Figure 45. FAI-00040 test excavation unit.

FAI-00040 is a large buried lithic scatter, partially exposed on the surface by military activities and erosion. Quartz is the predominant material type of the 11 present, followed by chert (banded, grey, light grey, dark grey, red and black), obsidian, rhyolite, basalt, and chalcedony. Both faunal and charcoal samples may provide material for dating. During 2012 investigations, a total of 6 tools and over 900 hundred flakes, 42 of which are obsidian, were recovered. Despite disturbance in the upper soil layers, the site appears to be largely intact and retains sufficient integrity to generate useful data. The variety of material types, abundance of cultural materials, as well as the presence of obsidian, indicate FAI-00040 has the potential to yield important information about prehistory and is eligible for inclusion in the.

Table 3. FAI-00040 artifact accession log.

UA Accession #	FS #	Provenience	Depth cmbd	Type	Material	Quantity
UA2012-111-0001	13	ST 12S 5W	0-15	bone	bone	1
UA2012-111-0002	14	ST 12S 5W	0-15	flake	obsidian	1
UA2012-111-0003	15	ST 12S 5W	0-15	flakes	chert	4
UA2012-111-0004	16	ST 12S 5W	0-15	bone	charcoal	4
UA2012-111-0005	17	ST 12S 5W	15-25	bone	charcoal	1
UA2012-111-0006	18	ST 12S 5W	15-25	flakes	chert	7
UA2012-111-0007	19	ST 12S 5W	25-35	bone	bone	2
UA2012-111-0008	20	ST 12S 5W	25-35	flakes	chert/quartz	8

UA2012-111-0009	21	ST 12S 5W	35-47	bone	bone	7
UA2012-111-0010	22	ST 12S 5W	35-47	flakes	bone/chert/quartz	12
UA2012-111-0011	23	ST 12S 5W	47-65	flake	obsidian	1
UA2012-111-0012	24	ST12S 5W	47-65	bone	bone	3
UA2012-111-0013	25	ST 12S 5W	47-65	flakes	quartz/chert	7
UA2012-111-0014	26	ST 12S 5W	47-65	flake	chert	1
UA2012-111-0015	27	ST 12S 5W	65-70	flake	obsidian	1
UA2012-111-0016	28	ST 12S 5W	65-70	flake	quartz	1
UA2012-111-0017	56	1.56N 1.35W	surface	tci-tho	basalt	1
UA2012-111-0018	74	3.04W 9.2S	surface	uniface frag	rhyolite	1
UA2012-111-0019	76	19.05S 17.62W	surface	flake	chert	1
UA2012-111-0020	77	ST 5N 0E	0-11	flake	quartz	1
UA2012-111-0021	78	ST 5S 0E	0-11	flake	quartz	1
UA2012-111-0022	79	ST 5S 5W	0-13	flakes	chert, quartz	6
UA2012-111-0023	80	ST 5S 15W	30-40	flake	quartz	1
UA2012-111-0024	81	ST 5S 15W	10-30	flakes	quartz	2
UA2012-111-0025	82	ST 5S 15W	0-10	flake	quartz	1
UA2012-111-0026	83	ST 5S 10W	0-20	flake/shatter	quartz	8
UA2012-111-0027	84	ST 5S 10W	0-20	flake	quartz	1
UA2012-111-0028	85	ST 5S 10W	0-20	bone	bone	2
UA2012-111-0029	86	ST 5S 10W	20-30	flake	quartz	1
UA2012-111-0030	87	ST 5S 10W	30-40	flakes	quartz	6
UA2012-111-0031	88	ST 5S 10W	40-50	flakes	quartz	3
UA2012-111-0032	89	22.47S 3.53W	surface	flake	quartz	1
UA2012-111-0033	91	17.48S 2.54W	surface	uniface	chert	1
UA2012-111-0034	97	ST 0N 5W	0-20	flake	quartz	1
UA2012-111-0035	98	ST 0N 0E datum	0-22	flakes	quartz	6
UA2012-111-0036	101	ST 0N 0E datum	22-30	flakes	quartz, chert	57
UA2012-111-0037	102	ST 0N 0E datum	0-35	flakes	quartz, chert	2
UA2012-111-0038	103	ST 0N 0E datum	22-30	flakes	obsidian, quartz	3
UA2012-111-0039	104	ST 9S 10W	30-40	flake	obsidian	1
UA2012-111-0040	105	ST 9S 10W	30-40	chunk/shatter	quartz	2
UA2012-111-0041	106	ST 9S 10W	80-91	flake	obsidian	1
UA2012-111-0042	107	ST 9S 10W	0-91	flake	quartz	1
UA2012-111-0043	108	ST 15S 20W	35-50	flake	chert	1
UA2012-111-0044	109	ST 15S 20W	35-50	biface	quartz	1
UA2012-111-0045	110	TU 1S 0E LVL1	0-10	flakes	quartz	2
UA2012-111-0046	111	TU 1S 0E LVL2	10-20	flakes	quartz/chert	14
UA2012-111-0047	112	TU 1S 0E LVL2 .68S .75E	19	flake	quartz	1
UA2012-111-0048	113	TU 1S 0E LVL2 .52S .60E	18	flakes	quartz/chert	5
UA2012-111-0049	114	TU 1S 0E LVL2 .60S	19	flakes	quartz	4

		.40E				
UA2012-111-0050	115	TU 1S 0E LVL2	10-20	flakes	quartz	25
UA2012-111-0051	116	TU 1S 0E LVL2 .61S .23E	19	flakes	quartz	3
UA2012-111-0052	117	TU 1S 0E LVL2 .53S .30E	19.5	flake	obsidian	1
UA2012-111-0053	118	TU 1S 0E LVL2 .53S .25E	19.5	flake	quartz	1
UA2012-111-0054	119	TU 1S 0E LVL2 .54S .26E	19.5	flakes	quartz	4
UA2012-111-0055	120	TU 1S 0E LVL2 .55S .32E	19.5	flake	quartz	1
UA2012-111-0056	121	TU 1S 0E LVL2 .54S .32E	19.5	flake	quartz	1
UA2012-111-0057	122	TU 1S 0E LVL2 .59S .38E	19.5	flake	quartz	1
UA2012-111-0058	123	TU 1S 0E LVL2 .66s .25E	19.5	flakes	quartz	3
UA2012-111-0059	124	TU 1S 0E LVL2 .60S .20E	19.5	flakes	quartz	2
UA2012-111-0060	125	TU 1S 0E LVL2 .32S .23E	15	flake	chert	1
UA2012-111-0061	126	TU 1S 0E LVL2	10-20	flakes	obsidian	3
UA2012-111-0062	127	TU 1S 0E LVL2	10-20	flake	obsidian	1
UA2012-111-0063	128	TU 1S 0E LVL2	10-20	flakes	obsidian/chert	61
UA2012-111-0064	129	TU 1S 0E LVL2	10-20	flakes	chert	64
UA2012-111-0065	130	TU 1S 0E LVL2	10-20	flake	chert	1
UA2012-111-0066	131	TU 1S 0E LVL2	10-20	flakes	quartz	3
UA2012-111-0067	132	TU 1S 0E LVL2 .15S .07E	16	flake	chert	1
UA2012-111-0068	133	TU 1S 0E LVL2 .14S .19E	16	flake	chert	1
UA2012-111-0069	134	TU 1S 0E LVL2 .20S .18E	16	flake	chert	1
UA2012-111-0070	135	TU 1S 0E LVL2 .13S .20E	16	flake	quartz	1
UA2012-111-0071	136	TU 1S 0E LVL2 .13S .11E	16	flake	chert	1
UA2012-111-0072	137	TU 1S 0E LVL2 .23S .16E	13	flake	chert	1
UA2012-111-0073	138	TU 1S 0E LVL2 .16S .10E	13	flake	chert	1
UA2012-111-0074	139	TU 1S 0E LVL2 .11S .23E	15	flake	chert	1
UA2012-111-0075	140	TU 1S 0E LVL2 .25S .20E	14	flake	chert	1
UA2012-111-0076	141	TU 1S 0E LVL2 .16S .19E	17	flakes	chert/quartz	3
UA2012-111-0077	142	TU 1S 0E LVL2 .36S	14.5	flake	quartz	1

		.33E				
UA2012-111-0078	143	TU 1S 0E LVL2 .14S .10E	13.5	flake	quartz	1
UA2012-111-0079	144	TU 1S 0E LVL2 .19S .18E	13	flake	quartz	1
UA2012-111-0080	145	TU 1S 0E LVL2 .31S .24E	16	flakes	quartz	2
UA2012-111-0081	146	TU 1S 0E LVL2 .27-.34S .32-.39E	15-17	flake concentration	quartz/chert	56
UA2012-111-0082	147	TU 1S 0E LVL2 .11S .08E	12	flakes	quartz/chert	2
UA2012-111-0083	148	TU 1S 0E LVL2 .11S .08E	12	flake	obsidian	1
UA2012-111-0084	149	TU 1S 0E LVL2 .08S .10E	15	flake	quartz	1
UA2012-111-0085	150	TU 1S 0E LVL2 .07S .05E	13	flakes	quartz/chert	5
UA2012-111-0086	151	TU 1S 0E LVL2 .36S .42E	15	flake	quartz	1
UA2012-111-0087	152	TU 1S 0E LVL2 .38S .45E	15	flakes	quartz/chert	4
UA2012-111-0088	153	TU 1S 0E LVL1 NW1/4	0-10	flakes	quartz/chert	5
UA2012-111-0089	154	TU 1S 0E LVL2 .38S .46E	15	flakes	quartz/chert	4
UA2012-111-0090	155	TU 1S 0E LVL2 .40S .40E	15	flakes	quartz/chert	4
UA2012-111-0091	156	TU 1S 0E LVL2 .38S .40E	15	flakes	quartz	3
UA2012-111-0092	157	TU 1S 0E LVL2 .39S .35E	15	flake	chert	1
UA2012-111-0093	158	TU 1S 0E LVL2 .37S .44E	15	flake	chert	1
UA2012-111-0094	159	TU 1S 0E LVL2 .35S .33E	16.5	flake	quartz	1
UA2012-111-0095	160	TU 1S 0E LVL2 .36S .39E	17	flake	chert	1
UA2012-111-0096	161	TU 1S 0E LVL2 .39S .43E	16	flake	quartz	1
UA2012-111-0097	162	TU 1S 0E LVL2 .40S .36E	17	flakes	quartz	2
UA2012-111-0098	163	TU 1S 0E LVL2 .36S .38E	17	flake	quartz	1
UA2012-111-0099	164	TU 1S 0E LVL2 .50S .33E	17.5	flake	quartz	1
UA2012-111-0100	165	TU 1S 0E LVL2 .42S .36E	17	flake	quartz	1
UA2012-111-0101	166	TU 1S 0E LVL2 .40S .32E	17	flake	quartz	1
UA2012-111-0102	167	TU 1S 0E LVL2 .09S	14	flake	chert	1

		.10E				
UA2012-111-0103	168	TU 1S 0E LVL2 .05S .06E	15	flake	chert	1
UA2012-111-0104	169	TU 1S 0E LVL2 .13S .12E	13	flakes	chert	2
UA2012-111-0105	170	TU 1S 0E LVL2 .43S .42E	16	flake	quartz	1
UA2012-111-0106	171	TU 1S 0E LVL2 .42S .38E	17	flakes	quartz	2
UA2012-111-0107	172	TU 1S 0E LVL2 .35S .33E	17.5	flakes	quartz	3
UA2012-111-0108	173	TU 1S 0E LVL2 .32S .33E	17.5	flakes	quartz	2
UA2012-111-0109	174	TU 1S 0E LVL2 .31S .40E	17	flakes	chert/quartz	2
UA2012-111-0110	175	TU 1S 0E LVL2 .37S .29E	18	flake	quartz	1
UA2012-111-0111	176	TU 1S 0E LVL2 .43S .20E	18	flake	quartz	1
UA2012-111-0112	177	TU 1S 0E LVL2 .41S .35E	18	flake	quartz	1
UA2012-111-0113	178	TU 1S 0E LVL2 .42S .45E	17	flakes	quartz	4
UA2012-111-0114	179	TU 1S 0E LVL2 .12S .16E	16	flake	quartz	1
UA2012-111-0115	180	TU 1S 0E LVL2 .48S .27E	18	flake	quartz	1
UA2012-111-0116	181	TU 1S 0E LVL2 .05S .16E	15	projectile point frag	obsidian	1
UA2012-111-0117	182	TU 1S 0E LVL2 .49S .36E	18.5	flake	quartz	1
UA2012-111-0118	183	TU 1S 0E LVL2 .40S .24E	18	flakes	quartz	2
UA2012-111-0119	184	TU 1S 0E LVL2 .45S .06E	16	flake	obsidian	1
UA2012-111-0120	185	TU 1S 0E LVL2 .27S .15E	18	flakes	quartz	3
UA2012-111-0121	186	TU 1S 0E LVL2 .21S .22E	17	flake	obsidian	1
UA2012-111-0122	187	TU 1S 0E LVL2 .14S .14E	15	flakes	chert	3
UA2012-111-0123	188	TU 1S 0E LVL3 .79S .48E	29	flake	chert	1
UA2012-111-0124	189	TU 1S 0E LVL2 .19S .14E	17	flake	chert	1
UA2012-111-0125	190	TU 1S 0E LVL2 .09S .08E	17	flakes	quartz/chert	2
UA2012-111-0126	191	TU 1S 0E LVL2 .16S .05E	17	flake	quartz	1
UA2012-111-0127	192	TU 1S 0E LVL2 .22S	17	flakes	quartz	2

		.15E				
UA2012-111-0128	193	TU 1S 0E LVL2 .06S .05E	17	flakes	obsidian	2
UA2012-111-0129	194	TU 1S 0E LVL2 .06S .05E	17	flake	chert	1
UA2012-111-0130	195	TU 1S 0E LVL2 .02S .25E	15	flake	chert	1
UA2012-111-0131	196	TU 1S 0E LVL2 .50S .26E	18	flakes	quartz	3
UA2012-111-0132	197	TU 1S 0E LVL2 .48S .18E	18	flake	quartz	1
UA2012-111-0133	198	TU 1S 0E LVL2 .35S .22E	19	flake	quartz	1
UA2012-111-0134	199	TU 1S 0E LVL2 .40S .25E	17	flake	quartz	1
UA2012-111-0135	200	TU 1S 0E LVL2 .42S .16E	18	flake	quartz	1
UA2012-111-0136	201	TU 1S 0E LVL 2 NW1/4	10-20 screen	flakes	chert/quartz	16
UA2012-111-0137	202	TU 1S 0E LVL2 .48S .28E	19	flake	quartz	1
UA2012-111-0138	203	TU 1S 0E LVL2 NW1/4	10-20 screen	flake	obsidian	1
UA2012-111-0139	204	TU 1S 0E LVL 2 .24S .27E	17	flake	quartz	1
UA2012-111-0140	205	TU 1S 0E LVL2 .32S .35E	18	flakes	quartz	2
UA2012-111-0141	206	TU 1S 0E LVL2 .34S .24E	18	flake	chert	1
UA2012-111-0142	207	TU 1S 0E LVL2 .32S .27E	19	flake	quartz	1
UA2012-111-0143	208	TU 1S 0E LVL2 .40S .27E	19	flakes	quartz	2
UA2012-111-0144	209	TU 1S 0E LVL2 .38S .27E	19.5	flake	quartz	1
UA2012-111-0145	210	TU 1S 0E LVL2 .50S .31E	20	flakes	quartz	3
UA2012-111-0146	211	TU 1S 0E LVL2 .04S .02E	16	flake	obsidian	1
UA2012-111-0147	212	TU 1S 0E LVL2 .01S .11E	16	flake	obsidian	1
UA2012-111-0148	213	TU 1S 0E LVL2 .05S .07E	19	flakes	chert	2
UA2012-111-0149	214	TU 1S 0E LVL2 .18S .51E	11.5	flake	chert	1
UA2012-111-0150	215	TU 1S 0E LVL2 NE1/4	10-20	flakes	chert/quartz	65
UA2012-111-0151	216	TU 1S 0E LVL2 .63S .04E	11	flakes	chert/quartz	2
UA2012-111-0152	217	TU 1S 0E LVL2 .35S .64E	14-16.5	flake	quartz	1

UA2012-111-0153	218	TU 1S 0E LVL2 .27S .54E	14	flake	quartz	1
UA2012-111-0154	219	TU 1S 0E LVL2 .18S .69E	14	flake	chert	1
UA2012-111-0155	220	TU 1S 0E LVL2 .30S .59E	15	flake	chert	1
UA2012-111-0156	221	TU 1S 0E LVL2 .20S .53E	14	flake	chert	1
UA2012-111-0157	222	TU 1S 0E LVL2 .19S .62E	15	flakes	chert	2
UA2012-111-0158	223	TU 1S 0E LVL2 .30S .56E	15	flakes	chert/quartz	5
UA2012-111-0159	224	TU 1S 0E LVL2 .30S .62E	15	flake	chert	1
UA2012-111-0160	225	TU 1S 0E LVL2 .25S .69E	15	flakes	quartz	2
UA2012-111-0161	226	TU 1S 0E LVL2 .13S .70E	15	flakes	quartz	2
UA2012-111-0162	227	TU 1S 0E LVL2 .12S .78E	15	flakes	quartz	2
UA2012-111-0163	228	TU 1S 0E LVL2 .05S .74E	14	flake	chert	1
UA2012-111-0164	229	TU 1S 0E LVL2 .12S .79E	14	flakes	quartz	2
UA2012-111-0165	230	TU 1S 0E LVL2 .15S .55E	16	flake	chert	1
UA2012-111-0166	231	TU 1S 0E LVL2 .09S .57E	15	flake	quartz	1
UA2012-111-0167	234	TU 1S 0E LVL2 .28S .51E	17	flake	quartz	1
UA2012-111-0168	233	TU 1S 0E LVL2 .39S .74E	18	flake	rhyolite	1
UA2012-111-0169	234	TU 1S 0E LVL2 .46S .73E	18.5	flakes	quartz	3
UA2012-111-0170	235	TU 1S 0E LVL2 .20S .54E	18	flake	quartz	1
UA2012-111-0171	236	TU 1S 0E LVL2 NE1/4	10-20 screen	flakes	obsidian	3
UA2012-111-0172	237	TU 1S 0E LVL2 .04S .76E	17	flakes	quartz	3
UA2012-111-0173	238	TU 1S 0E LVL2 .49S .95E	19	flake	quartz	1
UA2012-111-0174	239	TU 1S 0E LVL2 .06S .81E	18	flake	quartz	1
UA2012-111-0175	240	TU 1S 0E LVL2 .49S .62E	19.5	flake	chert	1
UA2012-111-0176	241	TU 1S 0E LVL2 .50S .36E	20	flake	quartz	1
UA2012-111-0177	242	TU 1S 0E LVL2	10-20	flakes	chert/quartz	5
UA2012-111-0178	243	TU 1S 0E LVL3 SW1/4	20-30	flakes	chert/quartz	116
UA2012-111-0179	244	TU 1S 0E LVL3 .64S	21	flakes	quartz	5

		.25E				
UA2012-111-0180	245	TU 1S 0E LVL3 .63S .15E	21	flakes	quartz	2
UA2012-111-0181	246	TU 1S 0E LVL3 .26E .59S	21	flakes	quartz	4
UA2012-111-0182	247	TU 1S 0E LVL3 .66S .22E	21	flake	quartz	1
UA2012-111-0184	248	TU 1S 0E LVL3 .61S .26E	21.5	flakes	quartz	5
UA2012-111-0185	249	TU 1S 0E LVL3 .54S .31E	23	flakes	quartz	2
UA2012-111-0186	250	TU 1S 0E LVL3 .69S .21E	20.5	flake	quartz	1
UA2012-111-0187	251	TU 1S 0E LVL3 .80S .23E	20.5	flake	obsidian	1
UA2012-111-0188	252	TU 1S 0E LVL3 .82S .43E	21	flake	quartz	1
UA2012-111-0189	253	TU 1S 0E LVL3 .52S .21E	21	flakes	quartz	2
UA2012-111-0190	254	TU 1S 0E LVL3 .50S .13E	21	flake	quartz	1
UA2012-111-0191	255	TU 1S 0E LVL3 .80S .20E	21	flake	quartz	1
UA2012-111-0192	256	TU 1S 0E LVL3 .76S .30E	21	flake	quartz	1
UA2012-111-0193	257	TU 1S 0E LVL3 .90S .42E	21	flake	obsidian	1
UA2012-111-0194	258	TU 1S 0E LVL3 .90S .42E	21	flake	quartz	1
UA2012-111-0195	259	TU 1S 0E LVL3 SW1/4	20-30	flakes	obsidian	6
UA2012-111-0196	260	TU 1S 0E LVL3 .96S .50E	21	flake	quartz	1
UA2012-111-0197	261	TU 1S 0E LVL3 .74S .10E	21	flake	rhyolite	1
UA2012-111-0198	262	TU 1S 0E LVL3 .77S .36E	25	flake	obsidian	1
UA2012-111-0199	263	TU 1S 0E LVL3 .77S .36E	25	flake	quartz	1
UA2012-111-0200	264	TU 1S 0E LVL3 .65S .40E	25	flake	quartz	1
UA2012-111-0201	265	TU 1S 0E LVL3 .56S .37E	25	flakes	quartz	2
UA2012-111-0202	266	TU 1S 0E LVL3 .74S .40E	25	flake	quartz	1
UA2012-111-0203	267	TU 1S 0E LVL3 .61S .12E	28	flakes	quartz	2
UA2012-111-0204	268	TU 1S 0E LVL3 .83S .27E	27	flakes	chert/quartz	7
UA2012-111-0205	269	TU 1S 0E LVL3 .88S .16E	28	flake	chert	1

UA2012-111-0206	270	TU 1S 0E LVL3 .84S .29E	27	flakes	chert/quartz	3
UA2012-111-0207	271	TU 1S 0E LVL3 .86S .30E	28	flake	quartz	1
UA2012-111-0208	272	TU 1S 0E LVL3 .88S .39E	25	flakes	quartz	2
UA2012-111-0209	273	TU 1S 0E LVL3 .81S .26E	25	flakes	quartz	3
UA2012-111-0210	274	TU 1S 0E LVL3 .81S .26E	25	flake	obsidian	1
UA2012-111-0211	275	TU 1S 0E LVL3 .90S .40E	27	flakes	quartz	3
UA2012-111-0212	276	TU 1S 0E LVL3 .90S .30E	28	flakes	quartz	3
UA2012-111-0213	277	TU 1S 0E LVL3 .84S .40E	24	flake	quartz	1
UA2012-111-0214	278	TU 1S 0E LVL3 .74-.80S .34-.40E	25-28	flakes	chert/quartz	24
UA2012-111-0215	279	TU 1S 0E LVL3 .86S .36E	29	flakes	quartz	2
UA2012-111-0216	280	TU 1S 0E LVL3 .59S .26E	27	flake	chert	1
UA2012-111-0217	281	TU 1S 0E LVL3 .63S .38E	25	flakes	quartz	2
UA2012-111-0218	282	TU 1S 0E LVL3 .84S .41E	28	flakes	quartz	5
UA2012-111-0219	283	TU 1S 0E LVL3 .80S .32E	30	flakes	quartz	2
UA2012-111-0220	284	TU 1S 0E LVL3 .80S .50E	24	flakes	quartz	4
UA2012-111-0221	285	TU 1S 0E LVL3 .73S .48E	24	flakes	quartz	3
UA2012-111-0222	286	TU 1S 0E LVL3 .82S .25E	29	flake	obsidian	1
UA2012-111-0223	287	TU 1S 0E LVL3 .76S .15E	29	flake	chert	1
UA2012-111-0224	288	TU 1S 0E LVL3 SE1/4	20-30	flakes	quartz	9
UA2012-111-0225	289	TU 1S 0E LVL3 .65S .65E	20.5	flake	quartz	1
UA2012-111-0226	290	TU 1S 0E LVL3 .595S .57E	22	flakes	quartz	2
UA2012-111-0227	291	TU 1S 0E LVL3 .82S .69E	28	flake	quartz	1
UA2012-111-0228	292	TU 1S 0E LVL3 .75S .58E	27	flake	quartz	1
UA2012-111-0229	293	TU 1S 0E LVL3 .89S .49E	28	flake	quartz	1
UA2012-111-0230	294	TU 1S 0E LVL3 .65S .60E	26	flake	quartz	2
UA2012-111-0231	295	TU 1S 0E LVL3 .67S	25	flake	quartz	1

		.59E				
UA2012-111-0232	296	TU 1S 0E LVL3 .68S .48E	29.5	flake	quartz	1
UA2012-111-0233	297	TU 1S 0E LVL3 .60S .38E	25	flake	quartz	1
UA2012-111-0234	298	TU 1S 0E LVL3 .62S .61E	28	flake	quartz	2
UA2012-111-0235	299	TU 1S 0E LVL3 .58S .50E	28	flake	quartz	1
UA2012-111-0236	300	TU 1S 0E LVL3 .76S .64E	26	flake	quartz	1
UA2012-111-0237	301	TU 1S 0E LVL3 .85S .64E	30	flake	quartz	1
UA2012-111-0238	302	TU 1S 0E LVL3 NE1/4	20-30	flake	quartz	1
UA2012-111-0239	303	TU 1S 0E LVL3 NW1/4	20-30	flakes	obsidian	2
UA2012-111-0240	304	TU 1S 0E LVL3 NW1/4	20-30	flakes	rhyolite/quartz	9
UA2012-111-0241	305	TU 1S 0E LVL3 .41S .03E	23	flake	quartz	1
UA2012-111-0242	306	TU 1S 0E LVL3 .46S .02E	22.5	flake	chert	1
UA2012-111-0243	307	TU 1S 0E LVL3 .93S .51E	30	flakes	quartz	2
UA2012-111-0244	308	TU 1S 0E LVL4 SW1/4	30-40	flakes	chert/quartz	3
UA2012-111-0245	309	TU 1S 0E LVL4 SW1/4	30-40	flakes	quartz	3
UA2012-111-0246	310	TU 1S 0E LVL2 0N .67E	10-20	flake	quartz	1
UA2012-111-0247	311	TU 1S 0E LVL2 0N .64E	14	flake	chert	1
UA2012-111-0248	312	TU 1S 0E LVL2 0N 0E	13	biface	quartz	1
UA2012-111-0249	313	TU 1S 0E LVL3 .74-.80S .34-.40E	25-28	flake	obsidian	1

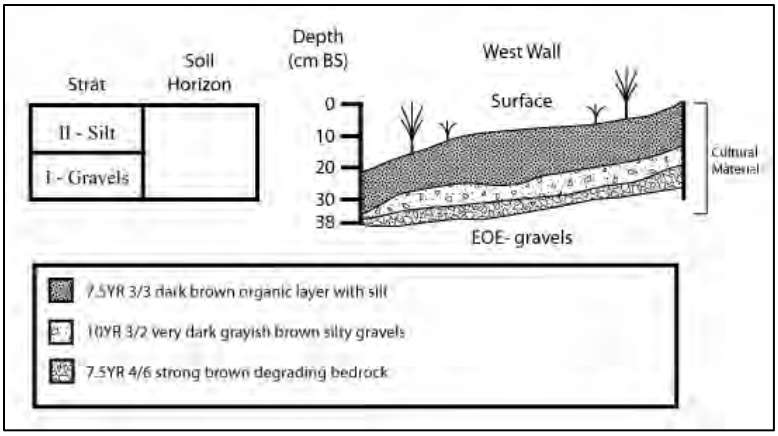

Figure 46. FAI-00040 site stratigraphy.

FAI-00041

[redacted]

Determination of Eligibility: Not Eligible

FAI-00041 is located on a disturbed bluff edge overlooking the Chena River floodplain, downslope and 90m southwest of FAI-00040 and 200m southwest of FAI-00043 (Figure 42, Figure 47). The northeast-southwest trending bluff rises approximately 150 m above the floodplain and has just over a 180° view shed, showing Birch Hill, Ladd Airfield, Chena Valley floor, and Yukon Training Area. The closest water source is Columbia Creek, 1.5 km to the east. The ecosystem is characterized as upland moist mixed forest. Site vegetation includes birch, spruce, aspen, grasses, cranberry, strawberry, bear berry, wild roses, Artemisia, pasque flower, dwarf willow, low scrub, Labrador, and mosses. Surface exposure is minimal except where military activity or game trails have disturbed the vegetation (Figure 48).

FAI-00041 was originally discovered during a 1979 survey by James Dixon and others (Dixon et al. 1980) and consisted of a surface tool and 26 chert flakes found in a shovel test. The site was relocated in 2006, and six flakes were observed on the surface. No subsurface testing was performed. In 2012, the surface artifacts were relocated and recorded, in addition to seven other flakes eroding downslope to the south, for a total of 13 grey chert and quartz flakes. A shovel test grid was placed over the site to determine site boundaries, subsurface concentrations, and site integrity. The grid was established at 10m intervals, with offset shovel tests at 5 m intervals to coincide with the main landform and possibly undisturbed soils. A total

of 16 shovel tests were excavated to degrading schist bedrock. A single shovel test was positive, producing eight chert flakes and two bone fragments, likely recent rodent remains.

A 1 m^2 unit was excavated to the southwest of the positive shovel test in 10cm levels and terminated at degrading bedrock (Figure 49). Artifacts were recovered from 0-24 cmbs, consisting of 44 flakes of chert (grey and banded), quartz and rhyolite, as well as four bone fragments (again, likely recent rodent remains) (Table 4).

Shovel tests ranged in depth from 9-98 cmbs, with deeper deposition to the north away from the bluff edge. Stratigraphy in the excavation unit consisted of poorly sorted 10YR3/3 dark brown silt followed by 10YR3/6 dark yellowish brown silty gravel, then decaying bedrock. Cultural materials were found in the first silt layer (Figure 50).

FAI-00041 is a small lithic scatter containing five raw material types (grey chert, light grey chert, banded chert, quartz and rhyolite). The center of the site was destroyed sometime in the past by the creation of a 20 m x 7 m foxhole. Surface artifacts may be in their original location or eroding out of the displaced fill from the foxhole. Only recent faunal remains were recovered, and no charcoal or diagnostic stone tools were found. Archaeological investigations have produced 92 flakes and one tool. Due to the intense disturbance, lack of site integrity, scarcity of cultural material, and lack of datable material, FAI-00041 is not eligible for inclusion in the NHRP.

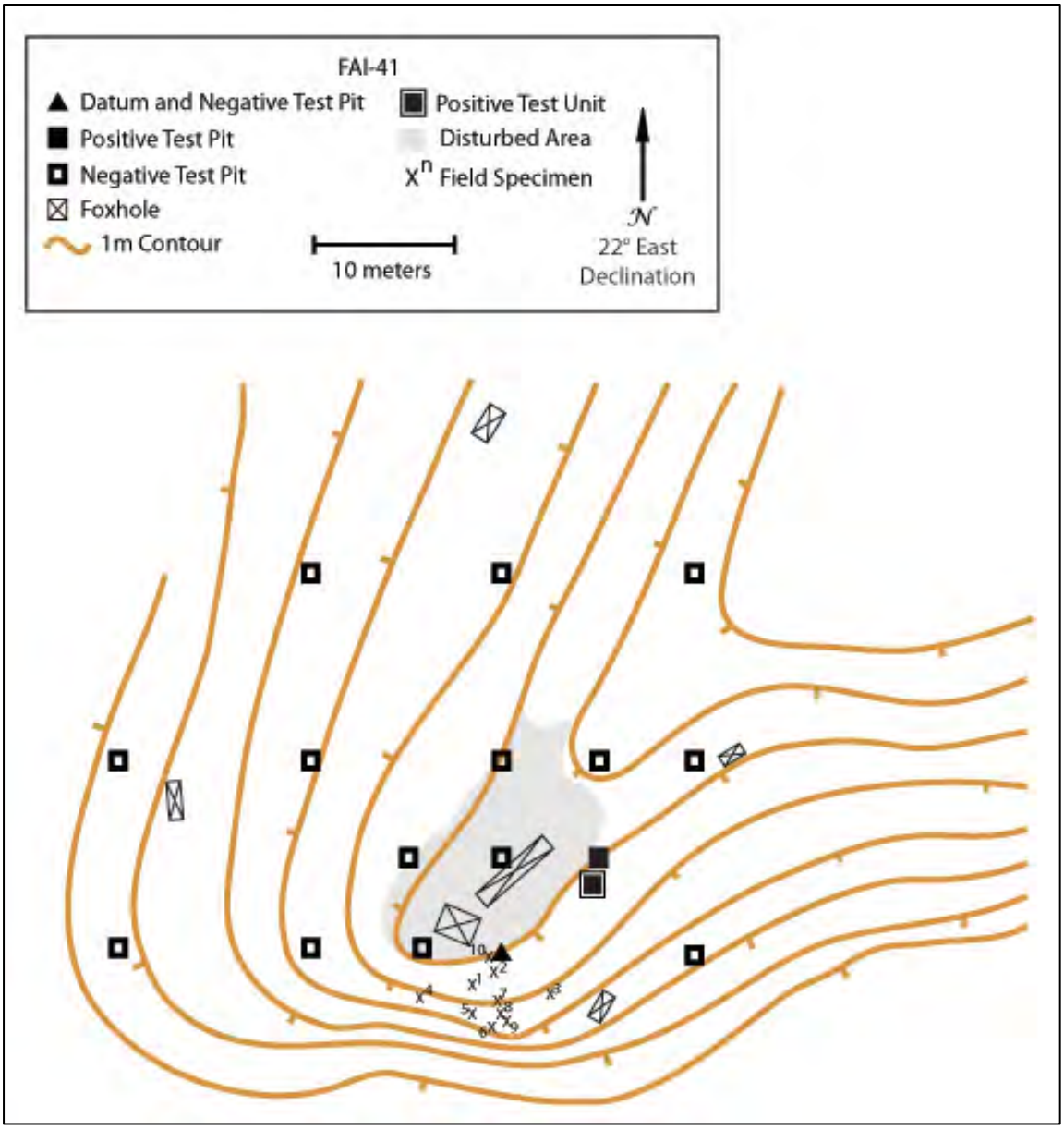

Figure 47. FAI-00041 site map.

Figure 48. FAI-00041 site overview.

Figure 49. FAI-00041 test excavation unit.

Table 4. FAI-00041 artifact accession log.

UA Accession #	FS #	Provenience	Depth	Type	Material	Quantity
UA2012-112-0001	11	STP 5N 5E	9-17	flake	chert	1
UA2012-112-0002	12	STP 5N 5E	15	flakes	chert	2
UA2012-112-0003	13	STP 5N 5E		flakes	chert	5
UA2012-112-0004	14	STP 5N 5E	4	N/A	bone	2
UA2012-112-0005	15	TU 3N 4E LVL1 NE1/4	10-20	flakes	chert	3
UA2012-112-0006	16	TU 3N 4E LVL1 NE1/4	10-20	flakes	chert	3
UA2012-112-0007	17	TU 3N 4E LVL1 .91N .47E	16	flake	chert	1
UA2012-112-0008	18	TU 3N 4E LVL1 .92N .37E	16	flake	chert	1
UA2012-112-0009	19	TU 3N 4E LVL2 .25N .05E	25	flake	chert	1
UA2012-112-0010	20	TU 3N 4E LVL2 SW1/4	20-30	flakes	chert/quartz	4
UA2012-112-0011	21	TU 3N 4E LVL2 SW1/4	20-30	N/A	bone	4
UA2012-112-0012	22	TU 3N 4E LVL2 .06N .37E	28	flake	quartz	1
UA2012-112-0013	23	TU 3N 4E LVL2 .36N .84E	27	flake	quartz	1
UA2012-112-0014	24	TU 3N 4E LVL2 SE1/4	20-30	flake	chert	1
UA2012-112-0015	25	TU 3N 4E LVL2 .80N .80E	20	flake	chert	1
UA2012-112-0016	26	TU 3N 4E LVL2 .84N .70E	21	flake	chert	1
UA2012-112-0017	27	TU 3N 4E LVL2 NE1/4	20-30	flakes	chert	12
UA2012-112-0018	28	TU 3N 4E LVL2 .81N .69E	21	flake	chert	1
UA2012-112-0019	29	TU 3N 4E LVL2 .99N .62E	22	flake	chert	1
UA2012-112-0020	30	TU 3N 4E LVL2 .92N .67E	22	flake	chert	1
UA2012-112-0021	31	TU 3N 4E LVL2 .88N .81E	22	flake	chert	1
UA2012-112-0022	32	TU 3N 4E LVL2 .60N .56E	21.5	flake	chert	1
UA2012-112-0023	33	TU 3N 4E LVL2 NW1/4	20-30	flake	chert	1
UA2012-112-0024	34	TU 3N 4E LVL2 SW1/4	20-30	flakes	chert/quartz	7
UA2012-112-0025	35	TU 3N 4E LVL3 .12N .02E	34	flake	rhyolite	1

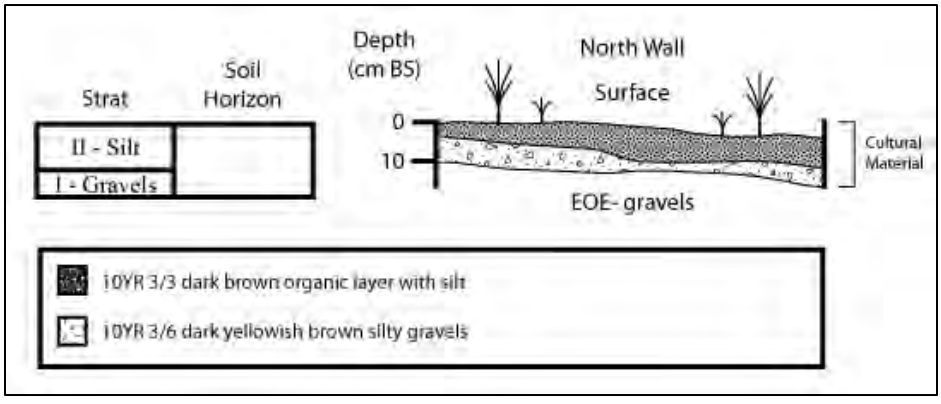

Figure 50. FAI-00041 site stratigraphy.

FAI-00042

(*Exact location unknown, coordinates are from Dixon et al. 1980.)

[redacted]

Determination of Eligibility: Not Eligible

FAI-00043 was found by Dixon et al. (1980) on a high bluff overlooking the Chena River. It was estimated to be 20 m x15 m in size. Site testing produced one chert and one quartz flake. A relocation survey by CEMML in 2006 and another survey in 2012 were unable to locate the sites using coordinates found in the 1980 volume and the coordinates found in military records (Figure 42, Figure 51). According to Dixon, the site was located within 100 m of FAI-00041 and FAI-00043. It was said to have been disturbed by military activity. The site may have been, in reality, located in the disturbed parking and roadway area between the two locations in Figure 50. If this is the case, the site has probably been destroyed.

Figure 51. FAI-00042 possible site locations.

Because of the small number of artifacts found in the original site discovery and because the site cannot be relocated, FAI-00042 is not eligible for inclusion in the NHRP.

FAI-00509

(*Exact location unknown.)

[redacted]

Determination of Eligibility: Not Eligible

FAI-00509 was originally discovered when three flakes were found eroding out of a hillside in a gravel pit on Fort Wainwright (original 1999 AHRS card). Bill Hedman revisited the site in 2002 but was unable to locate any cultural material (Hedman et al. 2003). He reported that the area was greatly disturbed by road and quarry activity and was probably destroyed.

Figure 52. FAI-00509 site location.

CEMML crews visited the site area again in 2012 (Figure 42, Figure 52). Pedestrian surveys around the area were unable to relocate the site. Because of the small number of artifacts found in the original site discovery and because the site cannot be relocated, FAI-00509 is not eligible for inclusion in the NHRP.

FAI-01990

[redacted]

Determination of Eligibility: Not Eligible

FAI-01990 is located on a narrow vegetated strip on the south slope of Sage Hill (Figure 42, Figure 53). Sage Hill rises 20 m above the Chena River floodplain, with views of the Yukon Training Area, Approach Hill, Ladd Airfield, the Chena River valley floor, and Birch Hill spanning a 220° view shed. Site slope varies from 20°-40° with an even steeper slope of 40°-60° dropping down to the floodplain (Figure 54). The closest source of water is Columbia Creek, which winds around the east side of Sage Hill and empties into an unnamed pond to the south. Site vegetation includes black and white spruce, wild roses, service berry, willow, aspen, birch, high bush cranberry, bearberry, strawberry, dwarf dogwood, pumpkin berries, moss and grasses. The site ecosystem is upland moist mixed forest. The top of Sage Hill has been severely disturbed by mechanical clearing down to bedrock, leaving the narrow southern slope partially intact. The southeastern slope has likely lost some deposition, and the entire area is actively used for recreation. There is also evidence for prior military activity both above and below the surface, evidenced by foxholes, bullet shells and trash. There is less than 10% surface exposure around datum and none elsewhere on site.

The site was discovered through subsurface testing in 2009 when nine flakes (black chert, grey chert, rhyolite, basalt, and quartz) were recovered from four test pits, two of which had disturbed soils (Gaines et al. 2010). No permanent datum was placed in 2009, and the exact location of survey shovel tests could not be determined. As part of 2012 investigations, a datum was established at E474905 N7192448, Zone 6 WGS 84. A shovel test grid was placed at 10 m intervals over the vegetated portion of the landform, with shovel tests excavated to bedrock gravels with three exceptions for various impasses. From a total of 15 excavated shovel tests, only one quartz flake was recovered (UA2012-114-0001).

Due to the steep slopes and disturbed nature of the site, four radial shovel tests were excavated at 5 m intervals from the positive shovel test. All were excavated to bedrock gravels and contained no cultural materials.

Shovel tests ranged in depth from 32-109 cmbs. More deposition was noted in the forested area of the site, with decreasing deposition to the east and west. Military debris and litter was noted over the entire surface of the site, while shovel tests in the eastern portion of the site contained bullet casings and glass to depths of 30 cmbs or more. Stratigraphy in the positive shovel test consisted of a thin layer of 7.5YR2.5/2 very dark brown organic matter over 10YR4/4 dark yellowish brown silt, followed by bedrock gravels. The quartz flake was recovered in the silt layer between 10-30 cmbs (Figure 55).

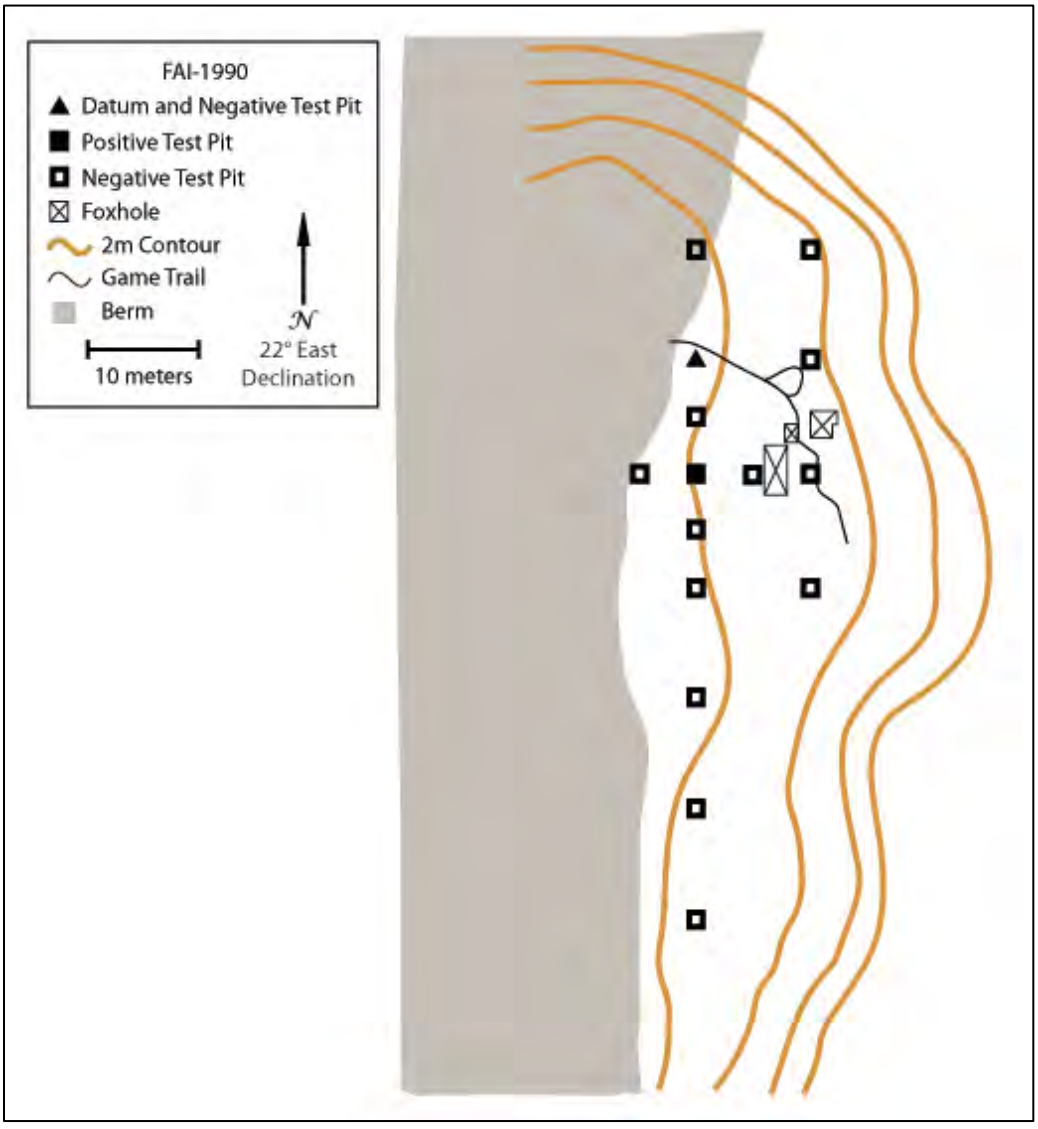

Figure 53. FAI-01990 site map.

Figure 54. FAI-01990 site overview.

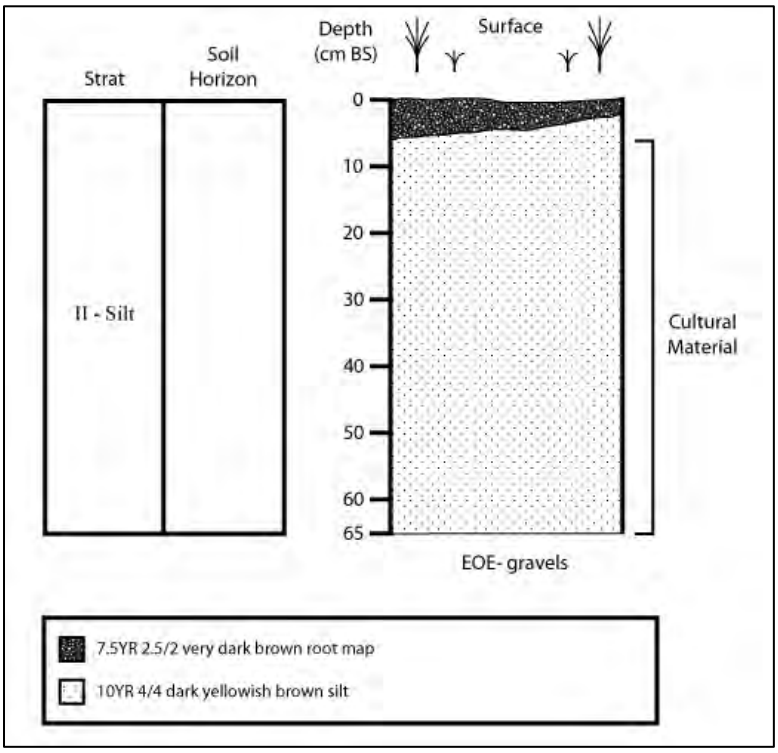

Figure 55. FAI-01990 site stratigraphy.

FAI-01990 is a very small lithic scatter on the southern slope of a highly disturbed and actively used area. Archaeological investigations have produced only 10 flakes, consisting of five material types: black and grey chert, rhyolite, basalt, and quartz. The majority of the landform has been impacted by mechanical clearing to bedrock, while at least half of the south slope has surface and subsurface disturbances caused by military activities. Recovered artifacts have likely eroded or moved downslope from a larger site area which has been destroyed. No datable materials, diagnostic tools or traceable raw materials were recovered to provide context for the few cultural remains found. Combined with the extent of disturbance, lack of site integrity, and scarcity of archaeological remains in intact strata, FAI-01990 has little potential to add to our knowledge of prehistory and is ineligible for inclusion in the NRHP.

FAI-02117

[redacted]

Determination of Eligibility: Not Eligible

FAI-02117 is a late 20th century site consisting of four features related to local recreational activities. The site is located within the Fort Wainwright cantonment, in Training Area 108, on an upper terrace, 89 m northeast of the Chena River (Figure 42). Located on the north side of the river, the vegetation cover consists of mixed broadleaf needle lowland vegetation. Previous archaeological pedestrian survey and subsurface testing in 2011 by CEMML staff demonstrates that no prehistoric cultural remains exist at the site (CEMML 2011). Four historic features were identified during the 2011 survey: a picnic table, a table/box, a rectangular depression, and a go-cart/sled. CEMML archaeologists returned to the site in 2012 to document the historic features present at FAI-02117 and to evaluate its eligibility for the NRHP.

Four historic contexts have been developed by Fort Wainwright Cultural Resources personnel for this area. These are homesteading, transportation, mining, and military development. Several homesteads were located near the Chena River within the modern boundaries of the Fort Wainwright cantonment. Chena River access provided a transportation link to the city, and the south-facing slopes of Birch Hill offered relatively good farm soils. Figure 56 shows homestead locations circa 1913 and the location of FAI-02117. FAI-02117, within the boundaries of the original Ladd Field land withdrawal, is in an area of possible homesteading but no known homesteads were recorded in this location. To the east of FAI-02117 is the unpatented Sweeney homestead (Price 2002).

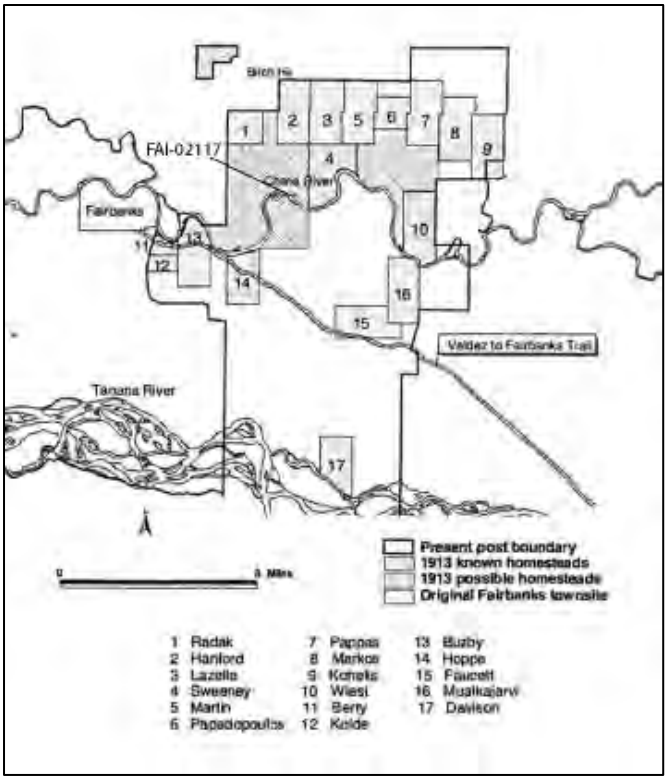

Figure 56. Homestead locations on Fort Wainwright circa 1913 (Price 2002).

In the case of the U.S. military land withdrawals for Ladd Field, homestead buildings were quickly removed by the military to make way for military development. Today no homestead building or structures remain on the Main Post although other homestead features, such as building foundations, fence sites, remnants of cleared fields, and farming equipment, are found on post.

Four features are present at FAI-02117: a picnic table, a box/table, rectangular depression and a possible go-cart (Figure 57). The first feature, the picnic table, was located at 469967E 7191403N, Zone 6 (WGS 84) (Figure 58). The overall dimensions are 7’10” in length and 4’ 4” in width. The picnic table is constructed from milled lumber and bolts. The table top portion is removed, but benches and frame remain intact. The lumber is peeling and moss is growing on the wood’s surface. The table is sinking into the forest ground cover.

The second feature, a box or table, was located at 469950E 7191315N, Zone 6 (WGS 84) (Figure 59). This structure has an unknown function and is constructed of milled lumber and wire nails. Overall dimensions of the table are 4’5” in length, 2’8” in width, and 2’3” in height. Four dimensional lumber supports were found at each corner. One end is reinforced with a ‘Z’ shaped dimensional lumber brace. The table top is heavily reinforced and supported. The table surface is constructed of various sized dimensional lumber (a 10”x2”, two 8”x2”, and one

6”x2”). An 8”x2” dimensional lumber piece is broken off from one end from the table frame and has partially fallen underneath the table. At one corner of the table top, a square opening is cut from the milled lumber piece. A rectangular fuel can, with one side peeled back to provide an opening, is attached under the hole in the table top. The can is nailed to the frame of the structure with wire nails. Perhaps items were stored in the can container, or items were pushed from the table surface into the container.

The metal can is a rectangular motor oil can with crimped seams and a metal handles. Dimensions are 12.5” in height, and 8” in width. The lithography on the can states: “ALL STATE” “MOTOR OIL” “----E 40” with a star emblem.

Protruding from underneath the open end of the table is a milled piece of lumber, painted green, with two metal hinges. The wood is part of a door frame but is not attached to the table. The length of the lumber is too long to have been a hinge for this feature. This feature does not have a door. A stove pipe was also found lying on top of the table. It is T-shaped and had three openings, all 6” diameter.

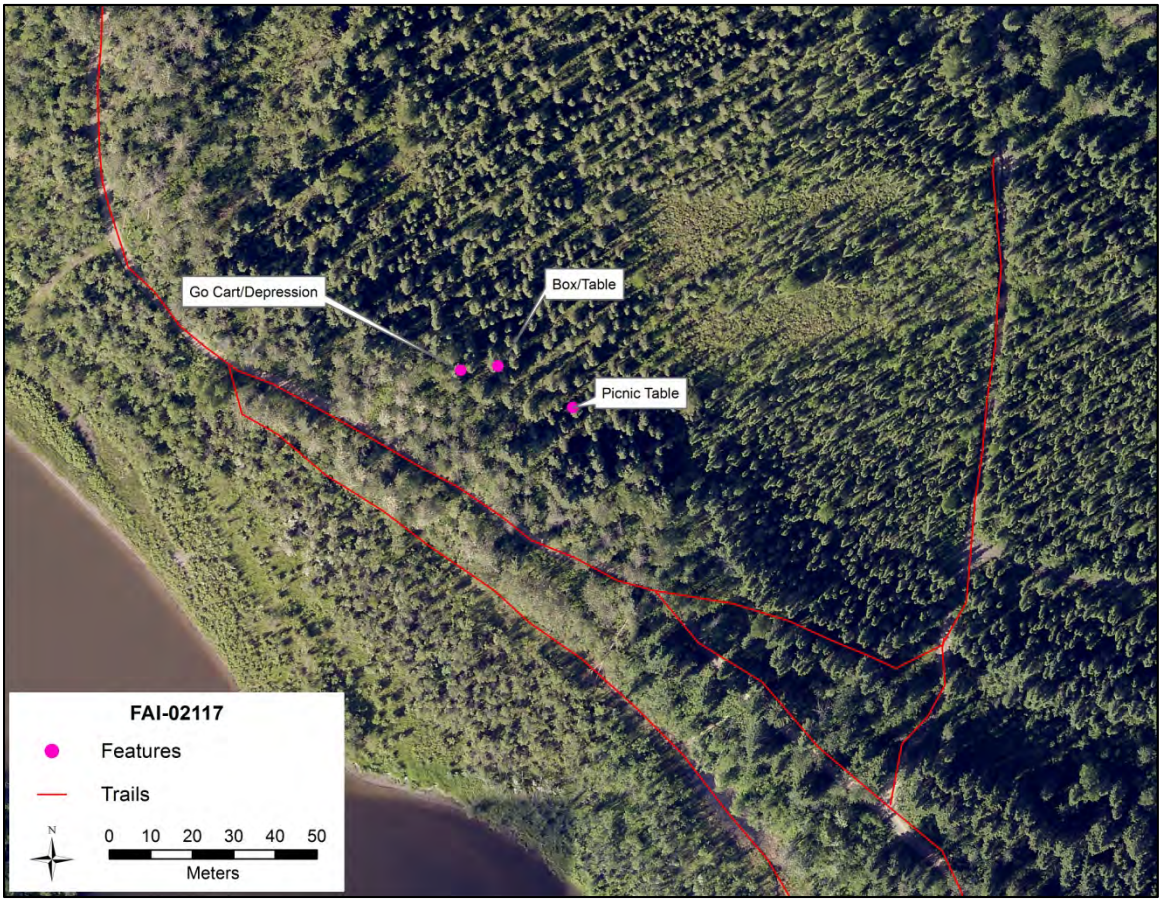

Figure 57. Location of features at FAI-02117.

Figure 58. Feature 1, picnic table.

Figure 59. Feature 2, box/table.

The third feature is a rectangular depression found at 469949E 7191412N, Zone 6 (WGS 84) (Figure 60).The dimensions of the rectangular depression are 10’ long, 4’ wide, and 2.5’ deep. No artifacts are present in or around the feature. Vegetation consists of grass, moss, roses, fireweed, and high-bush cranberries. The edges of the depression are slumped. There is no dump outside of the depression indicating where the fill was placed when the depression was excavated. Perhaps the depression was backfilled. No artifacts or structural elements are

present in the interior of the depression. This feature is not the remains of a structure or building. Feature 3 is possibly a military fox hole.

Figure 60. Feature 3, depression.

Feature 4, found at 469949E 7191413N, Zone 6 (WGS 84), is shaped liked a sled with a high back and rectangular body (Figure 61). The dimensions are 12' long x 2' wide. The interior of the cart is filled with squirrel midden debris and the wood floor of the cart is deteriorated. The front of the cart has notches for wheels and pedals to manipulate steering (Figure 62). The wheels are not present. The rectangular body portions are divided into two sections. Railings on sides are constructed of 1" metal pipe. Dimensional lumber was utilized in construction as were bolts and wire nails. On the rectangular back portion of the feature, a willow branch is lashed on with leather. Willow creates a curved railing. No evidence of sled runners is present. The lumber is painted green. Pieces of milled lumber are in the interior of the feature. The utilization of 2" x 4" lumber and metal pipe created a very heavy and robust cart.

FAI-02117 consists of three features which relate to late 20th century recreational activities (the table, go-cart and picnic table). The rectangular depression is probably related to military training exercises. Although the site is located within an area of potential homesteads, the features present are not related to homesteading activities.

Figure 61. Feature 3, sled/go-cart.

Figure 62. Steering mechanism on Feature 3.

Fort Wainwright finds FAI-02117 not eligible for the NRHP. The features present at FAI-02117 do not relate to the historic contexts identified by CEMML for the area: homesteading, transportation, mining, or military development. The features are late 20th century recreational items that are not part of a recreational park or development. The items do not represent typical 20th century recreational activities. The surface features described above are the only cultural information at FAI-02117. Few subsurface historic artifacts were found in association

with the features and these do not provide any significant information about the site. Potential for any additional information is low.

FAI-02197

[redacted]

Determination of Eligibility: Not Eligible

FAI-02197 is a site of early 20th century gold placer mining equipment located at U.S. Army Corps of Engineers (USACE) Cold Regions Research and Engineering Laboratory's (CRREL) permafrost tunnel property located off the Steese Highway approximately eight miles northeast of Fairbanks and one mile south of Fox, Alaska (Figure 63). Cultural resources include boilers, a hoist, scrapers, and industrial hardware mining equipment. These artifacts are located on the bluff to the northeast of the permafrost tunnel entrance, north of the CRREL permafrost tunnel access road, outside of the boundaries of the CRREL research facilities (Figure 64).

Two previous cultural resources evaluations focused on the CRREL permafrost tunnel expansion project. The area of potential effect (APE) for those evaluations did not include the mining equipment on the bluff to the northeast of the permafrost tunnel entrance. Edmund Gaines performed an NHPA evaluation for the initial excavations of the entrance to the research tunnel that occurred during the winter of 2010. A DOE was completed in December of 2011 for the Legacy permafrost tunnel by Mary Shanks and Julie Esdale (Proposed Expansion of The Cold Regions Research and Engineering Laboratory Permafrost Tunnel CRL-00008-iJ, Fort Wainwright, 12.22.2011). The evaluation of potential cultural resources was instigated as a result of the planned construction of a new tunnel, a new road, fence expansion, construction of administrative, educational and laboratory facilities and a boardwalk at the top of the bluff over the tunnels. The APE of that project covers the entire permafrost tunnel center facility, focusing on the parking area, Legacy tunnel, new tunnel location and area directly above the tunnels. Buildings and cultural resources within the APE were evaluated for eligibility to the NRHP. Archaeological survey was conducted by six archaeologists and two architectural historians. Visual survey coverage consisted of parallel pedestrian transects covering 100% of the APE. Shovel tests were excavated in areas of higher site probability, including flat areas suitable for prehistoric campsites (Figure 64).

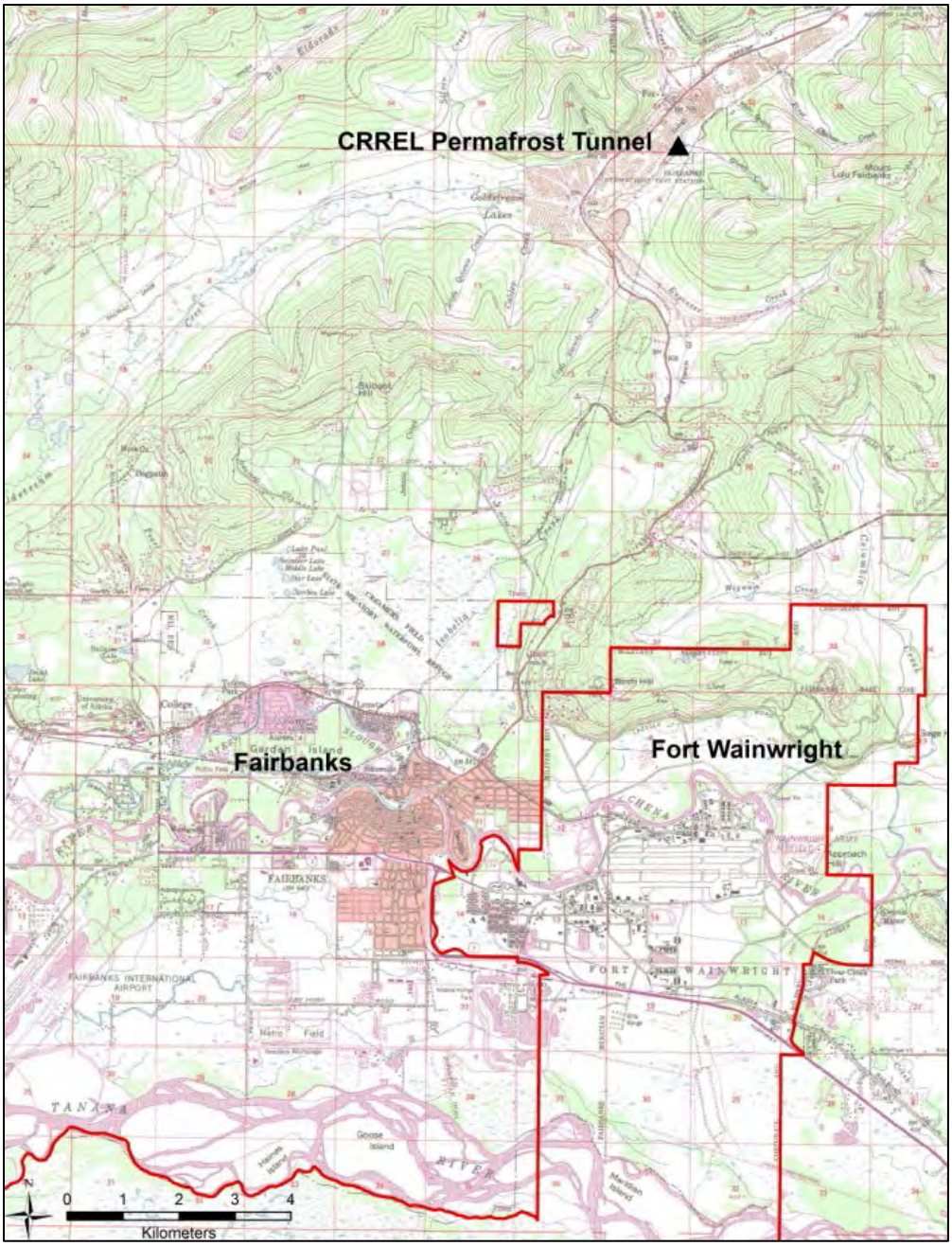

Figure 63. Location of CRREL permafrost tunnel facility.

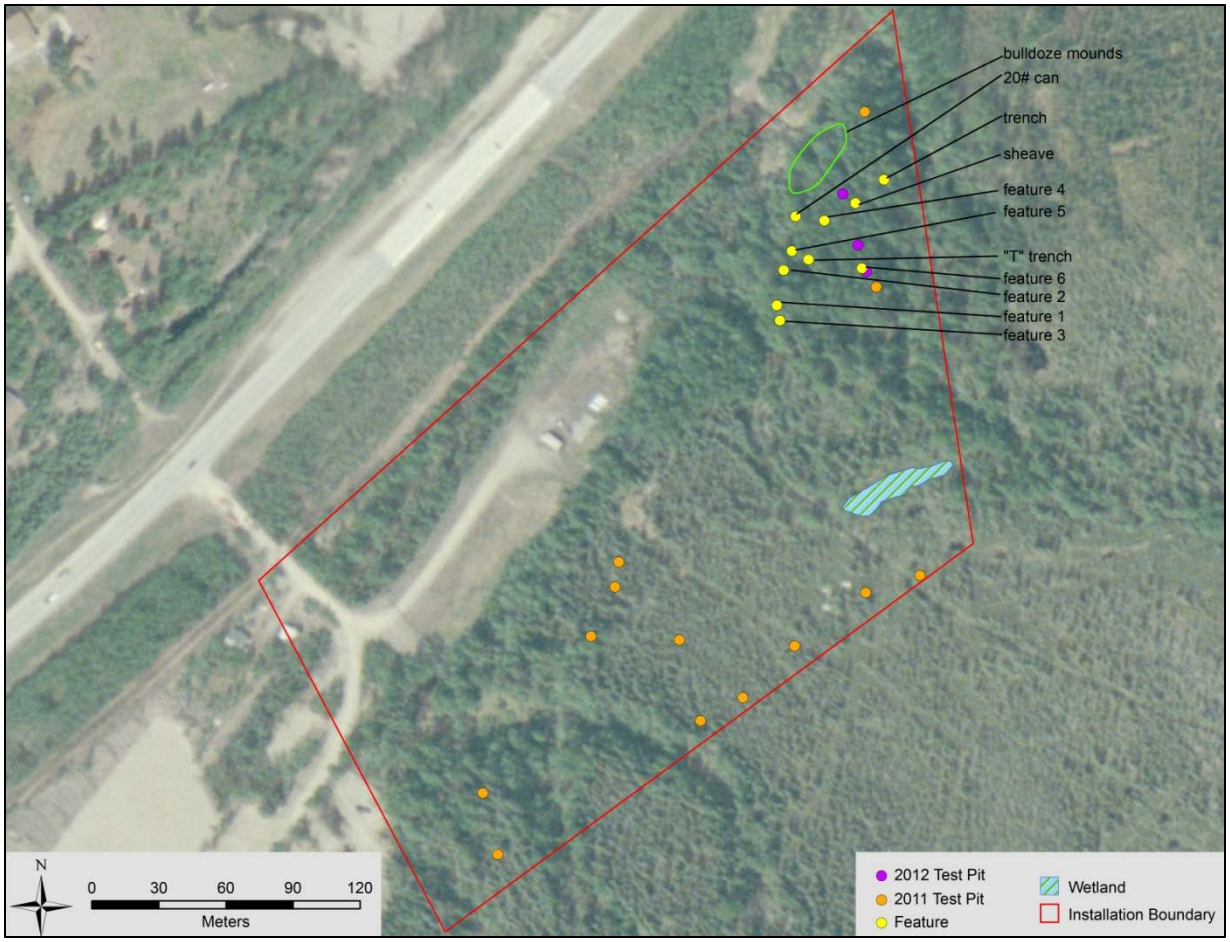

Figure 64. Location of FAI-02197, test pits, and features.

No prehistoric archaeological sites were discovered on the surface or in shovel tests during the survey of the CRREL permafrost facility property. The historic property and archaeological survey identified one potential historic site: the mining equipment located on the bluff to the northeast of the permafrost tunnel entrance. At the top of the bluff are four pieces of mining equipment that predate the F.E. Co.'s dredge mining activities in Goldstream Valley (1928-1959, Dredge No. 8). CRREL's property sits at the eastern edge of the F.E. Co.'s dredging operations. CEMML archaeologists and architectural historians documented the mining equipment but did not evaluate the equipment in the DOE because the mining equipment was outside of the 2011 project APE (Proposed Expansion of The Cold Regions Research and Engineering Laboratory Permafrost Tunnel CRL-00008-iJ, Fort Wainwright, 12.22.2011).

Historical Contexts for Evaluation

The first Yukon River gold strikes in the Fortymile River region (1886), Birch Creek (1893), and the Canadian Klondike (1896) and subsequent gold rushes drew thousands of people into the Yukon River drainage of eastern Alaska and western Canada. In a region that was previously ignored by the U.S. government, the influx of people spurred U.S. military (Abercrombie 1898; Glenn 1898; Schrader 1898; Herron 1899; McManus 1899) and geological explorations (Brooks 1898; Mendenhall 1898; Spurr 1898) in the Yukon, Tanana, and Copper River drainages. While the geologists focused on the identification of the mineral deposits of the region, the military focused on an overland "All-American" route to the goldfields that by-passed the Chilkoot Trail and Canada (Sherwood 1992). Army forts were established at Fort Liscum (Valdez) and Fort Egbert (Eagle). The Valdez-Eagle Trail was constructed between 1898-1906, and provided year - round overland mail service to Eagle by 1901 (Robe 1943).

Private enterprise also saw opportunity with the discovery of gold along the tributaries of the Yukon River. Four steamboat companies that operated on the Yukon River, the main source of transportation and supplies in Interior Alaska, consolidated in 1900 to form the Northern Navigation Company. Their associated mercantile businesses were handled by the Northern Commercial Company. As a result, only two transportation and mercantile companies operated in the region: the Northern Navigation Company/Northern Commercial Company and the North American Transportation and Trading Company. Independent traders relied upon these two companies for supplies and transportation and there was little economic competition (Robe 1943:91).

In this milieu, miners from the Fortymile and Birch Creek diggings made short prospecting trips into the Tanana Valley, but due to the distance and lack of supply networks the exploration was sporadic and hurried (Prindle 1905: 66). Meanwhile, merchants established trading posts in the middle and upper portions of the Tanana River. In September of 1901, Hendricks and Belt constructed a trading post on the Tanana River near the mouth of the Chena River that later became the nucleus for the town of Chena. Their main reason for establishing the post in 1901 was to trade furs with Athabascans of the region (Rampart Alaska Forum Dec 20, 1900; Robe 1943:103). During the summer of 1901, Pedro, Gilmore and other prospectors from the Birch Creek diggings were actively prospecting in the region. While purchasing supplies from E.T. Barnette, Felix Pedro told him that he had found gold prospects on several of the creeks in the vicinity. With this information, Barnette decided to build his post along the river bank. This opportunistic trading post became Fairbanks (Robe 1943:109; Fairbanks Miner May 1903:183-184).

During the summer of 1902, Felix Pedro discovered paying quantities of gold on Pedro Creek and news spread quickly to the Birch Creek diggings and beyond as people rushed to the region. The towns of Fairbanks and Chena quickly sprung up on Chena Slough and Tanana River, and trails were made, connecting these towns with the creeks. Exaggerated reports naturally found their way to other camps. People came via the Tanana River; over the direct trail from Circle, 150 miles to the northeast; and by way of the Goodpaster from Eagle, 200 miles in a direct line to the east (Prindle 1905:67). Most mining activities in the region occurred on creeks north of Fairbanks, with the town functioning as a central distribution center for supplies (Mills 1998:235).

The historical context of gold mining for the Fairbanks District focuses on chronology and mining technology (Sattler et al. 1994; Neely 2001). A historical context for the mining history of Army lands, written by Ronald J. Burr Neely, Jr. for CEMML, defines three waves of mining activity in Interior Alaska. Wave I (1902-1910) included small scale placer mining in rivers and creeks and small scale non-mechanized drift mining using windlass technology, hand tools, sluice boxes or riffles and rockers (Purington 1905; Sattler et al. 1994). Miners re-routed creek channels for sluicing operations by digging small ditches. Other equipment on drift mining sites would include wire, rope, wood scrapes, nails, bolts and other maintenance-oriented tools (Sattler et al. 1994; Neely 2001). Miners sometimes build cabins near placer deposits but more often stayed in canvas-walled tents.

During Wave I, the settlement pattern for the Fairbanks Mining District consisted of Fairbanks as the primary distribution center, which supplied the secondary distribution centers, which in turn supplied the smaller mining settlements or extraction camps located on the creeks. By 1907-08, during the apex of individual gold placer mining in the region, the number secondary distribution settlements consisted of Cleary, Meehan, Gilmore, Dome, Fox, Berry, Ester Siding, Vault, Eldorado, Olnes, Ridgetop, Chatanika, Golden, Little Eldorado and Ester. A wagon road left Fairbanks and followed ridges north 12 miles from town to the mouth of Gilmore Creek (Prindle 1905:69). Freight wagons drawn from two to six horses carried up to 3,000 pounds of freight. The wagon road connected Gilmore, Cleary, Twin Creek, Fox, and Fish Creek to Fairbanks (Prindle 1905:71). Between 1905 and 1907, the Tanana Valley Railroad became the major shipping conduit from Chena, Fairbanks, to Gilmore and smaller settlements in the hills (Sattler 1994:25). During the winter, freight and mail came to Fairbanks via the Valdez-Fairbanks Trail.

Examples of the small-scale or solitary extraction camps located on the gold creeks during Wave 1 is available through many cultural resources management reports, including Sattler et al. 1994 and Saleeby 2000. The extraction camps where the actual mining occurred consist of domestic structures, associated domestic trash, and various technological features, artifacts

and land use patterns reflective of the placer mining economy. In Sattler's survey report of Fish Creek, a typical extraction camp settlement consists of miner's cabin, domestic and industrial refuse sheets and dumps, mining artifacts such as boilers, hoists, pipes and mining extraction features such as shafts, penstocks, flumes, tailing piles, and gin poles (Sattler 1994; Saleeby 2000; Mills 1998).

Glenn Creek first showed up on the USGS maps in 1908. Prindle's 1905 USGS map of the Fairbanks District leaves the Glenn Creek drainage unlabeled. Unfortunately Glenn Creek did not contain gold-bearing deposits (Figure 65).

Like other creeks in the Fairbanks District, Glenn Creek was prospected during the first decade of the 20th century. In April 10th 1903, E. D. Howe, L.A. Jones, and Louis Sagar all filed mining claims at the Fairbanks Mining District Recorder's Office for "Glen Gulch a tributary of Goldstream" (1903 Mining Claims, Book 2, page 455-456). E. Noble filed his 20-acre mining claim described as "Claim No. 6 on Glen Gulch a tributary of Goldstream at about 10 below, extending 1320 feet up stream by 660 feet in width." filed on July 21 1903, although the claim was located in June of 1902 (1902 Mining Claims, Fairbanks Recorder's District, Book 1, page 3). Six claims were filed on Glenn Gulch (or Glenn Creek) during the first decade of the 20th century.

Wave II (1910 to 1923) involved more intensive mining with capital investment and mechanized mining techniques. By 1910, most of the easily accessible placer gold deposits were exhausted and capital-intensive technologies became necessary to extract remaining deposits. Miners formed limited partnerships and associations to gain the investment and manpower to mine the deeper placer gold deposits. Wood burning fires were replaced with steam points for thawing the overburden. The open cut mines where the overburden was removed by shoveling was replaced with mechanized equipment such as self-dumping carriers, drag lines, cableway excavators using scrapers, and steam-powered scrapers. The same equipment was utilized to remove the gold-bearing gravels into dump piles to be sluiced. Hydraulic mining employed by some mining associations involved utilizing high pressure hoses called giants to remove the overburden. Ditches, pipes, and flumes transported water to the hydraulic operations (Neely 2001).

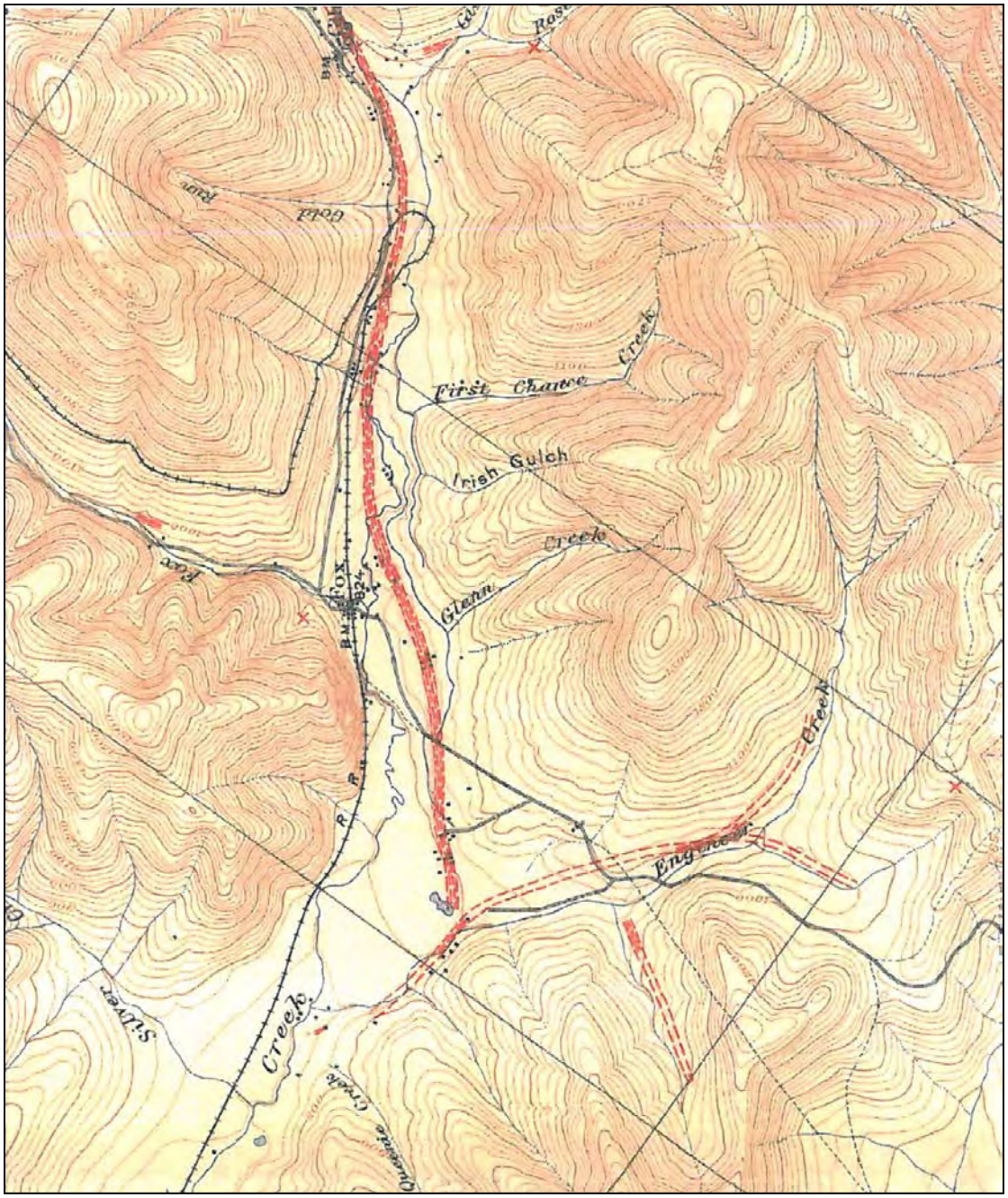

Figure 65. Map detail of gold bearing placer deposits in Fairbanks District (red). Glenn Creek does not have gold bearing deposits and a Glenn Creek settlement is not recorded (Prindle 1913).

By 1910, the gold rush boom was over, and the Fairbanks economy began a decline that lasted until the Fairbanks Exploration Company began working in the mid-1920s. During World War I, the gold mining decreased as men left the region for military service and high wage

employment opportunities in manufacturing in the states spurred by the war. Fairbanks remained the central distribution center of the mining district, but the secondary distribution centers in the hills fluctuated in size and available services. Transportation to the creeks consisted of the Tanana Valley Railroad and the wagon roads. Horses, mules and dog teams were still essential for transportation (Sattler et al. 1994:25). From 1915-1916, Fox, Olnes, and Chatanika offered the most services and businesses to the creeks followed by Cleary, Meehan, Berry, Little Eldorado, Golden, Ester, Gilmore and Dome. Vault, Eldorado, Ridgetop, and Engineer offered few services by 1915 (Mills 1998:257).

Wave III (1923-1959) is characterized by the consolidation of small mining associations and corporations into large mining corporations and the development of dredging. Three factors contribute to the development of dredge mining in the district: completion of the Alaska Railroad, widespread use of diesel engines which reduced power costs, and finally, the advancement of cold water thawing techniques that facilitated dredging operations (Sattler et al. 1994:32). In 1924, the Fairbanks Exploration Company (F.E. Co), a subsidiary of the U.S. Smelting Refining, and Mining Company, began intensive corporate mining operations. Other mining corporations operating during this period include Fairbanks Gold Dredging Company, Chatham Dredging Company and Tanana Valley Gold Dredging Company. Miners now became wage laborers for these companies. Dredging to extract ore became common place although drift mining, hydraulic, and open pit operations continued (Neely 2001:17).

The F.E. Co. operated Dredge No. 8 in Goldstream Valley from 1928-1959. In order to reach the deeper gold deposits, dredging was required to first remove the dense layer of overburden and permafrost that lies above the gold-bearing gravels. In 1942, the War Production Board banned all gold mining not associated with strategic material production. While F.E. Co resumed mining after the war, its operations were less extensive and Dredge No 8 was shut down in 1959. The CRREL permafrost tunnel property is at the eastern edge of the F.E. Co operations in Goldstream Valley. Although close to the limits of F.E. Co dredging operations, FAI-02197 was not dredged.

Archaeological Surveys: Methodology and Findings

On August 30, 2012, three CEMML archaeological technicians under the supervision of CEMML historical archaeological technician Mary Ann Sweeney surveyed FAI-02197, documented features and artifacts, and conducted subsurface tests.

The project area vegetation consists of an open birch forest with a grass understory (Figure 66). The area was clear cut in the past with the birch trees and grass growing in after the disturbance. Vegetation to the south of the Permafrost Tunnel Access Road on the bluff

consists of black spruce trees with sphagnum moss, Labrador tea, and low bush cranberry ground cover. The same vegetation pattern exists to the south of the project area upstream from a berm feature. In addition to clear cutting, the landscape in the project area has been bulldozed. The bulldozed mounds are evident along the bluff edge.

A visual and metal detector survey consisting of 10 m parallel pedestrian transects covered the bluff edge containing the historic artifacts (Figure 64). The metal detector (CST/Berger, Magna-Trak 200 series, Magnetic Locator), which detects iron, was used in a left to right sweeping motion. When the device detected iron the location was flagged, photographed, location recorded, described and assigned a CRREL mining number (i.e., CM 1). Due to the tall grass, the metal detector was very helpful in locating isolated artifacts. The majority of cultural remains located were clusters of industrial artifacts or isolated hardware artifacts related to mining. No building remains, structural features, adits, tailings, or domestic dumps were found. The following features and isolated artifacts were recorded.

Figure 66. FAI-02197 overview of site vegetation.

Feature 1 is located at the bluff edge and consists of a row of large pieces of industrial mining equipment: two boilers, a double drum hoist, scraper and bucket. Birch trees grow up among the pieces of equipment.

The first boiler is an “Ames Iron Works” boiler (Figure 67). It was a wood fueled, horizontal tubular boiler 11’ long and 3’8” wide, embossed with “Ames Iron Works, Oswego, NY” at one end. Ames Iron Works was founded in 1853 by Talcott and Underhill and sold to Henry Ames in 1855. The company was owned by the Ames family until 1919. The company specialized in boilers and engines for trains and industrial facilities. A similar horizontal boiler from the 1890 Ames Iron Work Catalog described it as an “Arch Front- 100 Pounds Steam” (www.freemansmill.com/other/AmesIron.pdf, viewed 9/12/12). Steam produced in wood burning boilers powered a variety of mining equipment such as hoists, scrapers, cableways, mechanical excavators, power scrapers, power shovels and power derricks (Saleeby 2000:4).

Figure 67. FAI-02197 Feature 1, boiler 1.

The second boiler is a “Pennsylvania Boiler Works, Erie” (Figure 68). Located to the north of boiler 1, this wood-fueled horizontal tubular boiler is 10’4” long and 4’ wide. “Pennsylvania Boiler Works, Erie” is embossed on the end of the boiler. In addition, “30 No 1” is stenciled on the boiler end. Incorporated in 1890, Pennsylvania Boiler Works manufactured locomotive type boilers from 1890 to 1930.

A double drum hoist and scraper are also part of Feature 1 (Figure 69, Figure 70). The dimensions of the hoist are 9’8” in length and 7’4” wide. The drum diameter is 2’4”. A wire cable extends from the drum and is attached to a nearby scraper. Hoists functioned to pull items via a wire cable and were utilized in drift and slack line mining as well as hard rock mines. The steam hoists drum (cylindrical spool) wound wire cable to lift buckets of ore, equipment, or men up drift mine shafts. In slack line mining operations, the hoist pulled in the wire cable, moving the scraper along the open cut. Steam-powered hoists replaced the winches and

windlass of earlier mining in the Fairbanks District. The scraper is 5” long and 4’ wide and is located just 6’ from the double drum hoist. A scraper or scraper bucket is a metal lidless iron box with no front wall and a slightly slanting back. The bottom has a scraping edge. Scrapers are used in open cut, slack line mining. Once the gold-bearing soil was exposed, slack line scraper buckets removed the gold-bearing soil and transported it to the dump or washing plant (Sattler et al. 1994: 28).

A bucket with a lift frame is the last element of Feature 1 (Figure 71). A rectangular bucket in a frame for hoisting is located just north of the scraper and sits precariously at the bluff edge. Dimensions of the bucket are 4’ long by 3’ wide. Buckets of this type were typically used in drift mining.

Figure 68. FAI-02197 Feature 1, boiler 2. Note tree growth close to boiler.

Figure 69. FAI-02197 Feature 1, double drum hoist.

Figure 70. FAI-02197 Feature 1, scraper.

Figure 71. FAI-02197 Feature 1, bucket with lift frame.

The second feature at FAI-02197 is a set of six water pipes constructed of riveted sheet metal located to the east of the boilers (Figure 72). The pipe length varies from 10’ to 12’8”, with a diameter of 1’6”. A crude valve consisting of a circular sheet metal disc on a rod was found in one of the pipes. This size pipe is typically associated with water transport. Prindle’s (1905) description of mining on Mastodon Creek in the Birch District describes the use of large diameter pipe: "On another claim where there was a depth to bed rock of 8 to 16 feet, a plant was being installed to work by the hydraulic method. There was an 80 foot head of water to be conveyed through the 12-inch pipe to the 2 1/2 inch giant” (Prindle 1905:63).

Figure 72. FAI-02197 Feature 2, pipe.

To the southeast of the large boilers/hoist is a scatter of hardware (11 m x 8 m) (Feature 3) (Figure 73). The contents of the scatter include small diameter (2.5-3”) pipe, wire cable, sheet metal scraps, 8”stove pipe fragment, galvanized metal bucket, galvanized corrugated metal roofing, anchor rod, galvanized stove pipe flashing, and two 20# rectangular cans modified into buckets with holes punched into the bottoms.

An additional cluster of hardware consisted of a flattened wheelbarrow body (3’ x 2’), a roll of corrugated metal sheeting (8’ x 2’), wire cable, 1” metal strapping, and scrap metal (2” x 2”) (feature 4) (Figure 74).

Another cluster of artifacts (Feature 5) consisted of a wire-handled rectangular metal can that had been modified into a bucket and flattened (14”x 16”), 1” metal strapping, wire cable, a rectangular sheet metal container that had cable wire attached on its exterior and was possibly used as a bucket (42” x 6”), and two 4” diameter pipes, 55” and 10” long, one bearing a casing.

Isolated artifacts included: (1) a 20 pound rectangular metal can (13”tall x 9” x 9”) with internal friction opening, and crimped seams. The circular opening (6.25”) has a rough solder, no lithography was present; (2) a 12’ long, 2’ wide and 1’ deep trench with the long axis running north-south and a wire snare on a tree that is not necessarily associated with mining activities; (3) a T-shaped trench, 10.5’ long, 2’2’ wide and 2.5’ deep; and (4) a metal sheave, 17” in diameter, covered by organic material.

Figure 73. FAI-02197 Feature 3, hardware scatter.

Figure 74. FAI-02197 Feature 4, hardware scatter wheelbarrow piece.

Four shovel test pits were excavated along Glenn Creek within the APE (Figure 64). The purpose of the shovel test pits was to determine if any subsurface historic artifacts were present. Typically on historic mining sites in Interior Alaska, historic material is on the surface and in the organic mat. Previous work in the area demonstrated the lack of prehistoric

archaeological deposits (Proposed Expansion of The Cold Regions Research and Engineering Laboratory Permafrost Tunnel CRL-00008-iJ, Fort Wainwright, 12.22.2011).

All shovel tests pits (STPs) were round, approximately 45 cm in diameter, and excavated to a depth of 100cm. No permafrost was encountered. Contents were screened through ¼" mesh and all shovel tests were backfilled. STPs 1, 3, and 4 were placed near Glenn Creek. Cultural remains were found only in STP 2; the rest were sterile.

STP 2's location was selected because it was the only case where the metal detector registered a signal and the artifact was not visible on the surface of the organic mat. The shovel test pit was excavated near the location of the trench. Excavated to a depth of 115 cm, the artifacts found in STP 2 were located at the interface of the organic mat (0-22cm) and layer 1 (22-40 cm) (Figure 75, Figure 76). Two 4.5" wire nails and a bent metal tube were recovered.

Figure 75. FAI-02197 shovel test pit 2.

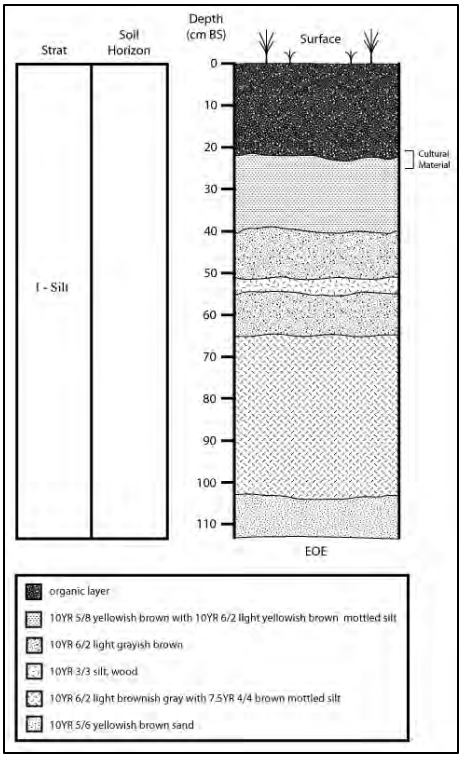

Figure 76. FAI-02197 shovel test pit stratigraphy.

Subsurface testing illustrates that the historic artifacts are found on and within the organic mat. The negative shovel tests support the idea that the metal detector pedestrian survey was an efficient method to locate historical cultural material at this site.

The bulldozed mounds and vegetation at the site indicate that the area has been clear cut and disturbed in the past. Birch trees are located in close proximity around boiler 1 and boiler 2 (Figure 68). The large industrial artifacts were situated on the bluff first and the trees grew up and around the boilers. The birch trees were cored to determine the age of the trees and the *terminus ante quem* for placement of the boilers. Trees were cored with a hand-held tree corer and the rings counted visually. Trees were cored approximately one to two feet above the ground. Knots in the wood were avoided.

One birch and one spruce tree close to boiler 1 and boiler 2 were tested. The birch tree age is 46 and the spruce tree age is 48. Two spruce trees were cored near Feature 3, hardware scatter with an age of 46 and 48. The fifth tree core was a spruce located near the east boundary of the property that dated to 51 years. The five trees cored have an age of 45-51 years. The tree core information indicated that the clear cutting and bulldozing at the site and the placement of the boiler 1 and boiler 2 occurred more than 45 years ago.

Archaeological Summary

FAI-02197 is consistent with the historic mining context Wave II: Transition to Wage Labor and Industrialized Placer Operations 1910-1923. The site consists of industrial equipment associated with placer mining. No structural features, domestic features, mining adits, drifts, or tailing dumps are present. The artifact assemblage of boilers, hoists, scrapers, cable, water pipes and industrial hardware present is typical of extraction camps found in interior Alaska (Sattler 1994; Saleeby 2000; Mills 1998). FAI-02197 is interpreted as a mining equipment storage yard. There is no evidence that mining took place at this location. There are three hypotheses to explain the mining equipment at this site.

Hypothesis 1: Placer mining occurred to the west of the site and was subsequently destroyed when the F.E. Company dredged the area. The only remaining part of the mining operation is the storage yard.

Hypothesis 2: The F.E. Company is known to have removed large pieces of mining equipment from earlier mining operations that were located in areas the company planned to dredge (Andy Higgs, personal communication, August 2012). The F.E. Company relocated mining equipment to this locality to avoid dredging the large pieces and as a courtesy to the owners of the mining equipment. This interpretation does not explain the isolated mining equipment (wheel barrel, wire cable, sheet metal, hardware, etc.) present at the site.

Hypothesis 3: The tree core data indicated that the trees in the area were allowed to re-vegetate about 50 years ago, circa 1962. This time frame is at the beginning of the military/scientific permafrost research from 1961 to 2012. The military may have bulldozed the area and relocated the large pieces of mining equipment from their original locations to the bluff edge.

FAI-00019 Glenn Creek Mining Settlement

FAI-02197 is not associated with FAI-00019 Glenn Creek Settlement because FAI-00019 was destroyed or, more likely, never existed in the first place. The AHRS record describes FAI-00019 as a mining settlement located eight miles north of Fairbanks at the approximate location of the CRREL property. The AHRS record also notes that the site was destroyed by the F.E. Co.'s dredging in the 1920s. The settlement was never located and the site existence never verified. The source reliability for FAI-00019 is poor. The references, Orth (1971), and Matheson and Haldeman (1981), refer back to a single secondary source-Kitchener 1954. Lois Delano Kitchener's book, "Flag over the North" is a popular history of the Northern Commercial Company in Alaska. Kitchener mentions a settlement called Glenn Creek when describing the Fairbanks Mining District in 1905 and the outlying settlements that had stores supplied by the

Northern Commercial Company: “Gold was coming in from 1,500 creeks. Stores at small settlements in Baker City, Berry, Chena City, Cleary, Cripple Creek, Dome City, Ester City, Fox Creek, Gilmore City, Glenn Creek, Goldstream Creek, Meehan City, Pedro, Richard City, and Tenderfoot were supplied by Northern Commercial on a whole sale basis.” (Kitchener 1954:297).

This secondary source is the only reference to a Glenn Creek settlement in the Fairbanks District. Orth (1971) and Matheson and Haldeman (1981) base their reference solely on Kitchener (1954). Other primary and secondary sources that discuss settlements in the Fairbanks Mining District do not mention a Glenn Creek settlement. A settlement at Glenn Creek is not mentioned in Polk’s “Alaska-Yukon Gazetteer and Business Directory” all volumes from 1909 through 1924. No USGS reports for the Fairbanks District mention a Glenn Creek settlement in the text or located on the maps (Prindle 1905; Purington 1905; Henshaw and Covert 1907; Ellsworth 1912; Smith 1913; Wimmler 1927). In addition there is no mention of a Glenn Creek settlement north of Fairbanks in any of the Fairbanks newspapers from 1903-1920 (Candy Wagaman, personal communication, August 30, 2012). Nothing in the University of Alaska Archives could be found on a Glenn Creek settlement (Rosemarie Speranza, archivist UAF, personal communication, August 30, 2012). Secondary references on Fairbanks history also fail to mention the Glenn Creek settlement although they mention other close by settlements such as Fox, Cleary, Gilmore etc. (Wickersham 1938; Robe 1943; Wold 1971, 1976; Cole 1991; Mills 1998). A Glenn Creek settlement is mentioned in Polk’s Directory located outside of Baker Hot Springs. Perhaps Kitchener was referring to the Baker Hot Springs Glenn Creek.

Determination of Eligibility

FAI-02197 has been evaluated in accordance to 36 CFR Part 60 and 36 CFR Part 63 for eligibility for the NRHP. FAI-02197 is associated with early 20th century Alaska placer gold mining in the Fairbanks mining district, specifically Wave II Transition to Wage Labor and Industrialized Placer Operations 1910-1923. The material culture at the site is typical of a storage yard of a placer gold mining extraction camp. However, the site is not significant because it lacks integrity. FAI-02197 cannot be associated with a specific mine or mining activities. No mining features or domestic features are present. The industrial equipment placement does not demonstrate how the equipment was utilized *in situ* in the past. The site has also bulldozed. The F.E. Co dredging operations in Goldstream Valley may have destroyed associated placer mine and mining settlement associated with FAI-02197.

FAI-02197 does not have the potential to contribute significant information to our understanding of placer gold mining in the Fairbanks District during the first decades of the 20th

century. The cultural resources present are not *in situ* and do not have all the elements of an historic placer mining extraction camp. FAI-02197 is a storage yard that is not associated with specific mining extractive activities or mining domestic settlement and therefore lacks the overall context of a significant historic mining site for this area. Mining extraction features and domestic mining features, key components of a complete mining extraction site, are not present. Other historic mining sites in the hills north of Fairbanks are better illustrations of mining activities of the region (see Sattler et al. 1994).

FAI-02197 is not eligible for NRHP. The site does not have an extraction or domestic component and therefore is not a good representation of a mining camp of this time period. Industrial equipment may have been moved to this location by the F.E. Company or the U.S. military. Integrity is compromised due to clear cutting and bulldozing. Extensive archaeological survey and subsurface testing demonstrate that research potential at FAI-02197 is negligible.

Yukon Training Area DOEs

One site in YTA was evaluated for its eligibility for the NRHP (Figure 15).

XBD-00387

[redacted]

Determination of Eligibility: Not Eligible

XBD-00387 is located on a disturbed schist outcrop 10 m northeast of Beaver Creek Road (Figure 77). The outcrop is 2 m above the surrounding ridge line and has a 360° view shed above the scrub brush. In addition to the YTA ranges to the north, south and east, Eielson Air Force Base, North Pole, the Alaska Range and Clear Creek Buttes are visible to the west. Moose Creek is the closest water source 4.5 km to the south. The ecosystem is an upland, rocky, dry mixed forest with spruce, alder, willow, aspen, cranberry, crowberry, bearberry and moss (Figure 78). Schist bedrock is exposed on the highest point and along the southeast side of the landform. Bedrock exposure varies from 25%-100% with no soil exposure at all. The surrounding area has been heavily disturbed by road and LZ Lynx construction and use. The full impact is difficult to assess as vegetation has grown over the disturbed areas. Military debris (50 gallon barrel, bullet casings, large and small cans, and trash) was found both above and below the root mat, and limited alder stands may indicate clearing on the hilltop. Road construction likely destroyed an unknown portion of the southwest side of the hill.

XBD-00387 was discovered in 2011 when subsurface testing uncovered five chert flakes in a shovel test. The shovel test also contained the remains of a modern fire pit complete with cans and trash below the root mat in the southwest quadrant. A shovel test at the base of the outcrop near Beaver Creek Road contained disturbed soils above degrading bedrock. In 2012, a shovel test grid was established at 5 m intervals to effectively cover the landform and determine site boundaries, subsurface concentrations and site integrity. The two shovel tests excavated in 2011 lined up with the grid and were not re-excavated. All shovel tests were excavated to schist bedrock, often degraded. Of the 28 shovel tests excavated in 2012, one contained a lone chert flake and the other 27 were devoid of prehistoric artifacts, although three contained modern trash below the root mat (bullet shells and a can). No surface artifacts were observed.

A 1 m^2 unit was excavated next to the 2011 positive shovel test on the hilltop in 5 cm levels and terminated at schist bedrock (Figure 79). Cultural materials consisted of 23 banded and black chert flakes found from 5-25 cmbs (Table 5). Modern military trash was noted but not collected just under the root mat in the western half of the unit, likely an extension of the fire pit noted in the shovel test.

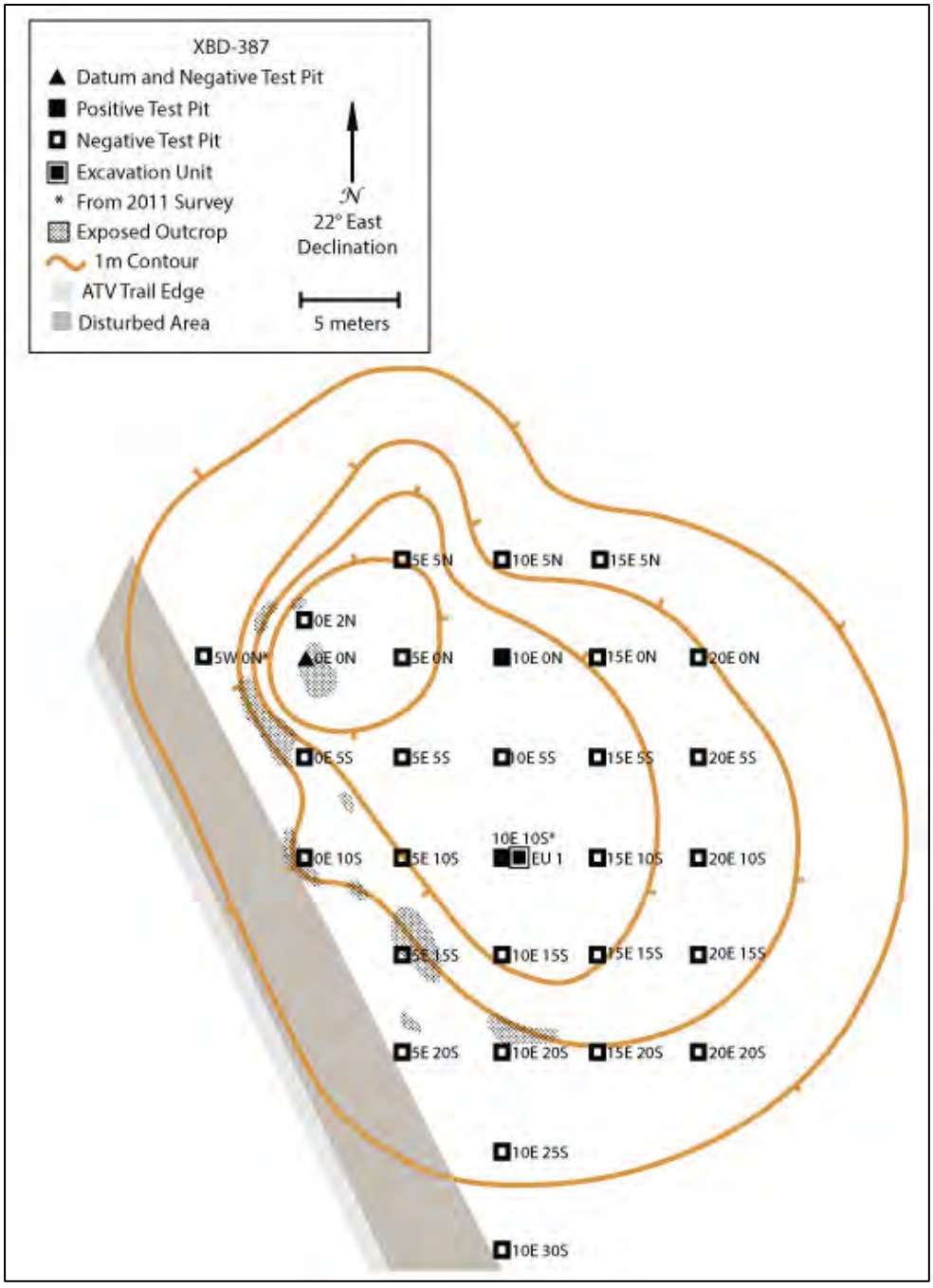

Figure 77. XBD-00387 site map.

Figure 78. XBD-00387 site overview.

Figure 79. XBD-00387 excavation unit.

Shovel tests depths ranged from 4-67 cmbs, with shallower sediments on the outcrop. Excavation unit stratigraphy consisted of a very dark brown organic layer (2.5YR2/2) followed by a very dark greyish brown silt (10YR3/2), above dark yellowish brown silt (10YR4/4). Under this was a thin layer of brown silty degrading bedrock gravel (10YR4/3) above schist bedrock (Figure 80). Artifacts were found below the root mat throughout all three silt layers. Modern activity, now overgrown by a shallow root mat, had an unknown depth of impact without disturbing

remaining soil stratigraphy. A charcoal sample taken from the 2012 positive shovel test may provide a date for site activities.

XBD-00387 is a very small lithic scatter on a heavily disturbed schist bedrock outcrop near a road and military use area. A total of 29 banded and black chert flakes were recovered during archaeological investigations. Artifact distribution was limited to the top of the schist outcrop. Despite retaining intact stratigraphy, site integrity has been negatively impacted by modern use. Artifact distribution is diffuse within a limited area and there are no diagnostic tools or traceable raw materials to place the site in a larger regional context. XBD-00387 has little potential to add to our knowledge of prehistory and is ineligible for inclusion in the NRHP.

Table 5. XBD-00387 artifact accession log

UA Accession #	FS #	Provenience	Depth (cmbd)	Type	Material	Quantity
UA2012-119-0001	3	0N 10E	10-30	N/A	charcoal	1
UA2012-119-0002	10	10N 10E	7	historic can	aluminum	1
UA2012-119-0003	2	0N 10E	0-10	flake	chert	1
UA2012-119-0004	4	Unit 1 LVL1-2	5-15	flakes	chert	2
UA2012-119-0005	5	Unit 1 LVL2 NE1/4	10-15	flakes	chert	2
UA2012-119-0006	6	Unit 1 LVL2 SW1/4	10-15	flake	chert	1
UA2012-119-0007	7	Unit 1 LVL3 NW1/4	15-20	flakes	chert	3
UA2012-119-0008	8	Unit 1 LVL3 NE1/4	15-20	flakes	chert	12
UA2012-119-0009	9	Unit 1 LVL4 NE1/4	20-50	flakes	chert	3

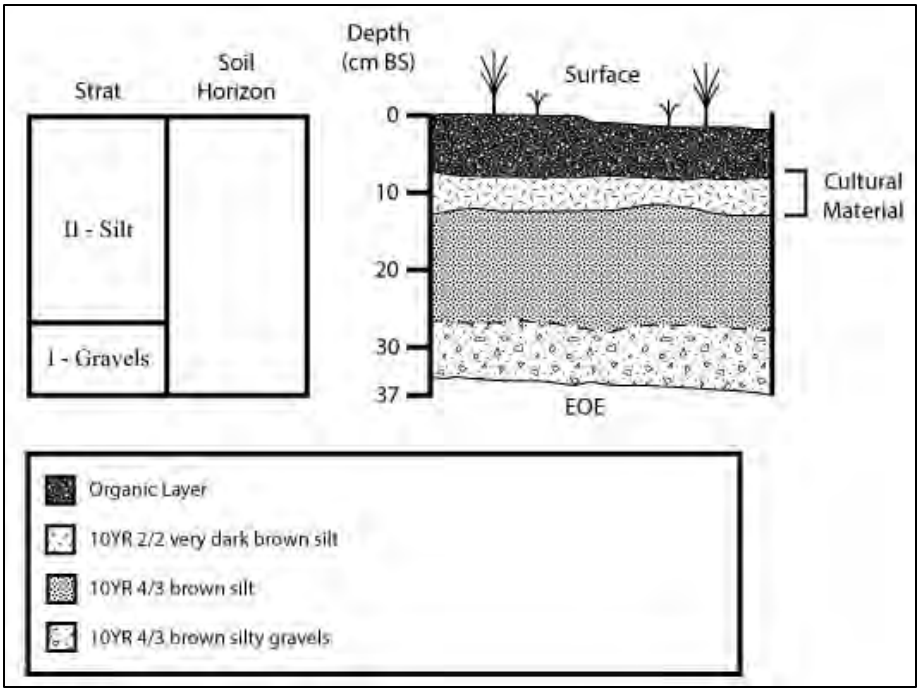

Figure 80. XBD-00387 site stratigraphy.

Donnelly Training Area DOEs

Fifteen sites in DTA were evaluated during the 2012 field season for their eligibility in the NRHP (Figure 81). Five sites were found eligible and ten sites were found not eligible for inclusion in the NRHP. One site currently eligible, XMH-00266, was investigated minimally investigated by CEMML and the University of Alaska Museum of the North (UAMN) as part of the Alaska Summer Research Program (July 2012). Results of that investigation are provided below.

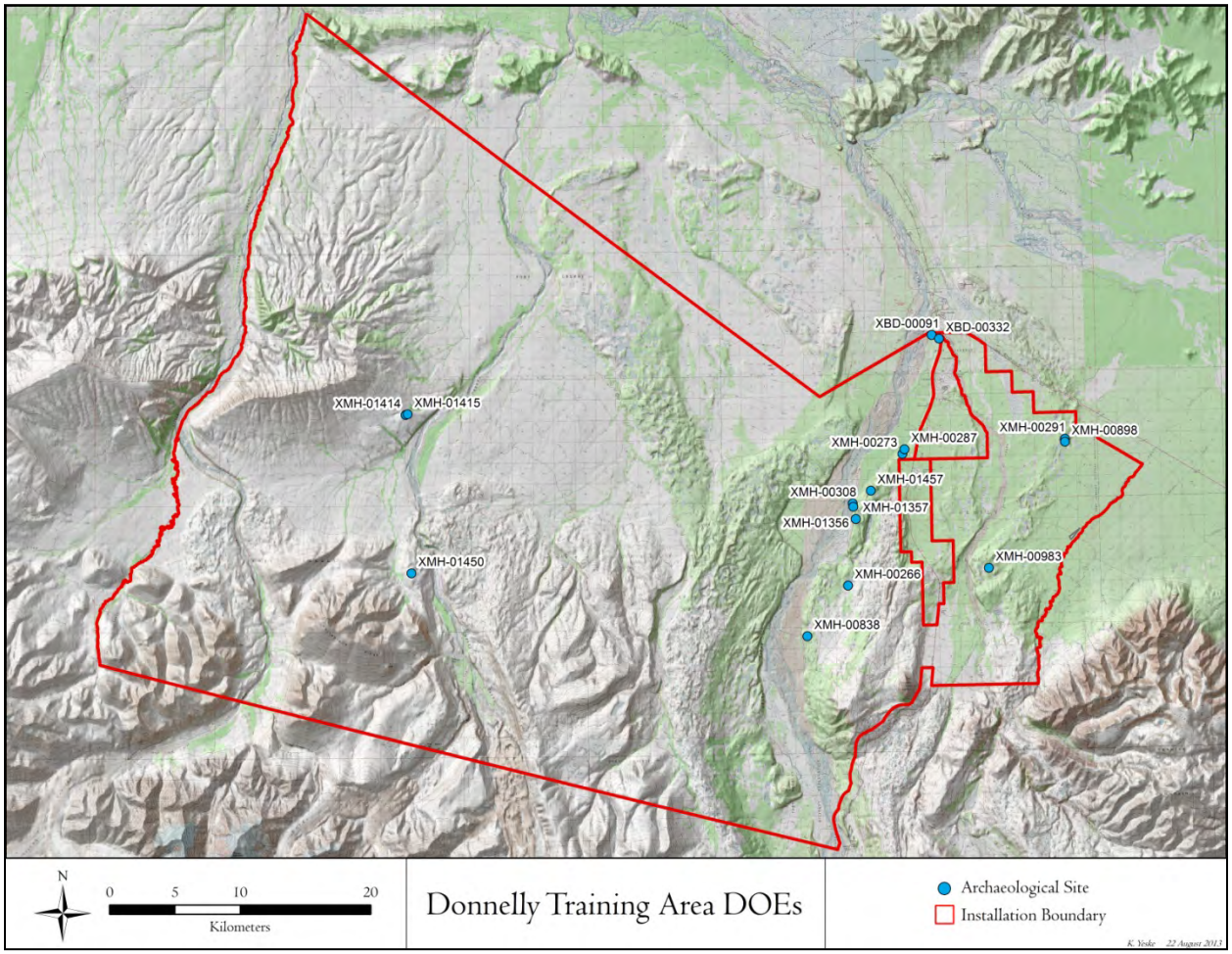

Figure 81. Site locations for 2012 DOEs in DTA.

XBD-00091

[redacted]

Determination of Eligibility: Not Eligible (not found)

XBD-00091 was originally discovered on the north bank of Jarvis Creek near its confluence with the Delta River in 1979 by C.E. Holmes (Figure 81). A solitary hearth was discovered eroding out of the creek bank. No artifacts were found in association. CEMML crews attempted to relocate this site during the 2012 field season. The hearth was not located at the location provided by Holmes (which is now within Jarvis Creek). It was also not discovered in surveys along the cut bank near the coordinates.

The creek bank was excavated to reveal a soil profile, but no evidence of a hearth, charcoal or artifacts was found (Figure 82). The stratigraphic profile of the excavated area (Figure 83, Figure 84) revealed an active stream bank with episodes of outwash deposition above and below calmer episodes of sand deposition along the floodplain.

This site has likely been destroyed by water erosion in the past. XBD-00091 was found ineligible for the NRHP because of the absence of cultural remains and features and because of the loss of site integrity over the 35 years since it was originally discovered.

Figure 82. Test excavations near the coordinates of XBD-00091 along the north bank of Jarvis Creek.

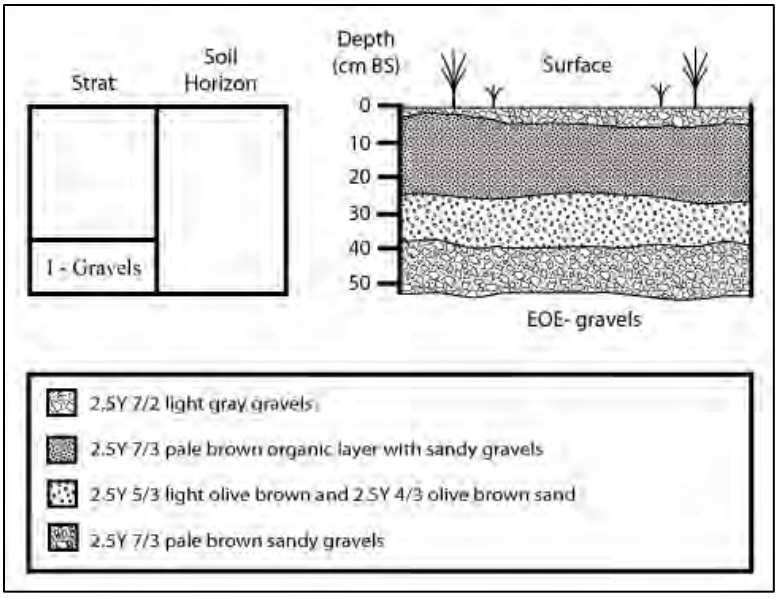

Figure 83. Stratigraphic profile of cut bank near XBD-00091.

Figure 84. Excavation unit near XBD-00091.

XBD-00332

[redacted]

Determination of Eligibility: Not Eligible

XBD-00332 is a mid-20th century historic trash scatter approximately 30m west of the Richardson Highway at MP 264.9 on the south bank of Jarvis Creek (Figure 81). The site dates from World War II (WORLD WAR II) into the 1950s and 1960s and probably relates to Richardson Highway and/or Alaska Highway road and bridge maintenance. The site is located on a low terrace approximately one meter above the Jarvis Creek flats. Landmarks and surrounding views are not visible due to dense tree cover of mixed forest with alder. A two track gravel road connecting to the Richardson Highway runs just south of the site.

Historical Contexts for Evaluation

The historical context of XBD-00332 revolves around transportation. The site is located along the Richardson Highway, a historic transportation route from Valdez to Fairbanks. Prior to the Klondike Gold Rush of the late 1890s fewer than 10 miles of road existed in Alaska. In 1899, the U.S. Army began construction of a pack trail from the port town of Valdez to Fort Egbert at Eagle. With the discovery of gold in Fairbanks in 1902, the trail was redirected to Fairbanks. The Alaska Road Commission formed in 1905 and oversaw all trail and road planning, construction, and maintenance within Alaska. The Fairbanks-Valdez Winter Trail was completed in 1907 and by 1913 motorized vehicles traveled along the route, now called the Richardson Highway. During the 1940s new roads were completed, allowing connections off the Richardson Highway to Anchorage (Glenn Highway) and the Lower 48 (Alaska Highway). By 1957 the Richardson was a hard-surfaced highway (King 2006).

The Alaska Highway, constructed in 1942, ends at Delta Junction, just to the north of XBD-00332. The idea of an Alaska Highway came about during the 1930s, and, in 1938 President Roosevelt created the Alaska International Highway Commissions with a goal of constructing a road to Alaska. American isolationism during that period delayed development. The attack on Pearl Harbor by the Japanese on December 7, 1941, ended American isolationism as the country entered World War II. The attack on Pearl Harbor, the beginning of the Pacific theater in World War II, along with Japanese threats to the west coast of North America and the Aleutian Islands, shifted the U.S. government's priorities. The construction of the Alaska Highway was approved by United States Army, U.S. Congress, and President Roosevelt on February 11, 1942. An overland route to Alaska became necessary to supply and defend the Northwest Staging Route, also known as "Alaska Skyway", a string of World War II airfields that was utilized for the Lend-Lease Program to the Soviet Union. Road construction officially began on March 8, 1942, with crews (U.S. Army and private contractors) building the road from the north and the south. The north and south construction crews meet at Contact Creek in September 24, 1942. The highway was not usable to vehicles until 1943. After World War II, in 1948, the highway opened to the public (Kingston 2006; Twitchell 1992).

The military and civilian construction workers on the Alaska Highway worked in very isolated conditions in a severe, unforgiving, subarctic environment of extreme cold in winter and hot temperatures combined with mosquitoes in summer. Due to the work crews' mobility their accommodations consisted of tent camps with little amenities. Supplies were difficult to obtain, and often cook shacks, outhouses, and tent poles were constructed from local materials. The camps were isolated, and work was constant and little social entertainment available (www.pbs.org/wgbh/americanexperience). Alaska Highway construction camps were often bulldozed when abandoned (Andy Higgs, personal communication, August 16, 2012).

The impact of World War II on Alaska included an increase in military installations and population. In Delta Junction, not only was the Alaska Highway under construction but a military base was established. The Army Air Corp established a camp on June 20, 1942 which became Station 17, Alaskan Wing Air, Air Transport Command. The station functioned as a rest and refueling location for American pilots ferrying aircraft to Ladd Field (Fort Wainwright) for the Lend Lease Program. After World War II, the Army Air Corp Base was put on an inactive status until 1948. The base was officially transferred to the Department of the Army in May of 1948, and became an Army post and an Arctic Training Center (www.greely.army.mil/about/history).

Archaeological Surveys: Methodology and Findings

XBD-0332 was documented by CEMML archaeologists on a pedestrian survey in 2005. At the time of discovery, the site consisted of several hundred cans, bottles and other historic debris scattered in a thin layer on the surface. Initial evaluations of surface artifacts dated the site to the 1940s. XBD-00332 has been recorded as XMH-01177 and XBD-00269 in the AHRS. Northern Land Use Research (NLUR) also documented the site in 2005 (as XMH-01177) under contract by the Alaska Department of Transportation and Public Facilities, through prime contractor PDC Inc. Engineers, to provide a cultural resources survey for proposed Richardson Highway reconstruction activities near Jarvis Creek. NLUR described the site as a large artifact scatter, approximately 270 feet by 40 feet in dimension comprised of one layers of cans and other historic material dating from the 1950s and 1960s (Figure 85). NLUR's preliminary interpretation of the site was as a dump from a construction camp from the Richardson Highway or bridge, and their initial assessment was that the site was not eligible for the National Register of Historic Places (NLUR: 2005). Although this determination is found in their report, there is no record of the SHPO having reviewed and concurred with this finding.

The goal of Phase II testing by CEMML in 2012 was to discover the significance of XBD-00332 and to complete the DOE. This was accomplished by a systematic subsurface testing to identify archaeological components and site boundaries, a characterization of site stratigraphy, a

material culture analysis to determine dates of occupation, and an evaluation of archaeological data and historical context to identify site function and assess site significance.

Figure 85. XBD-00332 site overview.

CEMML archaeological field investigations were conducted on 6, 7, 11 and 12 June 2012. Thirty-five shovel test pits were excavated in a grid pattern at 10 m intervals (Figure 86). The tests were excavated with shovels and trowels and material was screened through ¼" mesh. Twenty-two STPs tested positive for historic material culture. The artifacts were all located on the surface, in the vegetation mat, or in the micaceous silt (10yr 4/3) (Figure 87). No artifacts were found below 20 cm. STP's were terminated when alluvium was encountered. The depth to alluvium varied across the site from 30 cmbs in the south to 90 cmbs at the northern boundary.

Site boundaries were identified and overall site dimensions are 80 m x 26 m. Sub-surface artifacts were consistent in date and function with those found on the surface. No additional historic or prehistoric components were found. No structural features or building remains were identified.

All cultural material from the STPs was collected and information recorded in accordance with USAG FWA standards and UAMN requirements. A total of 766 historic artifacts were cataloged; the majority (695) are bottle fragments. During cataloging the artifacts were assigned a functional classification code to facilitate artifact assemblage description and interpretation (Figure 88) (Sprague 1981). Only five of the catalogued artifacts were given UAMN accession numbers (Table 6).

Personal items, specifically alcohol bottles and cans, comprise 83% of the assemblage (n=631). Alcohol bottle fragments (n=621) and 10 beer cans make up the Personal Indulgence alcohol class. “Red Cap Ale” and World War II military distributed beer cans were identified. Bottle glass was classified based on bottle color, base marks and body embossing such as “Federal Law Forbids Sale of Reuse of this Bottle”. Other personal items identified include a U.S. Army Corp 13 Star Button from the olive drab work uniform dating from World War II to 1960 (www. quaonline.com /military/military_reference/American/wwii_uniforms/usbuttons.html). Writing utensils and a talc can were also classified under personal items. Domestic items comprise 1% of the assemblage. Three food containers identified are: Hills Bros Coffee can (1943-1963), a chocolate milk can (Golden State Dairy), and a clear glass, wide-mouth jar. Culinary (n=6) and gustatory (n=2) items are also present.

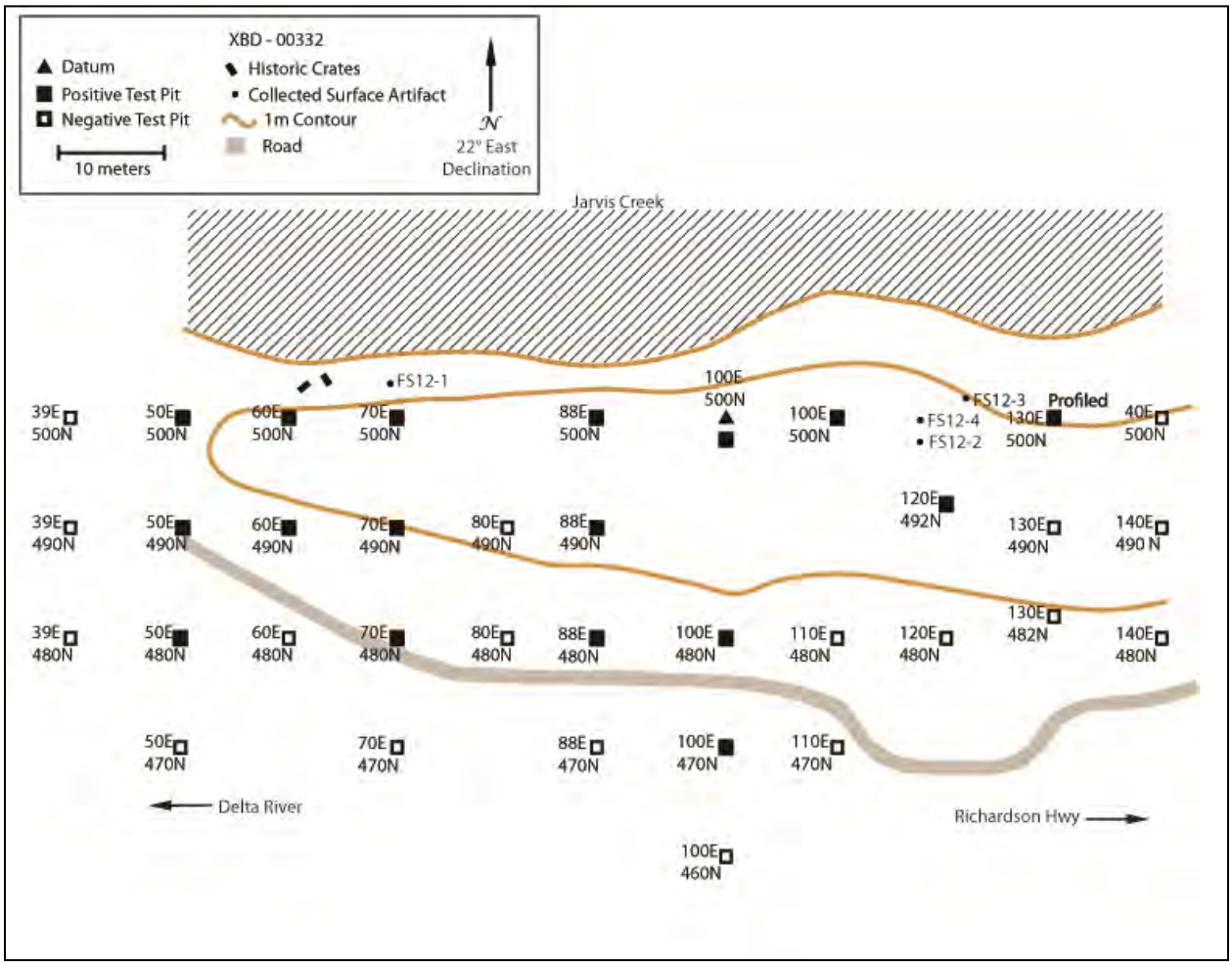

Figure 86. XBD-00332 site map with shovel test pits.

Architectural items, 3% of the assemblage, are dominated by 20 fasteners (nails, strapping and staples), a single piece of pegboard, and two glass insulators. The hunting class of Commerce and Industry is represented by seven .22 shells and one Winchester Repeating Arms shell. Military artifact falls under the general class of Group Services. A single, small fragment of a piece of ordinance was identified.

The Unknown/Unclassified category (n=85) makes up 12% of the assemblage. This category is for all items that are unable to be classified to function such as can fragments (n=4), non-diagnostic bottle fragments (n=73) and items only identified to material class (n=8).

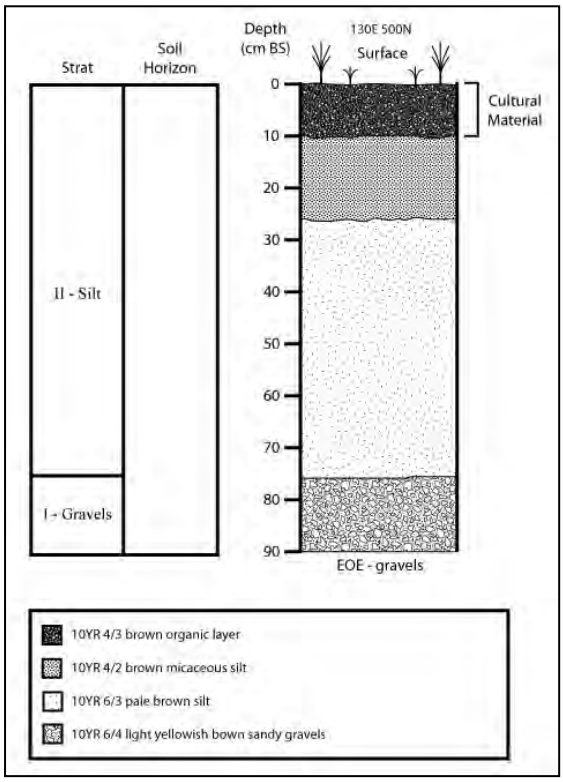

Figure 87. XBD-00332 site stratigraphy.

Many artifacts in the assemblage (n=313) provide manufacturing date ranges. Table 7 shows the diagnostic features on the artifacts that provide accurate date ranges. Manufacturing information and dates are often embossed on bottle bases or present in lithography on cans. Figure 89 demonstrates the date ranges of artifacts at the site. The gross manufacturing dates suggest a site occupation date of 1940s and 1950s. Several artifacts are present that were only manufactured during the 1940s: six green and white beer cans with a propeller motif were distributed by the U.S. military to troops during World War II and six bottle glass base

fragments were manufactured by Duraglass in 1944. World War II era material culture is present at XBD-00332.

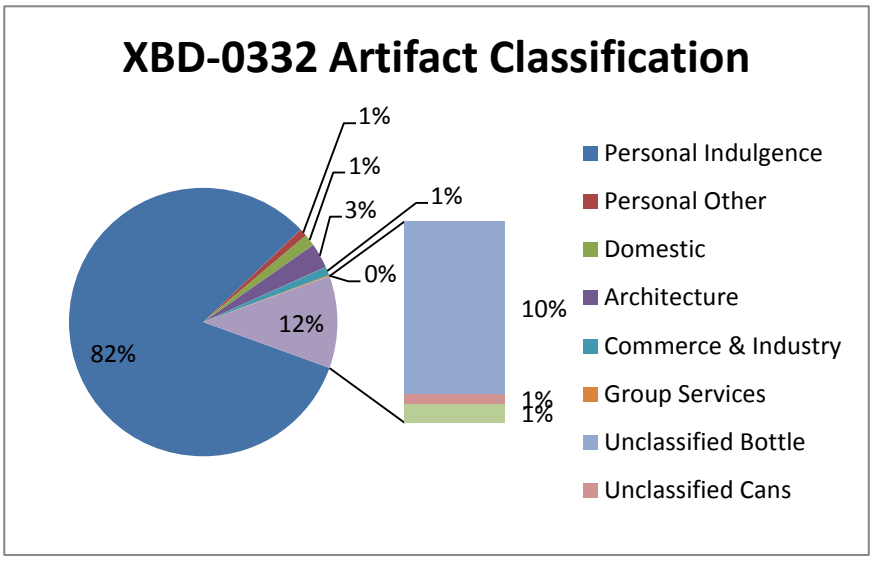

Figure 88. XBD-00332 artifact classification based on Sprague (1981).

Table 6. XBD-00332 artifact accession log.

UA Accession #	FS #	Depth	Type	Material	Quantity	Comments
UA2012-088-0001	12-10	0-19 cmbs	can	metal	1	World War II military beer distributed to the troops, dates 1938 to mid-1940s
UA2012-088-0002	12-1	0 cmbs	Easter toy	iron	1	Easter toy by Chein, rabbit pulling a cart. Post 1930
UA2012-088-0003	12-10	0-19 cmbs	button	metal	1	U.S. Army 13-star Metal Button, 1940s to 1960 U.S. Army Air Corps button from the olive drab work uniform
UA2012-088-0004	12-10	0-19 cmbs	bottle stopper	plastic	1	Bottle stopper, plastic head and cork, embossed on head is head of a man with goatee. Green plastic.
UA2012-088-0005	10-13		bottle base	glass	1	Duraglass bottle base, 1944

Archaeological Summary and Determine of Eligibility

XBD-332 is a mid-20th century trash scatter along Jarvis Creek in close proximity to the Richardson Highway just south of Delta Junction. The artifact assemblage consists mostly of alcohol related items dating to World War II and into the 1950s. No structures or building

remains are present. The shallow nature of the deposit indicates a limited occupation. This was not the trash dump of a multi-year inhabitation. The proximity to the Richardson Highway and Delta Junction along with the region's World War II military activities indicates XBD-0332 is probably the trash dump from a construction camp. Whether the camp was related to Richardson Highway construction, Alaska Highway construction, or U.S. Army Air Corp Station 17, is not known. The integrity of the site has also been compromised because it was bulldozed sometime in the past.

Due to the lack of site integrity, the lack of features or structures, the lack of significant artifacts, and inability to associate this can scatter with any important person or event, XBD-00332 was found not eligible for inclusion in the NRHP.

Table 7. Diagnostic artifacts and date ranges at XBD-00332.

Number	Diagnostic Artifact	Date Range	Reference
1	"Hills Bros." coffee can	1943-1963	Landford and Mills 2006
1	"Red Cap Ale" beer can	1947-mid 1950s	Keglined trademark and patent numbers, www.breweriana.com
1	Green and white beer can	1935-1950	IRTP, www.breweriana.com
1	Propeller beer can, World War II, military beer	1938-mid 1940s	Keglined trademark and patent code, www.breweriana.com
8	Propeller beer can, World War II, military beer	1938-mid 1940s	Keglined trademark and patent code, www.breweriana.com
12	"Federal Law Forbids…" bottle glass	1935-mid 1960s	www.sha.org/bottle/machinemadedating.htm#Question 10
6	"Duraglass" bottle base	1944	www.sha.org/bottle/bases.htm#Stippling
2	Hazel Atlas Glass Co., Wheeling, West Virginia	1920-1964	Toulouse 1971:239
1	Northwestern Glass Company, Seattle	1931-1971	Toulouse 1971:391
10	Northwestern Glass Company, Seattle. Plus stippling	1940-1971	Toulouse 1971:391
4	"FEDERAL LAW FORBIDS SALE OR REUSE OF THIS BOTTLE" plus stippling, bottle glass	1940-1965	www.sha.org/bottle/machinemadedating.htm#Question 10
271	Stippled bottle glass	Post 1940	www.sha.org/bottle/bases.htm#Stippling
1	Easter Toy by Chein	1930	www.trocadero.com/antiquesdc/items/636484/en3store.html
1	US Army Corp 13 star button	1940-1960	quaonline.com/military/military_reference/American/wwii_uniforms/usbuttons.html.

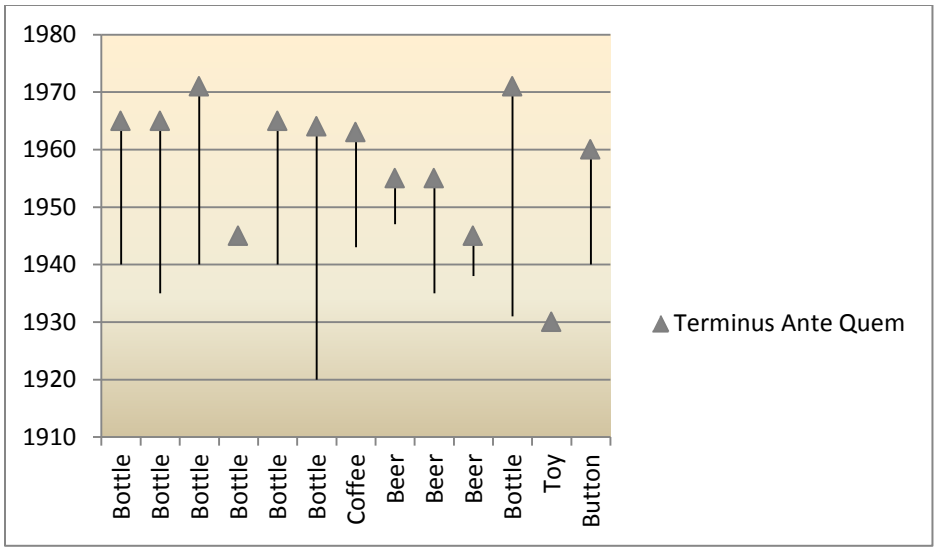

Figure 89. Manufacturing date ranges of artifacts from XBD-00332.

XMH-00266

[redacted]

Determination of Eligibility: Eligible (updates)

From 7-14 July 2013, UAMN partnered with Fort Wainwright Cultural Resources staff to provide a module for the Alaska Summer Research Academy (ASRA). ASRA is an intensive two-week learning experience hosted by the University of Alaska Fairbanks for students with an interest in science and technology. Junior high and high school students compete to gain a spot on a real-life project with scientists and researchers from the University of Alaska Fairbanks and the community. This summer's archaeology module took place at UAMN and the Big Lake Overlook site (XMH-00266) near the Delta River in DTA (Figure 81).

The Big Lake site was originally identified by C.E. Holmes (1979). Fire-cracked rocks and butchered animal bones were observed in a test pit. This site was revisited in 2002, but the earlier hearth was not rediscovered and only one black chert flake was found in a shovel test (Hedman et al. 2003). In 2005, DOE investigations uncovered over 525 artifacts, including one flake tool and two microblade fragments. The majority of the artifacts were found in one test excavation unit.

Scientists and students excavated four square meter² test units and 12 shovel tests to identify the site boundaries and to attempt to find charcoal and artifacts that would help to clarify the

site's age and purpose. The students were taught to use a total station, which they used to map the terrain around the site. The map they produced is shown in Figure 90.

None of the 12 shovel tests, which were all excavated to glacial till, produced any cultural material. The site appears to be restricted to a small area near the 2005 DOE excavation unit. Four 1x1 meter² test units were excavated at the site to a depth of about 120 cm in culturally sterile sand and to the top of glacial till (Figure 91, Figure 92). The four test units yielded a total of 90 cataloged artifacts (Table 8). No discernible tools were recovered. All artifacts were tertiary flakes related to late stage projectile point shaping and resharpening. Artifact raw material consisted of fine-grained volcanic and mottled red to yellow cherts. All artifacts were recovered from a buried context; there were no surface artifacts observed. The main artifact concentration appeared approximately 20-30cm below the surface to a depth of about 35 cm.

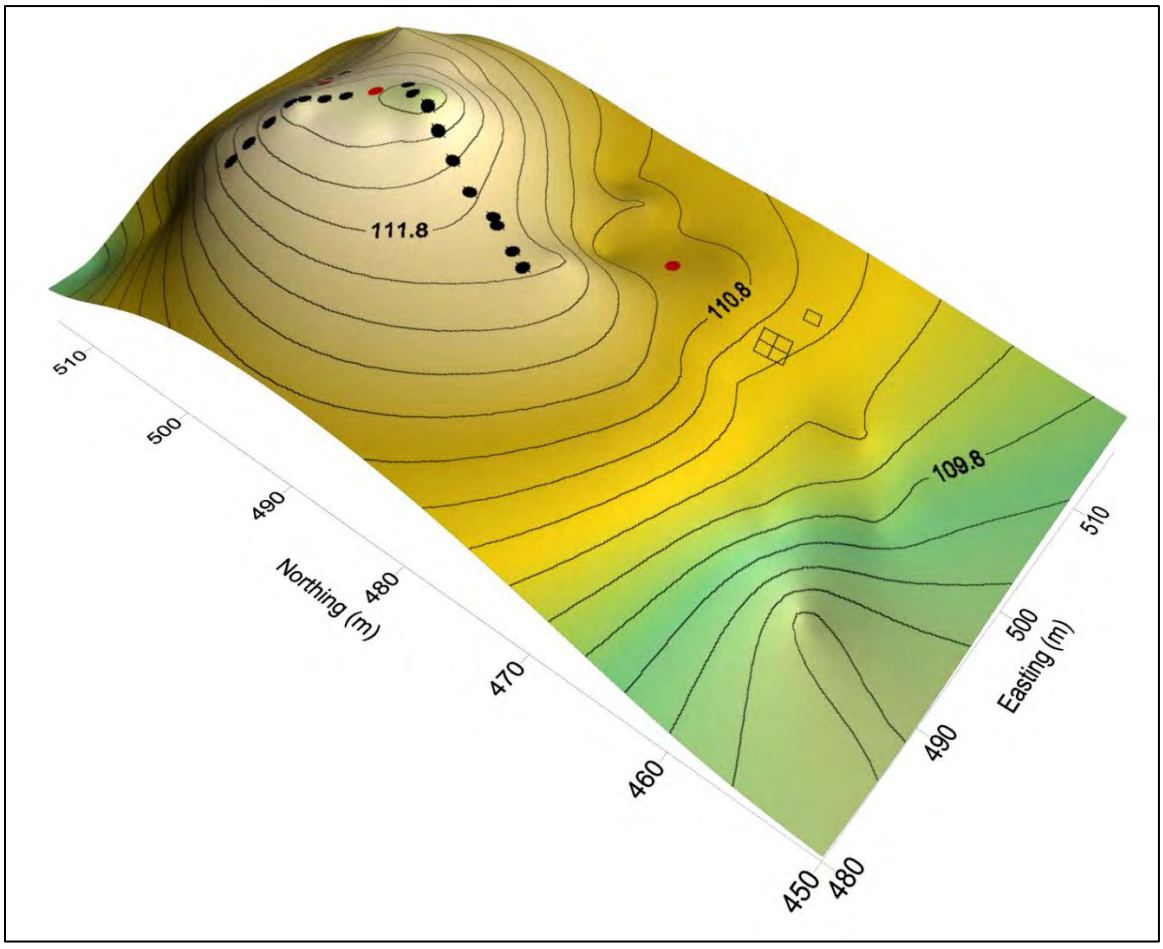

Figure 90. Contour map of site area with excavation units (from 2005 and 2012).

Figure 91. Excavation unit at XMH-00266.

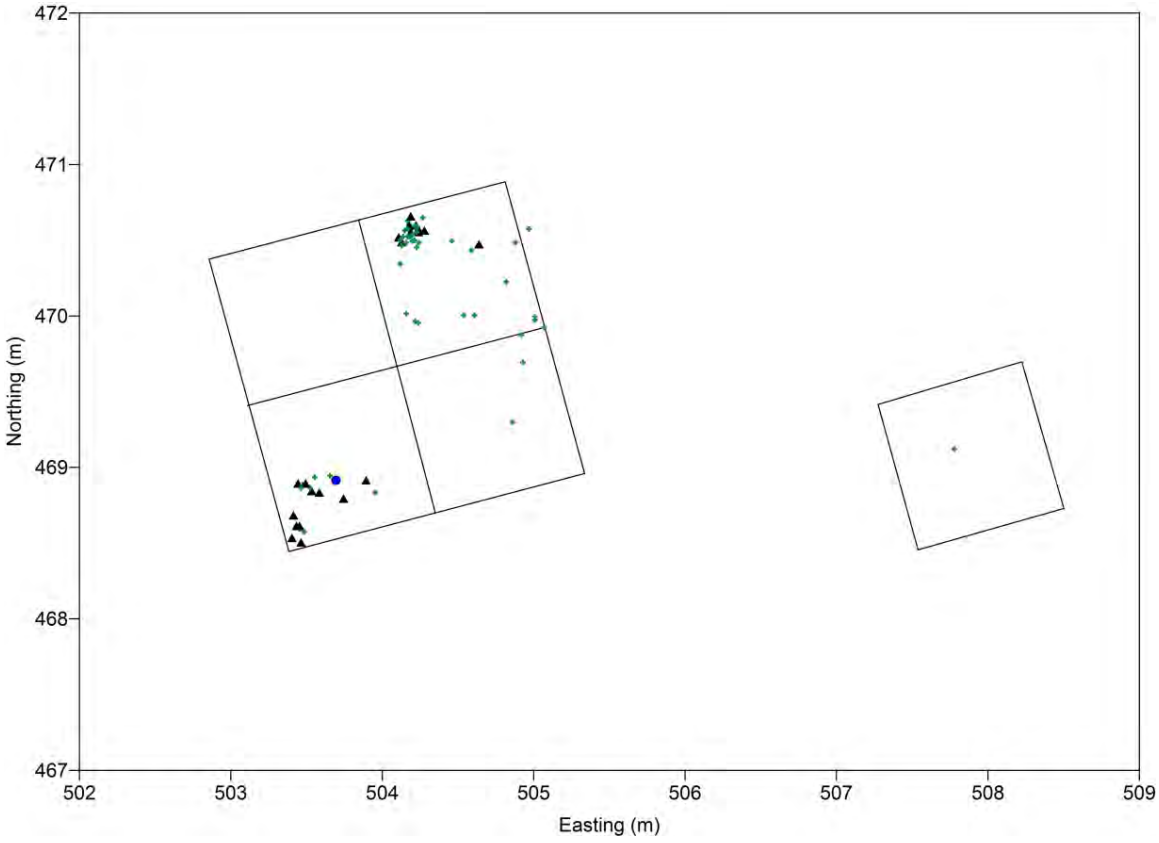

Figure 92. 2005 and 2012 test excavation units at XMH-00266. The blue symbol indicates the location of charcoal (Beta-341761) and its relationship to the rest of the cultural artifacts within Unit 3. Green symbols are fine grained volcanic artifacts and black symbols are chert artifacts.

Sediment samples were collected from all stratigraphic units (n=13) (Figure 93). Grain size of these samples appears to be predominately sand to sandy-silt. A small charcoal sample was collected and submitted to BETA Analytic in early 2013. This sample (UA2012-076-0076) was collected from Unit 3 (N468.914/E503.693) level 3 (22cmBD) and was directly associated with the cultural-bearing sediments at the site (Figure 92). This sample (Beta-341761) produced a conventional radiocarbon age of 4220±30BP.

The 2012 ASRA archaeology module was a successful teaching program (Figure 94). Students learned the principles of archaeological excavation, mapping, and modern museum curation techniques, while engaging in hands-on field and lab exercises. XMH-00266 was minimally impacted during this endeavor, and important information about the age of the site and the type of activities which took place was discovered.

Table 8. XMH-00266 artifact accession log.

UA Accession #	Unit	Grid North	Grid East	Depth	Quad	Level	Type	Material
UA2012-076-0001	2	470.4742	504.6378	12	NE	2	flake	chert
UA2012-076-0002	2	470.2242	504.8178	17	NE	2	flake	basalt
UA2012-076-0003	5	469.1211	507.7778	12.5	NW	2	flake	basalt
UA2012-076-0004	2	470.5742	504.9678	13	NE	2	flake	basalt
UA2012-076-0005	2			12-15	NW	2	4 flakes	basalt
UA2012-076-0006	2	470.5642	504.2778	18	NW	2	flake	chert
UA2012-076-0007	2	470.4342	504.5878	12.5	NW	2	flake	basalt
UA2012-076-0008	2	470.4542	504.2278	20	NW	2	flake	basalt
UA2012-076-0009	2	470.5742	504.2378	17.5	NW	2	flake	chert
UA2012-076-0010	2	470.5542	504.2378	16.5	NW	2	flake	chert
UA2012-076-0011	3	468.8448	503.5334	9.5	SE	3	charcoal	charcoal
UA2012-076-0012	3				SW	3	flake	basalt
UA2012-076-0013	2			10-20	NW	2	flakes	basalt
UA2012-076-0014	3	468.9148	503.8934	17	SE		flake	chert
UA2012-076-0015	3	468.8348	503.9534	15	SE		flake	basalt
UA2012-076-0016	4	469.2999	504.8603	16	NW		flake	basalt
UA2012-076-0017	5			63 BS	SE		charcoal	charcoal
UA2012-076-0018	5			94 BS	SE		charcoal	charcoal
UA2012-076-0019	5			107 BS	SE		charcoal	charcoal
UA2012-076-0020	3	468.8848	503.4734	19	SW	2	flake	basalt
UA2012-076-0021	3	468.5848	503.4734	19	SW	2	flake	basalt
UA2012-076-0022	3	468.6848	503.4134	20	SW	3	flake	chert
UA2012-076-0023	3	468.5948	503.4534	19	SW	3	flake	basalt

UA2012-076-0024	3	468.8948	503.4434	17	SW		flake	chert
UA2012-076-0025	3	468.5748	503.4834	19	SW		flake	basalt
UA2012-076-0026	3	468.8648	503.5234	18	SW		flake	basalt
UA2012-076-0027	3	468.8948	503.4434	17	SW		flake	chert
UA2012-076-0028	3	468.8948	503.4934	16	SW		flake	chert
UA2012-076-0029	3	468.8348	503.5834	17	SW		flake	chert
UA2012-076-0030	3	468.5048	503.4634	17	SW		flake	chert
UA2012-076-0031	3	468.7948	503.7434	13	SW	2	flake	chert
UA2012-076-0032	3	468.6148	503.4334	16	SW	2	flake	chert
UA2012-076-0033	3	468.8648	503.4634	17	SW		flake	basalt
UA2012-076-0034	3	468.6148	503.4334	16	SW		flake	basalt
UA2012-076-0035	3	468.9448	503.6534	17	SW	2	flake	basalt
UA2012-076-0036	3	468.5348	503.4034	14	SW	2	flake	chert
UA2012-076-0037	3			10-20	NW	3	flake	basalt
UA2012-076-0038	2	470.5542	504.2378	19	NW	2	flake	chert
UA2012-076-0039	2	470.0142	504.1578	28	SW	2	flake	basalt
UA2012-076-0040	2	469.9642	504.2178	30	SW		flake	basalt
UA2012-076-0041	2	469.9242	505.0678	14	SE		flake	basalt
UA2012-076-0042	2	469.9542	504.2378	27	SW		flake	basalt
UA2012-076-0043	2	469.6942	504.9278	10.5	SE		flake	basalt
UA2012-076-0044	2	469.8742	504.9178	13	SE		flake	basalt
UA2012-076-0045	2	470.0042	504.6078	16.5	SE		flake	basalt
UA2012-076-0046	2	469.9742	505.0078	11	SE		flake	basalt
UA2012-076-0047	2	469.9942	505.0078	12	SE		flake	basalt
UA2012-076-0048	2	screen		10-20	SE	2	flakes	chert
UA2012-076-0049	2	470.5542	504.2278	22	NW	2	flake	basalt
UA2012-076-0050	2	470.4942	504.1978	25	NW	2	flake	basalt
UA2012-076-0051	2	470.3442	504.1178	28	NW	2	flake	basalt
UA2012-076-0052	2	470.5192	504.1078	17	NW	2	flake	chert
UA2012-076-0053	2	470.5242	504.1378	22.5	NW	2	flake	basalt
UA2012-076-0054	2	470.4842	504.2408	27	NW	3	flake	basalt
UA2012-076-0055	2	470.4892	504.1278	25	NW	2	flake	chert
UA2012-076-0056	2	screen			SW	2	flakes	chert
UA2012-076-0057	2	470.0042	504.5378	18.5	SW	2	flake	basalt
UA2012-076-0058	2	470.6292	504.1678	24	NW	2	flake	basalt
UA2012-076-0059	2	470.4942	504.4578	27	NW	3	flake	basalt
UA2012-076-0060	2	470.5742	504.1678	24	NW	2	flake	basalt
UA2012-076-0061	2	470.5992	504.2228	25	NW	2	flake	chert
UA2012-076-0062	2	470.5002	504.2128	25	NW	2	flake	basalt
UA2012-076-0063	4				NE		flake	basalt
UA2012-076-0064	3	468.6148	503.4534	19.8	SW	2	flake	chert

UA2012-076-0065	2	470.4842	504.8778	36.5	NE	3	flake	basalt
UA2012-076-0066	3	468.9348	503.5534	19.5	SW	2	flake	basalt
UA2012-076-0067	3	screen			SE	2	flakes	chert
UA2012-076-0068	3	screen		10-20	NW	3	flakes	chert
UA2012-076-0069	2	470.5642	504.1478	28			flake	basalt
UA2012-076-0070	2	470.6592	504.1878	26		2	flake	chert
UA2012-076-0071	2	screen			NE	3	flake	chert
UA2012-076-0072	2	470.5942	504.1878	27			flake	basalt
UA2012-076-0073	2	470.6042	504.1778	29			flake	basalt
UA2012-076-0074	2	screen					flakes	chert
UA2012-076-0075	2	470.5242	504.1878	28			flake	basalt
UA2012-076-0076	3	468.9148	503.6934	22	SW	3	charcoal	charcoal
UA2012-076-0077	2	470.4842	504.1578	26.5		2	flake	basalt
UA2012-076-0078	2	470.5242	504.1778	29			flake	basalt
UA2012-076-0079	2	470.6492	504.2678	28			flake	basalt
UA2012-076-0080	2	470.6042	504.1778	25			flake	basalt
UA2012-076-0081	2	470.5542	504.1878	29			flake	chert
UA2012-076-0082	2	470.4642	504.1278	28			flake	basalt
UA2012-076-0083	2	470.5042	504.1178	28.5			flake	basalt
UA2012-076-0084	2	470.5942	504.2178	26			flake	basalt
UA2012-076-0085	2	470.5242	504.1678	30			flake	basalt
UA2012-076-0086	2	470.5742	504.1678	29			flake	basalt
UA2012-076-0087	2	470.5892	504.2328	27			flake	basalt
UA2012-076-0088	2	470.5342	504.1978	26			flake	basalt
UA2012-076-0089	2	470.5942	504.1778	27			flake	chert
UA2012-076-0090	2	469.9142	504.6378	13	SE	2	ochre	mineral

Figure 93. XMH-00266 site stratigraphy.

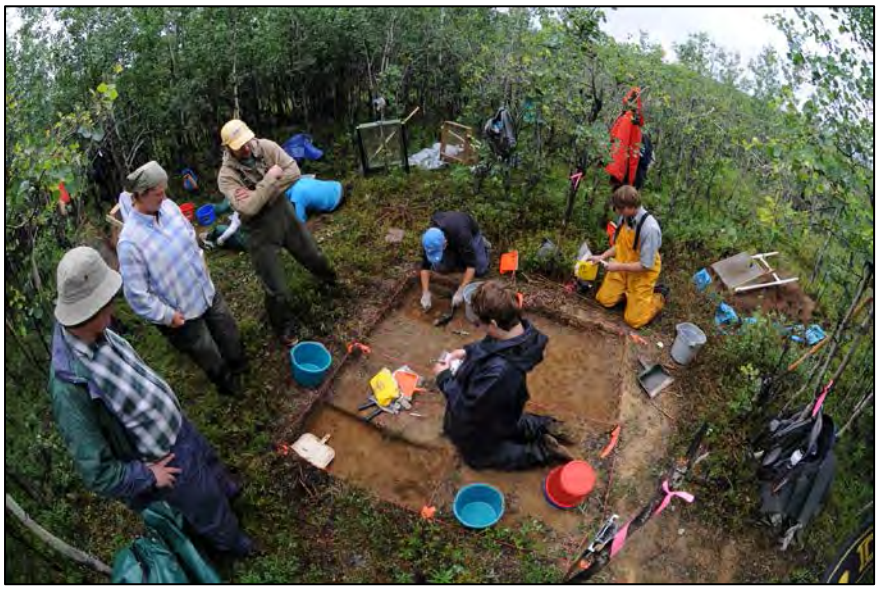

Figure 94. The 2012 archaeology module ASRA project in progress. Photo by post reporter Brian Schlumbohm.

XMH-00273

[redacted]

Determination of Eligibility: Not Eligible

Site XMH-00273 is located on a glacial outwash terrace that overlooks the Delta River, approximately 900 meters west of the Richardson Highway (Figure 81). The site was originally identified as a small lithic scatter found in 1979 by C.E. Holmes and consisted of several flakes, two retouched flakes, and a cobble core.

Relocating this site in recent years proved to be challenging. In 2004, new coordinates were identified for the site because the landform on older maps did not precisely match the old coordinates. No new cultural resources were discovered during testing at the new coordinates during that investigation, however.

In 2012, CEMML archaeologists attempted to locate the site at both the 1979 coordinates and the 2004 location. Five shovel test pits were excavated in the unlikely area of the older coordinates, and none produced any cultural material. Phase II DOE testing excavated 12 shovel test pits in the relocated location and these were also all negative (Figure 95, Figure 96). A shovel test grid was placed around the datum coordinates for each location. Shovel tests were excavated at 10 m intervals to glacial till (Figure 97, Figure 98). A total of 17 shovel test pits at both locations were excavated, all were negative for artifacts. Due to the negative results of surface examinations and subsurface testing, 1x1 units were not excavated.

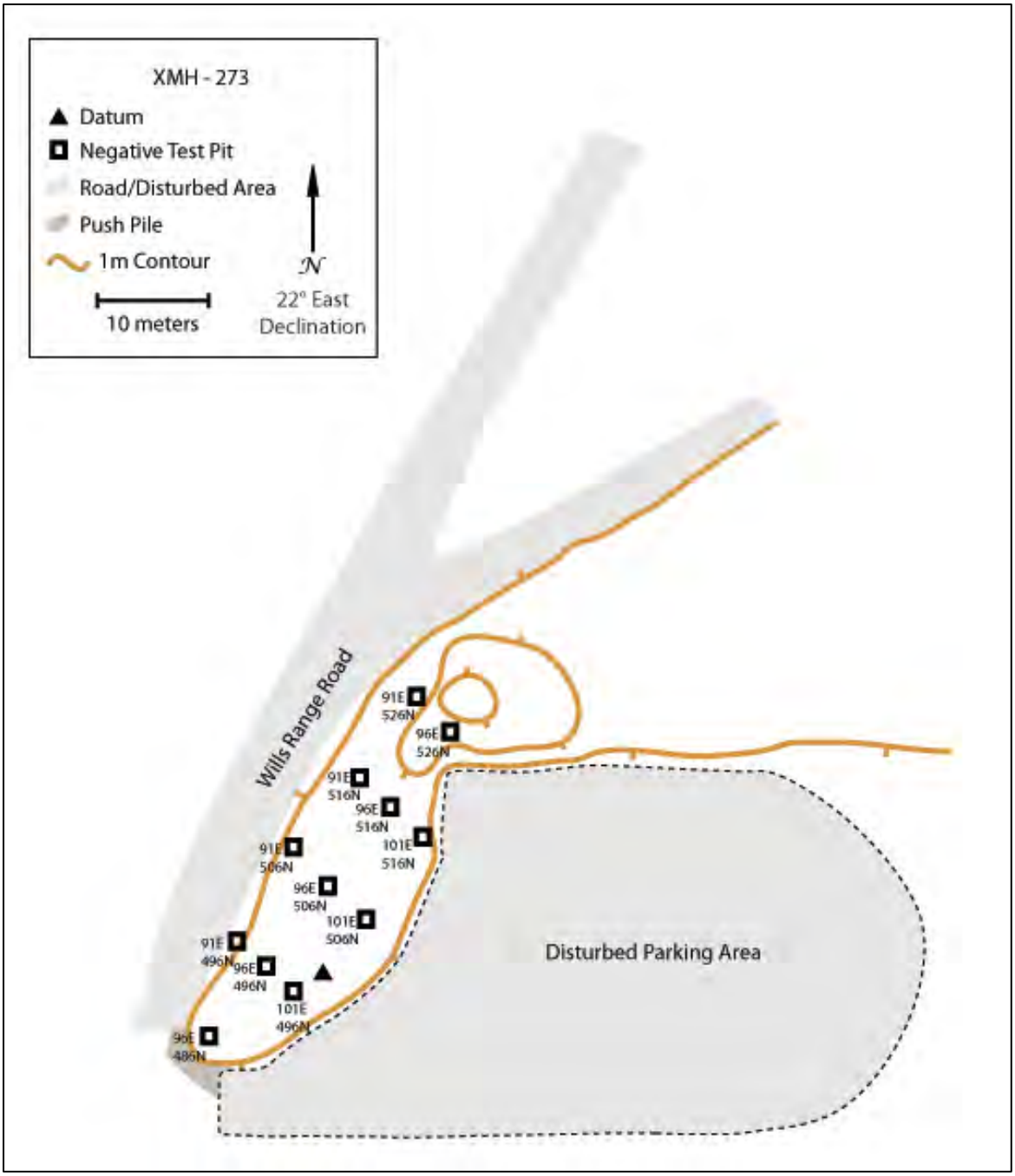

Figure 95. XMH-00273 site map.

Figure 96. XMH-00273 site overview.

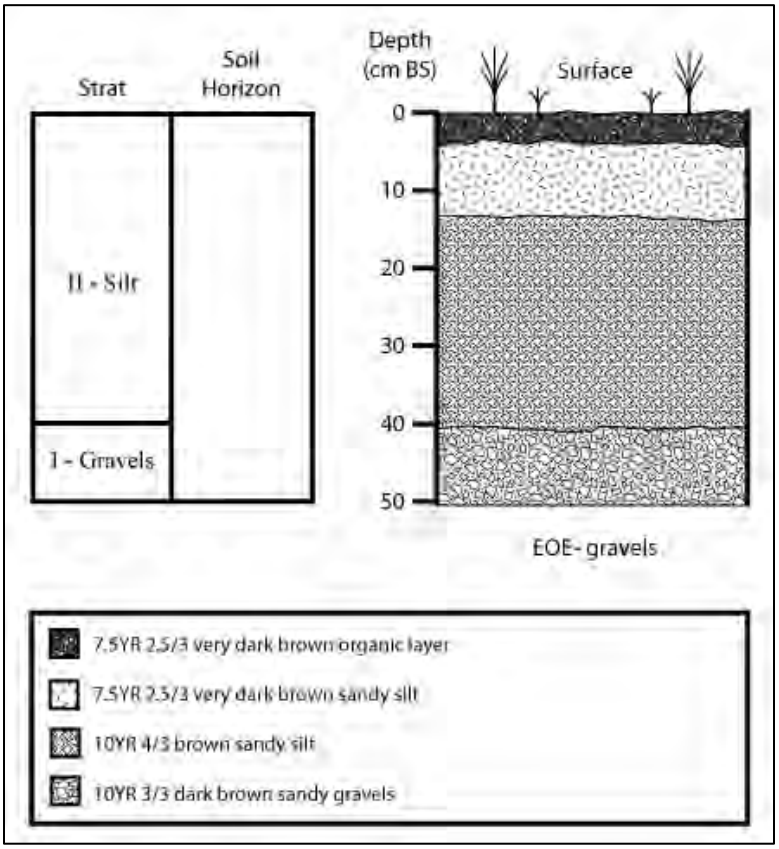

Figure 97. XMH-00273 site stratigraphy.

Figure 98. XMH-00273 shovel test pit.

Upon examination of the site landform, there was abundant evidence of military and construction activities. The site location is bordered on three sides by a parking/ staging area with push piles surrounding the cleared area. Wills Range Road is to the west. Disturbance was noted in the lack of topsoil over the site location, lack of vegetation, presence of bulldozer push piles and road development.

Site XMH-00273 was determined ineligible for the NRHP due to a loss of site integrity through disturbance and absence of artifacts at both locations.

XMH-00287

[redacted]

Determination of Eligibility: Not Eligible

Site XMH-00287 is located on a glacial outwash terrace that overlooks the Delta River to the west. The site is less than 10 m west of Wills Range Road (Figure 81, Figure 99). The vegetation consists of lowland spruce forest with aspen trees (Figure 100).

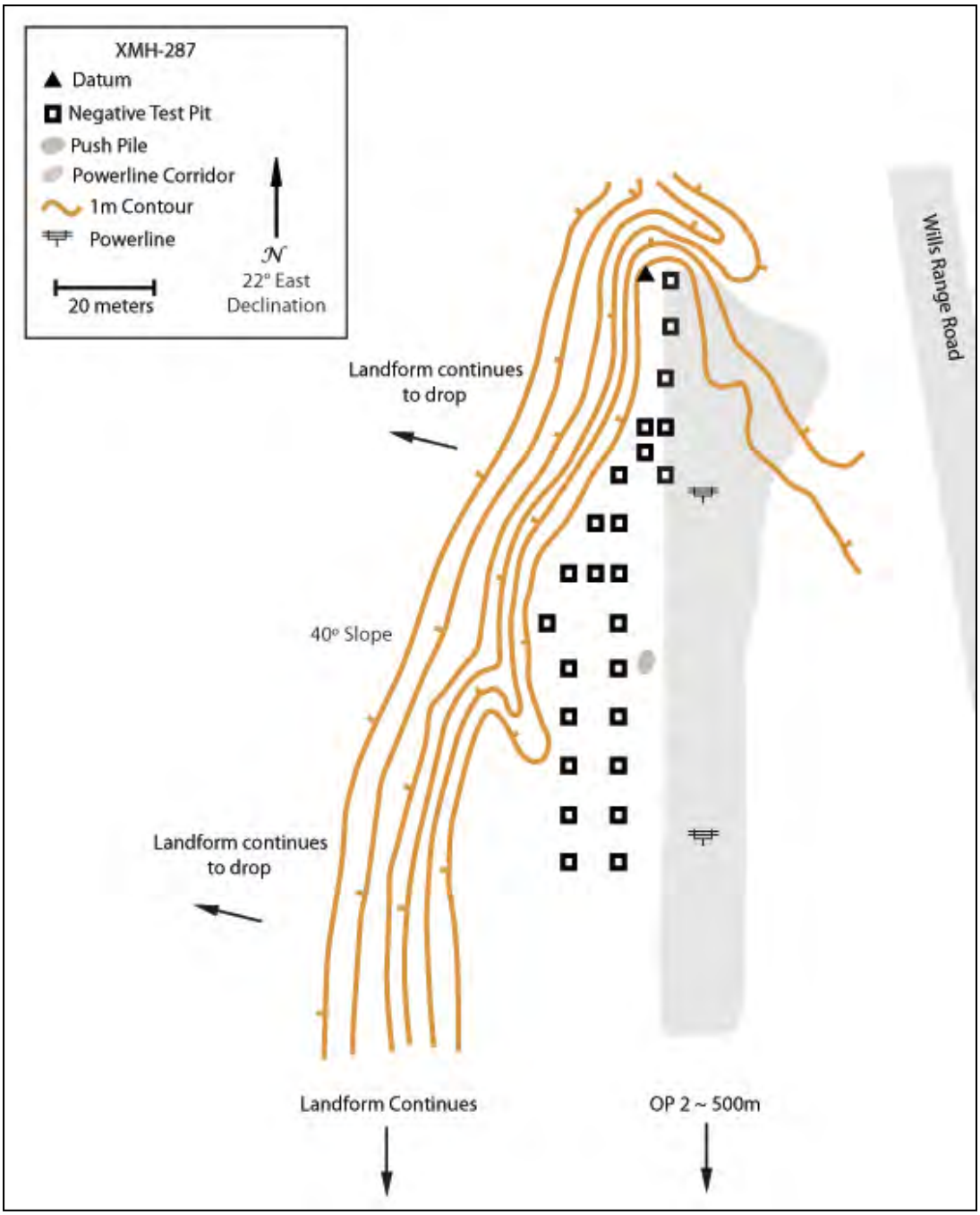

Figure 99. XMH-00287 site map.

Figure 100. XMH-00287 site overview, facing west.

The site was originally identified in a 1979 survey by C.E. Holmes and consists of a surface scatter of flakes. At the time of discovery, the area was heavily disturbed by roads, power lines, gravel pits and clearing. The original site location has also been impacted by a gravel pit. The site was revisited in 2004, and the original coordinates were determined to be wrong. Phase II evaluations at the updated coordinates recovered one large dark gray chert flake from the surface (UA2012-90-001). A shovel test grid was placed at the coordinates of the site datum. Shovel tests were excavated at 10 m intervals to glacial till (Figure 101, Figure 102). A total of 25 shovel tests were excavated and all were negative for cultural resources. Due to the negative results of surface examinations and subsurface testing, a unit was not excavated.

Site XMH-00287 was determined ineligible for the NRHP due to a loss of site integrity through disturbance and absence of artifacts at both locations.

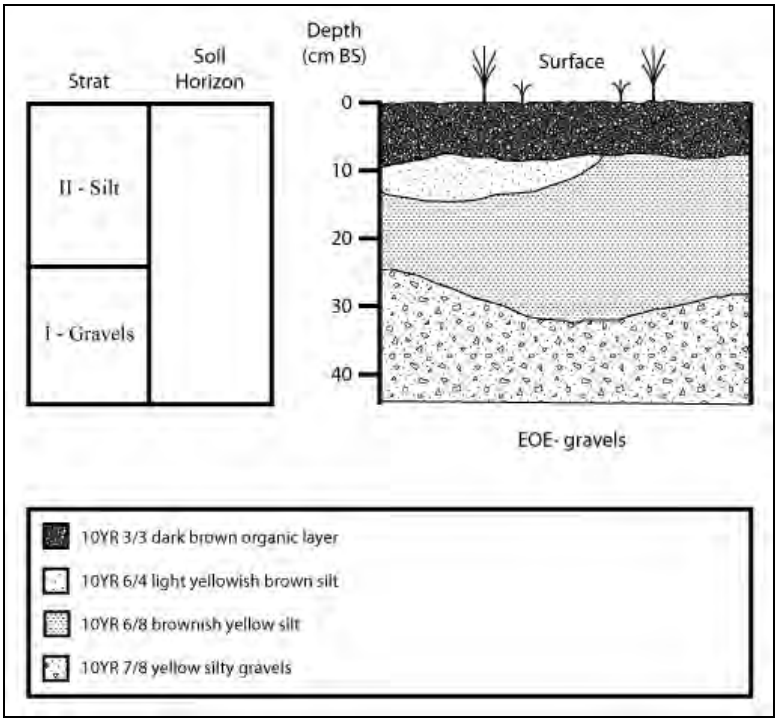

Figure 101. XMH-00287 site stratigraphy.

Figure 102. XMH-00287 shovel test pit.

XMH-00291

[redacted]

Determination of Eligibility: Not Eligible

XMH-00291 is located on a small north-south running glacial moraine knoll approximately 3.5 km south of the Alaska Highway and 11 km southeast of the entrance to Fort Greely (Figure 81). The landform falls steeply to the east and more gradually to the west (Figure 103). The area surrounding the knoll and site is relatively flat. A two-track road runs directly through the site in a north-south direction. Mary Lake is approximately 200 m to the northeast. Vegetation on the knoll is sparse with scattered aspen and spruce trees. The surrounding vegetation is lowland spruce-hardwood forest and high brush (Figure 104).

The site was located by C.E. Holmes during a 1979 survey. Holmes found two gray chert flakes on the surface (Holmes 1979). In 2012, a Phase II site evaluation located five artifacts in an intensive surface survey (Table 9). A shovel test grid was placed around the datum with datum coordinates at 100E 500N. Transects were placed over the landform 5 m apart with shovel tests excavated at 5 m intervals. Shovel test pits were excavated to glacial till at an average depth of 28cmbs. A total of 38 shovel tests were excavated over the landform and only one shovel test was positive for archaeological material. One 1 m x1 m unit (EU 1) was excavated a meter north of the positive shovel test. The unit was excavated in natural stratigraphic levels (Figure 105, Figure 106). A total of four levels were excavated. Archaeological materials were recovered from just below the sod. Artifacts included 10 chert flakes and one chert biface fragment. A total of 17 artifacts were recovered from the site.

Although artifacts were found in the excavation unit, they are non-diagnostic and at an extremely low density. No features or charcoal was discovered. Shovel tests around the excavation unit provided very little additional cultural material. This site is classified as a small lithic scatter. It does not have any potential for addressing research problems and is not unique in any way. Because of this, XMH-00291 does not meet Criterion D and has been found not eligible for the NRHP.

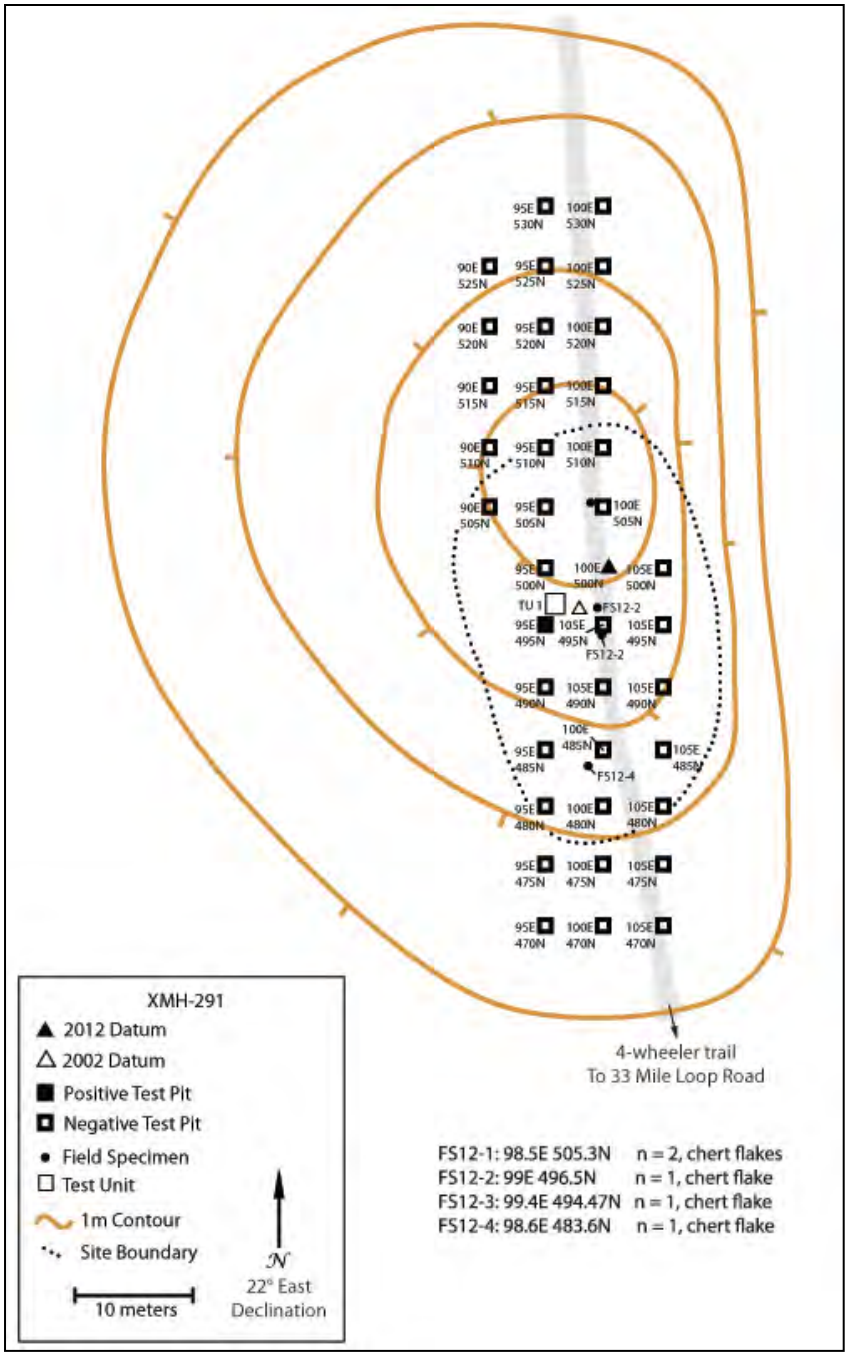

Figure 103. XMH-00291 site map.

Figure 104. XMH-00291 site overview.

Table 9. XMH-00291 artifact accession log.

UA Accession #	FS #	Provenience	Depth	Type	Material	Quantity
UA2012-091-0001	1	98.5E 505.3N	surface	flakes	chert	2
UA2012-091-0002	2	496.5N 99E	surface	flake	chert	1
UA2012-091-0003	3	494.7N 99.4E	surface	flake	chert	1
UA2012-091-0004	4	483.6N 98.6E	surface	flake	chert	1
UA2012-091-0005	5	95E 495N	0-10cm	flake	chert	1
UA2012-091-0006	6	EU1 STRAT II LVL2	25cmbd	flake	chert	1
UA2012-091-0007	7	EU1 STRATII LVL2 SE quad	18-23cmbd	biface frag	chert	1
UA2012-091-0008	8	EU1 STRATII LVL2 SW quad	18-23cmbd	flakes	chert	6
UA2012-091-0009	9	EU1 STRATII LVL2 NE quad	18-23cmbd	flake	chert	1
UA2012-091-0010	10	EU1 STRATII LVL2 NE quad	18-23cmbd	flake	chert	1
UA2012-091-0011	11	EU1 STRATII LVL2 NW quad	18-23cmbd	flake	chert	1

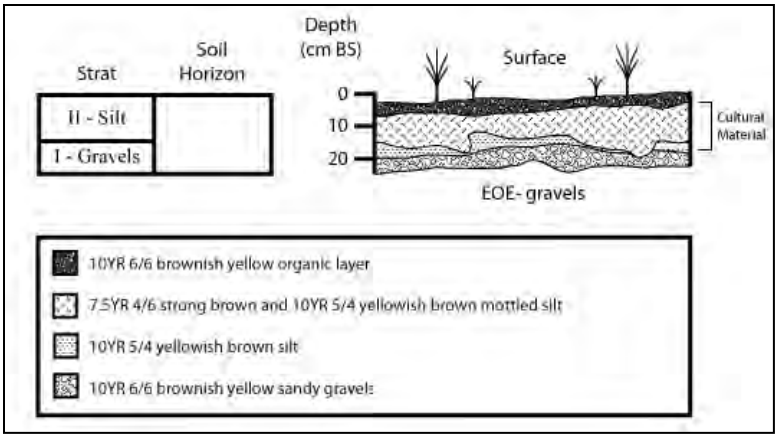

Figure 105. XMH-00291 site stratigraphy.

Figure 106. XMH-00291 excavation unit.

XMH-00308

[redacted]

XMH-00308 was originally discovered by C.E. Holmes during a 1979 survey. Several flakes were noted on a disturbed surface near a road and parking area (Figure 81). The parking area is a

heavily used military location known as Operating Point 6. In 2008, a systematic grip was placed over the site area and 86 shovel tests were excavated (Robertson et al. 2009). Only one chert flake was discovered on the surface. No artifacts were found in any of the test pits. Although the site was found not eligible by CEMML, the SHPO requested a district evaluation before making a determination on the site. CEMML returned to the site on 7 June 2012 and noted that the site has been graded and covered with gravel. There is nothing left of the original surface. The site has been completely destroyed over the years and no parts of it remain (Figure 107, Figure 108).

During discourse with the SHPO over the eligibility of the site in 2008, the XMH-00308 DOE was lumped in DOEs of a group of sites in the southeastern portion of DTA (in the Battle Area Complex Surface Danger Zone Area (BAX SDZ)). This site is, in fact, in a different location (along the OP Road west of the Richardson Highway) and would not be included in a district evaluation of the sites in the BAX SDZ. Although plans are still underway to consider an archaeological district assessment in the cluster of sites in the BAX SDZ area in southeastern DTA, Fort Wainwright requests concurrence with the finding of not eligible for XMH-00308 at this time as it is not part of the potential district and because there is nothing left of the site.

Figure 107. Site XMH-00308 facing east.

Figure 108. Site XMH-00308, facing west.

XMH-00838

[redacted]

Determination of Eligibility: Eligible

Site XMH-00838 is situated 45 m above the Delta River floodplain on the southern side of a partially deflating bluff at 425 masl (Figure 81). The site was located in 1998 by P. Bowers and J. Cook after making an inspection of nearby site XMH-00297. Northern Land Use Research, Inc. (NLUR) excavated a test trench and five 1x1 units during the 1998 investigation. They discovered artifacts, bone, and charred wood on the surface and buried in stratigraphic context. The site has a thick section of loess, sand, and paleosols spanning the entire Holocene (Potter et al. 2007). Although this site has a rich cultural record and significant potential for further research, a DOE was never completed.

The purpose of 2012 site visit was to complete field work for a DOE, monitor the impacts to the site since its discovery in 1998, and to determine the extent of the northern boundary away from the bluff edge. A CEMML crew conducted Phase II evaluations of XMH-00838 from 16-30 August 2012. This fieldwork included site mapping, excavation of nine test pits and 1x2 test unit, and recovery of surface artifacts that had eroded out of the bluff edge down the slope south of the site (Figure 109).

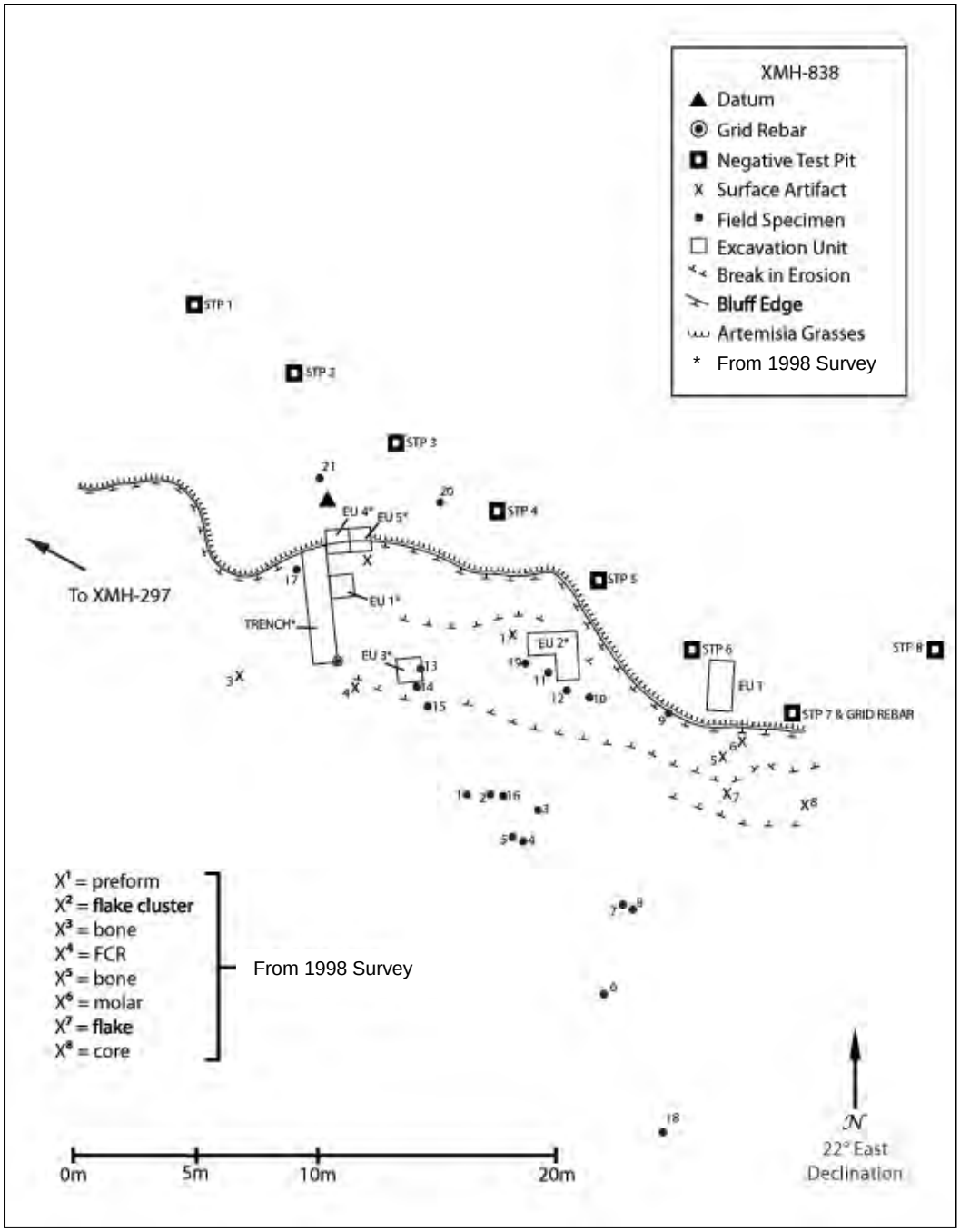

Figure 109. XMH-00838 site map.

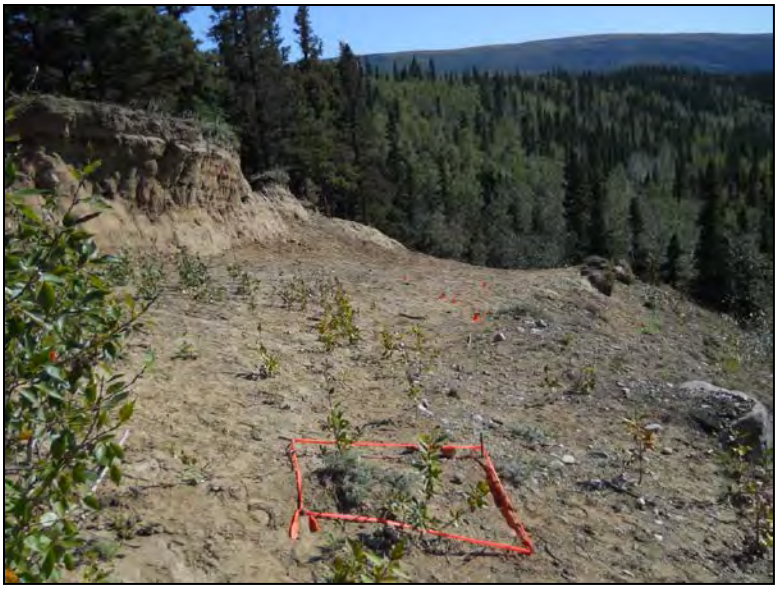

Figure 110. XMH-00838 site overview.

Unfortunately, the site appears to have been significantly impacted by wind erosion, wildlife, and possibly recreation and training in the intervening 15 years since original discovery. Comparison of the present bluff edge location to the 1998 site map and photographs demonstrate that approximately 1 m of sediment has eroded back from the bluff face (Figure 110). The exposed bluff edge continues to undergo wind erosion and bison trails along the bluff edge (and bison hair caught in roots along the bluff face) indicate that bison are also contributing to physical weathering of the site. People also commonly used this corridor in the recent past for access between military operation points (no longer still in use).

The area was extensively examined for surface artifacts. A total of 40 artifacts were recovered including two chert scrapers, a net sinker, an obsidian flake and two tabular cores (Table 10). A row of eight shovel tests were excavated 10 m apart in an east-west direction along the top of the bluff within the tree line. Shovel tests were excavated to an average depth of 155 cmbs. All shovel tests were negative for cultural resources. A 1x2 m unit was excavated at the top of the bluff in an area where two chert flakes were identified along the bluff face within a previously defined cultural component (Paleosol 3, Figure 111, Figure 112). The unit was excavated by shovel skimming 20 cm arbitrary levels; a total of eight levels were excavated to a depth beyond two established cultural components (Paleosol 3 and 5). Archaeological material was not recovered. Soil samples were taken within the 1x2 m of each stratigraphic unit corresponding to the soil profile established in 1998. Soil samples were also taken where the 1998 trench was excavated. The lack of artifacts in the shovel tests north of the bluff edge and

the general infrequency of artifacts elsewhere across the site suggests that either the site has a low density of cultural material or much of the prehistoric campsite has already been eroded during the past.

Table 10. XMH-00838 artifact accession log.

UA Accession #	FS #	Provenience	Depth	Type	Material	Quantity
UA2012-092-0001	1	surface 7.7m @ 140° from datum	N/A	biface	chert	1
UA2012-092-0002	2	surface 8.7m @ 138° from datum	N/A	flake	chert	1
UA2012-092-0003	3	surface 10.2m @ 132° from datum	N/A	flake	obsidian	1
UA2012-092-0004	4	surface 10.2m @ 140° from datum	N/A	flake	chert	1
UA2012-092-0005	5	surface 10.4m @ 142° from datum	N/A	tabular core frags	chert	1
UA2012-092-0006	6	surface 17.5m @ 145° from datum	N/A	flake	chert	1
UA2012-092-0007	7	surface 15.4m @ 135° from datum	N/A	flake	rhyolite	1
UA2012-092-0008	8	surface 15.4m @ 132° from datum	N/A	microblade core tablet	chert	1
UA2012-092-0009	9	surface 14.9m @ 122° from datum	N/A	flake	chert	1
UA2012-092-0010	10	surface 12.4m @ 108° from datum	N/A	flake	rhyolite	1
UA2012-092-0011	11	surface 9m @ 95° from datum	N/A	flakes	rhyolite	10
UA2012-092-0012	12	surface 9.7m @ 100° from datum	N/A	flakes	chert	2
UA2012-092-0013	13	surface 3.2m @ 100° from datum	N/A	net sinker	ground stone	1
UA2012-092-0014	14	surface 3.4m @ 105° from datum	N/A	flakes	chert	2
UA2012-092-0015	15	surface 4m @ 118° from datum	N/A	flake	chert	1
UA2012-092-0016	16	surface 9.2m @ 138° from datum	N/A	flake	rhyolite	1
UA2012-092-0017	17	surface 4.8m @ 350° from datum	N/A	flake	rhyolite	1
UA2012-092-0018	18	surface 23.7m @ 150° from datum	N/A	flake	rhyolite	1
UA2012-092-0019	19	surface 8.9m @ 90° from datum	N/A	flakes	rhyolite	5
UA2012-092-0020.1	20	surface 8.9m @ 40° from datum	N/A	flake	chert	1
UA2012-092-0020.2	20	surface 8.9m @ 40° from datum	N/A	microblade	chert	1

UA2012-092-0021	21	surface 9.1m @ 0° from datum	N/A	flake	chert	1
UA2012-092-0022	22	EU1	paleosol 1	soil sample	N/A	1
UA2012-092-0023	23	EU1	tephra above paleosol 2	soil sample	N/A	1
UA2012-092-0024	24	EU1	paleosol 2	soil sample	N/A	1
UA2012-092-0025	25	EU1	paleosol 3	soil sample	N/A	1
UA2012-092-0026	26	EU1	paleosol 4	soil sample	N/A	1
UA2012-092-0027	27	EU1	tephra w/charcoal between paleosol 4+5	soil sample	N/A	1
UA2012-092-0028	28	EU1	paleosol 5	soil sample	N/A	1
UA2012-092-0029	29	North profile	paleosol 1 0-15cmbs	soil sample	N/A	1
UA2012-092-0030	30	North profile	tephra 1 50-55cmbs	soil sample	N/A	1
UA2012-092-0031	31	North profile	palesol 2	soil sample	N/A	1
UA2012-092-0032	32	North profile	paleosol 3 90-100cmbs	soil sample	N/A	1
UA2012-092-0033	33	North profile	paleosol 4 125cmbs	soil sample	N/A	1
UA2012-092-0034	34	North profile	tephra 135cmbs	soil sample	N/A	1
UA2012-092-0035	35	North profile	tephra + charcoal 135cmbs	soil sample	N/A	1
UA2012-092-0036	36	North profile	paleosol 5 155cmbs	soil sample	N/A	1
UA2012-092-0037	37	South profile	paleosol 1	soil sample	N/A	1
UA2012-092-0038	38	South profile	tephra 1	soil sample	N/A	1
UA2012-092-0039	39	South profile	paleosol 2	soil sample	N/A	1
UA2012-092-0040	40	South profile	paleosol 3	soil sample	N/A	1
UA2012-092-0041	41	South profile	paleosol 4	soil sample	N/A	1
UA2012-092-0042	42	South profile	paleosol 5	soil sample	N/A	1

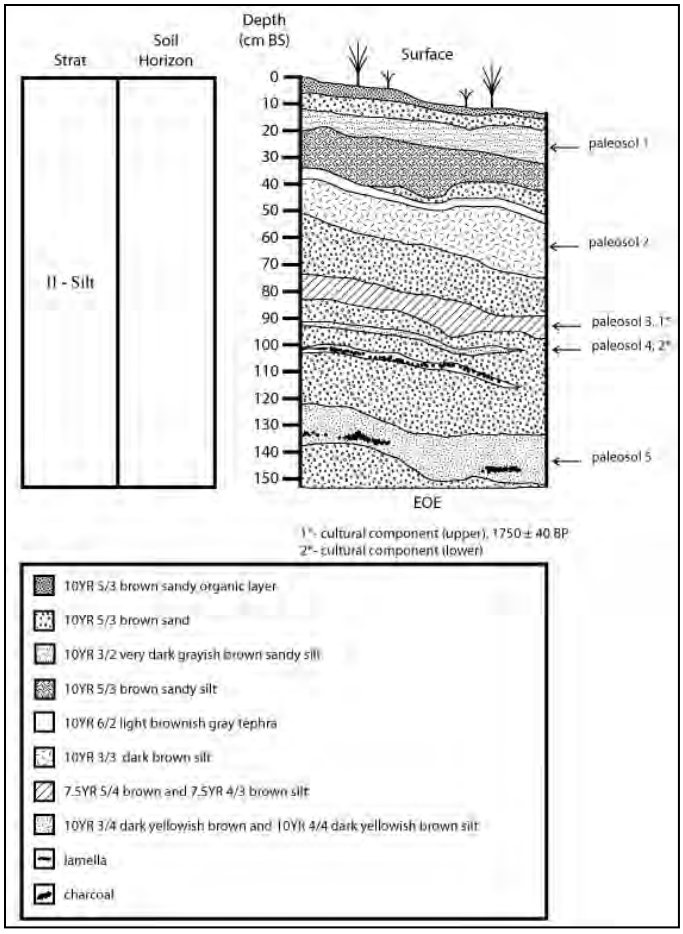

Figure 111. XMH-00838 site stratigraphy.

Figure 112. XMH-00838 excavation unit.

Although much of XMH-00838 has likely been destroyed in the past from physical erosion, Fort Wainwright still finds it eligible for the NRHP for several reasons. First, the site is well stratified with a loess, sand, paleosol, and volcanic ash sequence that can be dated and may provide an important palaeoenvironmental record. Second, it is a multicomponent site - artifacts are found in at least two buried horizons. Third, the combination of volcanic ash, soil organics, and preserved bone makes reliable dating of the site possible. Fourth, deeper cultural deposits may be preserved in sediment below the exposed bluff edge. Finally, although the site is partially eroded, the landform is large and may still contain significant archaeological material.

During the fall of 2012, Fort Wainwright established a temporary mitigation measure to protect both XMH-00838 and neighboring XMH-00297 from further impact by vehicle traffic. Boulders were placed in the road that leads to the site, and Fort Wainwright Range officers agreed to discontinue training in those locations until the sites could be properly mitigated.

XMH-00898

[redacted]

Determination of Eligibility: Not Eligible

XMH-00898 is located on the crest of a ridge line covered with sparse birch growth, approximately 40 m due south of the intersection of Fleet Street and the 33 Mile Loop Road (Figure 81, Figure 113, Figure 114). The site was originally located by CEMML archaeologists during a 2002 survey. A single retouched chert flake was found in a test pit. During this survey, a systematic grid was placed over the ridgeline and 18 additional shovel tests were excavated. No other artifacts were discovered.

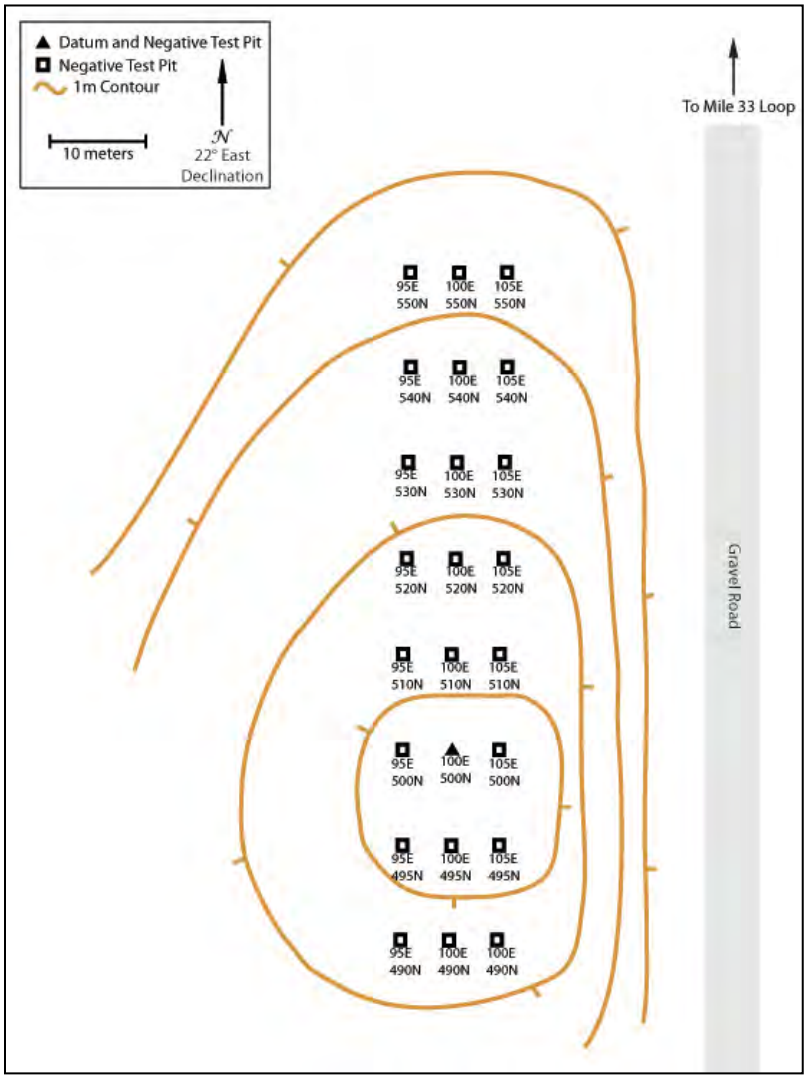

Figure 113. XMH-00898 site map.

Figure 114. XMH-00898 site overview.

CEMML archaeologists returned to the XMH-00898 from 28 June to 3 July 2012 because the site is located within 100 m of a trail that was scheduled for maintenance. During 2012 Phase II evaluations, surface examinations were negative for archaeological materials. An STP grid was set up around the site datum (100E 500N) (Figure 113). Three transects were placed along the narrow landform and STPs were excavated at 10 m intervals. A total of 23 shovel tests were excavated; all were negative for archaeological material.

Site stratigraphy consisted of homogenous silts overlying glacial outwash (Figure 115, Figure 116). Soil development is weak under a 5-8cm organic horizon.

XMH-00898 appears to be an isolated flake. No other artifacts were found at the site despite exhaustive surface examination and subsurface testing. Because there is little potential for more information to be extracted from XMH-0898, Fort Wainwright finds it not eligible for inclusion in the NRHP.

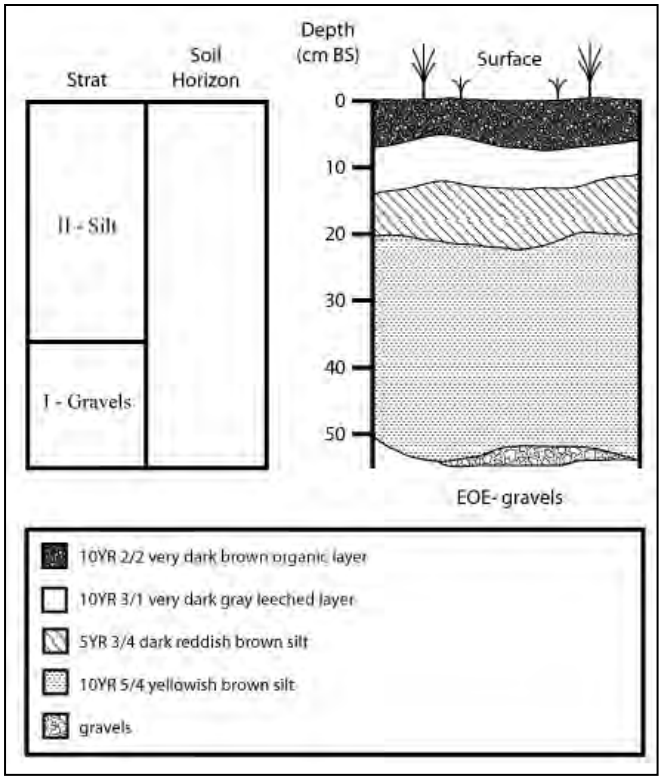

Figure 115. XMH-00898 site stratigraphy.

Figure 116. XMH-00898 shovel test pit.

XMH-00983

[redacted]

Determination of Eligibility: Not Eligible

Site XMH-00983 was discovered during a 2002 field survey of the 33-Mile Loop Road area. A single flake was recorded to be found on a high knoll west of 33 Mile Loop Road (Figure 81, Figure 117). The road bisects the crest of the knoll in a north-south direction. The crest of the hill is approximately 30-40 m in diameter with a slope of 0-2°. The hill slopes gradually, 2-4°on all sides. The location provides a 360° view-shed, with a view of an open flat area surrounding the knoll, Granite Mountains to the southeast, Donnelly Dome to the south and the Alaska Range to the southwest. The ecosystem is characterized by lowland scrub brush. Site vegetation primarily consists of black spruce, dwarf birch, low cranberry, Labrador, grasses in disturbed areas, deer moss, fireweed and aspen. Surface exposure is 0% in undisturbed areas (Figure 118).

Upon examination of the "artifact" in the lab, it was found to be a rock and not a cultural item. Therefore, no artifacts were collected from this landform in 2002. XMH-00983 is being monitored annually as part of the BAX SDZ site monitoring Programmatic Agreement (Esdale et al. 2012b; 2013). It was important to determine whether or not the site was, in fact, a cultural site if Fort Wainwright was planning to continue monitoring the site.

A Phase II evaluation of XMH-00983 took place from 24-26 July 2012. Transects were placed over the landform 10m apart with shovel tests excavated at 5 m intervals. Shovel test pits were excavated to glacial till, average depth was 50 cmbs (Figure 119, Figure 120). Shovel tests showed that aeolian silts, up to 40 cm thick, overly sands and poorly sorted glacial gravels. Phase II evaluations excavated a total of 27 STPs, and all were negative for cultural resources. A 1x1 m unit was not excavated.

There is no evidence that XMH-00983 was ever an archaeological site as no artifacts have been recovered from extensive surface examination and subsurface testing of the landform. Therefore, XMH-00983 is not eligible for the NRHP.

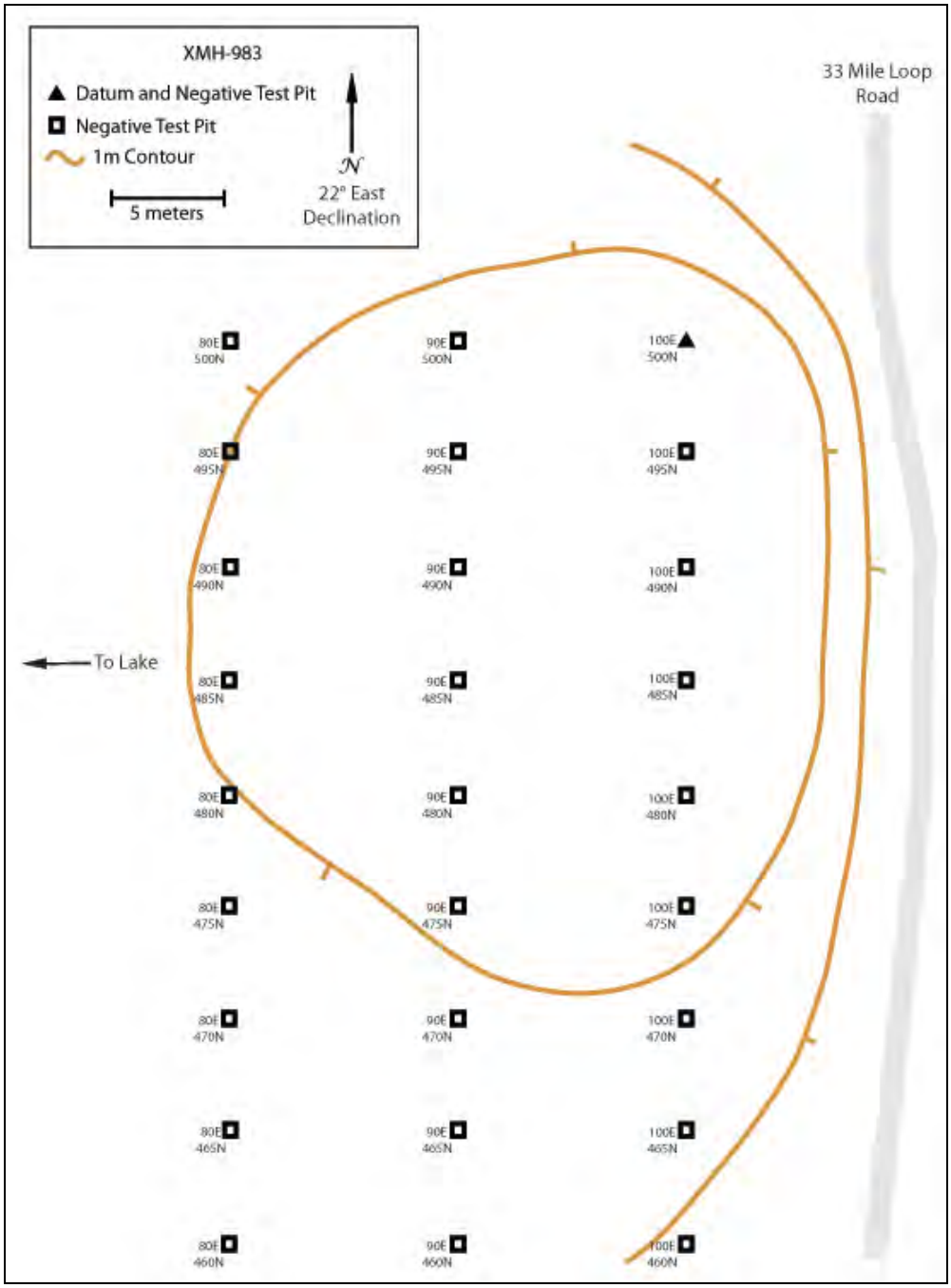

Figure 117. XMH-00983 site map.

Figure 118. XMH-00983 site overview.

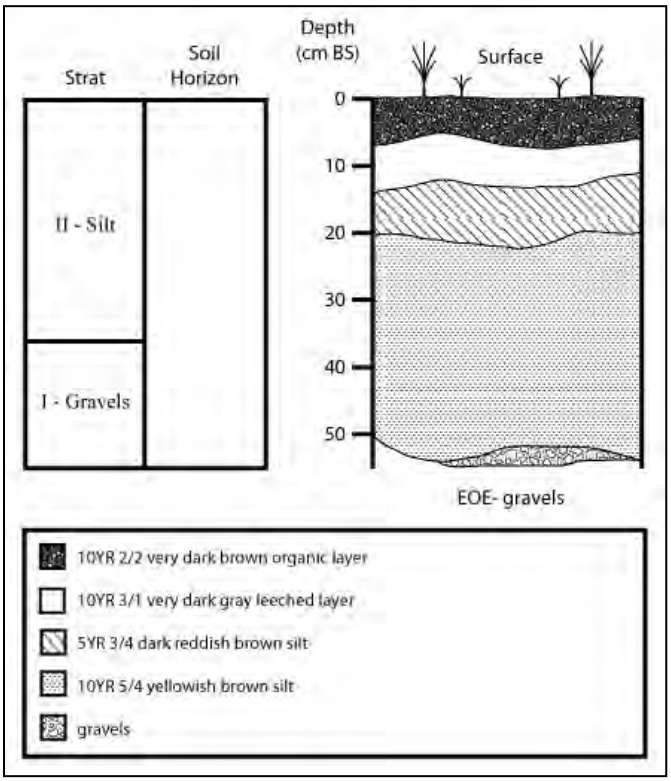

Figure 119. XMH-00983 site stratigraphy.

Figure 120. XMH-00983 shovel test pit.

XMH-01356

[redacted]

Determination of Eligibility: Eligible

XMH-01356 is located on a predominant bluff overlooking the Delta River (Figure 81). The bluff edge faces southwest, and south of the site is a deep drainage. The southern and western edge of the landform are highly eroded (Figure 121). Vegetation at the site consists of scrub plants including sage, juniper, wildflowers and various berries. Small patches of moss and lichen exist, but the primary ground cover is grass, which grows thick and inhibits surface visibility to about 5%. Dwarf trees, mostly poplar, are present across the site. The site is surrounded to the north and east by large spruce and aspen (Figure 122). The nearest water sources are the Delta River and adjoining drainage, both under 50m from the site. Significant disturbances have occurred at the site including excavated fox holes and recent small mammal burrowing, which is contributing to erosion on the western slope.

The site was discovered during shovel testing on a 2008 survey. Two STPs were excavated to a depth of over 1 m. One black and white banded chert flake was found 93 cmbs. Phase II evaluations by CEMML from 18-20 June 2012, aimed to determine the size and significance of the site. A shovel test grid was set up over the site datum. Shovel tests were excavated 5 m apart due to the small area surrounded by sloping landform and bluff edge. A total of 30 STPs

were excavated to glacial till; average depth was over 100 cmbs. Two shovel tests were positive. STP 100E 490N contained a chert flake located 52-62 cmbs, and STP 100E 505N contained a chert flake at 75-90 cmbs (Table 11).

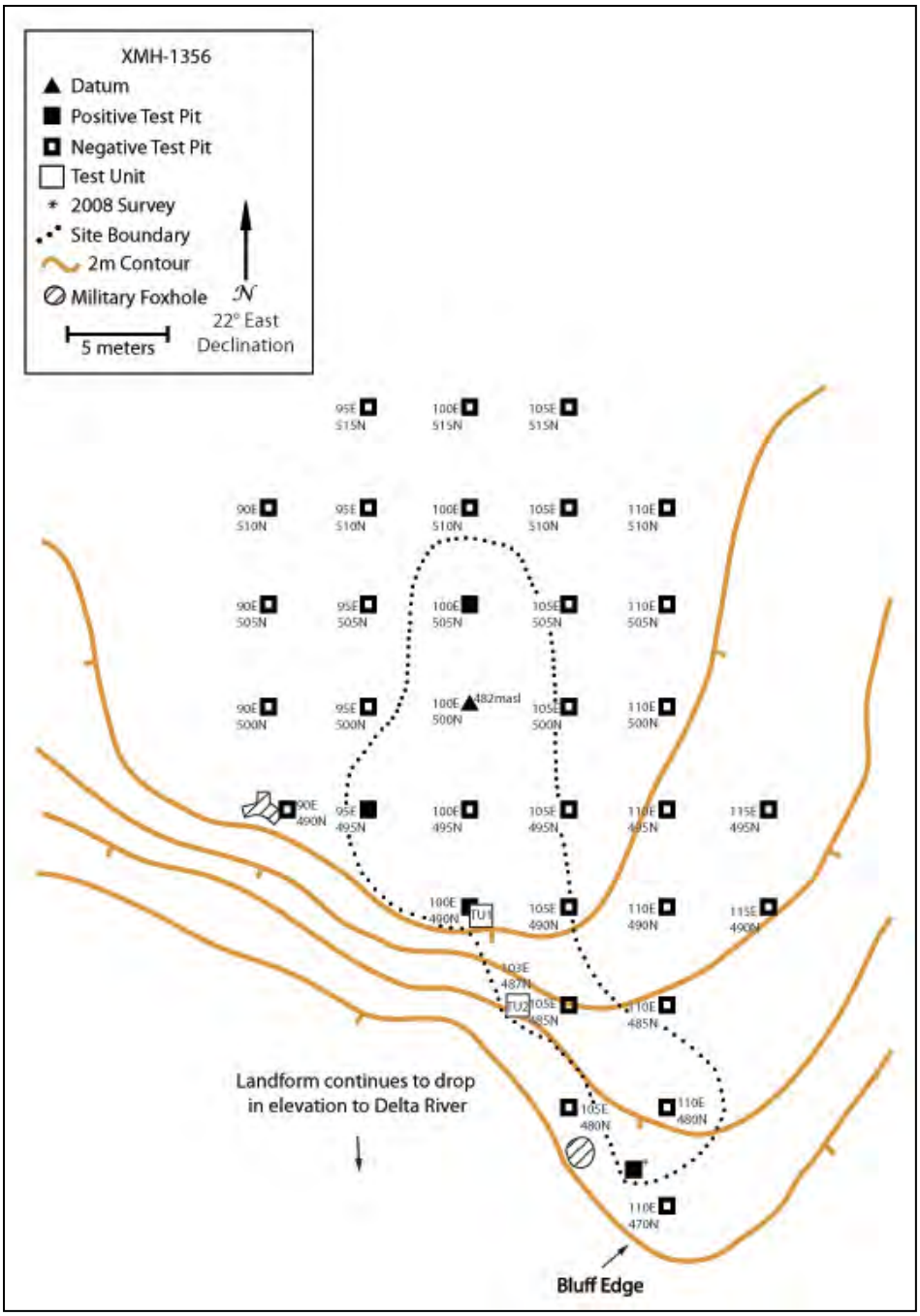

Figure 121. XMH-01356 site map.

Figure 122. XMH-01356 site overview.

Table 11. XMH-01356 artifact accession log.

UA Accession #	FS #	Provenience	Depth	Type	Material	Quantity
UA2012-095-0001	1	100E 490N	50-62cmbs	flake	chert	1
UA2012-095-0002	2	93E 495N	90-95cmbs	N/A	bone	2
UA2012-095-0003	3	100E 505N	75-90cmbs	flake	chert	1
UA2012-095-0004	4	TU1 LVL3 NW1/4	31-36cmbd	N/A	bone	2
UA2012-095-0005	5	TU1 LVL3 103.34E 488.95N	33-36cmbd	N/A	charcoal	1
UA2012-095-0006	6	TU1 LVL3 102.47E 486.72-486.78N	36cmbd in situ	N/A	charcoal	1
UA2012-095-0007	7	TU1 LVL4 102.82E 486.78N	37cmbd in situ	N/A	charcoal	1
UA2012-095-0008	8	TU1 LVL5 102.12E 486.2N SW1/4	51cmbd in situ	flake	quartz	1
UA2012-095-0009	9	100E 490N LVL6 SW1/4	75cmbd	flake	chert	1
UA2012-095-0010	10	TU2 LVL7 100E 490N NE1/4	85.5cmbd	flake (in 2 pieces)	chert	2
UA2012-095-0011	11	LVL10	76-86cmbd	flake	quartz	1
UA2012-095-0012	12	TU1 LVL8	56-61cmbd	hearth soil	N/A	1

Two 1x1m units were excavated at the site (Figure 121). A basin shaped concentration of charcoal and fire cracked rock was observed in the eroding edge of the bluff, at approximately 10 cmbs. Test Unit 1 was placed over this possible hearth feature. The unit was excavated in 5 cm levels until the charcoal concentration was reached. The charcoal feature was bisected, and a soil sample and charcoal sample collected. Fire cracked rock and two quartz flakes were

recovered above and below the charcoal concentration. The remainder of the unit was excavated in 10 cm levels to a depth of 116.

Test Unit 2 was excavated adjacent to positive STP 100E 490N. This unit contained one chert flake recovered from 51-62 cmbs (FS12-1). The unit was excavated in 10 cm levels and a total of ten levels were excavated to a depth of 129 cmbs. A total of eight flakes were recovered from all subsurface excavations. Three flakes were from STPs and five flakes were from 1x1 m test units.

Cultural material at this site is mainly found deeply buried in the silt just above glacial gravels (Figure 123). The silt shows evidence of ancient soil horizons and several stratigraphic levels (Figure 124).

Although lithic materials at this site appear to be at a low density, the presence of artifacts in buried, stratified context, along with fire-cracked rock and charcoal, suggest that the site may be able to contribute to the understanding of prehistoric occupation in the Delta area. Because of this, Fort Wainwright finds XMH-01356 eligible for inclusion in the NRHP.

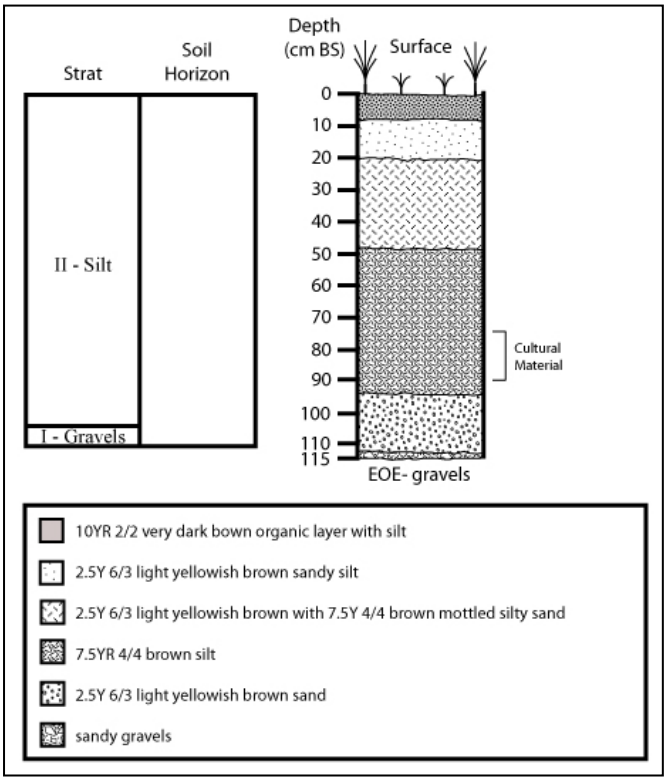

Figure 123. XMH-01356 site stratigraphy.

Figure 124. XMH-01356 excavation test unit 2.

XMH-01357

[redacted]

Determination of Eligibility: Eligible

XMH-01357 is located on a high knoll, 500 m east of the Delta River (Figure 81, Figure 125). Donnelly Dome and the Alaska Range are visible to the southeast. The view shed is minimal due to dense spruce and mixed hardwoods surrounding the knoll (Figure 126). A two-track bisects the knoll, exposing some ground surface. This site was located during a survey in 2008. The surface of the knoll was scattered with artifacts including a gray green biface fragment, two basalt biface fragments, an obsidian flake, two black basalt flakes, two black chert flakes, and a gray green chert core.

CEMML conducted Phase II evaluations of the site on 12-14 and 21 June 2013. Surface examinations located one obsidian flake, one red jasper flake, one gray chert flake, one gray green chert core, and two quartz flakes (Table 12). A shovel test grid was set up around the site datum coordinates with datum at 100E 500N. Shovel tests were excavated 10 m apart. A total 33 STPs were excavated to glacial till at an average depth of 30 cmbs (Figure 127, Figure 128). Three shovel tests were positive for archaeological material: STP 100E 520N contained one chert flake at 32 cmbs, STP 100E 510N contained one chert flake at located 0-6 cmbs, and STP

105E 510N contained one chert flake at 0-10 cmbs. One test unit was excavated between two positive STPs with the SW corner at 105E 511N. Three 10 cm levels were excavated to glacial till. Eleven subsurface artifacts were recovered from the unit.

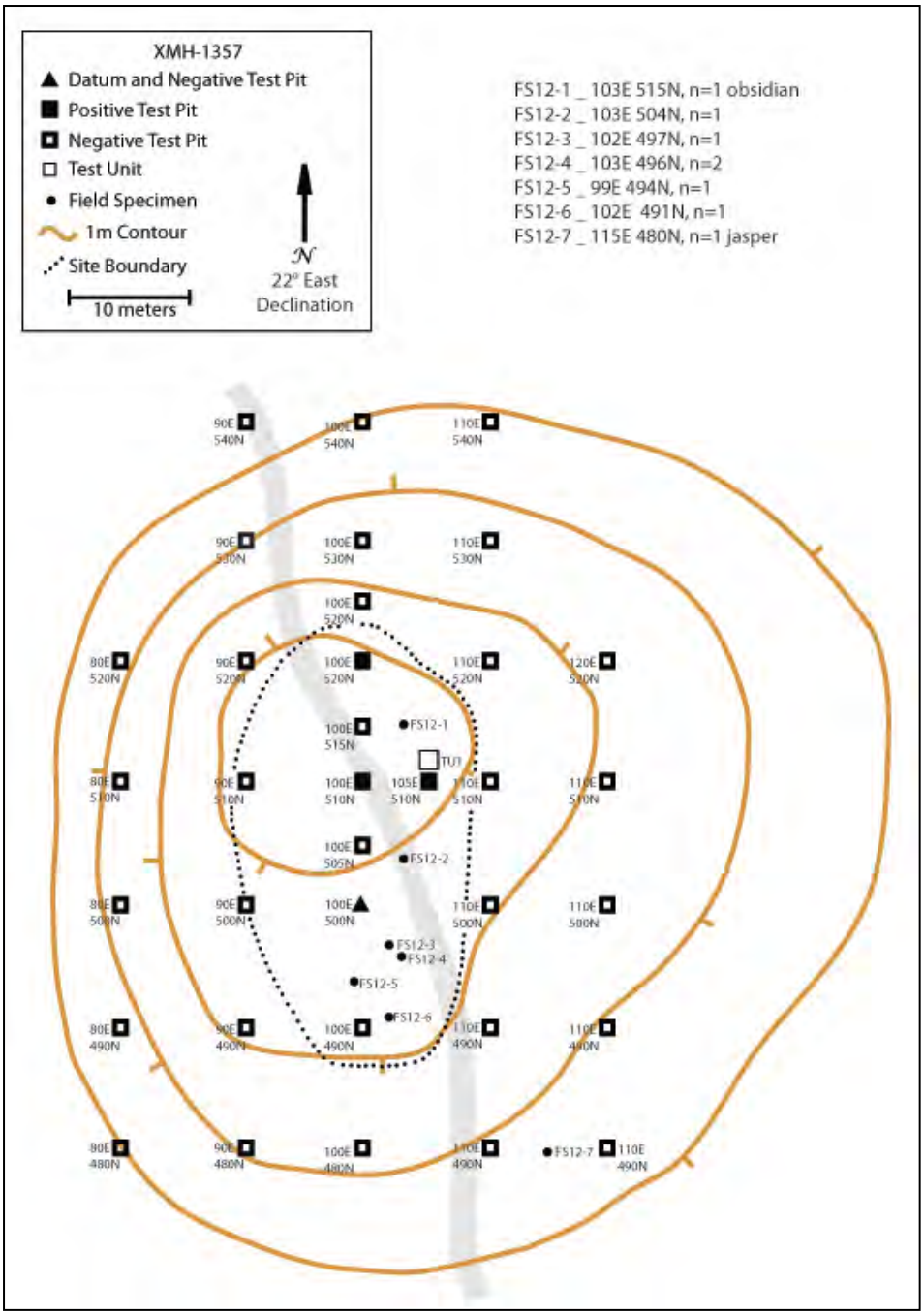

Figure 125. XMH-01357 site map.

Figure 126. XMH-01357 site overview.

Table 12. XMH-01357 artifact accession log.

UA Accession #	FS #	Provenience	Depth	Type	Material	Quantity
UA2012-096-0001	1	103E 515N	surface	flake	obsidian	1
UA2012-096-0002	2	103E 504N	surface	flake	chert	1
UA2012-096-0003	3	102E 497N	surface	flake	chert	1
UA2012-096-0004	4	103E 496N	surface	flakes	quartz	2
UA2012-096-0005	5	99E 494N	surface	abrader	ground stone	1
UA2012-096-0006	6	102E 491N	surface	core	chert	1
UA2012-096-0007	7	115E 480N	surface	flake	jasper	1
UA2012-096-0008	8	100E 510N	0-6cmbs	flake	chert	1
UA2012-096-0009	9	100E 520N	32cmbs	flake	chert	1
UA2012-096-0010	10	105E 510N	0-10cmbs	flake	chert	1
UA2012-096-0011	11	TU1 LVL2	46-56cmbd	flake	chert	1
UA2012-096-0012	12	TU1 LVL2 N1/2	46-56cmbd	flakes	chert	7
UA2012-096-0013	13	TU1 LVL2 S1/2	46-56cmbd	flakes	chert	1
UA2012-096-0014	14	TU1 LVL1	surface-46cmbd	biface frag	chert	1
UA2012-096-0015	15	TU1 LVL1 SE1/4 and SW1/4	surface-46cmbd	flakes	chert	6

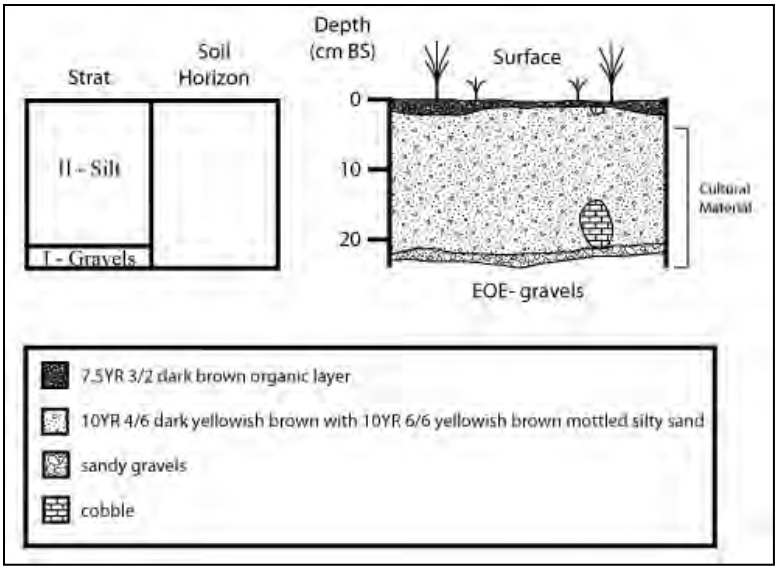

Figure 127. XMH-01357 site stratigraphy.

Figure 128. XMH-01357 shovel test pit.

A total of 14 flakes were recovered from subsurface excavations. Three flakes were from STPs and 11 flakes were from a 1x1 test unit. Although flake density is low at the site, the presence of buried artifacts in a wide range of materials (various cherts, quartz, obsidian, and ground stone) at the site and several formal tools suggests that more information may be extracted from the site in the future. The site integrity remains high despite the two-track running through the middle of the site. Fort Wainwright finds XMH-01357 eligible for inclusion in the NRHP.

XMH-01414

[redacted]

Determination of Eligibility: Eligible

XMH-01414 is located on the toe of the main ridge of Hillbilly Hill in DTA West (Figure 81). The site is surrounded on three sides by poorly drained muskeg (Figure 129). Surface visibility is high, and artifacts were found above and below the surface (Figure 130). The site has a 100% view shed with views of Molly Ridge to the south and Dinosaur Ridge to the northwest. The nearest water source is Hillbilly Lake, one kilometer to the southwest.

XMH-01414 was discovered by New South Associates (Espenshade 2010) during a 2010 survey of various locations in DTA. They noted a high density of archaeological material at the southwestern edge of the landform. A Phase II investigation of the site was undertaken from 9-20 July 2012. A shovel test grid was placed around the site datum at coordinates 100E 500N. Transects were placed over the landform 5 m apart with shovel tests excavated at 5 m intervals. Shovel tests were excavated to glacial till which was encountered at an average depth of 30 cmbs. A total of 24 STPs were excavated and subsurface artifacts were found in nine of these. Two 1x1 m units were excavated both contained archaeological material. Units were excavated with the natural stratigraphy defining the levels. A total of four levels were excavated; artifacts were present in all levels above glacial deposits.

Over 280 pieces of lithic debitage were excavated (Table 13). The majority were made from chert, but rhyolite, basalt, and obsidian artifacts were also present. Formal tools include a wedge-shaped microblade core and a scraper. The debitage at the site is associated with microblade production and bifacial projectile point production.

The site stratigraphy consists of a thin (30-40 cm) layer of silt over glacial gravels). Artifacts were found at all depths within the silt deposits (Figure 131). No charcoal or features were discovered in the test excavations (Figure 132).

Fort Wainwright finds XMH-01414 eligible for inclusion in the NRHP because of its high density of cultural material, intact sedimentary deposits, variety of raw materials including obsidian, and variety of technologies represented. This site has the potential to provide further information about land use strategies and the prehistoric life ways in the region.

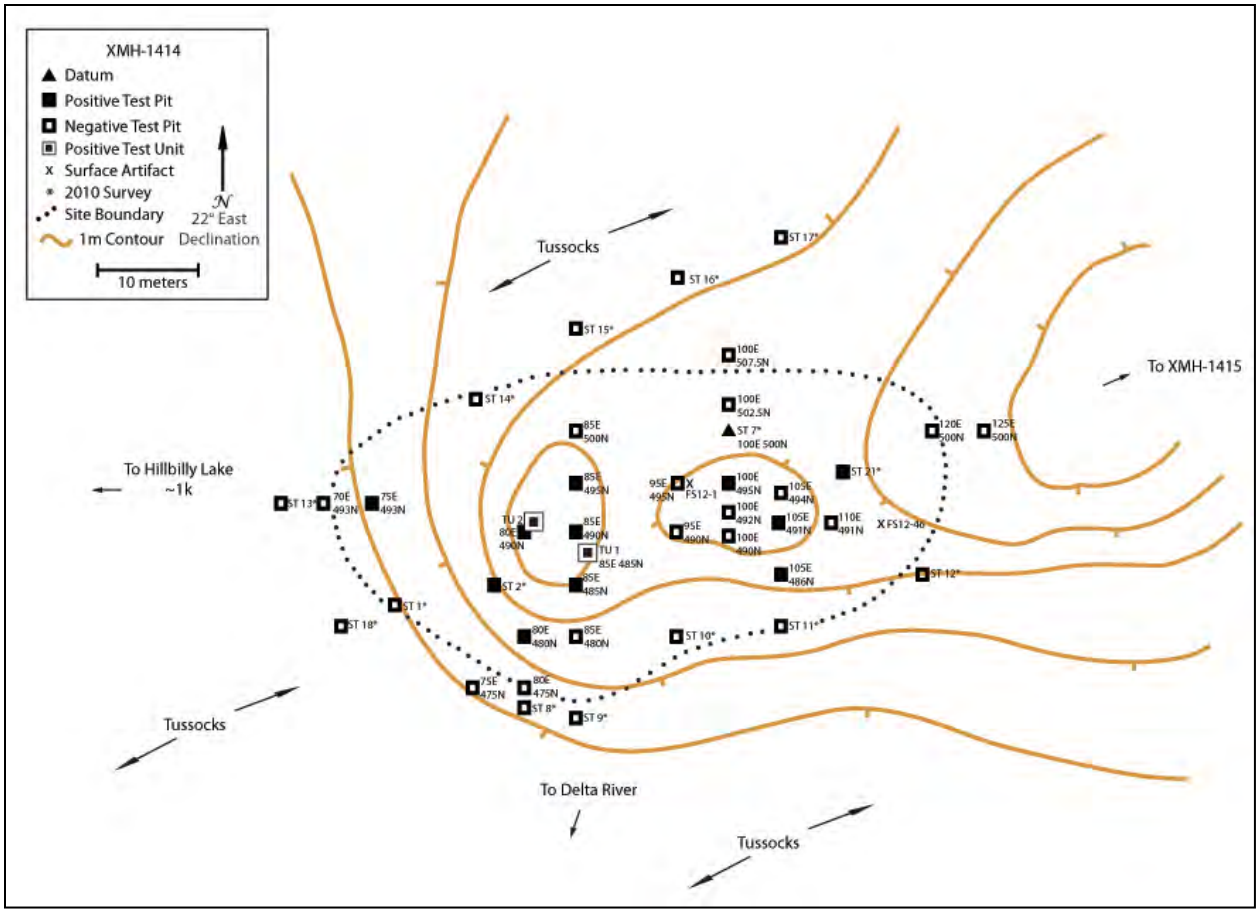

Figure 129. XMH-01414 site map.

Figure 130. XMH-01414 site overview (facing west).

Table 13. XMH-01414 artifact accession log.

UA Accession #	FS #	Provenience	Depth	Type	Material	Quantity
UA2012-98-0001	1	052130N 7094084E	surface	flake	chert	1
UA2012-98-0002	2	100E 495N	surface	flakes	chert	2
UA2012-98-0003	3	100E 495N	surface	flakes	chert/quartz	7
UA2012-98-0004	4	491N 105E	root mat	flake	chert	2
UA2012-98-0005	5	486N 105E	root mat	flake	chert	1
UA2012-98-0006	6	85E 485N	surface	flake	chert	1
UA2012-98-0007	7	85E 490N	0-6cmbs	flakes	chert	16
UA2012-98-0008	8	495N 85E	0-28cmbs	flakes	chert, rhyolite	17
UA2012-98-0009	9	495N 85E	10cmbs	flake	chert	1
UA2012-98-0010.1	10	495N 85E	0-28cmbs	microblade wedge core	chert	1
UA2012-98-0010.2	10	495N 85E	0-28cmbs	microblade	chert	1
UA2012-98-0011	11	480N 80E	surface	flake	chert	1
UA2012-98-0012	12	493N 175E		tabular core	chert	1
UA2012-98-0013	13	493N 75E		flakes	basalt	2
UA2012-98-0014	14	490N 80E	0-5cmbs	flakes	chert, rhyolite	8
UA2012-98-0015	15	490N 80E	5-9cmbs	flakes	chert, rhyolite	8
UA2012-98-0016	16	490N 80E	9-27cmbs	flakes	chert	2
UA2012-98-0017	17	490N 80E	0-5cmbs	flakes	obsidian	6
UA2012-98-0018	18	490N 80E	0-5cmbs	microblade	chert	1
UA2012-98-0019.1	19	490N 80E	5-9cmbs	microblade	chert	1
UA2012-98-0019.2	19	490N 80E	5-9cmbs	microblade	chert	1
UA2012-98-0020	20	490N 80E	9-27cmbs	flakes	obsidian	6
UA2012-98-0021	21	490N 80E	9-27cmbs	microblade	chert	1
UA2012-98-0022	22	493.23N 84.38E	24cmbd	flake	chert	1
UA2012-98-0023	23	TU1 85E 493N LVL1 S1/2	16-23cmbd	flakes	chert	3
UA2012-98-0024	24	TU1 85E 493N LVL1 N1/2	16-23cmbd	flake	chert	1
UA2012-98-0025	25	TU1 85E 493N LVL2 N1/2	23-35cmbd	flakes	chert	2
UA2012-98-0026	26	TU1 85E 493N LVL2 S1/2	23-35cmbd	flakes	chert	1
UA2012-98-0027	27	TU1 85E 493N LVL2 S1/2	23-35cmbd	microblade	rhyolite	1
UA2012-98-0028	28	TU1 85E 493N LVL2 N1/2	23-35cmbd	microblade	chert	1
UA2012-98-0029	29	TU1 85E 493N LVL3 N1/2	35-38cmbd	flakes	chert	4

UA2012-98-0030	30	TU1 85E 493N LVL4 S1/2	38-50cmbd	flake	chert	1
UA2012-98-0031	31	TU2 80E 490.2N LVL1 Strat I	19cmbd	scraper	chert	1
UA2012-98-0032	32	TU2 80E 490.2N LVL1 Strat I S1/2	18-23cmbd	flakes	chert	5
UA2012-98-0033	33	TU2 80E 490.2N LVL1 Strat I S1/2	18-23cmbd	flakes	obsidian	2
UA2012-98-0034	34	TU2 80E 490.2N LVL1 Strat I S1/2	18-23cmbd	microblade	chert	1
UA2012-98-0035	35	TU2 80E 490.2N LVL1 Strat I N1/2	0-3cmbs	flakes	chert	15
UA2012-98-0036	36	TU2 80E 490.2N LVL1 Strat I N1/2	0-3cmbs	flakes	chert, rhyolite	18
UA2012-98-0037	37	TU2 80E 490.2N LVL1 Strat I N1/2	0-3cmbs	microblade	obsidian	1
UA2012-98-0038	38	TU2 80.9E 490.4N LVL2 Strat II in situ	14cmbd	flake	chert	1
UA2012-98-0039	39	TU2 80E 490.2N LVL2 Strat II N1/2	20-27cmbd	flakes	chert	35
UA2012-98-0040.1	40	TU2 80E 490.2N LVL2 Strat II N1/2	20-27cmbd	biface frag	chert	1
UA2012-98-0040.2	40	TU2 80E 490.2N LVL2 Strat II N1/2	20-27cmbd	biface frag	chert	1
UA2012-98-0041	41	TU2 80E 490.2N LVL2 Strat II N1/2	20-27cmbd	flakes	obsidian	6
UA2012-98-0042	42	TU2 80E 490.2N LVL2 Strat II N1/2	20-27cmbd	microblade	chert	1
UA2012-98-0043	43	TU2 80E 490.2N LVL2 Strat II in situ	17cmbd	flake	chert	1
UA2012-98-0044	44	TU2 80E 490.2N LVL2 Strat II S1/2	20-27cmbd	flakes	obsidian	6
UA2012-98-0045	45	TU2 80E 490.2N LVL2 Strat II S1/2	20-27cmbd	flakes	chert	11
UA2012-98-0046	46	115E 491N	surface	flakes	chert	7
UA2012-98-0047	47	TU2 80E 490.2N LVL1 Strat I N1/2	0-3cmbs	flakes	obsidian	7
UA2012-98-0048	48	TU2 80E 490.2N LVL3 Strat III S1/2	20-38cmbd	microblade	chert	1
UA2012-98-0049	49	TU2 80E 490.2N LVL3 Strat III S1/2	20-38cmbd	flakes	chert, rhyolite	26
UA2012-98-0050	50	TU2 80E 490.2N LVL3 Strat III S1/2	20-38cmbd	flakes	obsidian	26
UA2012-98-0051	51	TU2 80E 490.42N LVL3 Strat III in situ	30cmbd	flake	chert	1
UA2012-98-0052	52	TU2 80E 490.2N LVL3 Strat III N1/2	20-38cmbd	blade	chert	1
UA2012-98-0053.1	53	TU2 80E 490.2N LVL3 Strat III N1/2	20-38cmbd	microblade	chert	1
UA2012-98-0053.2	53	TU2 80E 490.2N LVL3	20-38cmbd	microblade	chert	1

		Strat III N1/2				
UA2012-98-0053.3	53	TU2 80E 490.2N LVL3 Strat III N1/2	20-38cmbd	microblade	chert	1
UA2012-98-0054	54	TU2 80E 490.2N LVL3 Strat III N1/2	20-38cmbd	flakes	chert, rhyolite, basalt	206
UA2012-98-0055	55	TU2 80E 490.2N LVL4 Strat III S1/2	38-43cmbd	flakes	chert	8
UA2012-98-0056	56	TU2 80E 490.2N LVL4 Strat III S1/2	38-43cmbd	flake	obsidian	1
UA2012-98-0057	57	TU2 80E 490.2N LVL4 Strat III N1/2	38-43cmbd	flakes	chert	7
UA2012-98-0058	58	TU2 80E 490.2N LVL4 StratII N1/2	38-43cmbd	scraper	chert	1

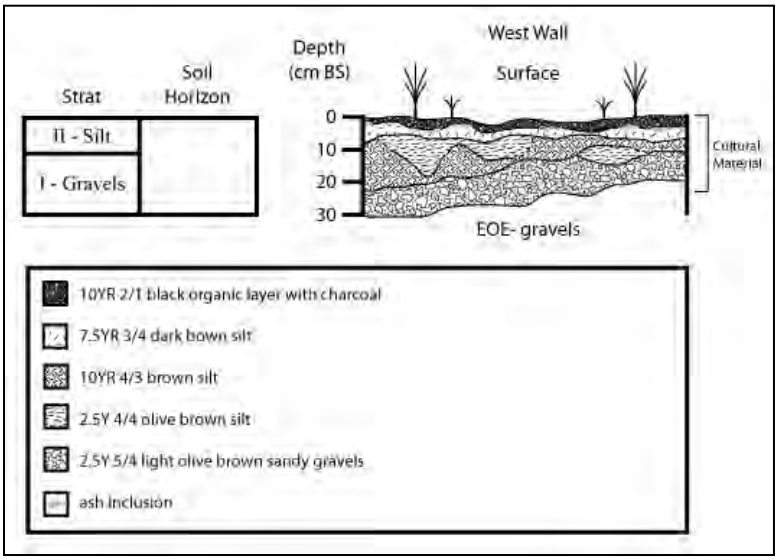

Figure 131. XMH-01414 site stratigraphy.

Figure 132. XMH-01414 excavation unit.

XMH-01415

[redacted]

Determination of Eligibility: Not Eligible

XMH-01415 is located along the high point of the main ridge of Hillbilly Hill in DTA West (Figure 81). The site is surrounded on three sides by poorly drained muskeg (Figure 133). Surface visibility is moderate (Figure 134). The site has a 100% view shed with views of Molly Ridge to the south and Dinosaur Ridge to the northwest. The nearest water source is Hillbilly Lake, one kilometer to the southwest.

XMH-01415 was discovered by New South Associates (Espenshade 2010) during a 2010 survey of various locations in DTA. They noted two grey chert flakes in a single test pit 200 m north of XMH-01414. A Phase II investigation of the site was undertaken from 9-20 July 2012. A shovel test grid was placed around the datum at coordinates 100E 500N. Transects were placed over the landform 5 m apart with shovel tests excavated at 5 m intervals. Shovel test pits were excavated to glacial till at an average depth of 24 cmbs (Figure 135, Figure 136). Phase II evaluations excavated a total of 23 shovel test pits; all were negative for archaeological materials. A 1x1 m test unit was not excavated.

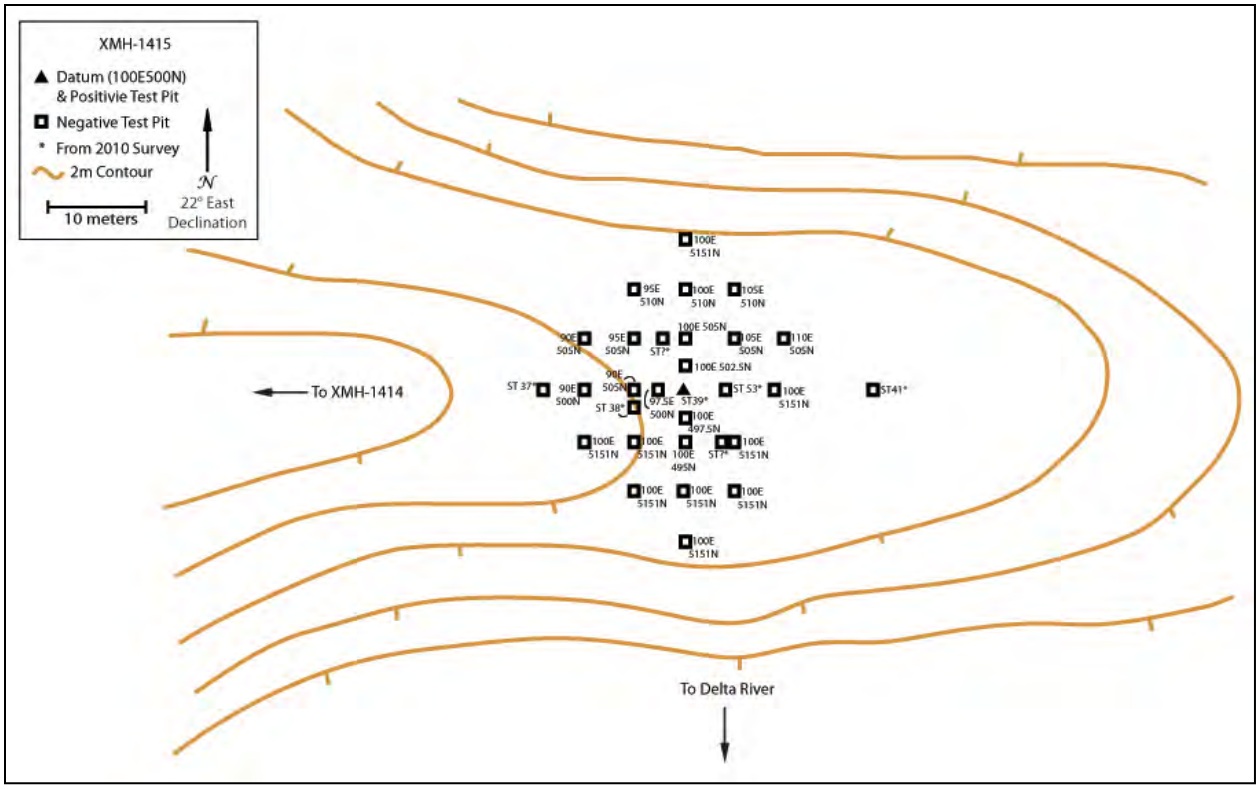

Figure 133. XMH-01415 site map.

Figure 134. XMH-01415 site overview.

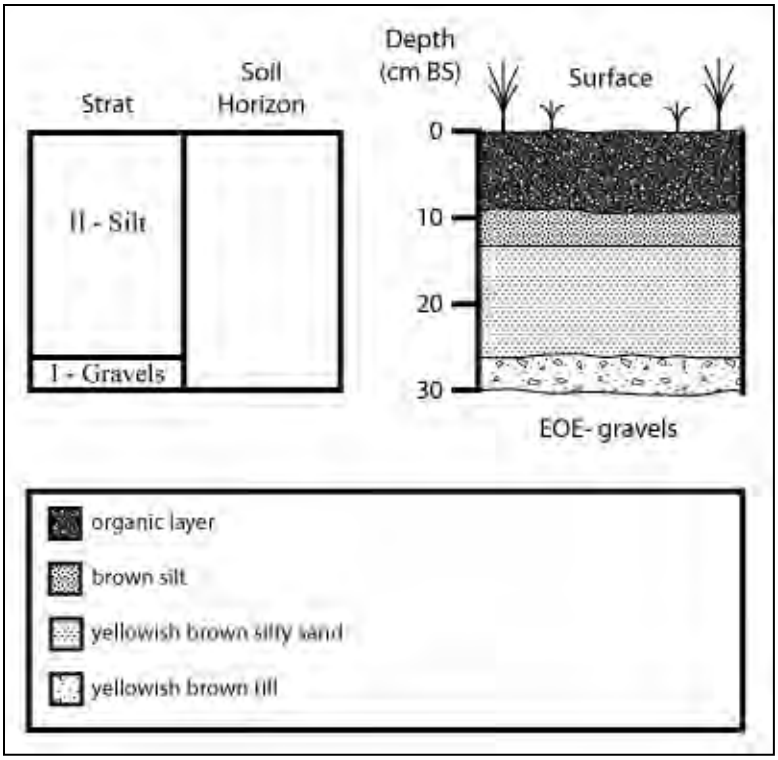

Figure 135. XMH-01415 site stratigraphy.

Figure 136. XMH-01415 shovel test pit.

XMH-01415 appears to be an isolated find. No other cultural materials were discovered within 100 m of the original positive test pit. Because of the low density of materials and insignificance of the find, Fort Wainwright finds XMH-01415 not eligible for the NRHP.

XMH-01450

[redacted]

Determination of Eligibility: Eligible

XMH-01450 is located in the Molybdenum Ridge area of DTA West (Figure 81). The site is on a small, rock-covered and vegetated rise on a landform that extends northwest-southeast west of Delta Creek and east of Gold Pan Creek (Figure 137). The rise is approximately 25 x 25 m and less than 10 m above its surrounding area. The adjacent landscape is covered in tussocks and rises >50 m above the surrounding valleys. Molybdenum Ridge is visible to the southwest, Dinosaur Ridge is to the northwest, and small lakes are visible to the northeast. There is 20%-30% surface visibility, which consists of gravels and large rocks with some silt (Figure 138).

Vegetation includes low scrub, moss, lichen, dwarf birch, alder, low bush cranberry and blueberry, and scattered spruce (Figure 139).

Figure 137. Aerial view of XMH-01450

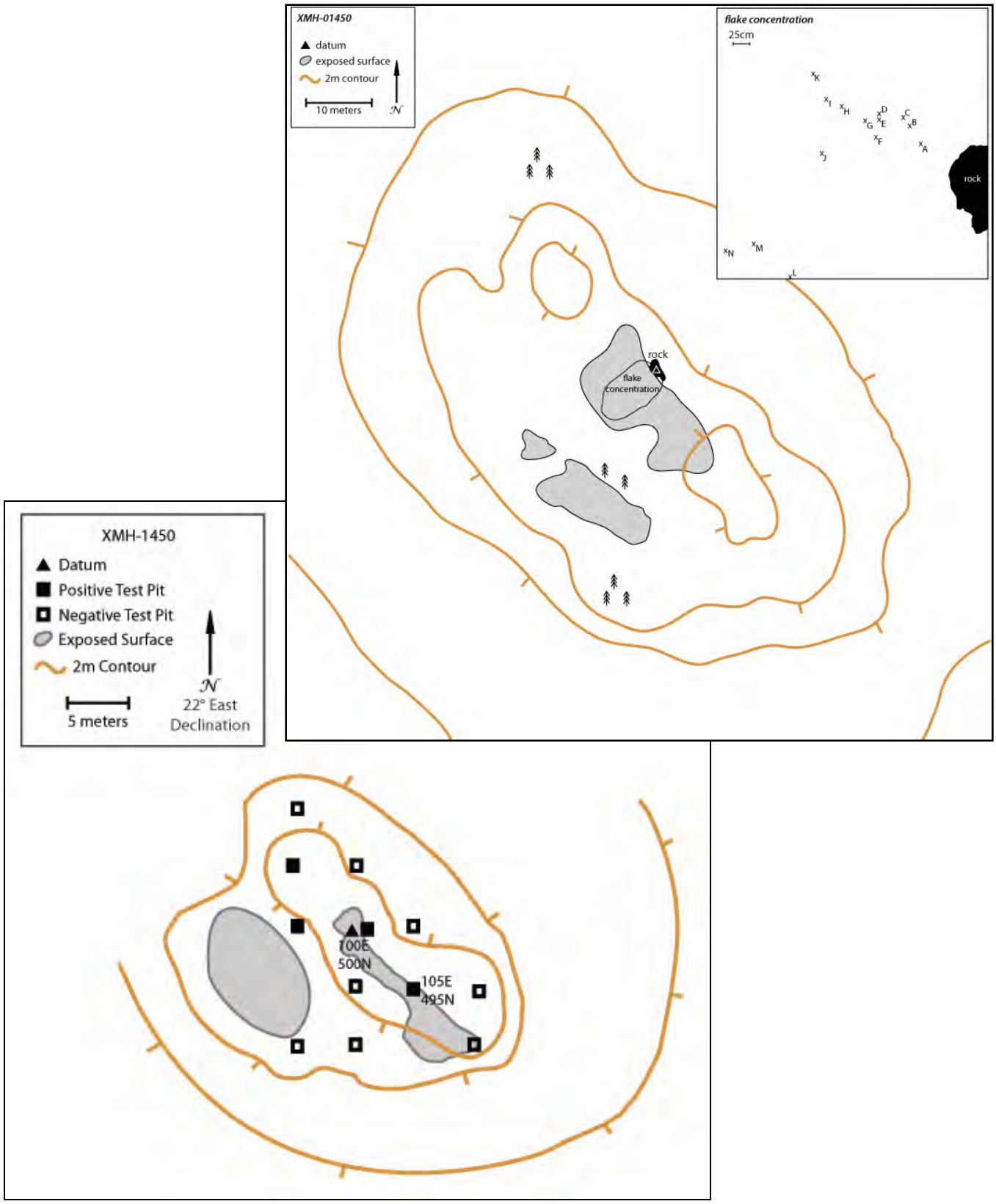

Figure 138. XMH-01450 site map.

Figure 139. XMH-01450 overview

Initial investigations by CEMML in 2011 discovered a surface scatter of 14 flakes made from a variety of cherts and rhyolite. At that time, no artifacts were collected and no subsurface testing was conducted.

Upon returning for evaluation from 9-20 July 2012, 13 of the initial surface flakes were relocated, mapped, and collected. Shovel tests were systematically placed throughout the site area at intervals of 5 m. A total of 12 new shovel tests were excavated. The depths of the shovel tests varied, but all were excavated to glacial till. Four of these shovel tests were positive. One positive shovel test yielded 58 flakes, including one found *in situ* in the south wall at a depth of 16 cm.

Over 112 artifacts were found in total at XMH-01450 (Table 14). Thirteen flakes came from the surface, 68 came from shovel test pits, and over 31 artifacts were located in the excavation unit. Artifact materials were primarily light gray or banded chert, rhyolite, and quartz.

One 1x1 m test unit was excavated at XMH-01450 and was situated directly west of the positive shovel test with the *in situ* flake. The unit was excavated in 10cm levels until glacial till was reached throughout the entire unit floor (Figure 140, Figure 141). A total of four levels were excavated to bring the unit down to a uniform glacial till. No subsurface features were found during the excavation of this unit. Test Unit 1 was covered by a thick organic root mat. Under the organic mat was a dark brown moderately compact loess soil layer mottled with gray loess from which a majority of the artifacts came. These were the most substantial layers lying on top

of glacial till, which was compacted with a high density of gravel and larger cobbles, and dark brown in color. Two large boulders took up nearly 50% of the unit and many other smaller cobbles littered the unit floor (Figure 142).

Site XMH-01450 yielded over 112 flakes of various materials and is in an excellent position to contribute to our knowledge of prehistoric land use patterns and potentially contribute to a broader regional context. Site XMH-01450 is an intact archaeological site with integrity. Charcoal found may provide evidence of site age. For these reasons, XMH-01450 is eligible for inclusion in the NRHP.

Table 14. XMH-01450 artifact accession log.

UA Accession #	FS #	Provenience	Depth	Type	Material	Quantity
UA2012-100-0001	1	105E 495N	0-15cmbs	flakes	chert	1
UA2012-100-0002	2	100E 500N A	10-20cmbs	flakes	chert	37
UA2012-100-0003	3	100E 500N A	20-25cmbs	flakes	chert	16
UA2012-100-0004	4	100E 500N A	10-28cmbs	flakes	chert	5
UA2012-100-0005	5	95E 505N	0-14cmbs	flakes	chert	2
UA2012-100-0006	6	95E 500N	0-10cmbs	flake	chert	1
UA2012-100-0007	7	concentration A	surface	flakes	chert	13
UA2012-100-0008	8	TU1 E1/4	19-20cmbd	flake	chert	1
UA2012-100-0009	9	TU1 W1/4	20-30cmbd	flakes	chert/quartz	6
UA2012-100-0010	10	TU1 W1/4	20-30cmbd	N/A	charcoal	1
UA2012-100-0011	11	TU1 LVL1 E1/4	20-30cmbd	flakes	chert	5
UA2012-100-0012	12	TU1 LVL2 S1/4	20-30cmbd	flakes	chert	2
UA2012-100-0013	13	TU1 LVL3 S1/4	30-80cmbd	flake	chert	1
UA2012-100-0014	14	TU1 LVL3 S1/4	30-80cmbd	N/A	charcoal	1
UA2012-100-0015	15	TU1 LVL3 E1/4	30-40cmbd	flakes	chert	8
UA2012-100-0016	16	TU1 LVL3 N1/4	30-40cmbd	flakes	chert	7
UA2012-100-0017	17	TU1 LVL3 W1/4	30-40cmbd	flakes	chert	2
UA2012-100-0018	18	TU1 LVL4 N1/4	40-50cmbd	flakes	chert	6
UA2012-100-0019	19	TU1 LVL4 E1/4	40-50cmbd	flake	chert	1

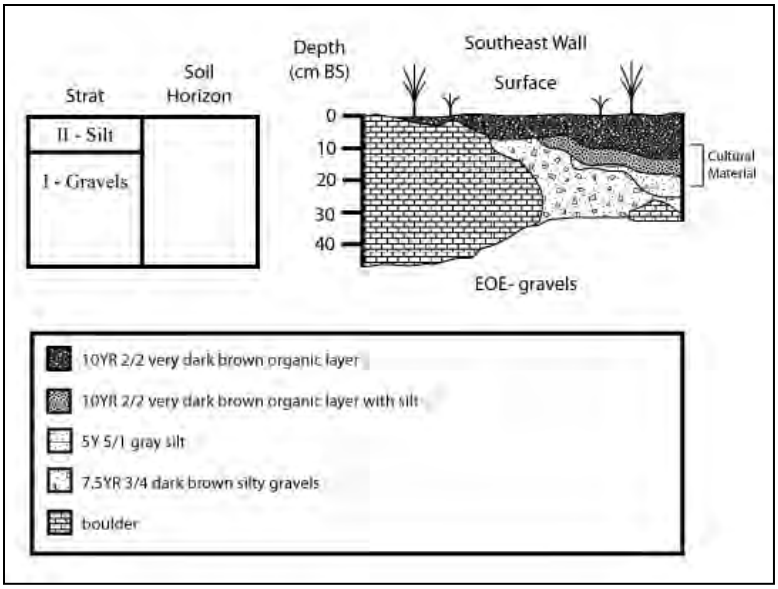

Figure 140. XMH-01450 site stratigrapy.

Figure 141. XMH-01450 shovel test pit.

Figure 142. XMH-01450 excavation unit.

XMH-01457

[redacted]

Determination of Eligibility: Not Eligible

XMH-01457 is located on a high knoll in DTA East (Figure 81). The nearest water source is an unnamed lake 500 m to the southeast. The location provides a 360° view-shed (Figure 143). Visible landmarks include the Delta River to the northwest, the Granite Mountains, to the southeast, and the Alaska Range to the southwest. The ecosystem is characterized as upland rocky broadleaf forest and human disturbed barrens (Figure 144). Site vegetation primarily consists of mixed forest with small birch, alder and dead standing spruce. Surface visibility is 95%. Ground cover is sparse consisting of moss in areas not exhibiting erosional exposures.

The site was located in 2011 during a pedestrian survey. Two chert bifaces were discovered on the ground surface. A Phase II evaluation of the site was conducted 9 and 13-15 August 2012. A shovel test grid was placed around the datum with coordinates of 100E 500N. Two chert flakes were found on the ground surface east of the datum (UA2012-99). Transects were placed over the landform 5 m apart with shovel tests excavated at 5 m intervals. Phase II evaluations excavated a total of 22 STPs all were negative for cultural resources. Shovel test pits were excavated to glacial till, average depth was 31 cmbs. One 1x1 m unit (EU 1) was excavated 50

cm west of STP 95E 500N in the location of surface artifacts (Figure 145). Test Unit EU 1 was excavated with the natural stratigraphy defining the levels. A total of three levels were excavated, all were negative for cultural resources. Site stratigraphy consists of aeolian silts overlying aeolian sands and poorly sorted gravels (Figure 146).

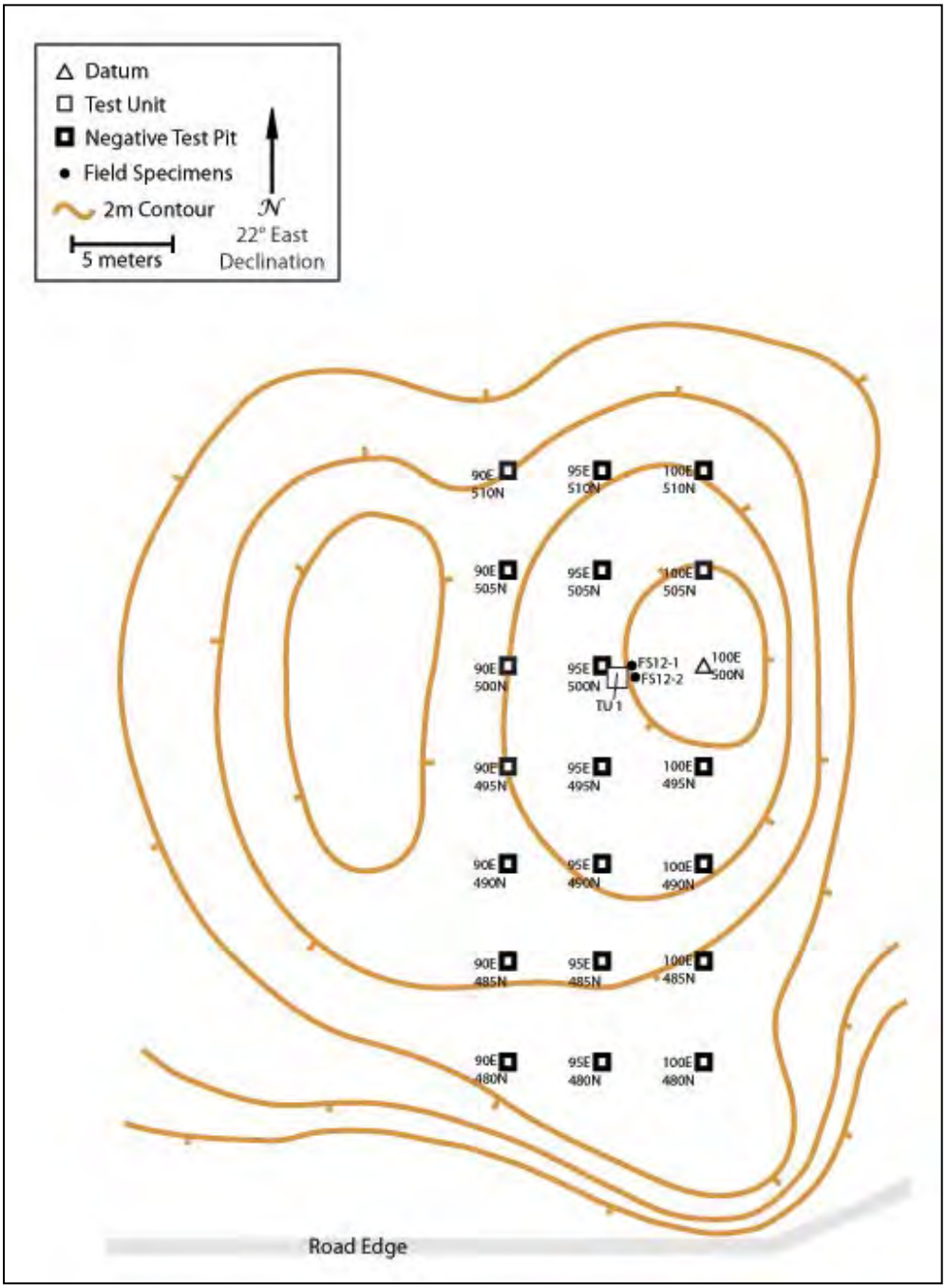

Figure 143. XMH-01457 site map.

Figure 144. XMH-01457 site overview.

Figure 145. XMH-01457 excavation unit.

A total of four artifacts were recovered from the site: two biface blanks were located in 2011 and two chert flakes in 2012. Because of the paucity of archaeological material at the site and the fact that there is no sub-surface expression of the site, Fort Wainwright finds XMH-01457 not eligible for inclusion in the NRHP.

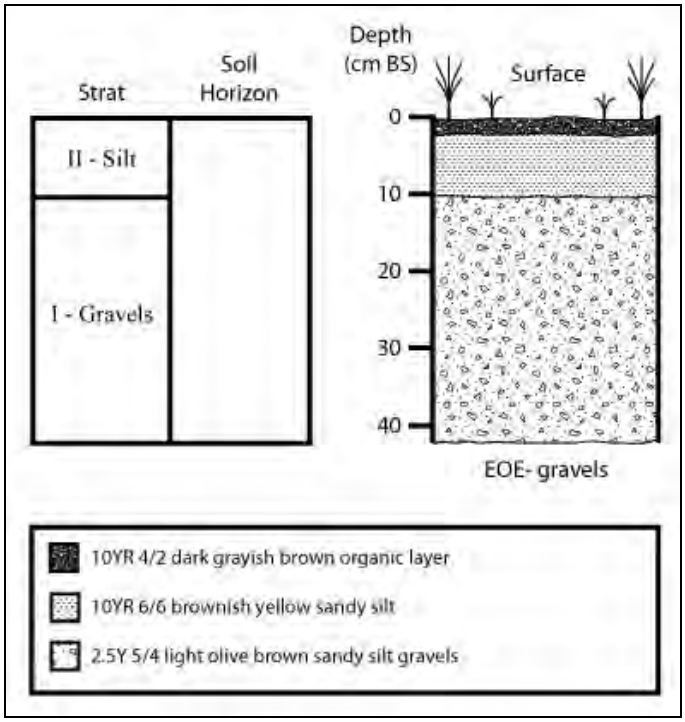

Figure 146. XMH-01457 site stratigraphy.

Tanana Flats Training Area DOEs

During the 2012 field season, the CEMML archaeology team visited Salmon Loaf Butte in TFTA. Three sites were known from this location: FAI-01357, FAI-01888, and FAI-01889. New boundaries for FAI-01357 were sent to the SHPO on August 2 2012, in conjunction with a construction project. SHPO reviewed the site information on 27 Aug 2012. A DOE of one site on Salmon Loaf, FAI-01889, was also conducted at that time. This site was also found eligible for the NRHP.

FAI-01889

[redacted]

Determination of Eligibility: Eligible

FAI-01889 is found on the western end of Salmon Loaf Butte in TFTA (Figure 147). The site is located on a trail that extends east-west along the crest of the butte and terminates in the vicinity of the site (Figure 148). Surface visibility is limited to areas disturbed by the trail. The site slope is 0%-10%, and the landform drops steeply to both the north and south. This vantage point provides a 270° view shed of the surrounding areas.

Vegetation at the site consists of aspen, white spruce, and birch, with a thick understory of low-bush cranberry, wild rose, grasses, forbs, and some dwarf scrub (Figure 149). The site elevation is 168 masl.

FAI-01889 was discovered during a 2008 survey of Salmon Loaf Butte and Clear Creek Buttes. Seven flakes and two pieces of calcined bone were found on the surface in areas disturbed by the trail. No shovel tests were excavated at the time. There was abundant evidence of modern recreational and military use of the site, although there was minimal evidence of ground disturbance. A wildfire went through the area in 2010, removing much of the scrub vegetation from the top of the site.

A Phase II investigation of the site took place on 13-14 June 2012 while the CEMML archaeology crew was surveying a proposed construction project at the opposite end of Salmon Loaf Butte. A 10m grid was set up over the site south of the 2008 datum (Figure 148). A thorough surface examination recovered 26 flakes, one microblade, and one scraper made from chert, rhyolite, and obsidian (Table 15). Eleven of the 12 shovel tests excavated produced additional archaeological material. One 1x2m test unit was excavated (Figure 150). An additional 140

flakes were found in shovel tests and the excavation unit. Four microblades, one microblade core, and two scrapers were also excavated.

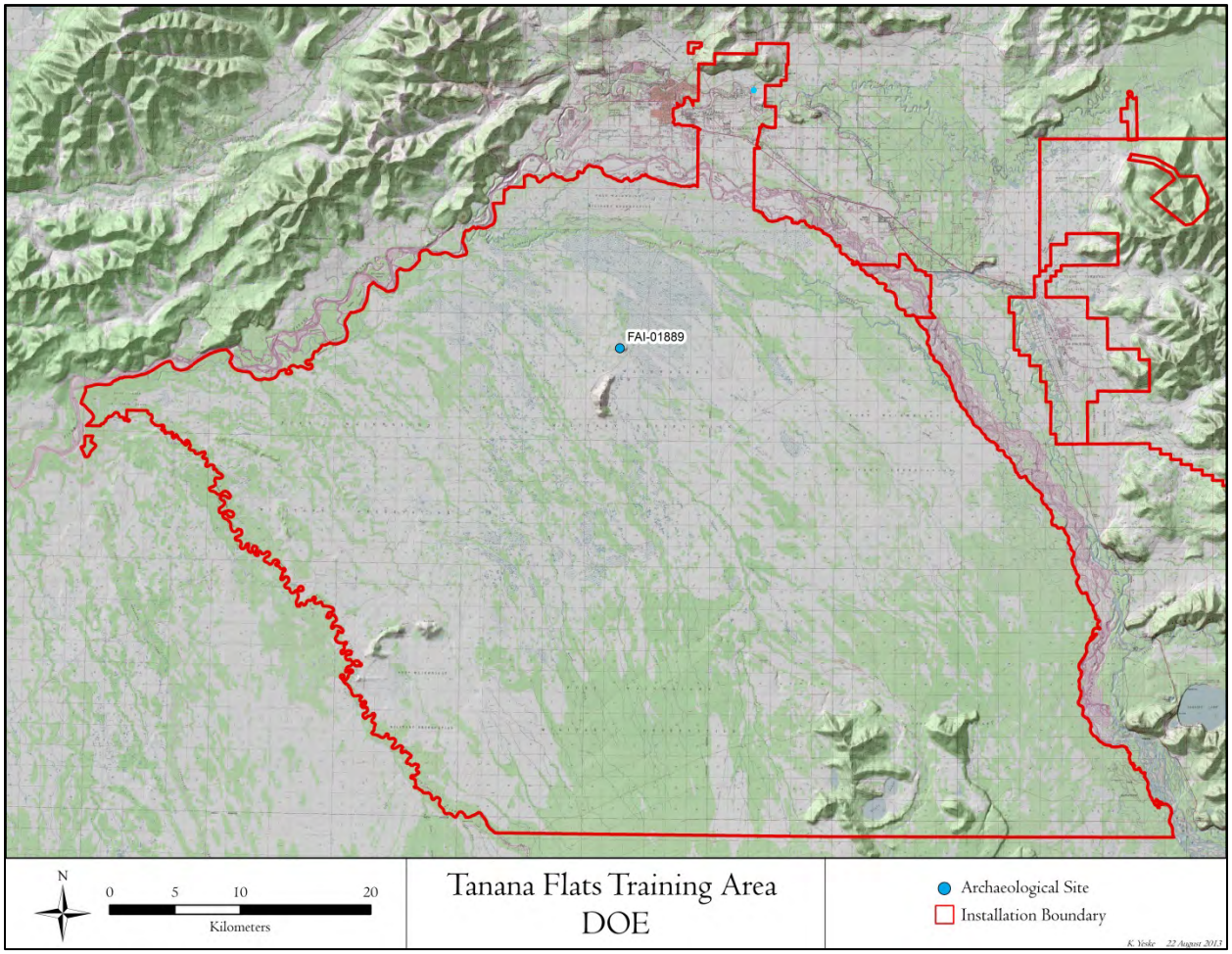

Figure 147. TFTA DOE locations.

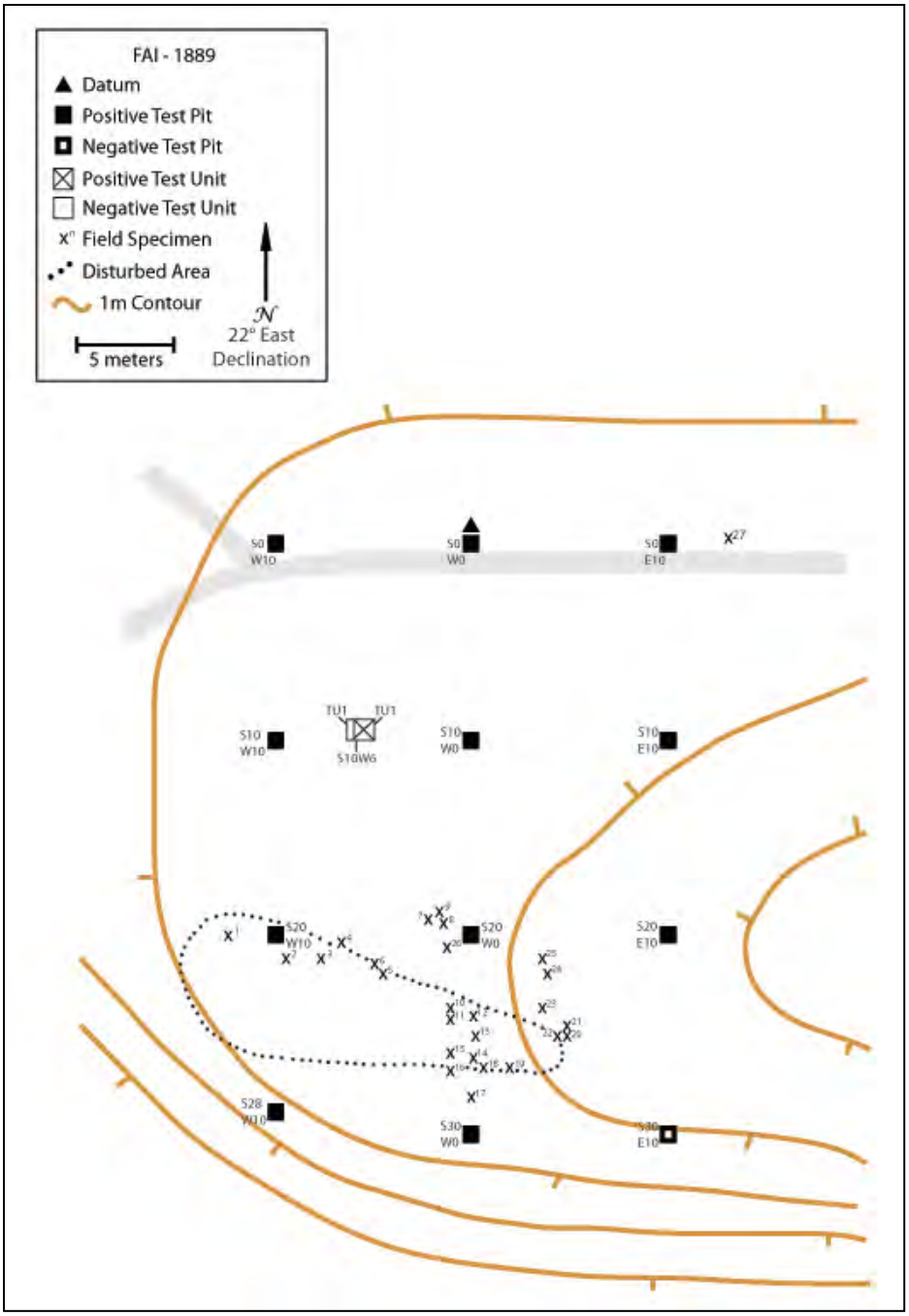

Figure 148. FAI-01889 site map.

Figure 149. FAI-01889 site overview (facing south).

Figure 150. FAI-01889 excavation unit.

Table 15. FAI-01889 artifact accession log.

UA Accession #	FS #	Provenience	Depth	Type	Material	Quantity
UA2012-109-0001	1	Surface	N/A	flake	chert	1
UA2012-109-0002	2	Surface	N/A	flake	chert	1

UA2012-109-0003	3	Surface	N/A	flake frag	chert	1
UA2012-109-0004	4	surface	N/A	flake	chert	1
UA2012-109-0005	5	Surface	N/A	flake	chert	1
UA2012-109-0006	6	Surface	N/A	microblade	obsidian	1
UA2012-109-0007	7	surface	N/A	flake	chert	1
UA2012-109-0008	8	Surface	N/A	flake	chert	1
UA2012-109-0009	9	Surface	N/A	flake	chert	1
UA2012-109-0010	10	Surface	N/A	flake	chert	1
UA2012-109-0011	11	Surface	N/A	flake	chert	1
UA2012-109-0012	12	Surface	N/A	flake	chert	1
UA2012-109-0013	13	surface	N/A	flake	chert	1
UA2012-109-0014	14	surface	N/A	flake	rhyolite	1
UA2012-109-0015	15	surface	N/A	flake	rhyolite	1
UA2012-109-0016	16	surface	N/A	flake	chert	1
UA2012-109-0017	17	surface	N/A	flake	obsidian	1
UA2012-109-0018	18	surface	N/A	flake	chert	1
UA2012-109-0019	19	surface	N/A	flake	rhyolite	1
UA2012-109-0020	20	surface	N/A	flake	obsidian	1
UA2012-109-0021	21	surface	N/A	flake	chert	1
UA2012-109-0022	22	surface	N/A	flake	obsidian	1
UA2012-109-0023	23	surface	N/A	flake	chert	1
UA2012-109-0024	24	surface	N/A	flake frag	chert	1
UA2012-109-0025	25	surface	N/A	flake	chert	1
UA2012-109-0026	26	surface	N/A	flake	chert	1
UA2012-109-0027	27	surface	N/A	flake	chert	1
UA2012-109-0028	28	0S 10W	10-20cmbs	flake	chert	1
UA2012-109-0029	29	0S 10W	20-30cmbs	flake	obsidian	1
UA2012-109-0030	30	10S 10W	0-3cmbs	microblade core	chert	1
UA2012-109-0031	31	10S 10W	0-10cmbs	flakes	chert	3
UA2012-109-0032	32	10S 10W	10-20cmbs	flakes	chert	9
UA2012-109-0033	33	10S 10W	20-30cmbs	flakes	chert	6
UA2012-109-0034	34	10S 10W	30-40cmbs	flake	chert	1
UA2012-109-0035	35	20S 10W	0-10cmbs	flakes	chert	3
UA2012-109-0036	36	20S 10W	10-20cmbs	flake	chert	1
UA2012-109-0037	37	20S 10W	20-30cmbs	flake	chert	1
UA2012-109-0038	38	28S 10W	0-10cmbs	flakes	chert	11
UA2012-109-0039	39	28S 10W	0-10cmbs	flake	obsidian	1
UA2012-109-0040	40	28S 10W	10-20cmbs	flake	chert	10
UA2012-109-0041	41	28S 10W	20-30cmbs	flake	chert	1
UA2012-109-0042	42	0S 0W Datum	0-10cmbs	flake	chert	1

UA2012-109-0043	43	0S 0W Datum	10-20cmbs	flakes	chert	4
UA2012-109-0044	44	0S 0W Datum	30-40cmbs	flake	chert	1
UA2012-109-0045	45	10S 0E	0-10cmbs	flakes	chert	2
UA2012-109-0046	46	10S 0E	9cmbs in situ	flake	chert	1
UA2012-109-0047	47	10S 0E	10-20cmbs	flakes	chert	4
UA2012-109-0048	48	10S 0E	20-30cmbs	flake	chert	1
UA2012-109-0049	49	10S 0E	30-40cmbs	flake	chert	1
UA2012-109-0050	50	20S 0E	20-30cmbs	flake	chert	1
UA2012-109-0051	51	20S 0E	20-40cmbs	flake	chert	1
UA2012-109-0052	52	30S 0E	25-35cmbs	flakes	obsidian	3
UA2012-109-0053.1	53	0N 10E	20-30cmbs	flakes	chert	2
UA2012-109-0053.2	53	0N 10E	20-30cmbs	microblade frag	chert	1
UA2012-109-0054	54	10S 10E	10-20cmbs	flake	chert	1
UA2012-109-0055	55	10S 10E	20cmbs	microblade	chert	1
UA2012-109-0056	56	10S 10E	30-40cmbs	flake	chert	1
UA2012-109-0057	57	20S 10E	0-10cmbs	flakes	chert	2
UA2012-109-0058	58	20S 10E	10-25cmbs	flake	chert	1
UA2012-109-0059	59	TU1 10S 6W LVL1 SW1/4	0-5cmbd	flakes	chert	3
UA2012-109-0060	60	TU1 10S 6W LVL1 SW1/4	0-5cmbd	flake	obsidian	1
UA2012-109-0061	61	TU1 10S 6W LVL1 NW1/4	0-5cmbd	flakes	chert	2
UA2012-109-0062	62	TU1 10S 6W LVL1 NW1/4	0-5cmb5	scraper	basalt	1
UA2012-109-0063	63	TU1 10S 6W LVL1 SE1/4	0-5cmbd	flakes	chert	4
UA2012-109-0064	64	TU1 10S 6W LVL2 NE1/4	5-10cmbd	flakes	chert	2
UA2012-109-0065	65	TU1 10S 6W LVL2 SE1/4	5-10cmbd	microblade	obsidian	1
UA2012-109-0066	66	TU1 10S 6W LVL2 NE1/4	5-10cmbd	flake	obsidian	1
UA2012-109-0067.1	67	TU1 10S 6W LVL2 SE1/4	5-10cmbd	flakes	chert	1
UA2012-109-0067.2	67	TU1 10S 6W LVL2 SE1/4	5-10cmbd	scraper	chert	1
UA2012-109-0068	68	TU1 10S 6W LVL2 SW1/4	5-10cmbd	flakes	chert	4
UA2012-109-0069	69	TU1 10S 6W LVL2 SW1/4	5-10cmbd	flakes	obsidian	5
UA2012-109-0070	70	TU1 10S 6W LVL2 NW1/4	5-10cmbd	flake	obsidian	1
UA2012-109-0071	71	TU1 10S 6W	5-10cmbd	flakes	chert	7

		LVL2 NW1/4				
UA2012-109-0072	72	TU2 10S 7W LVL1 SE1/4	2-5cmbd	flakes	chert	3
UA2012-109-0073	73	TU2 10S 7W LVL1 SE1/4	2-5cmbd	flake	obsidian	1
UA2012-109-0074.1	74	TU2 10S 7W LVL2 SE1/4	5-10cmbd	flakes	chert	9
UA2012-109-0074.1	74	TU2 10S 7W LVL2 SE1/4	5-10cmbd	microblade	chert	1
UA2012-109-0075	75	TU2 10S 7W LVL2 SE1/4	5-10cmbd	flake	obsidian	1
UA2012-109-0076	76	TU2 10S 7W LVL2 NE1/4	5-10cmbd	flakes	chert	4
UA2012-109-0077	77	TU2 10S 7W LVL2 SE1/4	5-10cmbd	flake	chert	1
UA2012-109-0078	78	TU1 10S 6W LVL3 SW1/4	10-15cmbd	flake	chert	1
UA2012-109-0079	79	TU1 10S 6W LVL3 SE1/4	10-15cmbd	flakes	chert	3
UA2012-109-0080	80	TU1 10S 6W LVL4 SE1/4	15-20cmbd	flakes	chert	5
UA2012-109-0081	81	TU1 10S 6W LVL5 SE1/2	20-25cmbd	flakes	chert	4
UA2012-109-0082	82	TU1 10S 6W wall cleaning	0-10cmbd	flake	obsidian	1
UA2012-109-0083	83	E0462372 N7171583	surface	scraper	chert	1

Although some vegetation has been cleared in the past from the XMH-01889 area, sediments, for the most part, appear undisturbed. The silt deposits on top of schist bedrock at the site reach a depth of approximately 1 m but cultural material was restricted to the top 40 cm of the stratigraphic profile (Figure 151). Homgenous silts overly bedrock at the site. A shallow A soil horizon overlies a 35 cm thick B horizon (Figure 152).

Only a small portion of this site was uncovered during Phase II testing. Time did not allow for determining the outer limits of the site. It spans an area of over 600 m^2. A variety of bifacial and core and blade technologies are represented in the artifact assemblage. Although no charcoal was found during the 2012 investigation, charred bone on the surface of the site suggests a hearth may be present somewhere at the site. FAI-01889 has a great potential for providing further information about the use of the Tanana Flats by hunter-gatherers in the past. Because of the large intact site area, the wealth of archaeological material, and future potential for uncovering more information, Fort Wainwright has determined that FAI-01889 is eligible for the NRHP.

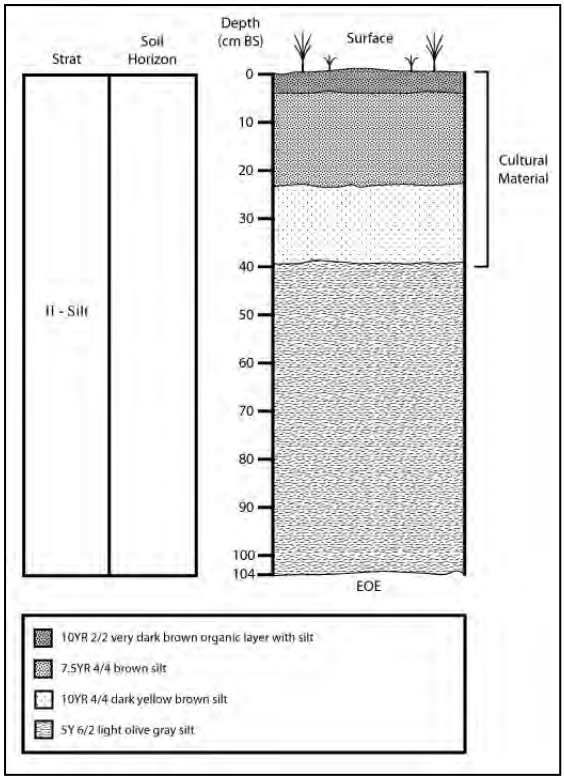

Figure 151. FAI-01889 site stratigraphy.

Figure 152. FAI-01889 shovel test pit.

Gerstle River Training Area DOEs

Only one DOE was completed in GRTA in 2012. A DOE of XMH-01294 was submitted to the SHPO as part of a Section 106 on 29 November 2012. The SHPO concurred with a finding of Not Eligible for this site on 4 January 2013.