377 are 250 m and 500 m to the south.

A small lithic scatter was found on the surface of the site in the trail that runs north-south along the ridgeline. A single obsidian flake and four rhyolite flakes were collected (UA2014-97-001). Two shovel tests were excavated but neither contained cultural material (Figure 83). The site appeared to be minimally disturbed by the ATV trail, a survey marker, erosion and animal digging.

Shovel tests at XMH-01511 reached approximately 36 cmbs and were terminated once glacial outwash gravels were reached. The upper deposits are made of windblown silts with weak soil development (0-30 cmbd) (Figure 85, Figure 86). A thin elluvial horizon underlies a 5 cm thick organic horizon. Outwash gravels are increasingly mixed with aeolian deposits with depth in the profile.

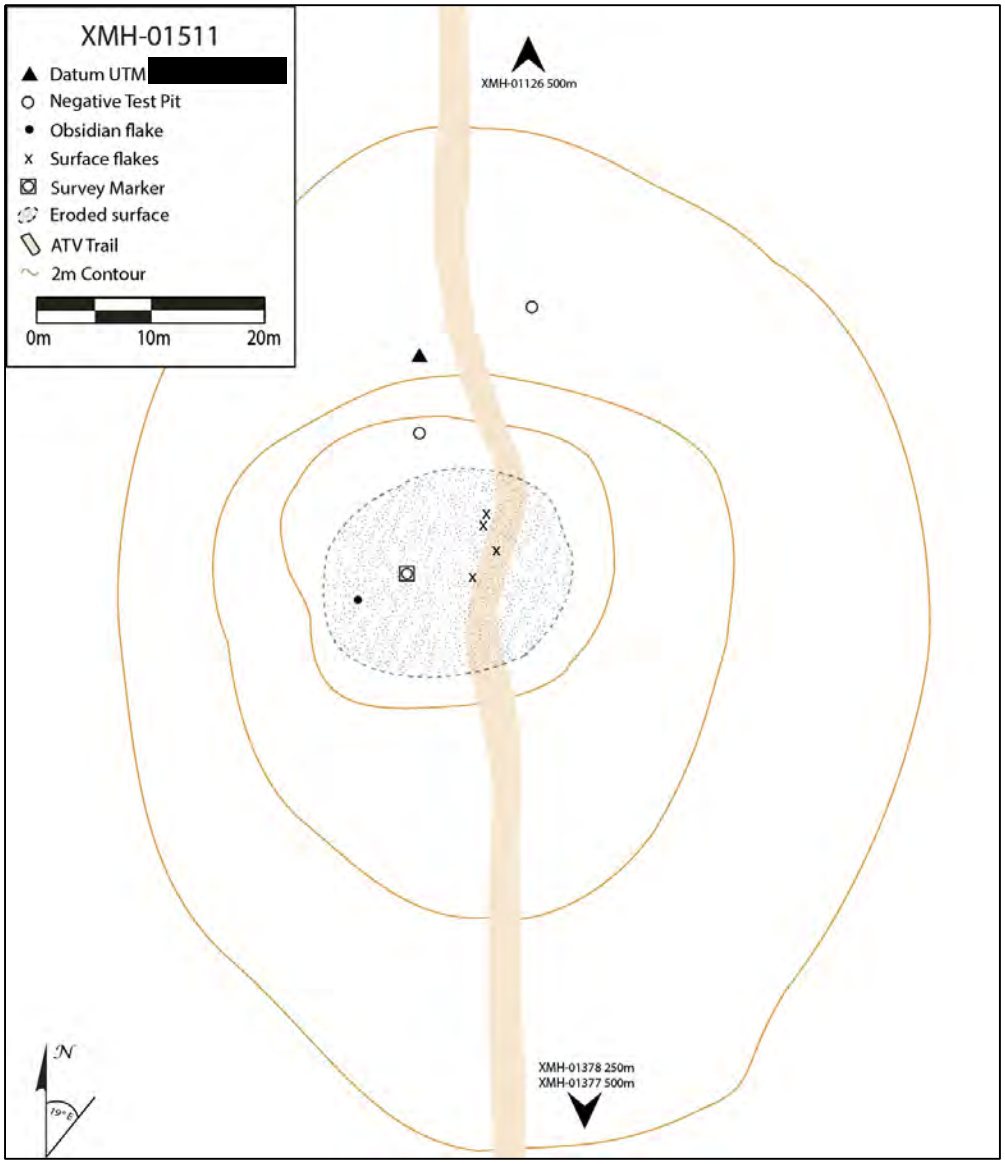

Figure 83. XMH-01511 site map.

Figure 84. XMH-01511 site overview.

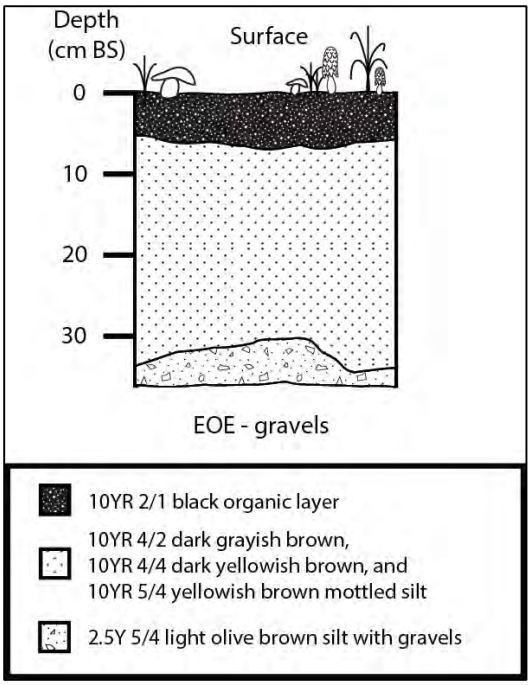

Figure 85. XMH-01511 stratigraphic profile.

Figure 86. XMH-01511 test pit.

XMH-01512

[redacted]

Determination of Eligibility: Not Evaluated

XMH-01512 is located on a small glacial kame at the southern end of 33 Mile Loop Road, approximately 24 km south of Delta Junction (Figure 83). The knoll rises 10 m above the surrounding area, and the nearest water source, Butch Lake, is 1 km to the southwest (Figure 87). The viewshed includes the Granite Mountains to the east, Butch Lake to the southwest, Donnelly Dome and the Alaska Range to the south and west. Vegetation includes crowberries, cranberries, scrub birch, and lichens (Figure 88).

A single chert flake was found in the one of the three test pits and collected (UA2014-98-001). The site appeared to be minimally disturbed by erosion and animal digging.

Shovel tests at the site reached approximately 38 cmbs and were terminated once glacial gravels were reached. The upper deposits are made of windblown silts with weak soil

development (Figure 89, Figure 90). A thin elluvial horizon underlies a 5 cm thick organic horizon. Glacial gravels are increasingly mixed with aeolian deposits with depth in the profile.

Though surface and subsurface investigations were conducted and only a single chert flake was located XMH-01512 may contain more cultural material and further testing is needed to determine eligibility for the NRHP.

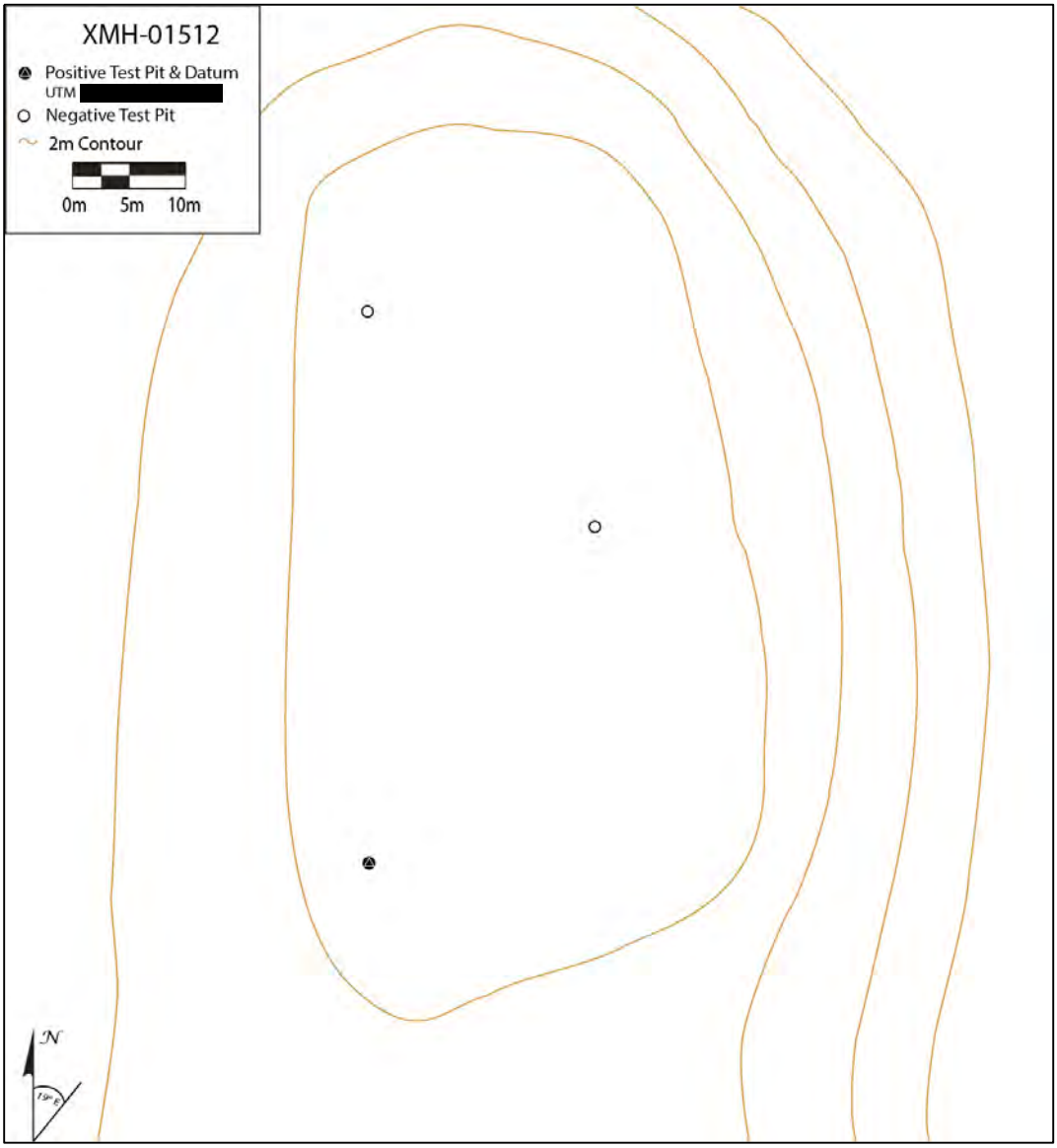

Figure 87. XMH-01512 site map.

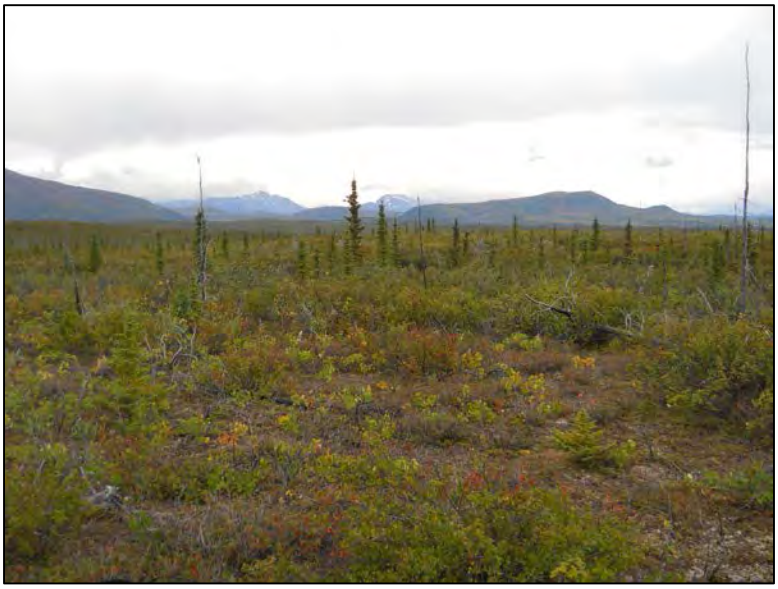

Figure 88. XMH-01512 site overview.

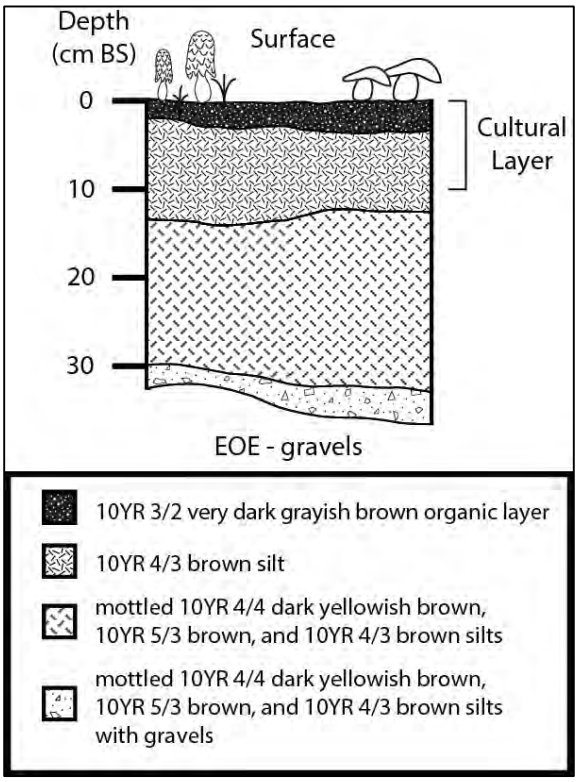

Figure 89. XMH-01512 stratigraphic profile.

Figure 90. XMH-01512 test pit.

XMH-01530

[redacted]

Determination of Eligibility: Not Evaluated

XMH-01530 is located south of Donnelly Dome and west of the Richardson Highway in the Donnelly Ridge Archaeological District (XMH-00388) approximately 30 km south of Delta Junction (Figure 82). The site was originally located during a 2002 survey of the area by Tanana Chiefs Conference, but was never sent to the SHPO and formally described in an AHRS card. The site was relocated in 2014 by CEMML crews, just east of the border of Army managed DTA, on state land.

A small lithic scatter was located on the highest flat knoll within a large blowout during the 2002 survey (Figure 91). Upon relocation, it was noted that the site is 200 m northwest of a small lake on a glacial moraine. Vegetation on and around the site includes spruce trees, bear berries and other types of small brush (Figure 92). There is 90% surface visibility in the blowout area. Five flakes were reported to have been found in surficial and shallowly buried context in a single test pit. These consisted of 2 quartzite, 2 black chert, and 1 basalt flake. Only the one quartzite and one chert flake were found among the notes and artifacts for the survey however (UA2014-099-001 and 002).

A single test pit was excavated in 2014. No other artifacts were found. Silt mixed with gravel make up the upper 15 cm of the stratigraphic profile. No soil development is evident. Outwash gravels are exposed at surface in some areas and found no deeper than 15 cm in other areas (Figure 93).

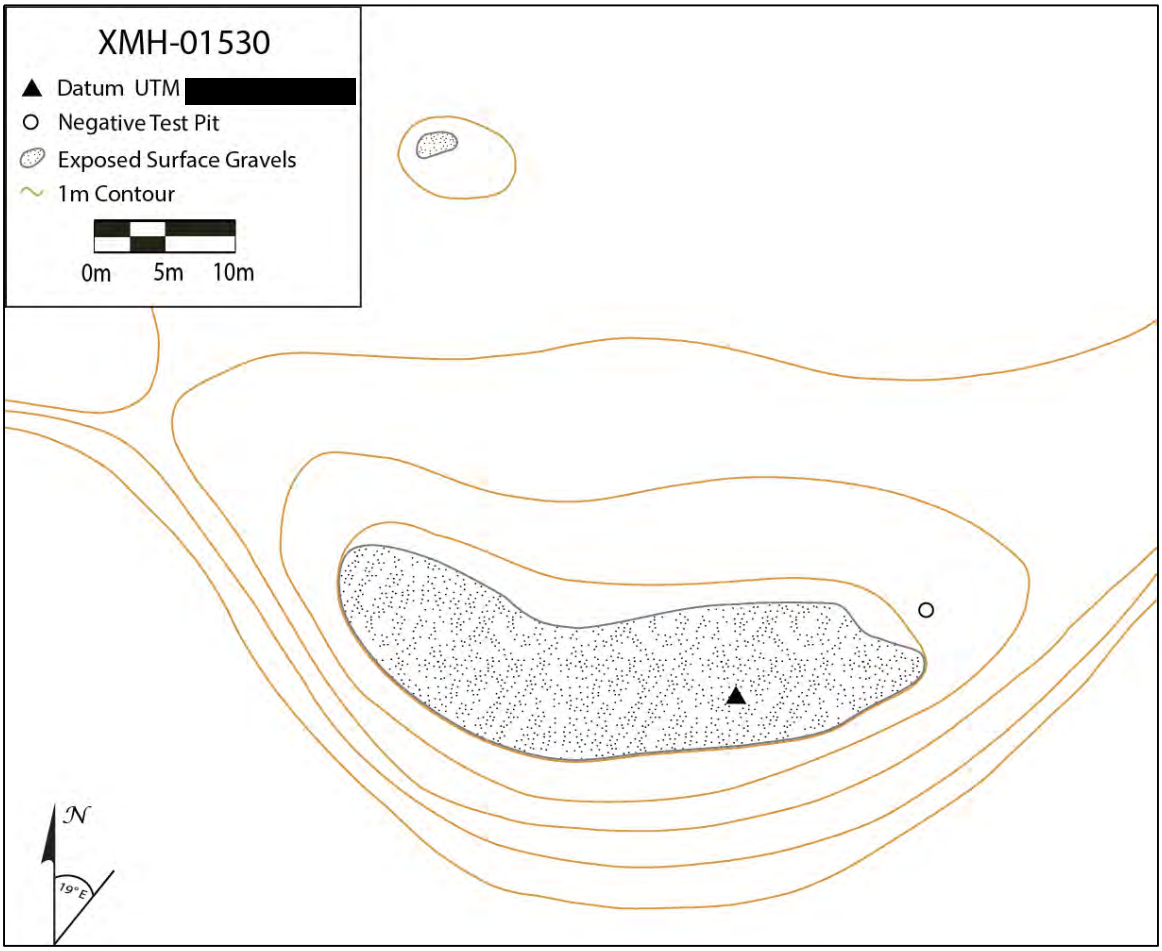

Figure 91. XMH-01530 site map.

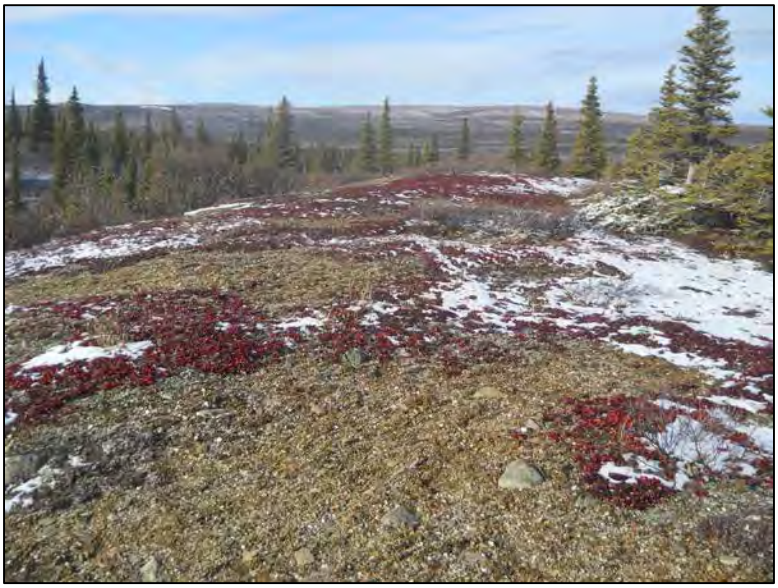

Figure 92. XMH-01530 site overview.

Figure 93. XMH-01530 test pit.

XMH-01531

[redacted]

Determination of Eligibility: Not Evaluated

XMH-01531 is located south of Donnelly Dome and west of the Richardson Highway in the Donnelly Ridge Archaeological District (XMH-00388) approximately 30 km south of Delta Junction (Figure 82). The site was originally located during a 2002 survey of the area by Tanana Chiefs Conference, but was never sent to the SHPO and formally described in an AHRS card. The site was relocated in 2014 by CEMML crews, just east of the border of Army managed DTA, on state land.

A lithic scatter including a broken gray chert biface, two rhyolite flakes, and a quartzite flake was found on a knoll within a large blowout during the 2002 survey (Figure 94). Upon relocation, it was noted that the site is 200 m north of a small kettle lake on a glacial moraine. Vegetation on and around the site includes spruce trees, bear berries and other types of small brush (Figure 95). There is 85% surface visibility in the blowout area. Three gray chert flakes were found on the surface but not collected. One additional gray chert flake was discovered shallowly buried in the single test pit excavated at the site (UA2014-100-001).

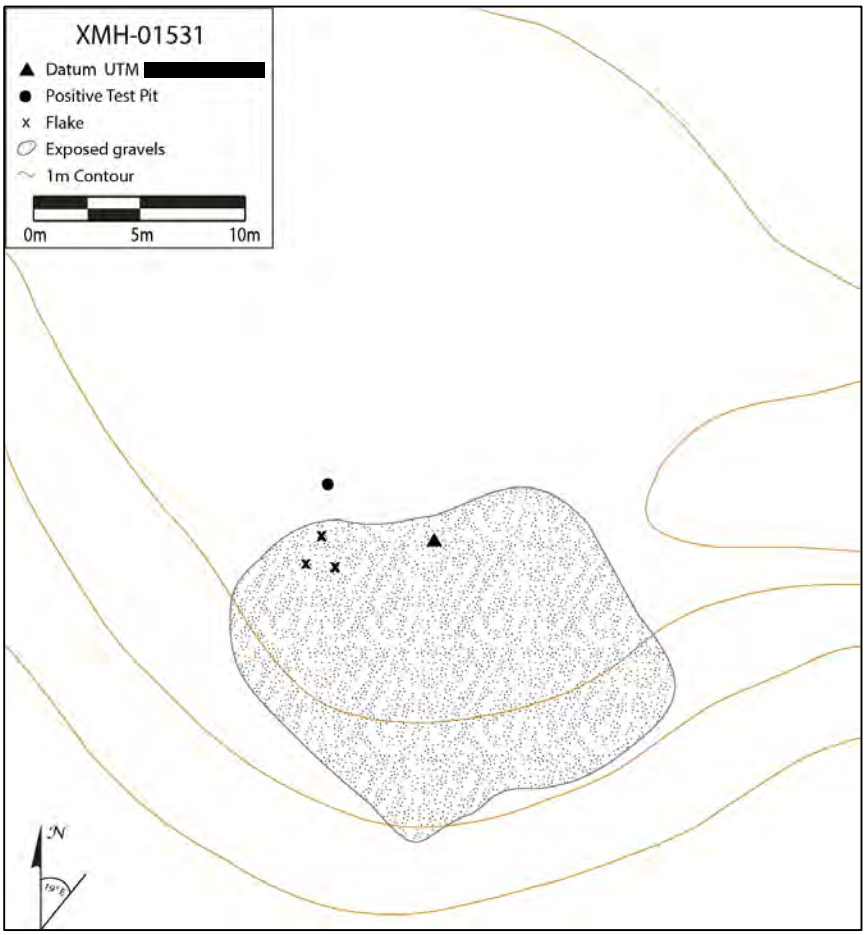

Figure 94. XMH-01531 site map.

Glacial gravels are exposed in most locations at the site, but some shallow pockets of intact sediment exist. Up to 10 cm of coarse silt lacking significant soil development is found in places under the 5 cm root mat (Figure 96, Figure 97).

Figure 95. XMH-01531 site overview.

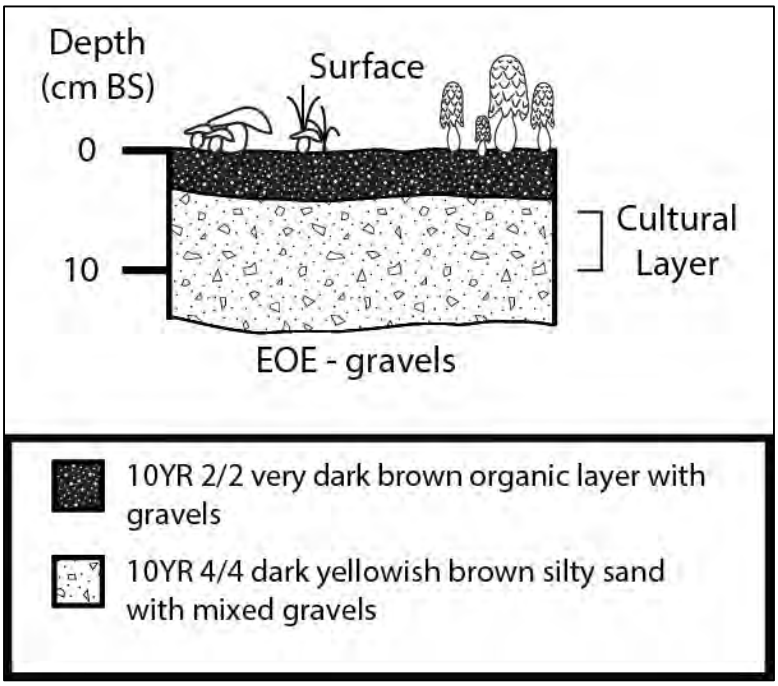

Figure 96. XMH-01531 stratigraphic profile.

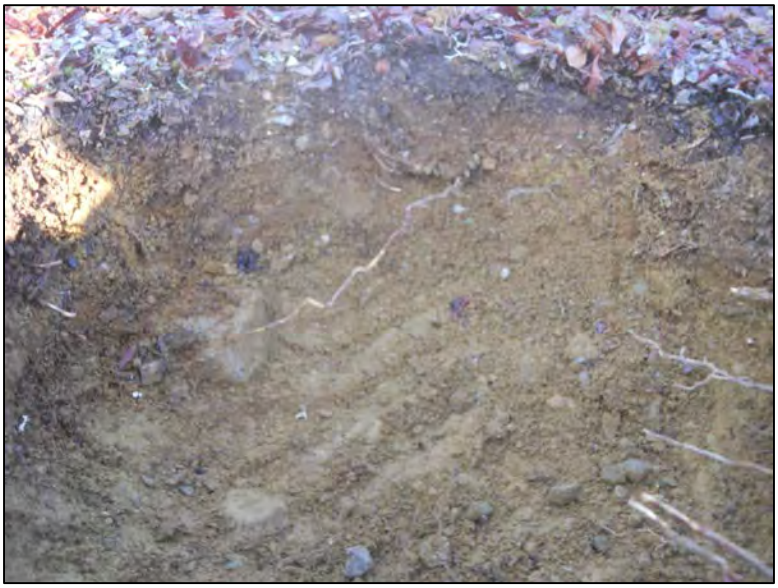

Figure 97. XMH-01531 test pit.

XMH-01532

[redacted]

Determination of Eligibility: Not Evaluated

XMH-01532 is located south of Donnelly Dome and west of the Richardson Highway in the Donnelly Ridge Archaeological District (XMH-00388) approximately 30 km south of Delta Junction (Figure 82). The site was originally located during a 2002 survey of the area by Tanana Chiefs Conference, but was never sent to the SHPO and formally described in an AHRS card. The site was relocated in 2014 by CEMML crews, 250 m east of the pipeline corridor, on the eastern edge of Army managed DTA.

An isolated basalt was discovered on a knoll during the 2002 survey (Figure 98). Kettle lakes are located 250 m to the northwest and approximately 1 km to the south. The site is covered in low shrubs, spruce, and grasses (Figure 99). Views can be seen in all directions. No additional flakes were discovered during the relocation but the knoll matches original coordinates and descriptions.

Glacial gravels are exposed in some areas at the site, but the majority of the knoll is covered in a shallow layer of intact sediment. Up to 10 cm of coarse silt lacking significant soil development is found in places under the 5 cm root mat (Figure 100).

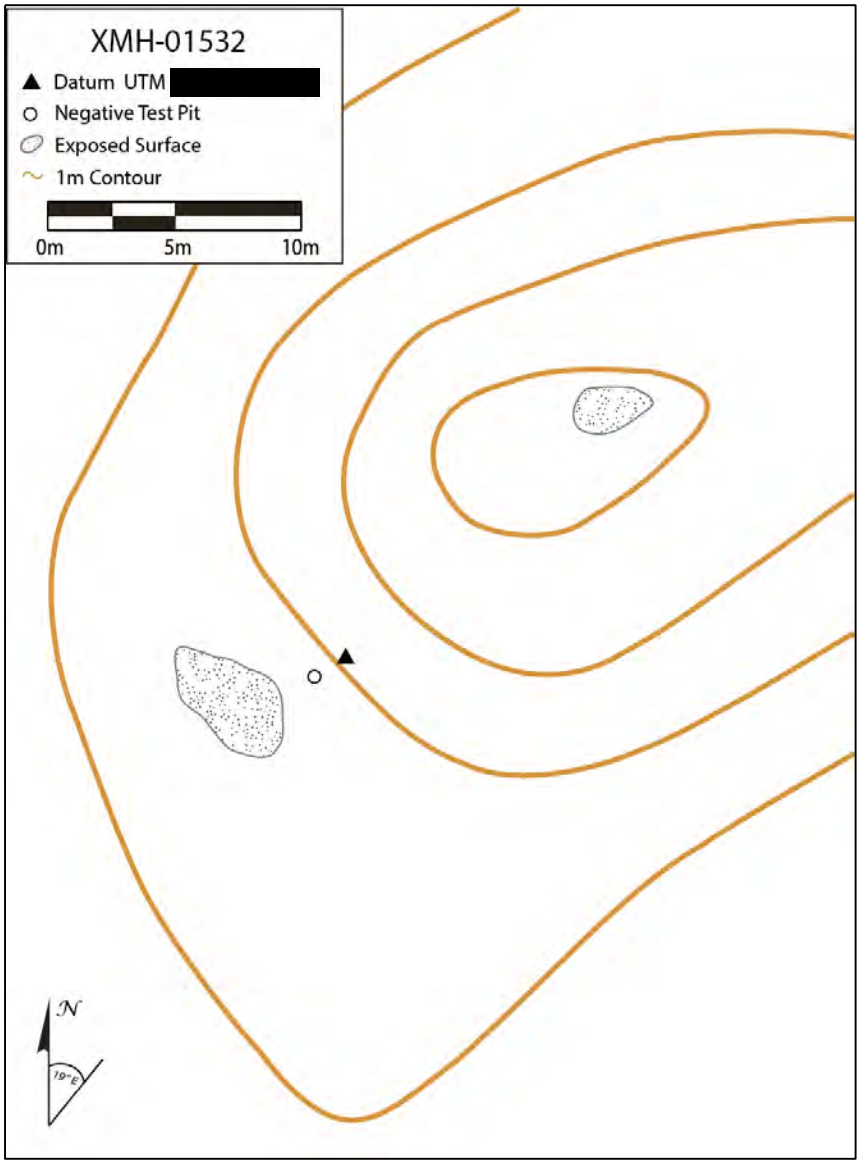

Figure 98. XMH-01532 site map.

Figure 99. XMH-01532 site overview.

Figure 100. XMH-01532 test pit.

XMH-01533

[redacted]

Determination of Eligibility: Not Evaluated

XMH-01533 is located south of Donnelly Dome and 1.4 km west of the Richardson Highway in the Donnelly Ridge Archaeological District (XMH-00388) approximately 31 km south of Delta Junction (Figure 82). The site was originally located during a 2002 survey of the area by Tanana Chiefs Conference, but was never sent to the SHPO and formally described in an AHRS card. The site was relocated in 2014 by CEMML crews, 1 km west of the eastern edge of Army managed DTA.

In 2002, 2 chert and 7 rhyolite flakes were recovered from the surface of the site. A 1x1m unit was excavated, producing 1 rhyolite and 4 chert flakes. The unit was identified when the site was relocated in the 2014 survey (Figure 101). The site overlooks a kettle lake and is covered in low shrubs, spruce, and grasses (Figure 102). Views can be seen in all directions. In 2014, two additional shovel test were excavated but no cultural material was recovered. Although no additional flakes were discovered during the relocation, the knoll matches original coordinates and descriptions, and the identifiable 2002 excavation unit ensures an accurate site location.

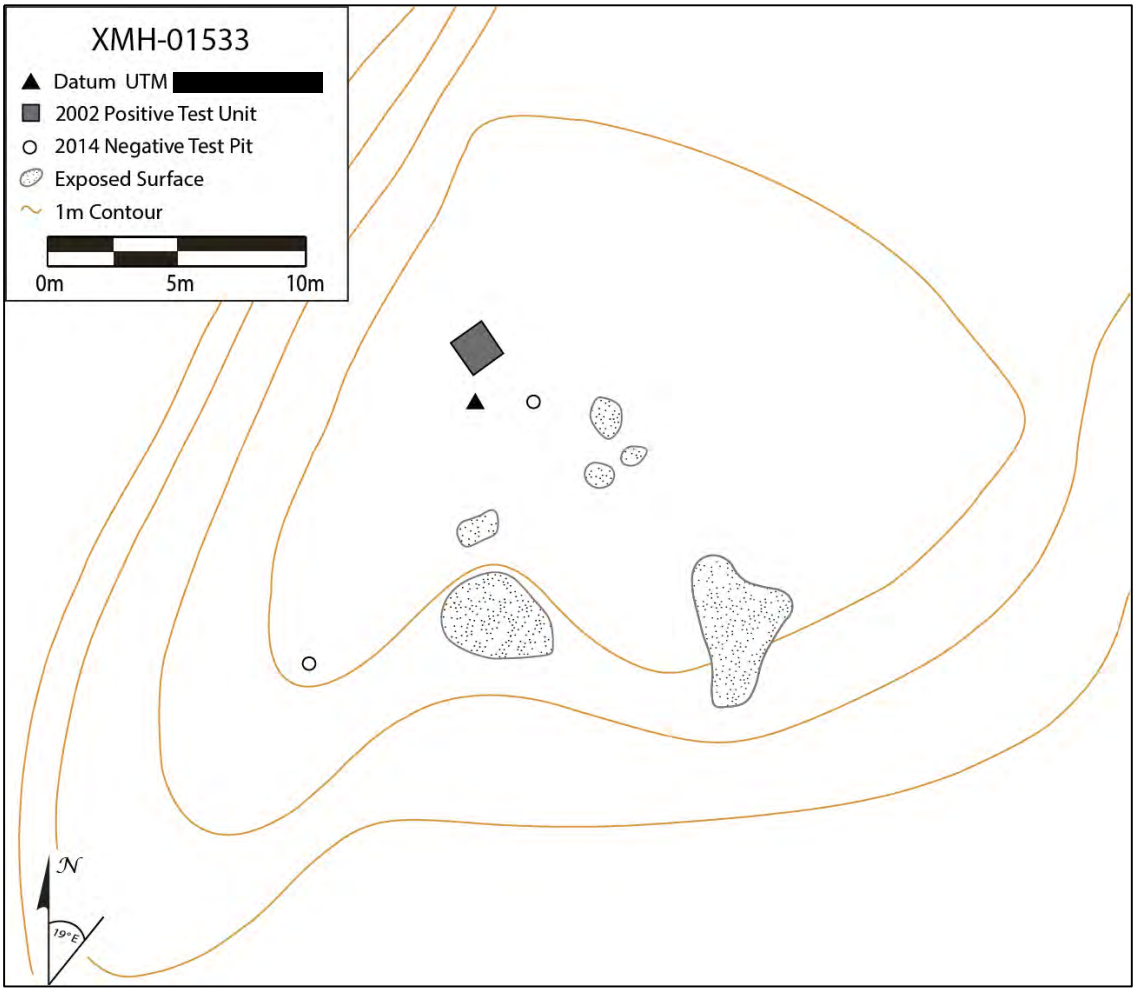

Figure 101. XMH-01533 site map.

Glacial gravels are exposed in some areas at the site, but the majority of the knoll is covered in a shallow layer of intact sediment. Up to 10 cm of coarse silt lacking significant soil development is found in places under the 5 cm root mat (Figure 103).

Figure 102. XMH-01533 site overview.

Figure 103. XMH-01533 test pit.

XMH-01534

[redacted]

Determination of Eligibility: Not Evaluated

XMH-01534 is located south of Donnelly Dome and west of the Richardson Highway in the Donnelly Ridge Archaeological District (XMH-00388) approximately 30 km south of Delta Junction (Figure 82). The site was originally located during a 2002 survey of the area by Tanana Chiefs Conference, but was never sent to the SHPO and formally described in an AHRS card. The site was relocated in 2014 by CEMML crews, just east of the border of Army managed DTA, on state land.

A single chert flake was collected on the surface of the prominent landform in 2002. The site was relocated on the edge of a ridge overlooking a kettle lake, 200 m to the southeast (Figure 104). Vegetation on and around the site includes spruce trees, bear berries and other types of small brush (Figure 105). There is 65% surface visibility in the blowout area. A single shovel test found no additional cultural material.

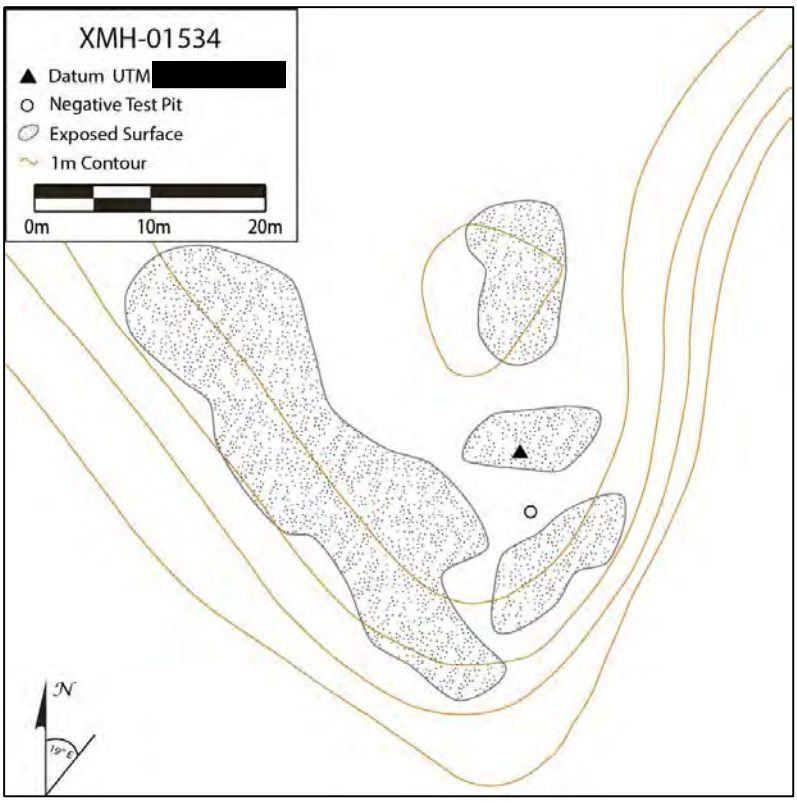

Figure 104. XMH-01534 site map.

Glacial gravels are exposed in most locations at the site, but some shallow pockets of intact sediment exist. Up to 10 cm of coarse silt lacking significant soil development is found in places under the 5 cm root mat (Figure 106).

Figure 105. XMH-01534 site overview.

Figure 106. XMH-01534 test pit.

XMH-01535

[redacted]

Determination of Eligibility: Not Evaluated

XMH-01535 is located on a small glacial kame at the southern end of 33 Mile Loop Road, approximately 24 km south of Delta Junction (Figure 82). The knoll rises 30 m above the surrounding area to the east and is along the eastern edge of a more prominent ridge that overlooks Granite Creek 500 m to the east (Figure 107). Butch Lake is 2 km to the west. The viewshed includes the Granite Mountains to the east and Donnelly Dome and the Alaska Range to the south and west. Vegetation includes crowberries, cranberries, scrub birch, and lichens (Figure 108).

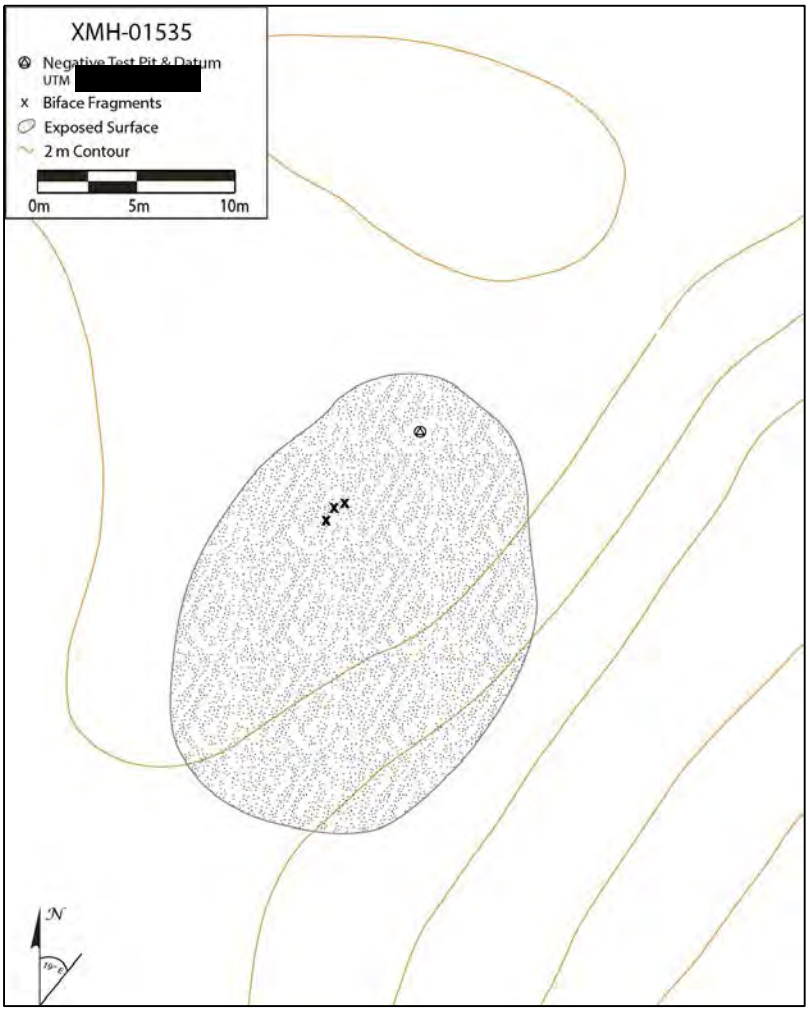

Figure 107. XMH-01535 site map.

A small scatter of a broken biface (3 fragments refit) was found on the surface of the site. (UA2014-104-001). A single shovel test was excavated but contained no cultural material. The site appeared to be minimally disturbed by erosion and animal digging.

The shovel test at the site reached 31 cmbs and was terminated once glacial gravels were reached (Figure 109, Figure 110). The upper deposits are made of windblown silts with weak soil development. A thin elluvial horizon underlies a 5 cm thick organic horizon. Glacial gravels are increasingly mixed with aeolian deposits with depth in the profile.

Though surface and subsurface investigations were conducted and the biface fragments collected, XMH-01535 may possess additional research potential and further testing is needed to determine eligibility for the NRHP.

Figure 108. XMH-01535 site overview.

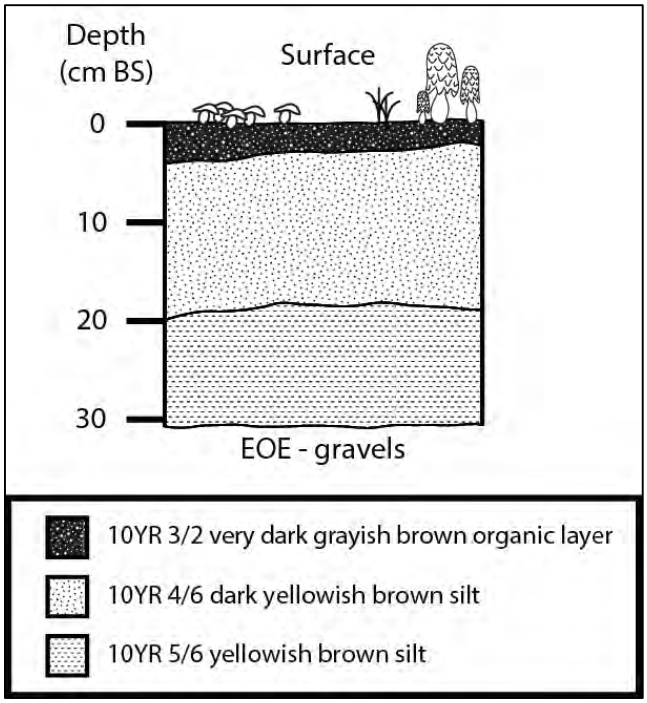

Figure 109. XMH-01535 stratigraphic profile.

Figure 110. XMH-01535 test pit.

DTA DOEs

Three sites were evaluated for NRHP eligibility in the DTA during the 2014 field season: XMH-01296, 01297, and 01455 (Figure 111). All were determined ineligible for the NRHP.

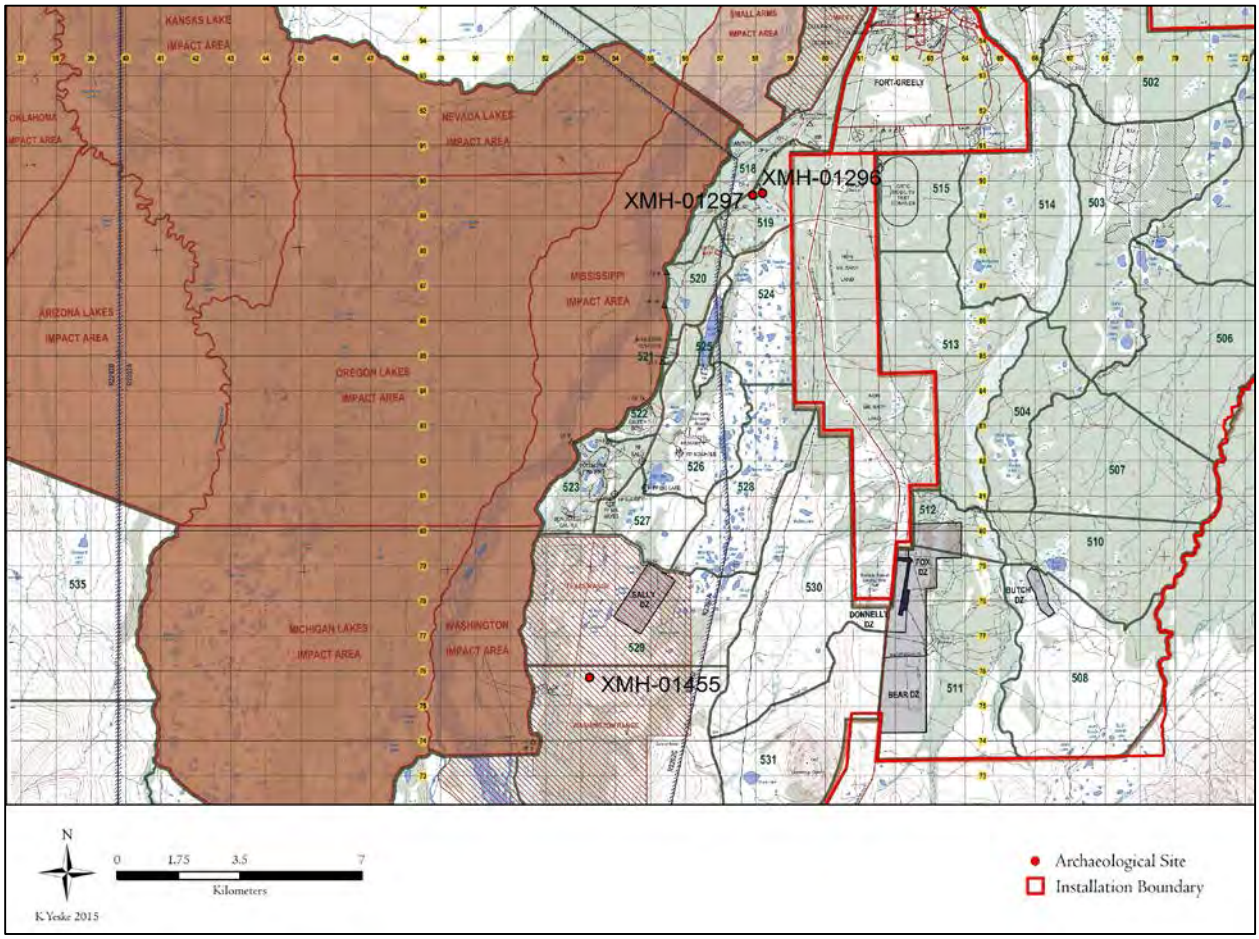

Figure 111. DTA 2014 DOE sites.

XMH-01296

[redacted]

Determination of Eligibility: Not Eligible

XMH-01296 was discovered on a glacial kame west of the OP road in DTA east, 13 km south of Delta Junction during a 2006 survey (Figure 111). The site was located 150 m west of the OP

road and 1.7 km west of the highway. Although the site was recorded in 2006, test pits from a previous visit by archaeologists were noted. Four flakes (3 chert and 1 basalt) were noted on the surface near the east end of the east-west trending landform (Robertson et al. 2007). The artifacts were not collected. The nearest body of water is a small kettle lake, 150 m to southwest. From the site, there is a 180° view of the surrounding area to the south and west. The site was revisited by CEMML crews on 5 September, 2014 for secondary investigations into its eligibility for the NRHP. A shovel test grid was set up over the site. The landform is narrow and steep sided, and shovel tests were placed along the top of the ridgeline at 10 m intervals (Figure 112, Figure 113). Two banded chert and one basalt flake were found at the high point of the ridge just west of the datum. One additional chert flake was found 20 m southeast of datum and appeared to have moved down the main ridge. The surface flakes were not collected.

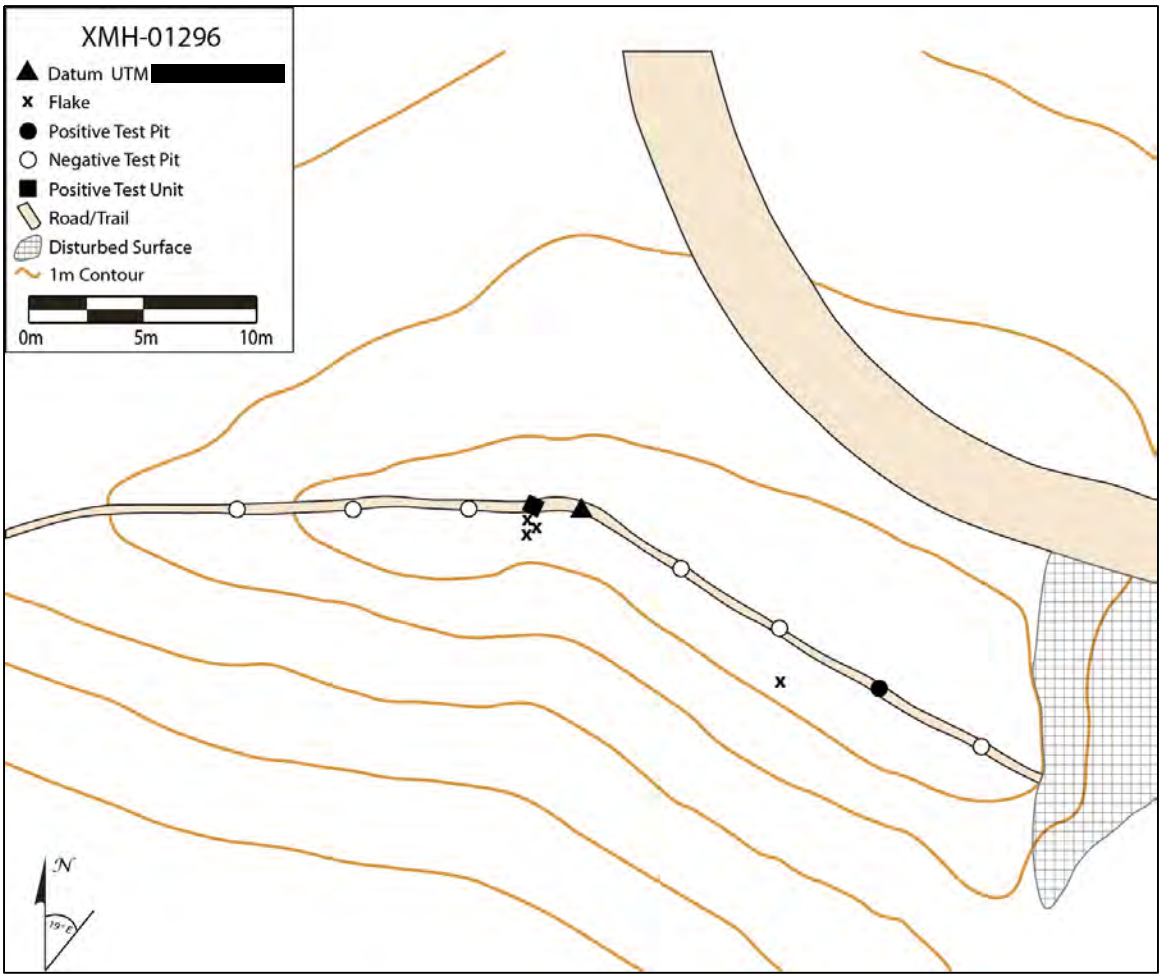

Figure 112. XMH-01296 site map.

A 1 x 1 m unit was excavated near the surface flakes west of datum. The unit was shallow and reached outwash gravels at less than 10 cmbs. Five gray basalt flakes were found shallowly buried in the excavation unit (UA2014-129-001 through 003). A mix of silt and gravels underlies light vegetation across the site (Figure 114, Figure 115). Very little soil development was noted.

In summary, a total of nine flakes were found on site in two separate visits. The artifacts are not diagnostic and thin deposits preclude stratified deposits. Because of lack of datable materials and an insufficient quantity of artifacts, USAG FWA finds XMH-01296 not eligible for inclusion in the NRHP.

Figure 113. XMH-01296 site overview.

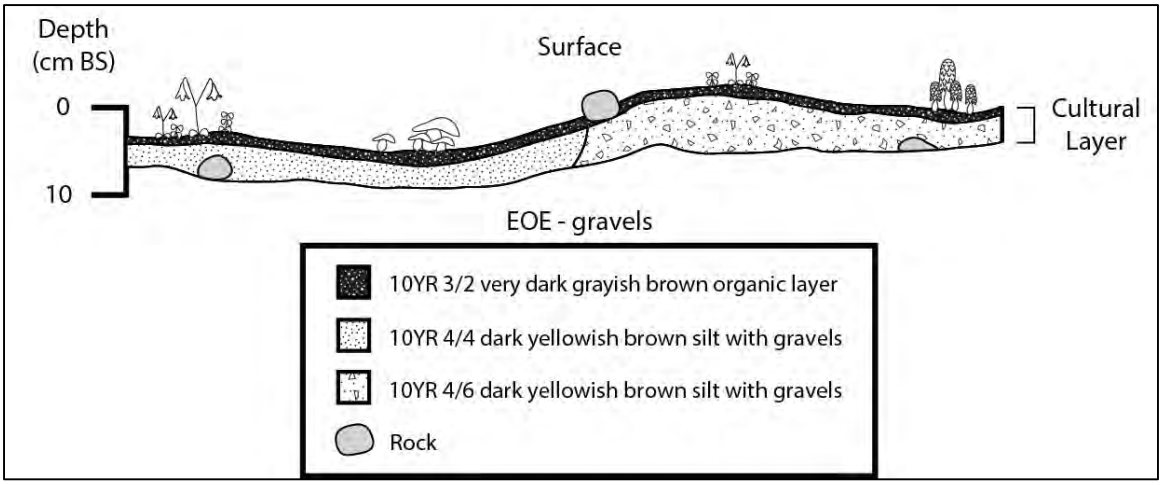

Figure 114. XMH-01296 stratigraphic profile.

Figure 115. XMH-01296 test excavation.

XMH-01297

[redacted]

Determination of Eligibility: Not Eligible

XMH-01297 was discovered on a glacial kame west of the OP road in DTA east, 13 km south of Delta Junction during a 2006 survey (Figure 111). The site was located 150 m northwest of the OP road and 1.9 km west of the highway. The site was recorded in 2006 (Robertson et al. 2007). A single basalt flake was noted on the surface of the landform. A string of unnamed kettle lakes begins 300 m to the southeast and a pond is located 100 m to the southwest. Trees surround the site preventing views in any direction (Figure 117). Surface exposure is 40%.

The site was revisited by CEMML crews on 4 September, 2014 for secondary investigations into its eligibility for the NRHP. A shovel test grid was set up over the site at 10 m intervals (Figure 116). Thirteen shovel tests and a careful surface examination encountered no cultural materials. Sediments at the site are extremely shallow and lacked significant organic accumulation across the surface in most places. Eight to ten centimeters of silt overly outwash gravels in this area (Figure 118, Figure 119).

In summary, only a single flake was found at XMH-01297 in two separate visits. The artifact is not diagnostic and thin deposits preclude stratified deposits. Because of lack of datable

materials and an insufficient research potential, USAG FWA finds XMH-01297 not eligible for inclusion in the NRHP.

Figure 116. XMH-01297 site map.

Figure 117. XMH-01297 site overview.

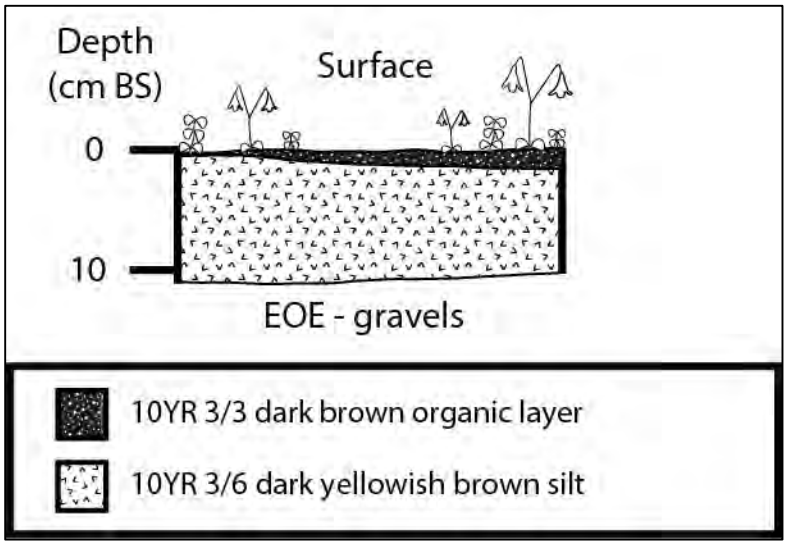

Figure 118. XMH-01297 stratigraphic profile.

Figure 119. XMH-01297 test pit.

XMH-01455

[redacted]

Determination of Eligibility: Not Eligible

XMH-01455 is located on a glacial kame east of the southern end of the OP road in DTA east, 27 km south of Delta Junction (Figure 111). The site is 550 m east of the OP road and 4.5 km west of the Richardson highway. The site was recorded in 2011 when three gray chert and one basalt flake were found on the surface and in a single shovel test (UA2011-373-001 and -002) (Esdale et al. 2012c). The knoll where the site was found overlooks the Delta River to the west and a small unnamed lake 500 m to the west (Figure 120). Views from the site are 180° to the west. Vegetation at the site consists of a spruce, aspen, birch, and tamarack overstory with low and tall scrub (Figure 121). Surface visibility at the site is approximately 50%.

The site was revisited by CEMML crews on 10 September, 2014 for secondary investigations into its eligibility for the NRHP. A shovel test grid was set up over the site at 5-10 m intervals (Figure 120). Fourteen shovel tests and a careful surface examination encountered no cultural materials. A test unit was excavated adjacent to the positive shovel test from the 2011 investigations. Two flakes were found shallowly buried in the unit (0-10 cmbs). The flakes were made from chert and rhyolite (UA2014-130-001 and -002).

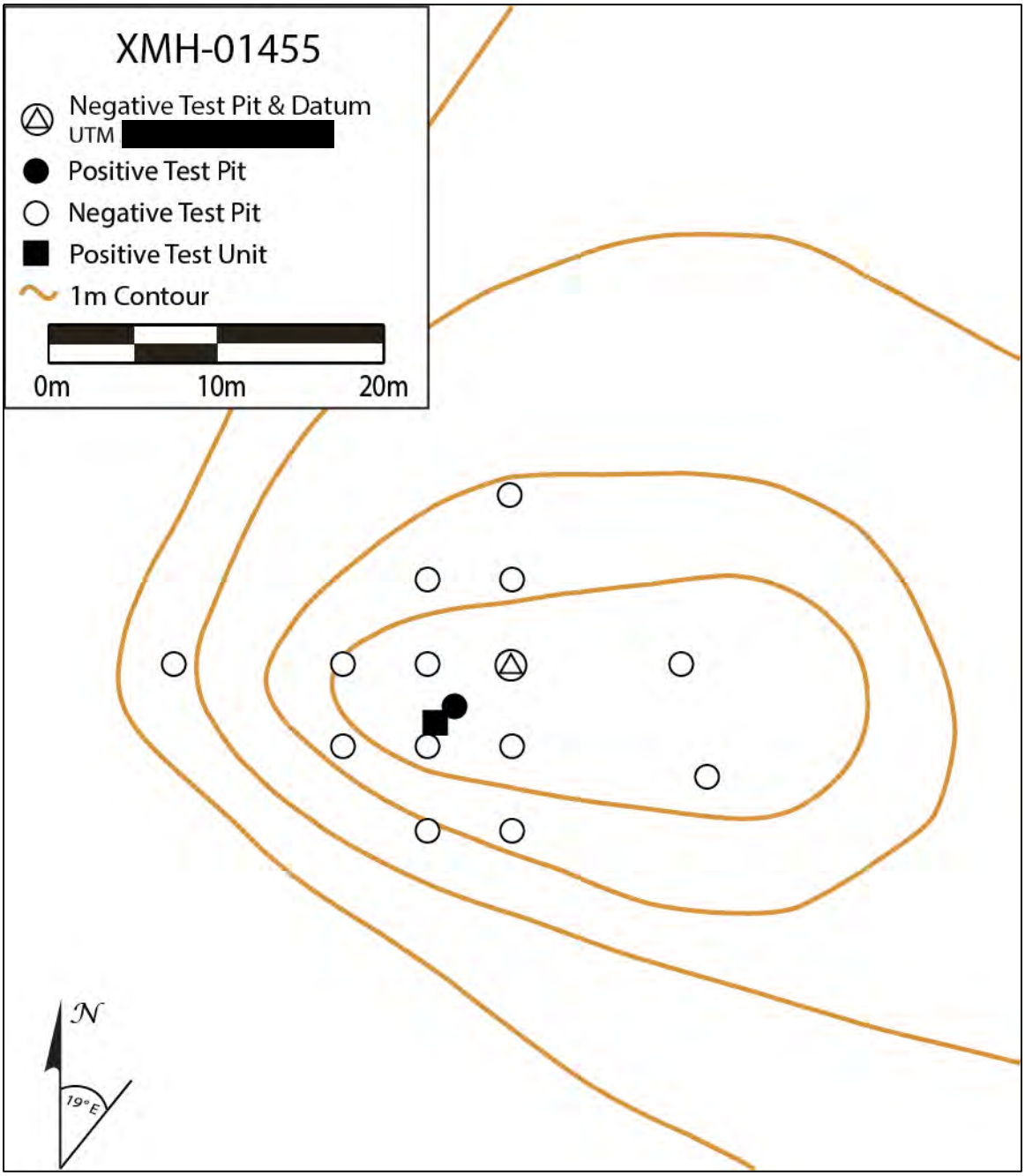

Figure 120. XMH-01455 site map.

Sediments at the site are extremely shallow and lacked significant organic accumulation across the surface in most places. Twelve to twenty centimeters of silt overly outwash gravels in this area (Figure 122, Figure 123).

Six complete flakes were found on surface and shallowly buried in a small area at XMH-01455 in two separate visits. The artifacts are not diagnostic and thin deposits preclude stratified deposits. Because of lack of datable materials and an insufficient research potential, USAG FWA finds XMH-01455 not eligible for inclusion in the NRHP.

Figure 121. XMH-01455 site overview.

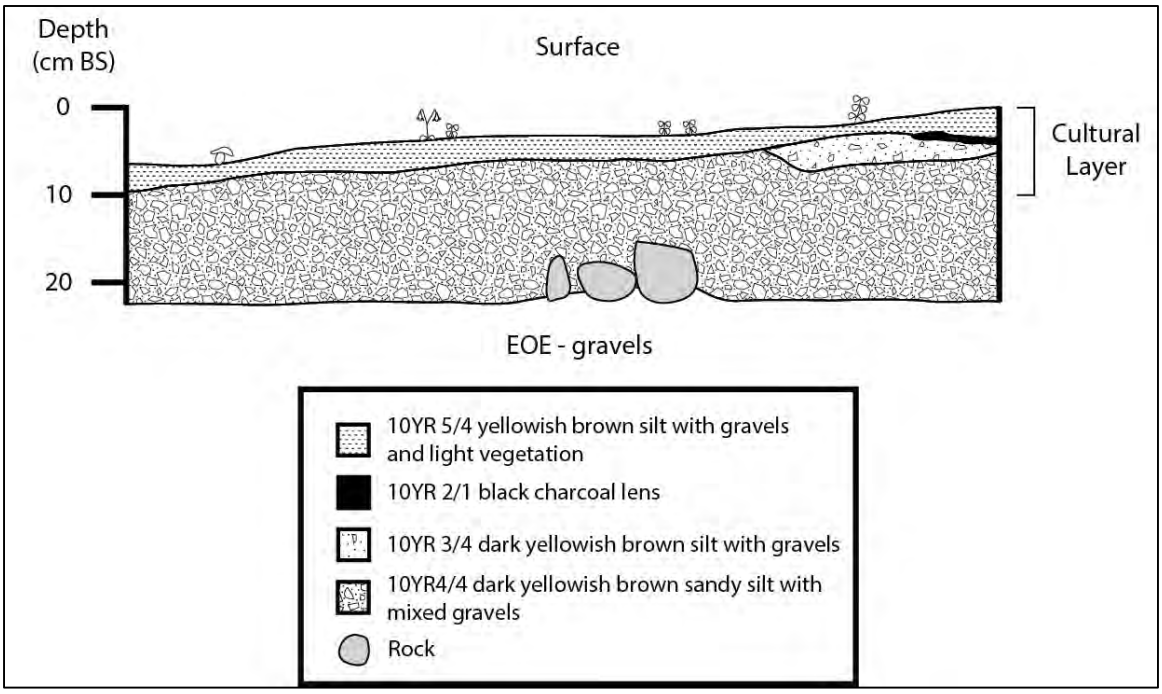

Figure 122. XMH-01455 stratigraphic profile.

Figure 123. XMH-01455 test pit.

2014 Gerstle River Training Area Fieldwork

GRTA Section 106 Activities

There were no Section 106 undertakings in the GRTA in 2014.

GRTA Surveys

No surveys were conducted in the GRTA in 2014.

GRTA New Sites

No new archaeological site were discovered in the GRTA in 2014.

GRTA DOEs

No sites were evaluated for NRHP eligibility in the GRTA in 2014.

2014 Black Rapids Training Area Fieldwork

BRTA Section 106 Activities

There were no Section 106 undertakings in the BRTA in 2014.

BRTA Surveys

Five hundred ninety-eight acres of land were surveyed in the BRTA in 2014. These areas were identified by USAG FWA Range Control as potential future development areas. The surveys encompassed mountainous terrain in the southern part of the training area (Figure 112). All highlighted areas in Figure 112 were covered by pedestrian transects, and shovel testing occurred on upland locations. No new archaeological sites were found during these surveys.

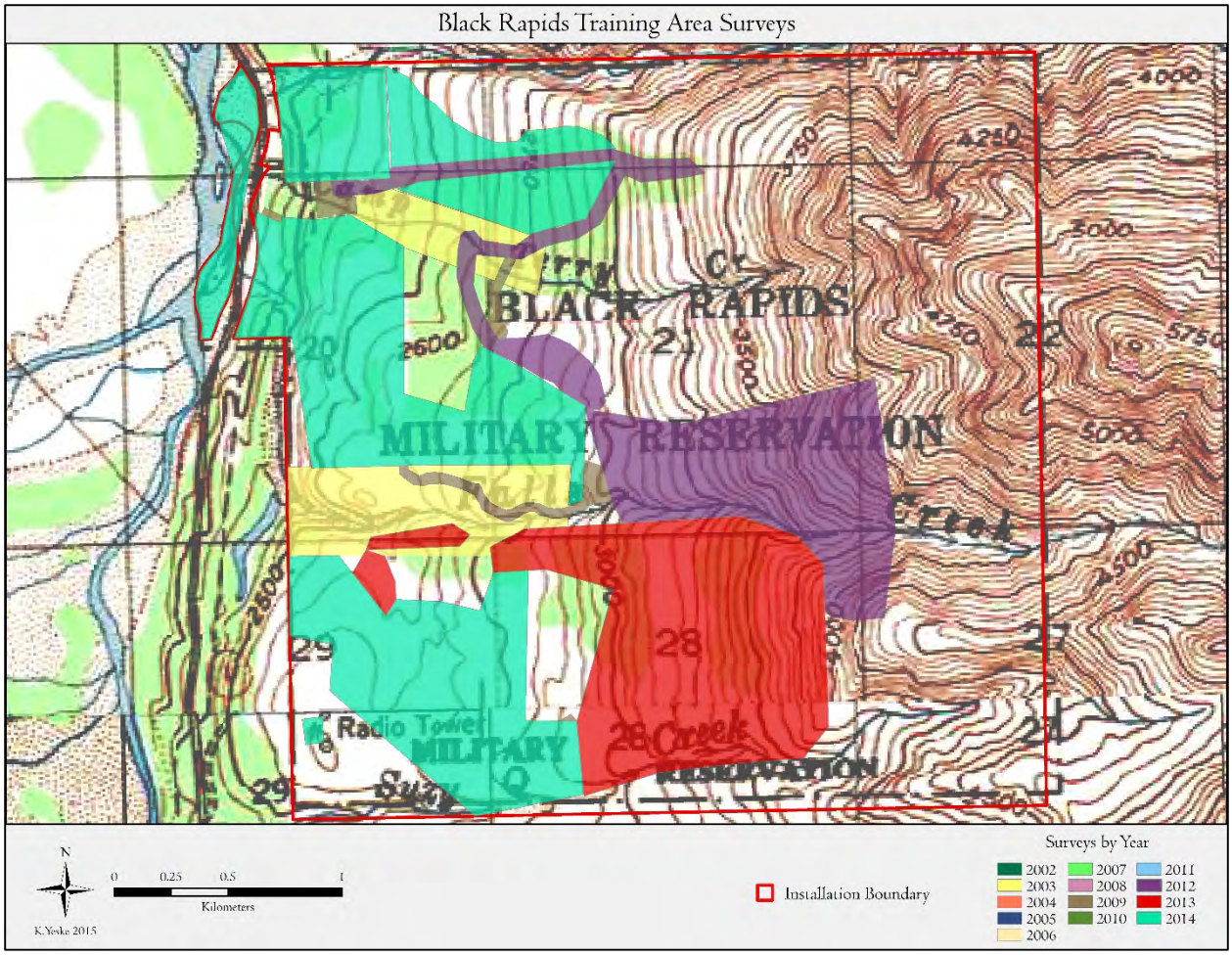

Figure 124. All surveys in BRTA by year. The red area was surveyed in 2014.

BRTA New Sites

No new archaeological sites were discovered in the BRTA in 2014.

BRTA DOEs

No sites were evaluated for NRHP eligibility in the BRTA in 2014.

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Appendix 1: 2014 AHRS Forms

Alaska Heritage Resources Survey

Alaska Office of History and Archaeology

For information contact the Alaska Office of History and Archaeology at (907) 269-8721

This document contains restricted information. Unauthorized circulation is prohibited by law!

AHRS Number: FAI-02319 **Mapsheet(s):** Fairbanks B-1

Acreage: **Date Issued:** 10/16/2014 **MTRS(s):** F006S001E36

Resource Shape: point **Location Confidence:** Location exact and existence verified

Long/ Latt DD: [redacted] **Assigned To:** J. Esdale

Site Name(s): K-14-1

Other Name(s):

Associations:

Site Description: Site is located on elevated bedrock outcrop on a narrow ridge that extends NW-SE. Site is about 40 x 50 m, near the apex of the hill. Nearest water is 1.8 k NE, Anne Lake. Viewshed is 0° due to dense vegetation. Site slopes less than 5°, surrounding area slopes 20-30°. Vegetation includes moss, lichen, low bush cranberry, and various low scrub. Burned deadfall surrounds the rise. Vegetation obscures ground surface visibility. One of five test pits was positive, containing a black chert flake 0-10 cmbs. Evidence of military use seen in spent ammunition and clips scattered across hill. Uphill from this site are FAI-02320, 75 m NE, and FAI-02321, 305 m NE.

Site Significance:

Location: Site is on hill 2.8 km west of South Blair Lake in Tanana Flats Training Area, 53 km south of Fairbanks, Alaska. Site is not accessible by road.

Danger(s) of Destruction: Recreation, military training

Present Condition: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering.

Associated Dates:

Period(s): Prehistoric Modern N/A N/A N/A

Resource Nature: Site

Historic Function(s): Subsistence

Current Function(s): Vacant

page: 1

Cultural Affiliation: Unknown

Property Owner: US Army

Repository/Accession #: UA2014-085

Alaska Heritage Resources Survey

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AHRS Number: FAI-02320 **Mapsheet(s):** Fairbanks B-1

Acreage: **Date Issued:** 10/16/2014 **MTRS(s):** F006S001E36

Resource Shape: point **Location Confidence:** Location exact and existence verified

Long/ Latt DD: [redacted] **Assigned To:** J. Esdale

Site Name(s): K-14-2

Other Name(s):

Associations:

Site Description: Site is situated on a bedrock knoll on a NW-SE trending ridgeline. Site slope is less than 3°, surrounding area is 15° to the SW, 90° to the NE. Nearest water source is Anne Lake, 1.7 km NE. Viewshed is 0° due to vegetation, which includes low bush cranberry, moss, lichen, aspen, and dwarf birch. Surface visibility is about 1%. The area is burnt, with burnt deadfall and root mat. One of two test pits was positive, containing two light gray chert flakes, one light gray rhyolite flake, and one light tan rhyolite flake at 0-10 cmbs. The test pit was excavated to mixed gravels at 21 cmbs. Also found were remnants of military activity, mainly spent ammunition and links. FAI-02319 is 75 m SE downslope, FAI-02321 is 230 m NW uphill, and FAI-02238 is 370 m NE uphill.

Site Significance:

Location: Site is on hill 2.8 km west of South Blair Lake in Tanana Flats Training Area, 53 km south of Fairbanks, Alaska. Site is not accessible by road.

Danger(s) of Destruction: Recreation, military training

Present Condition: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering.

Associated Dates:

Period(s): Prehistoric Modern N/A N/A N/A

Resource Nature: Site

Historic Function(s): Subsistence

Current Function(s): Vacant

Cultural Affiliation: Unknown

Property Owner: US Army

Repository/Accession #: UA2014-086

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AHRS Number: FAI-02321 **Mapsheet(s):** Fairbanks B-1

Acreage: **Date Issued:** 10/16/2014 **MTRS(s):** F006S001E36

Resource Shape: point **Location Confidence:** Location exact and existence verified

Long/ Latt DD: [redacted] **Assigned To:** J. Esdale

Site Name(s): K-14-3

Other Name(s):

Associations:

Site Description: Site is located at the top of a ridgeline that trends NE-SW 1.6 km SW of Anne Lake. Site slope is 0°, surrounding area is 10°. Viewshed is 0°, as thick aspen covers the entirety of the ridge. Moss, lichen, fireweed, dwarf birch, low bush cranberry, and low scrub are also present. The area is blanketed with burnt rootmat and deadfall. There is no surface visibility. One of three test pits was positive for cultural material. Two microblades and 22 gray chert flakes were recovered, and one charcoal sample was collected. This test pit terminated at 42 cmbs due to outwash gravels. FAI-02238 is 260 m NE, and downslope to the SE are FAI-02320 at 230 m and FAI-02319 at 305 m.

Site Significance:

Location: Site is on hill 3 km west of South Blair Lake in Tanana Flats Training Area, 53 km south of Fairbanks, Alaska. Site is not accessible by road.

Danger(s) of Destruction: Recreation, military training

Present Condition: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering.

Associated Dates:

Period(s): Prehistoric N/A N/A N/A N/A

Resource Nature: Site

Historic Function(s): Subsistence

Current Function(s): Vacant

Cultural Affiliation: Unknown

Property Owner: US Army

Repository/Accession #: UA2014-087

Alaska Heritage Resources Survey

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AHRS Number: FAI-02322 **Mapsheet(s):** Fairbanks B-1

Acreage: **Date Issued:** 10/16/2014 **MTRS(s):** F006S001E36

Resource Shape: point **Location Confidence:** Location exact and existence verified

Long/ Latt DD: [redacted] **Assigned To:** J. Esdale

Site Name(s): K-14-4

Other Name(s):

Associations:

Site Description: Site is located on a NE-SW trending ridgeline 2.1 km SW of Anne Lake. The site is a flat area (slope 0-5°) slightly raised above the surrounding area (slope 5-30°). Viewshed is 0° due to vegetation including aspen, moss, lichen, and scattered small shrubs, with no ground surface exposure. One of three test pits was positive, containing one obsidian flake at 19 cmbs. Stratigraphy is 1 cm organic material over 7 cm dark brown silt, 10 cm dark yellowish brown sandy silt, and excavation ended at outwash gravels. Evidence of recent military use includes a plastic ammo can and scrap metal. FAI-02321 is 460 m NE, FAI-02320 is 470 m E, and FAI-02319 is 505 m E.

Site Significance:

Location: Site is on hill 3.4 km west of South Blair Lake in Tanana Flats Training Area, 53 km south of Fairbanks, Alaska. Site is not accessible by road.

Danger(s) of Destruction: Recreation, military training

Present Condition: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering.

Associated Dates:

Period(s): Prehistoric Modern N/A N/A N/A

Resource Nature: Site

Historic Function(s): Subsistence

Current Function(s): Vacant

Cultural Affiliation: Unknown

Property Owner: US Army

Repository/Accession #: UA2014-088

Alaska Heritage Resources Survey

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AHRS Number: FAI-02323 **Mapsheet(s):** Fairbanks B-1

Acreage: **Date Issued:** 10/16/2014 **MTRS(s):** F006S002E31

Resource Shape: point **Location Confidence:** Location exact and existence verified

Long/ Latt DD: [redacted] **Assigned To:** J. Esdale

Site Name(s): K-14-5

Other Name(s):

Associations:

Site Description: Site is on a small rise that runs 16 m N-S and 11 m E-W and rises about 1.5 m above surrounding area. The small rise is located on a ridgetop that trends NNW-SSE in immediate vicinity. Site slope is 0-3°, surrounding area is 10-12°. South Blair Lake is 1.8 km E, Anne Lake is 1 km N. There is no viewshed nor surface visibility due to vegetation, which includes birch, moss, and lichen. One test pit was excavated and was positive. One obsidian scraper (approx. 8 x 3 x 1.5 cm) with cortex was found at 5 cmbs. There is shallow deposition (15 cm) on top of outwash gravels. Site FAI-2238 is closest at 1.1 km W.

Site Significance:

Location: Site is on hill approximately 2 km west of South Blair Lake in Tanana Flats Training Area, 53 km south of Fairbanks, Alaska. Site is not accessible by road.

Danger(s) of Destruction: Recreation, military training

Present Condition: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering.

Associated Dates:

Period(s): Prehistoric N/A N/A N/A N/A

Resource Nature: Site

Historic Function(s): Subsistence

Current Function(s): Vacant

Cultural Affiliation: Unknown

Property Owner: US Army

Repository/Accession #: UA2014-089

Alaska Heritage Resources Survey

Alaska Office of History and Archaeology

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AHRS Number: XBD-00408 **Mapsheet(s):** Big Delta C-6

Acreage: **Date Issued:** 10/16/2014 **MTRS(s):** F003S004E09

Resource Shape: point **Location Confidence:** Location exact and existence verified

Long/ Latt DD: [redacted] **Assigned To:** J. Esdale

Site Name(s): Stout House

Other Name(s):

Associations:

Site Description: This stout house is a temporary structure that rests on skids that was built during the early mobilization of WWII. It is a 2x4 wooden construction with diagonal sheathing and 1.5 lb felt tar paper on exterior walls. The floor and ceiling are tongue-in-groove hardwood, the interior walls have fiberboard covering, the insulation is aluminum foil blanket type II double layer, and there are six 40x40" window openings. The gabled roof is collapsed and covered with hardware cloth. There are two breaker boxes with cloth-covered electrical lines, and two drums used as an oil fuel tank. Interior plywood cubby holes have names penciled on the framing.

Site Significance:

Location: Located in Fort Wainwright's Yukon Training Area, north of Quarry Road about 3/4 km off an establisned ATV trail, 150 m east of the Installation boundary adjacent to Eielson AFB, approx. 24 miles east of Fairbanks.

Danger(s) of Destruction: Recreation, military training, weathering

Present Condition: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering.

Associated Dates:

Period(s): Historic N/A N/A N/A N/A

Resource Nature: Structure

Historic Function(s): Military

Current Function(s): Vacant

Cultural Affiliation: WWI Military

Property Owner: US Army

Repository/Accession #: n/a

Alaska Heritage Resources Survey

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AHRS Number: XMH-01511

Mapsheet(s): Mount Hayes D-4

Acreage:

Date Issued: 10/16/2014

MTRS(s): F012S011E33

Resource Shape: point

Location Confidence: Location exact and existence verified

Long/ Latt DD: [redacted]

Assigned To: J. Esdale

Site Name(s): E-14-2

Other Name(s):

Associations:

Site Description: XMH-01511 is located on a small glacial kame that rises 20 m above the surrounding area. The nearest water source is an arid kettle lake 100 m west of the site. Butch Lake is 1.7 km to the west. The viewshed includes the Granite Mountains to the east, Donnelly Dome and the Alaska Range to the south and west. Vegetation includes crowberries, cranberries, scrub birch, and lichens. Additional sites surround XMH-01511 including XMH-1365 (~400 m ENE), XMH-01126 (~500 m N), XMH-01378 (~250 m S) and XMH-01377 (~500 m S). A small lithic scatter was found on the surface of the site in the trail that runs north to south along the ridgeline. A single obsidian flake and four rhyolite flakes were collected. Two shovel tests were excavated but both were sterile of cultural material.

Site Significance:

Location: Located on a moraine 1.7 km E of Butch Lake and 24 km SW of Delta Junction in Donnelly Training Area East.

Danger(s) of Destruction:

Present Condition: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering.

Associated Dates:

Period(s): Prehistoric N/A N/A N/A N/A

Resource Nature: Site

Historic Function(s): Subsistence

Current Function(s): Vacant

Cultural Affiliation: Unknown

Property Owner: BLM/US Army

Repository/Accession #: UA2014-097

Alaska Heritage Resources Survey

Alaska Office of History and Archaeology

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Compiled: Tue Oct 13 09:05:50 AKDT 2015

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AHRS Number: **XMH-01512** **Mapsheet(s):** MT HAYES D-4 (XMHD4)
Acreage: **Date Issued:** 10-16-2014 **MTRS(s):** F012S011E32
Resource Shape: Point **Location Approximate:** Yes
Point Representation: Lat: [redacted] Long: [redacted] **Assigned To:** CEMML/Esdale, J.

Site Name(s): E-14-1
Alternate Name(s):
Associations:
Informal Association(s):
Formal Association(s):

Site Description:

XMH-01512 is located on a small knoll that rises 10m above the surrounding area, and the nearest water source, Butch Lake, is 1km to the SW. The viewshed includes the Granite Mountains to the E Butch lake to the SW, Donnelly Dome and the Alaska Range to the S and W. Vegetation includes crowberries, cranberries, scrub birch, and lichens. A single chert flake was found in the one of the three test pits and collected. The site appeared to be minimally disturbed by erosion and animal digging. In all three test pits, silt was overlying glacial gravels at a depth of approximately 30-35cm.

Site Significance:

Location:

Located on a moraine 1km/.5 mi NE of Butch Lake and 23km/14 mi SW of Delta Junction in Donnelly Training Area East.

AHRS References: none

Document Repository References: 1

(02/19/2015) CEMML/Esdale, J.
Battle Area Complex Surface Danger Zone PA Archaeological Site Monitoring, Donnelly Training Area, Annual Report 2014(Doc Repo Record ID #16287301) (attached files: 1)
FA788.pdf

Danger(s) of Destruction:

Present Condition: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Associated Dates:
Period(s):
Resource Nature: Site: Chert, Flake
Historic Function(s):
Current Function(s):
Cultural Affiliation:

Property Owner:
Repository/Accession #:
BIA/BLM Number(s):

Other Number(s):
Source Reliability: Professional reports, records and field studies (A)
Location Reliability: Location exact and site existence verified (1)

Determinations of Eligibility: none

National Register Nominations: none

Alaska Heritage Resources Survey

Alaska Office of History and Archaeology

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AHRS Number: XMH-01530 **Mapsheet(s):** Mt. Hayes D-4

Acreage: **Date Issued:** 10/16/2014 **MTRS(s):** F013S010E21

Resource Shape: point **Location Confidence:** Location exact and existence verified

Long/ Latt DD: [redacted] **Assigned To:** J. Esdale

Site Name(s): TCC 3

Other Name(s):

Associations:

Site Description: Site is on a moraine S of Donnelly Dome, overlooking a lake 200m to the SE. Glacial deposits are exposed on 90% of the moraine surface. In 2002, 1 quartzite flake was recovered from the surface, and 1 chert flake from 0-10cmbs in a shovel test. The site was relocated in 2014. A shovel test was excavated, but contained no cultural materials.

Site Significance:

Location: Site is on a moraine 750m NW of the Richardson Highway and 13km S of Delta Junction, Alaska.

Danger(s) of Destruction:

Present Condition: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering.

Associated Dates:

Period(s): Prehistoric N/A N/A N/A N/A

Resource Nature: Site

Historic Function(s): Subsistence

Current Function(s): Vacant

Cultural Affiliation: Unknown

Property Owner: State of Alaska

Repository/Accession #: UA2014-099

Alaska Heritage Resources Survey

Alaska Office of History and Archaeology

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AHRS Number: XMH-01531 **Mapsheet(s):** MT HAYES D-4

Acreage: **Date Issued:** 10/16/2014 **MTRS(s):** F013S010E28

Resource Shape: point **Location Confidence:** Location exact and existence verified

Long/ Latt DD: [redacted] **Assigned To:** J. Esdale

Site Name(s): TCC 4

Other Name(s):

Associations:

Site Description: Site is on a small knoll surrounding by kettle lakes S of Donnelly Dome. Glacial deposits are exposed on 85% of the site. The knoll has clear views of the surrounding landscape. In 2002, 1 retouched chert flake fragment and 2 pieces of chert shatter were collected from the surface. A chert flake was found in a shovel test at 0-14cmbs. Site was relocated in 2014. Three chert flakes were found on the surface and left in situ. A shovel test produced another chert flake from 5-10cmbs.

Site Significance:

Location: Site is on a knoll 600m NW of the Richardson Highway and 30km S of Delta Junction, Alaska.

Danger(s) of Destruction:

Present Condition: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering.

Associated Dates:

Period(s): Prehistoric N/A N/A N/A N/A

Resource Nature: Site

Historic Function(s): Subsistence

Current Function(s): Vacant

Alaska Heritage Resources Survey

Alaska Office of History and Archaeology

For information contact the Alaska Office of History and Archaeology at (907) 269-8721

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AHRS Number:	**XMH-01532**	**Mapsheet(s):**	MT HAYES D-4 (XMHD4)
Acreage:	**Date Issued:** 10-16-2014	**MTRS(s):**	F013S010E28
Resource Shape:	Point	**Location Approximate:**	Yes
Point Representation:	Lat: [redacted] Long: [redacted]	**Assigned To:**	CEMML/Esdale, J.

Site Name(s): TCC 5
Alternate Name(s):
Associations:
Informal Association(s):
Formal Association(s):

Site Description:
1 flake found on surface.

Site Significance:

Location:
Site is on a knoll in Donnelly Training Area West,1km/.6 mi NW of the Richardson Highway and 31km/19 mi S of Delta Junction, Alaska.::

AHRS References: none

Document Repository References: none

Danger(s) of Destruction:
Present Condition: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Associated Dates:
Period(s):
Resource Nature: Site
Historic Function(s):
Current Function(s):
Cultural Affiliation:

Property Owner:
Repository/Accession #:
BIA/BLM Number(s):

Other Number(s):
Source Reliability: Professional reports, records and field studies (A)
Location Reliability: Location exact and site existence verified (1)

Alaska Heritage Resources Survey

Alaska Office of History and Archaeology

For information contact the Alaska Office of History and Archaeology at (907) 269-8721

Compiled: Wed Nov 26 10:28:19 AKST 2014

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AHRS Number:	**XMH-01533**	**Mapsheet(s):**	MT HAYES D-4 (XMHD4)
Acreage:	**Date Issued:** 10-16-2014	**MTRS(s):**	F013S010E29
Resource Shape:	Point	**Location Approximate:**	Yes
Point Representation:	Lat: [redacted] Long: [redacted]	**Assigned To:**	CEMML/Esdale, J.

Site Name(s): JARRAH's KAME

Alternate Name(s):

Associations:

Informal Association(s):

Formal Association(s):

Site Description:

5 flakes found in a unit and 9 from an unknown context

Site Significance:

Location:

Site is on a moraine in Donnelly Training Area West, 1.4km/.9 mi NW of the Richardson Highway and 31.5km/19.5 mi S of Delta Junction, Alaska.::

AHRS References: none

Document Repository References: none

Danger(s) of Destruction:

Present Condition: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Associated Dates:

Period(s):

Resource Nature: Site

Historic Function(s):

Current Function(s):

Cultural Affiliation:

Property Owner:

Repository/Accession #:

BIA/BLM Number(s):

Other Number(s):

Source Reliability: Professional reports, records and field studies (A)

Location Reliability: Location exact and site existence verified (1)

Alaska Heritage Resources Survey

Alaska Office of History and Archaeology

For information contact the Alaska Office of History and Archaeology at (907) 269-8721

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AHRS Number: XMH-01534 **Mapsheet(s):** MT HAYES D-4

Acreage: **Date Issued:** 10/16/2014 **MTRS(s):** F013S010E21

Resource Shape: point **Location Confidence:** Location exact and existence verified

Long/ Latt DD: [redacted] **Assigned To:**

Site Name(s): Baggins

Other Name(s):

Associations:

Site Description: Site is located on glacial deposits overlooking a kettle lake 175m to the SE with clear views of the surrounding landscape. Surface exposure is 65%. A single chert flake was found on the surface and collected in 2002. A shovel test excavated when the site was relocated in 2014 was negative, and no surface artifacts were observed.

Site Significance:

Location: Site is on a glacial moraine 740m NW of Richardson Highway and 30km S of Delta Junction, Alaska.

Danger(s) of Destruction:

Present Condition: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering.

Associated Dates:

Period(s): Prehistoric N/A N/A N/A N/A

Resource Nature: Site

Historic Function(s): Subsistence

Current Function(s): Vacant

Cultural Affiliation: Unknown

Property Owner: State of Alaska

Repository/Accession #: UA2014-100

Alaska Heritage Resources Survey

Alaska Office of History and Archaeology

For information contact the Alaska Office of History and Archaeology at (907) 269-8721

Compiled: Wed Nov 26 10:28:44 AKST 2014

This document contains restricted information. Unauthorized circulation is prohibited by law!

AHRS Number:	**XMH-01535**	**Mapsheet(s):**	MT HAYES D-4 (XMHD4)
Acreage:	**Date Issued:** 10-16-2014	**MTRS(s):**	F012S011E33
Resource Shape:	Point	**Location Approximate:**	Yes
Point Representation:	Lat: [redacted] Long: [redacted]	**Assigned To:**	CEMML/Esdale, J.

Site Name(s): E-14-3
Alternate Name(s):
Associations:
Informal Association(s):
Formal Association(s):

Site Description:
1 biface fragment found on surface

Site Significance:

Location:
Located near ATV trail on a moraine 2.2km/1.3 mi E of Butch Lake and 24km/15 mi SW of Delta Junction in Donnelly Training Area East::

AHRS References: none

Document Repository References: none

Danger(s) of Destruction:
Present Condition: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Associated Dates:
Period(s):
Resource Nature: Site
Historic Function(s):
Current Function(s):
Cultural Affiliation:

Property Owner:
Repository/Accession #:
BIA/BLM Number(s):

Other Number(s):
Source Reliability: Professional reports, records and field studies (A)
Location Reliability: Location exact and site existence verified (1)

Appendix 2: 2014 DOE Forms

DETERMINATION OF ELIGIBILITY

AHRS # FAI-00052 Date 08/16/2014 Latitude [redacted] N Longitude [redacted] W

Site Name FAI-00052 UTM [redacted] E [redacted] N Zone 6 Datum WGS 84

Determination Eligible Location 4 km N of Anne Lake, 46 km S of Fairbanks, Tanana Flats Training Area

Classification of Property

Ownership Public- Federal Category Site Number of Resources 1

Property Description

Summary

FAI-00052 is a small buried lithic scatter located at the northwest corner of the hills north of Blair Lakes in the Tanana Flats Training Area. Flakes and microblades made from chert, obsidian and rhyolite were found in buried context in several test pits. Previous research at the site found wood and bone fragments as well. Because of the site's potential contributions to the prehistory of the region, USAG FWA finds it eligible for the NRHP.

Description and Historic Context

FAI-00052 was originally discovered during a 1979 survey of the Blair Lakes area by Dixon et al. (1980). This site is located on the north end of the ridge system north of Blair Lakes and the site was found on the west bank of a creek that intermittently drains Anne Lake (Dixon et al. 1980) (Figure 1). Obsidian flakes, wood, and bone fragments were discovered in six test pits.

This site was revisited on 16 August 2014 to verify its location and determine its eligibility for the NRHP. The site was found precisely at the described area from the 1980 report and several old test pits were evident on the surface (Figure 2). FAI-00052 is 46 km south of Fairbanks and 4 km north of Anne Lake, on a north-south trending hill that extends into a dry creek drainage. The site is about 3 m above the creek bed, on the west bank. The area is thinly covered with spruce, alder, low shrubs, and deadfall (Figure 3). Fireweed, mosses, grasses, and lichen make up the ground cover. The view is 200°, mainly to the east.

No artifacts were found on the surface and a shovel test grid was set up over the landform (Figure 2). Artifacts were discovered in five of eleven test pits. Twenty-one flakes made of chert and rhyolite and two obsidian microblade fragments were excavated from near surface to 45 cmbs. The obsidian was identified as originating from the Batza Tena obsidian source (Rasic pers. comm. 2015).

The majority of flakes and the two microblades were found in the two test pits at the southern end of the landform. The northern boundary of the site was not completely established with the shovel test grid and it is estimated that the site covers an area of approximately 40 m north to south and 15 m east to west.

Deposits across the creek bank were deep and test pits reached 90-120 cmbs before encountering terrace gravel (Figure 4). A thin organic rich O horizon (5 cm) overlies a weather Bw horizon (10 cm) and B horizon (20 cm thick). All of the soil development is in a thick silt deposit that is likely of aeolian origin.

Like many sites in the area, the thick loess cap on the surface of the landform provides a context for potentially stratified cultural deposits dating back to the end of the Pleistocene. Although the landform is small, test excavations have not uncovered all material and there is significant potential for future research. Because the site contains multiple tool production methods (bifacial reduction flakes and microblades) and of a variety of raw materials in buried context, it may be possible to date the site and contribute to a variety of research questions with further study. Raw material sourcing studies for both rhyolite and obsidian are currently taking place in Alaska, and data from the artifacts recovered here will contribute to these projects. USAG FWA finds FAI-00052 eligible for inclusion in the NRHP under criteria D because it will likely contribute to our understanding of hunter-gather raw material acquisition strategies, lithic technological organization, and cultural chronology of the area.

AHRS # FAI-00052

Maps and Photos

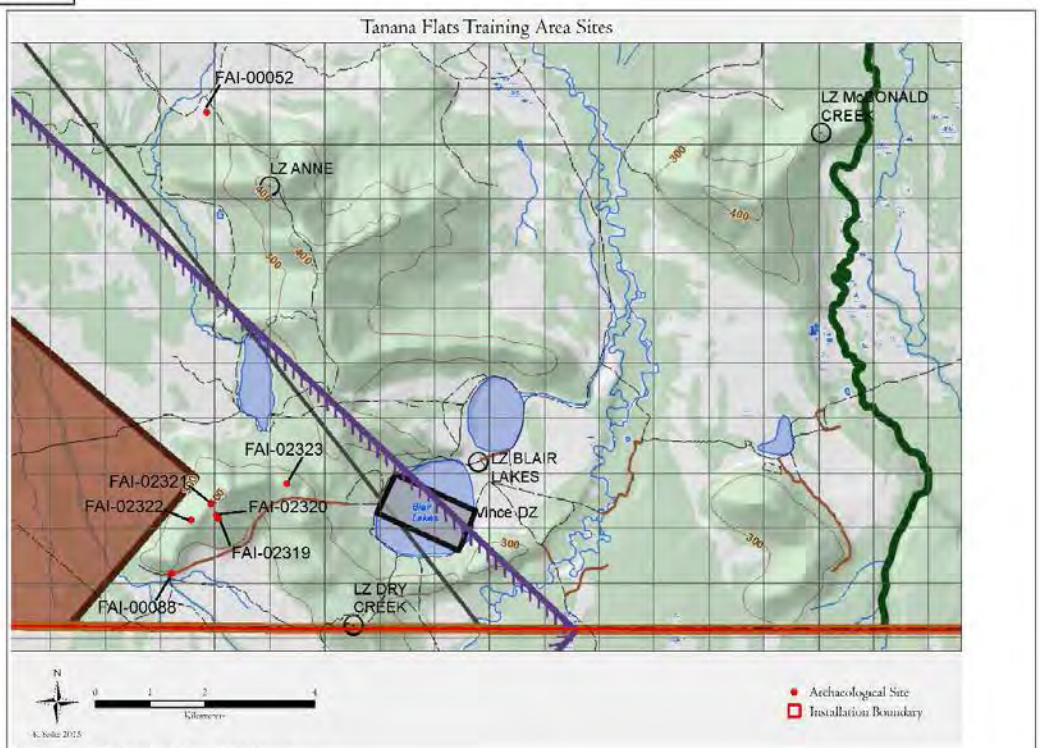

Figure 1. FAI-00052 site location.

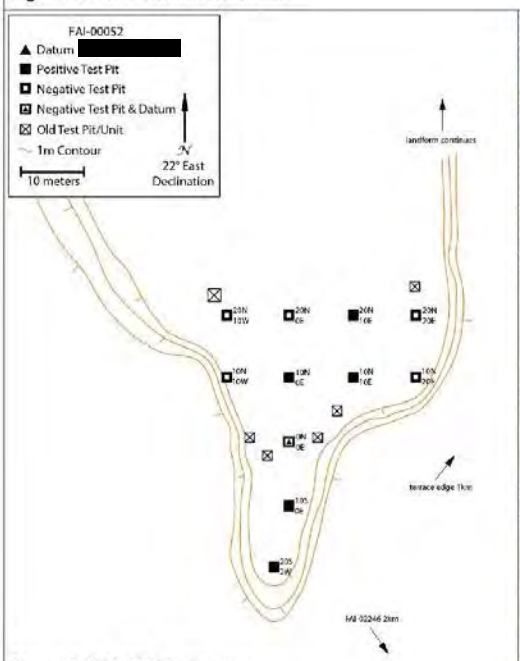

Figure 2. FAI-00052 site map.

Figure 3. FAI-00052 site overview.

AHRS # FAI-00052

Statement of Significance

☐ **A.** Property is associated with events that have made a significant contribution to the broad patterns of our history.

☐ **B.** Property is associated with the lives of persons significant in our past.

☐ **C.** Property embodies the distict characteristics of a type, period, or method of construction.

☒ **D.** Property has yielded, or is likely to yield, information important in prehistory or history.

Areas of Significance	Archaeology, prehistoric
Period of Significance	Holocene unknown
Cultural Affiliation	Unknown
Level of Significance	Local and state
Criteria Considerations	FAI-00052 is eligible for the NRHP under Criterion D, information potential. Althoug the site is on a restricted landform and does not appear to be very large, lithic artifacts from a variety of raw materials was found in buried context. Two types of raw material can be identified to the source location and artifacts represent both bifacial and core and blade technology.
Research Potential	Moderate research potential because flakes were found in several test pits across the site in buried context.
Integrity	Site retains integrity. Most of the deposits are buried and in undisturbed context.
Summary	FAI-00052 is a small buried lithic scatter located at the northwest corner of the hills north of Blair Lakes in the Tanana Flats Training Area. Flakes and microblades made from chert, obsidian and rhyolite were found in buried context in several test pits. Previous research at the site found wood and bone fragments as well. Because of the site's potential contributions to the prehistory of the region, USAG FWA finds it eligible for the NRHP.

AHRS # FAI-00052

Selected Resources

Published Sources

Esdale, J.A., K.S. Yeske, H.D. Hardy, and W.E. McLaren. 2015. Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands 2014. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Bibliography

Dixon, E.J., G.S. Smith, and D. Plaskett. 1980. Archeological Survey and Inventory of Cultural Resources, Fort Wainwright, Alaska. Prepared for the U.S. Army Corps of Engineers, Alaska District.

Geographical Data

Acreage of Property 0.1 acre

Boundary Description

Small site 40x15 m.

Other Information

Other Information

Artifacts at University of Alaska Museum of the North UA2014-082-0001 through UA2014-082-0008.

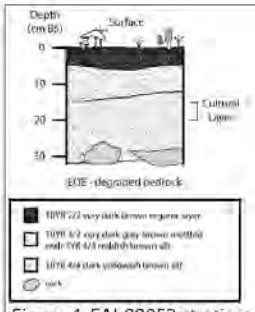

Figure 4. FAI-00052 stratigraphic profile.

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4

DETERMINATION OF ELIGIBILITY

AHRS # FAI-01556 Date 09/23/2015 Latitude [redacted] N Longitude -[redacted] W

Site Name Horseshoe Lake UTM [redacted] E [redacted] N Zone 6 Datum WGS 84

Determination Not Eligible Location FAI-01556 is located on the north shore of Horseshoe lake, off Transmitter Road, YTA, 30 km east of Fairbanks.

Classification of Property

Ownership Public- Federal Category Site Number of Resources 1

Property Description

Summary

FAI-01556 is a small buried lithic scatter located on the north shore of Horseshoe Lake in Yukon Training Area. Over 80 chert and basalt flakes were found in two test units during a 2002 investigation. No additional archaeological materials were discovered during a systematic test of the land form in 2014. The 2002 tests have recovered the majority of the material at the site and there is no potential for future research. USAG FWA finds FAI-01556 not eligible for inclusion in the NRHP.

Description and Historic Context

FAI-01556 is off Transmitter Road in the western portion of Yukon Training Area, 30 km east of Fairbanks (Figure 1). The site is located on a 3 m high rise on the north shore of Horseshoe Lake. The surface of the hill slopes gently, from 0-8° in all directions but south. The gradient south to the lake is approximately 24°. The viewshed is 180° to the south, encompassing views of Horseshoe Lake and a hill on the opposite shore immediately south, a ridge to the east, and surrounding lowlands. The lake is the closest water source, 35 m from datum in 2014, although the shoreline varies according to annual precipitation (Figure 2). Vegetation consisting of birch, spruce, rose, horsetail, high bush cranberry, bedstraw and moss indicates an upland moist mixed forest ecosystem (Figure 3). Leaf litter and vegetation completely obscure the forest floor. The area has seen moderate recreational use as evidenced by a tree stand, 2007 bear baiting permit, halved 50 gallon barrels, fire pit, litter and a lightly used ATV trail currently under water.

The site was identified in 2002 when artifacts were recovered during Phase I subsurface testing. One shovel test out of 17 total contained 5 chert and basalt flakes. Two adjacent 1 x 1 m units were excavated later that summer. Unit B was centered over the positive shovel test. Recovered artifacts consisted of 3 bone fragments, 2 chert and 2 basalt flakes from unit A, and 79 bone fragments, 51 chert and 24 basalt flakes from unit B. The bone, likely rodent, was extremely calcined and found from 0-15 cmbs. Artifacts were found from 0-15 cmbs and concentrated from 5-10 cmbs. The site was relocated in 2013, though continuation of DOE testing was postponed due to the Stuart Creek Fire. In 2014, DOE testing was completed with the excavation of a shovel test grid to determine horizontal site boundaries (Figure 2). Although the excavated units from 2002 were relocated, none of the 2002 shovel tests could be positively identified. In 2014, shovel tests were placed at 10 m intervals from datum, for a total of 20 shovel tests largely concentrated around the units southwest of datum. Shovel tests were excavated to a meter and terminated due to depth, well past previously recorded cultural levels. All shovel tests were negative. As two units were already excavated in 2002, no additional ones were excavated.

The root mat and organic horizon (10YR2/2 very dark brown) covers the site from 5-15 cm thick over deep silts. All test pits reached 97-116 cmbs, and excavations were terminated at the length of a shovel and not because they reached bedrock. Aeolian silts made up the entire sediment profile. Two weak Bw horizons (10 cm thick 5YR4/4 reddish brown silt, and 15 cm thick 2.5Y5/1 gray silt) were found under the organic horizon and overlying unaltered silt (2.5Y5/1 gray silt) (Figure 4). Although no artifacts were found during the 2014 investigations, in 2002 artifacts were found in the root mat from 0-15 cmbs, and in the reddish brown silt layer. Soils do not appear disturbed by the recreational use.

FAI-01556 is a small lithic scatter consistent with a short-term single use site. Recovered cultural materials total 82 calcined bone fragments and 84 flakes. Only three material types (gray chert, banded chert, and basalt) are represented. The calcined bone is not datable and likely unrelated to the archaeology, and no diagnostic tools or traceable materials were found. Despite the favorable location, the highly localized concentration of artifacts surrounded by apparently sterile soils likely mean the majority of the cultural materials have been excavated. The site is limited in contributing further to our knowledge of prehistory by the scarcity of intact cultural materials and USAG FWA finds FAI-01556 ineligible for inclusion in NRHP.

AHRS # FAI-01556

Maps and Photos

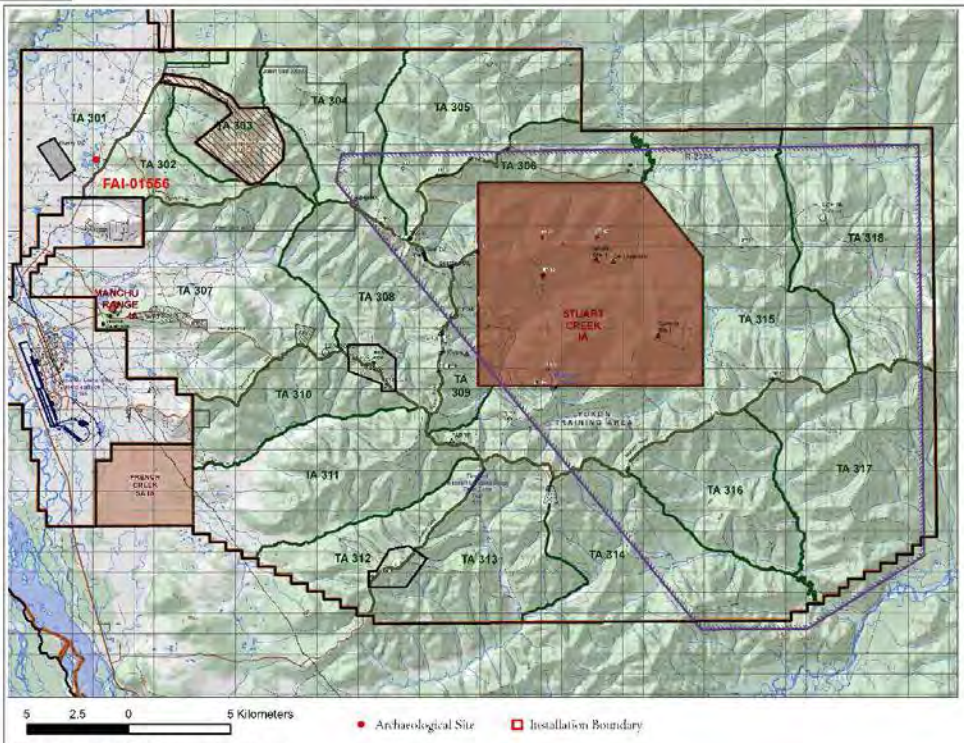

Figure 1. FAI-01556 site location.

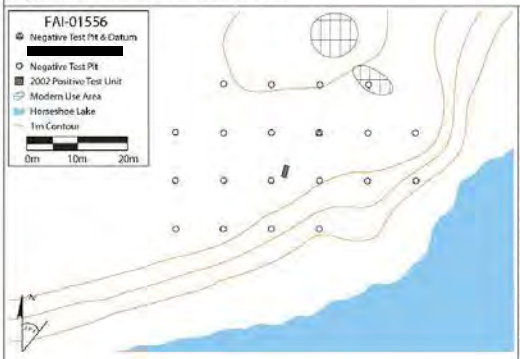

Figure 2. FAI-01556 site map.

Figure 3. FAI-01556 site overview.

2

AHRS # FAI-01556

Statement of Significance

☐ **A.** Property is associated with events that have made a significant contribution to the broad patterns of our history.

☐ **B.** Property is associated with the lives of persons significant in our past.

☐ **C.** Property embodies the distict characteristics of a type, period, or method of construction.

☐ **D.** Property has yielded, or is likely to yield, information important in prehistory or history.

Areas of Significance	Prehistoric, not specific
Period of Significance	N/A
Cultural Affiliation	N/A
Level of Significance	Local or none.
Criteria Considerations	The site may have been entirely excavated during preliminary investigations. A small number of flakes were found but no datable materials or diagnostic artifacts.
Research Potential	Very low due to insufficient cultural material.
Integrity	Low because the majority of the site was excavated during 2002 investigations.
Summary	FAI-01556 is a small buried lithic scatter located on the north shore of Horseshoe Lake in Yukon Training Area. Over 80 chert and basalt flakes were found in two test units during a 2002 investigation. Calcined bone fragments that may be from a rodent were also discovered. No datable materials or diagnostic artifacts were found and no additional archaeological materials were discovered during a systematic test of the land form in 2014. The 2002 tests have recovered the majority of the material at the site and there is no potential for future research. USAG FWA finds FAI-01556 not eligible for inclusion in the NRHP.

AHRS # FAI-01556

Selected Resources

Published Sources

Esdale, J.A., K.S. Yeske, H.D. Hardy, and W.E. McLaren. 2015. Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands 2014. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Bibliography

Hedman, W., A. Robertson, N. Fichter, and K. Anderson. 2003. Report: Archaeological Survey and Evaluation, Fort Richardson and Fort Wainwright, 2002. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Geographical Data

Acreage of Property <0.01 acre

Boundary Description

Site restricted to a 2x2 m area.

Other Information

Other Information

Artifacts at University of Alaska Museum of the North UA2010-180-1 through UA2010-180-15.

Figure 4. FAI-01556 stratigraphic profile.

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4

DETERMINATION OF ELIGIBILITY

AHRS # XBD-00105 Date 09/24/2015 Latitude [redacted] N Longitude [redacted] W

Site Name XBD-00105 UTM [redacted] E [redacted] N Zone 6 Datum WGS 84

Determination Not Eligible Location XBD-00105 is located south of Beaver Creek road in the western portion of Yukon Training Area, 42 km southeast of Fairbanks.

Classification of Property

Ownership Public- Federal Category Site Number of Resources 1

Property Description

Summary

XBD-00105 consists of a microblade core and flake found on a small knoll in the western part of Yukon Training Area. The microblade core was found on the surface of the knoll in 1979 and the flake was found in buried context in 2014. No other artifacts were found on the landform. Lack of cultural material and potential for further research makes this site not eligible for inclusion in the NRHP.

Description and Historic Context

XBD-00105 is located south of Beaver Creek road in the western portion of Yukon Training Area, 42 km southeast of Fairbanks (Figure 1). The site was discovered on a small, slightly raised knoll with some exposed bedrock just off a trail winding down the narrow ridge (Figure 2). Slope is less than 5% on the knoll, with sides sloping up to 20% in all directions. The site viewshed is filled 60° to northeast by the ridgeline, while finger ridges to east and west are partially visible through the forest, along with a valley and opposing ridgeline to south. The closest water source is Moose Creek approximately 1 km to southwest. The upland moist broadleaf forest burned in 2013, leaving charred alder and birch behind (Figure 3). New growth consists of grass, moss, fireweed, raspberry, and birch and spruce saplings. Surface visibility is about 5% and concentrated in a 16 m^2 area of exposed bedrock. Disturbances in the area include an overgrown, formerly well-used trail running within 5 m of datum, and bulldozed areas, push piles and litter associated with the trail corridor, which averages 20 m in width along the ridgeline.

XBD-00105 was originally identified by C. Holmes during an exploratory survey (Holmes 1979). A chert microblade core was found on the trail surface. The core was considered an isolated find and no shovel tests were excavated. On 26 August 2014, Phase II investigations were conducted to determine the site's eligibility for inclusion in the NRHP. The site was relocated at the highest point closest to the 1979 coordinates that also matched the physical description. A shovel test randomly placed on the knoll contained a single black chert flake. This shovel test was marked as the new site datum with the site coordinates (Figure 2). As the landform was less than 20 m in diameter, shovel tests were evenly spaced to cover the knoll, with an additional shovel test in the trail. Shovel tests were excavated to degrading schist bedrock. Of the five shovel tests excavated, only the first was positive for cultural material. As a lone subsurface flake was recovered in during these investigations, no further work was deemed necessary.

The shovel test pits varied between 32 and 57 cm deep on the knoll and only 14 cm deep on the trail. All ended at decaying quartz and schist bedrock (Birch Creek Schist). Above the bedrock aeolian silts make up the stratigraphic profile (Figure 4). The soil profile generally consisted of a thin organic layer (10YR2/2 very dark brown) over a 10 cm thick Bw horizon (10YR2/2 very dark brown) over a 20 cm thick B horizon (10YR4/4 dark yellow brown). The chert flake was found in the B horizon, 15-20 cmbs. Soils on the knoll appear undisturbed despite the trail and bulldozed surface and push piles in close proximity.

Although 2014 investigation found an additional flake, XBD-00105 is only a very small site or two isolated finds. Cultural remains consist of a microblade core from a disturbed surface and a single subsurface flake, both representing one material type (black chert). No diagnostic tools, datable materials or traceable materials were found. The site is limited in contributing to our knowledge of prehistory by lack of cultural materials and USAG FWA finds XBD-00105 not eligible for inclusion in the NRHP.

AHRS # XBD-00105

Maps and Photos

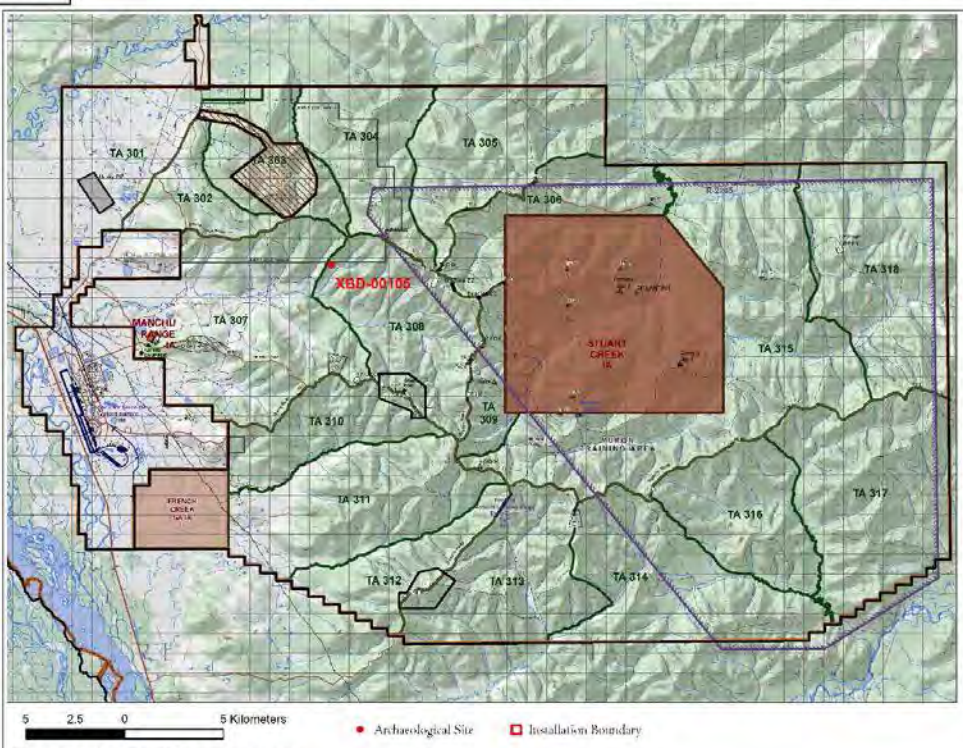

Figure 1. XBD-00105 site location.

Figure 2. XBD-00105 site map.

Figure 3. XBD-00105 site overview.

AHRS # XBD-00105

Statement of Significance

☐ **A.** Property is associated with events that have made a significant contribution to the broad patterns of our history.

☐ **B.** Property is associated with the lives of persons significant in our past.

☐ **C.** Property embodies the distict characteristics of a type, period, or method of construction.

☐ **D.** Property has yielded, or is likely to yield, information important in prehistory or history.

Areas of Significance	Prehistoric, not specific.
Period of Significance	N/A
Cultural Affiliation	N/A
Level of Significance	Local or none.
Criteria Considerations	Shovel tests and surface examinations suggest a very small number of artifacts. The site has no datable materials and no potential for further research.
Research Potential	Very low due to insufficient cultural material.
Integrity	Moderate integrity. Although there is evidence of disturbance to the surface, soil profiles appear to be intact.
Summary	XBD-00105 consists of a microblade core and flake found on a small knoll in the western part of Yukon Training Area. The microblade core was found on the surface of the knoll in 1979 and the flake was found in buried context in 2014. No other artifacts were found on the landform. Due to lack of cultural material and low potential for further research, USAG FWA finds XMH-00105 not eligible for inclusion in the NRHP.

AHRS # XBD-00105

Selected Resources

Published Sources

Esdale, J.A., K.S. Yeske, H.D. Hardy, and W.E. McLaren. 2015. Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands 2014. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Bibliography

Holmes, C.E. 1979a. Report on Archeological Reconnaissance: Yukon Training Command Withdrawal Area. Fort Wainwright. Report prepared for the U.S. Army Corps of Engineers under Contract DACA85-79-M-0001.

Geographical Data

Acreage of Property <0.01 acre

Boundary Description

Site restricted to one surface find and one flake in a 4x4 m area.

Other Information

Other Information

Artifacts at University of Alaska Museum of the North UA78-471-001 and UA2014-091-001.

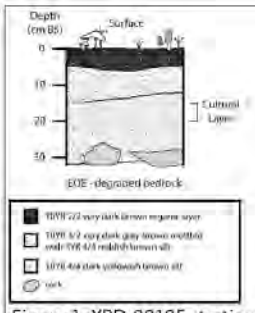

Figure 1. XBD-00105 stratigraphic profile.

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4

DETERMINATION OF ELIGIBILITY

AHRS # XMH-01296 Date 11/23/2015 Latitude [redacted] N Longitude [redacted] W

Site Name XMH-01296 UTM [redacted] E [redacted] N Zone 6 Datum WGS 84

Determination Not Eligible Location 150 m west of OP road, 13 km south of Delta Junction, Donnelly Training Area

Classification of Property

Ownership Public- Federal Category Site Number of Resources 1

Property Description

Summary

XMH-01296 is a small lithic scatter on a glacial kame in Donnelly Training Area east. Four flakes were found on the surface in 2006. Three flakes were found (or relocated on the surface in 2014) and five additional flakes were found in an excavation unit. The artifacts are not diagnostic and thin deposits preclude stratified deposits. This site is not eligible for inclusion in the NRHP.

Description and Historic Context

XMH-01296 was discovered on a glacial kame west of the OP road in DTA east, 13 km south of Delta Junction during a 2006 survey (Figure 1). The site was located 150 m west of the OP road and 1.7 km west of the highway. Although the site was recorded in 2006, test pits from a previous visit by archaeologists were noted (Robertson et al. 2007). Four flakes (3 chert and 1 basalt) were noted on the surface near the east end of the east-west trending landform. The artifacts were not collected. The nearest body of water is a small kettle lake, 150 m to southwest. From the site, there is a 180° view of the surrounding area to the south and west.

The site was revisited by CEMML crews on 5 September, 2014 for secondary investigations into its eligibility for the NRHP. A shovel test grid was set up over the site. The landform is narrow and steep sided, and shovel tests were placed along the top of the ridgeline at 10 m intervals (Figure 2, Figure 3). Two banded chert and one basalt flake were found at the high point of the ridge just west of the datum. One additional chert flake was found 20 m southeast of datum and appeared to have moved down the main ridge. The surface flakes were not collected.

A 1 x 1 m unit was excavated near the surface flakes west of datum. The unit was shallow and reached outwash gravels at less than 10 cmbs. Five gray basalt flakes were found shallowly buried in the excavation unit. A mix of silt and gravels underlies light vegetation across the site (Figure 4). Very little soil development was noted.

AHRS # XMH-01296

Maps and Photos

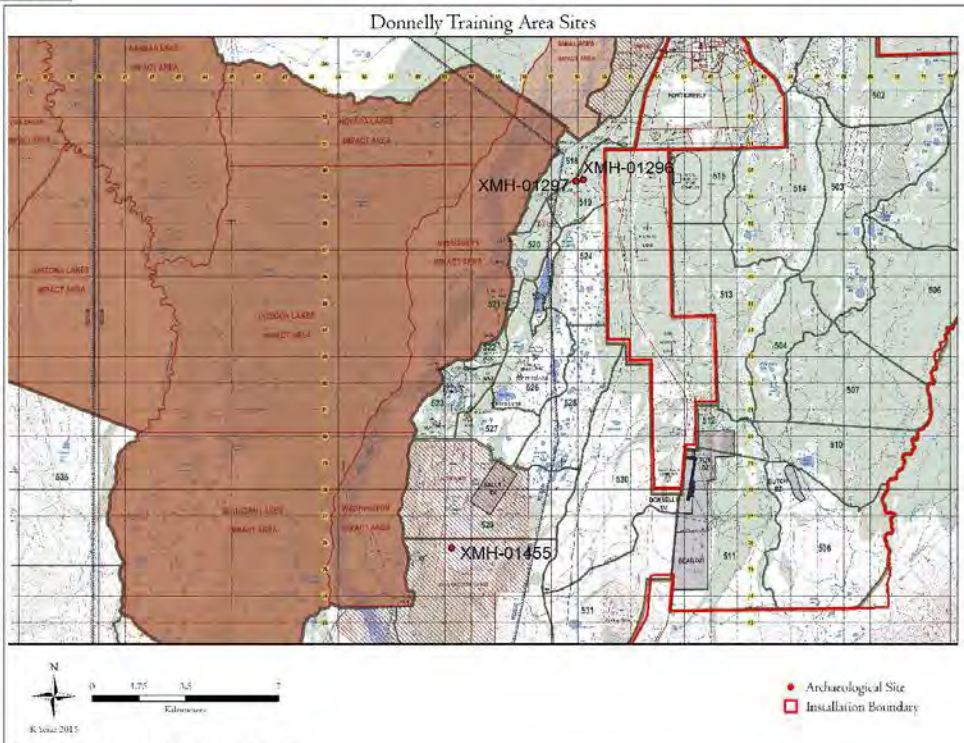

Figure 1. XMH-01296 site location.

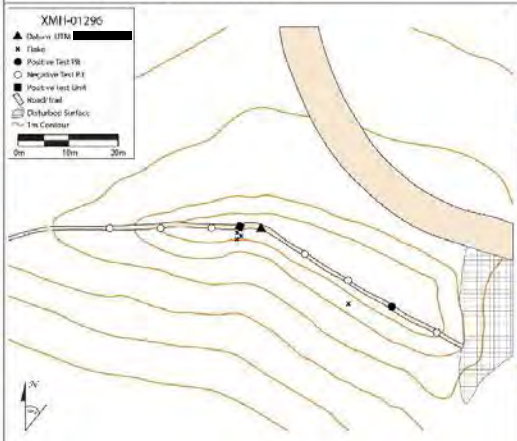

Figure 2. XMH-01296 site map.

Figure 3. XMH-01296 site overview.

2

AHRS # XMH-01296

Statement of Significance

☐ **A.** Property is associated with events that have made a significant contribution to the broad patterns of our history.

☐ **B.** Property is associated with the lives of persons significant in our past.

☐ **C.** Property embodies the distict characteristics of a type, period, or method of construction.

☐ **D.** Property has yielded, or is likely to yield, information important in prehistory or history.

Areas of Significance	Prehistoric, not specific.
Period of Significance	N/A
Cultural Affiliation	N/A
Level of Significance	Local or none.
Criteria Considerations	Shovel tests, excavations, and surface examinations suggest a very small number of artifacts. The site has no datable materials and no potential for further research.
Research Potential	Very low due to insufficient cultural material.
Integrity	Moderate integrity. Although there is evidence of disturbance to the surface, soil profiles appear to be intact.
Summary	XMH-01296 is a small lithic scatter on a glacial kame in Donnelly Training Area east. A total of nine flakes were found on site in two separate visits. The artifacts are not diagnostic and thin deposits preclude stratified deposits. Because of lack of datable materials and an insufficient quantity of artifacts, USAG FWA finds that XMH-01296 not eligible for inclusion in the NRHP.

AHRS # XMH-01296

Selected Resources

Published Sources

Esdale, J.A., K.S. Yeske, H.D. Hardy, and W.E. McLaren. 2015. Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands 2014. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Bibliography

Robertson, A.C., M. Proue, P. Hall, S. Shirar, and C.K. Paraso. 2007. Archaeological Survey, Evaluation, and Mitigation: Donnelly Training Area, Fort Wainwright, Alaska 2006. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Geographical Data

Acreage of Property .01 acre

Boundary Description

Small site 10x60 m.

Other Information

Other Information

Artifacts at University of Alaska Museum of the North UA2014-129-001 through UA2014-129-003.

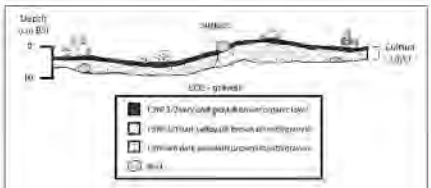

Figure 4. XMH-01296 stratigraphic profile.

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4

DETERMINATION OF ELIGIBILITY

AHRS # XMH-01297 Date 12/03/2015 Latitude [redacted] N Longitude [redacted] W

Site Name XMH-01297 UTM [redacted] E [redacted] N Zone 6 Datum WGS 84

Determination Not Eligible Location 150 m west of OP road, 13 km south of Delta Junction, Donnelly Training Area, Fort Wainwright

Classification of Property

Ownership Public- Federal Category Site Number of Resources 1

Property Description

Summary

XMH-01297 is an isolated flake on a glacial kame in Donnelly Training Area east. No other cultural material was discovered with additional testing. The artifact is not diagnostic and thin deposits preclude stratified deposits. This site is not eligible for inclusion in the NRHP.

Description and Historic Context

XMH-01297 was discovered on a glacial kame west of the OP road in DTA east, 13 km south of Delta Junction during a 2006 survey (Figure 1, Figure 2). The site was located 150 m northwest of the OP road and 1.9 km west of the highway. The site was recorded in 2006 (Robertson et al. 2007). A single basalt flake was noted on the surface of the landform. A string of unnamed kettle lakes begins 300 m to the southeast and a pond is located 100 m to the southwest. Trees surround the site preventing views in any direction (Figure 3). Surface exposure is 40%.

The site was revisited by CEMML crews on 4 September, 2014 for secondary investigations into its eligibility for the NRHP. A shovel test grid was set up over the site at 10 m intervals (Figure 2). Thirteen shovel tests and a careful surface examination encountered no cultural materials. Sediments at the site are extremely shallow and lacked significant organic accumulation across the surface in most places. Eight to ten centimeters of silt overly outwash gravels in this area (Figure 4).

AHRS # XMH-01297

Maps and Photos

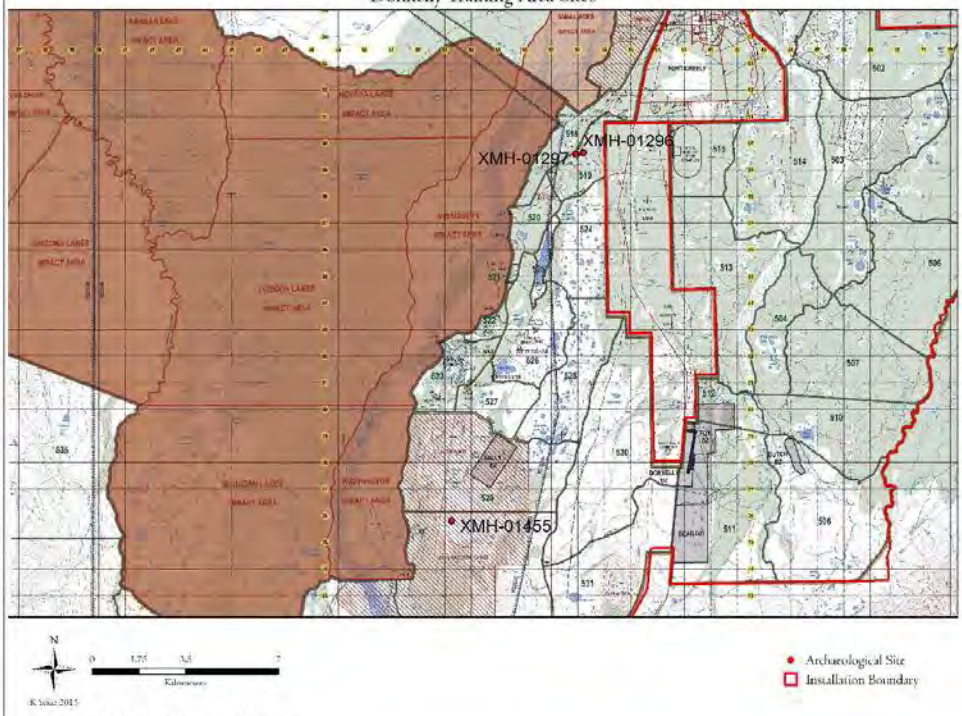

Figure 1. XMH-01297 site location.

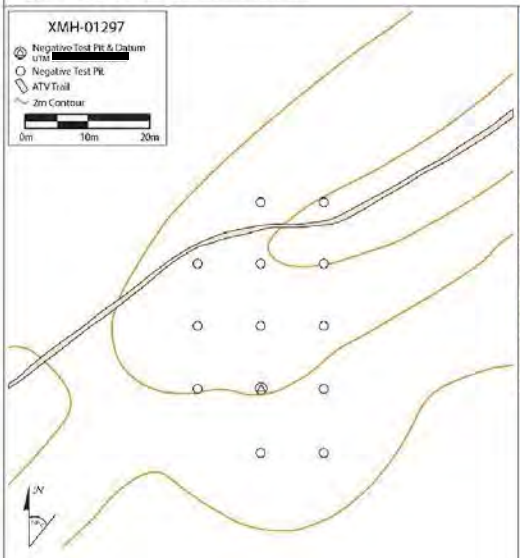

Figure 2. XMH-01297 site map.

Figure 3. XMH-01297 site overview.

2

AHRS # XMH-01297

Statement of Significance

☐ **A.** Property is associated with events that have made a significant contribution to the broad patterns of our history.

☐ **B.** Property is associated with the lives of persons significant in our past.

☐ **C.** Property embodies the distict characteristics of a type, period, or method of construction.

☐ **D.** Property has yielded, or is likely to yield, information important in prehistory or history.

Areas of Significance	Prehistoric, not specific.
Period of Significance	N/A
Cultural Affiliation	N/A
Level of Significance	Local or none.
Criteria Considerations	Shovel tests and surface examinations did not recover any cultural materials. The site has shallow deposits, no datable materials, and no potential for further research.
Research Potential	Very low due to insufficient cultural material.
Integrity	Moderate integrity. Although there is evidence of disturbance to the surface, soil profiles appear to be intact.
Summary	In summary, only a single flake was found at XMH-01297 in two separate visits. The artifact is not diagnostic and thin deposits preclude stratified deposits. Because of lack of datable materials and an insufficient research potential, USAG FWA finds XMH-01297 not eligible for inclusion in the NRHP.

3

AHRS # XMH-01297

Selected Resources

Published Sources

Esdale, J.A., K.S. Yeske, H.D. Hardy, and W.E. McLaren. 2015. Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands 2014. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Bibliography

Robertson, A.C., M. Proue, P. Hall, S. Shirar, and C.K. Paraso. 2007. Archaeological Survey, Evaluation, and Mitigation: Donnelly Training Area, Fort Wainwright, Alaska 2006. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Geographical Data

Acreage of Property .01 acre

Boundary Description

Small site 20x20 m.

Other Information

Other Information

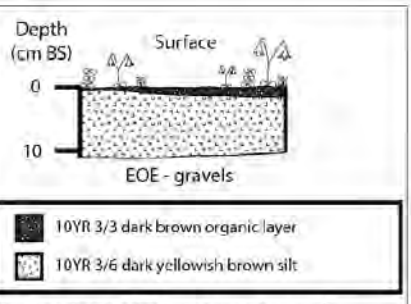

Figure 4. XMH-01297 stratigraphic profile.

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4

DETERMINATION OF ELIGIBILITY

AHRS # XMH-01455 Date 12/10/2015 Latitude [redacted] N Longitude [redacted] W

Site Name XMH-01455 UTM [redacted] E [redacted] N Zone 6 Datum WGS 84

Determination Not Eligible Location 550 m east of OP Road, 27 km south of Delta Junction, Donnell Training Area, Fort Wainwright

Classification of Property

Ownership Public- Federal Category Site Number of Resources 1

Property Description

Summary

XMH-01455 is a small flake scatter on a glacial kame in Donnelly Training Area east. Six flakes were found on teh surface and shallowly buried in a 1x1 m area. The artifacts are not diagnostic and thin deposits preclude stratified deposits. This site is not eligible for inclusion in the NRHP.

Description and Historic Context

XMH-01455 is located on a glacial kame east of the southern end of the OP road in DTA east, 27 km south of Delta Junction (Figure 1). The site is 550 m east of the OP road and 4.5 km west of the Richardson highway. The site was recorded in 2011 when three gray chert and one basalt flake were found on the surface and in a single shovel test (UA2011-373-001 and -002) (Esdale et al. 2012). The knoll where the site was found overlooks the Delta River to the west and a small unnamed lake 500 m to the west (Figure 2). Views from the site are 180° to the west. Vegetation at the site consists of a spruce, aspen, birch, and tamarack overstory with low and tall scrub (Figure 3). Surface visibility at the site is approximately 50%.

The site was revisited by CEMML crews on 10 September, 2014 for secondary investigations into its eligibility for the NRHP. A shovel test grid was set up over the site at 5-10 m intervals (Figure 2). Fourteen shovel tests and a careful surface examination encountered no cultural materials. A test unit was excavated adjacent to the positive shovel test from the 2011 investigations. Two flakes were found shallowly buried in the unit (0-10 cmbs). The flakes were made from chert and rhyolite (UA2014-130-001 and -002).

Sediments at the site are extremely shallow and lacked significant organic accumulation across the surface in most places. Twelve to twenty centimeters of silt overly outwash gravels in this area (Figure 4).

AHRS # XMH-01455

Maps and Photos

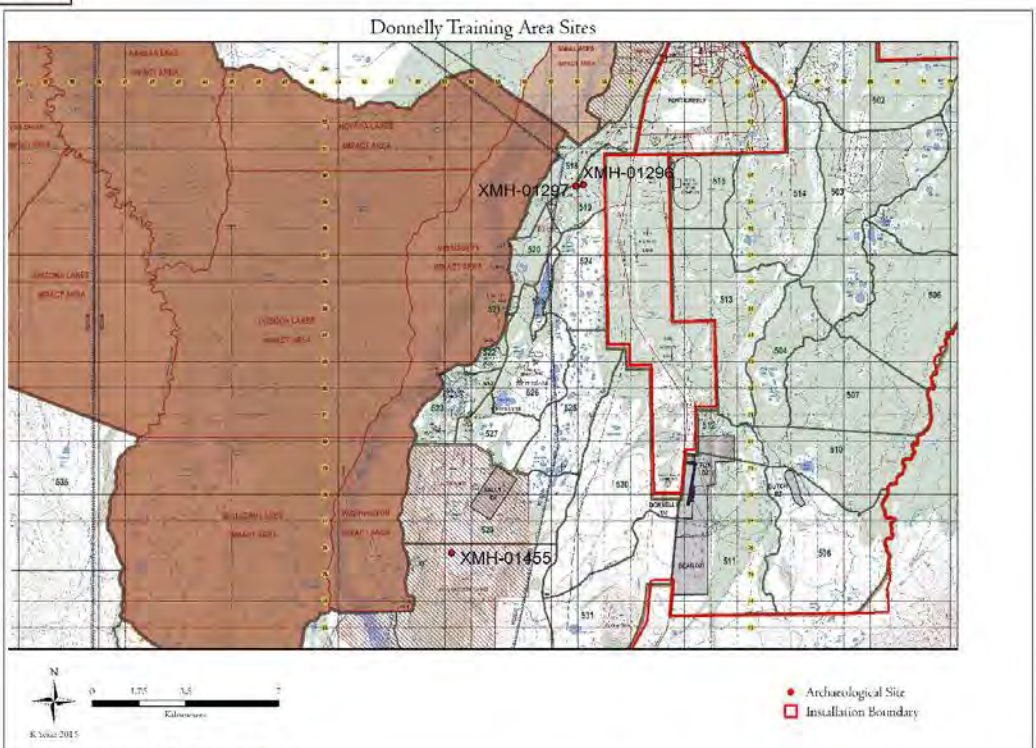

Figure 1. XMH-01455 site location.

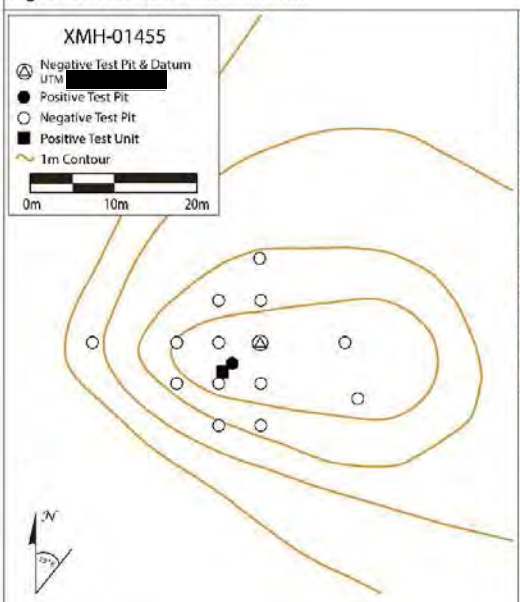

Figure 2. XMH-01455 site map.

Figure 3. XMH-01455 site overview.

AHRS # XMH-01455

Statement of Significance

☐ **A.** Property is associated with events that have made a significant contribution to the broad patterns of our history.

☐ **B.** Property is associated with the lives of persons significant in our past.

☐ **C.** Property embodies the distict characteristics of a type, period, or method of construction.

☐ **D.** Property has yielded, or is likely to yield, information important in prehistory or history.

Areas of Significance	Prehistoric, not specific.
Period of Significance	N/A
Cultural Affiliation	N/A
Level of Significance	Local or none.
Criteria Considerations	Shovel tests and surface examinations recovered only six flakes. The site has shallow deposits, no datable materials, and no potential for further research.
Research Potential	Very low due to insufficient cultural material.
Integrity	Moderate integrity. Although there is evidence of disturbance to the surface, soil profiles appear to be intact.
Summary	Six complete flakes were found on surface and shallowly buried in a small area at XMH-01455 in two separate visits. The artifacts are not diagnostic and thin deposits preclude stratified deposits. Because of lack of datable materials and an insufficient research potential, USAG FWA finds XMH-01455 not eligible for inclusion in the NRHP.

3

AHRS # XMH-01455

Selected Resources

Published Sources

Esdale, J.A., K.S. Yeske, H.D. Hardy, and W.E. McLaren. 2015. Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands 2014. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Bibliography

Esdale, J.A., E.P. Gaines, K.S. Yeske, W.E. McLaren, M. Shimel, and J.F. Kunesh. 2012. Section 110 Report, Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands: 2010 and 2011. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Geographical Data

Acreage of Property .01 acre

Boundary Description

Small site 20x30 m.

Other Information

Other Information

Artifacts are located at the University of Alaska Museum of the North: UA2011-373-001, 002; UA2014-130-001, 002.

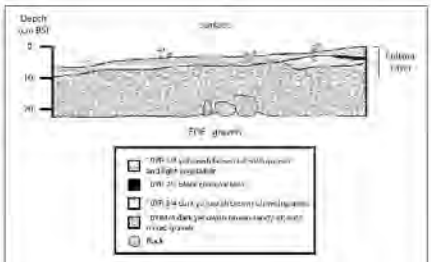

Figure 4. XMH-01297 stratigraphic profile.

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4