

**Cultural Resource Investigations of the Proposed Old Skid  
Road Subdivision Sale ADL 108053 near Thorne Bay,  
Alaska for the Division of Mining, Land and Water**



Prepared by  
Alan D. DePew and Molly E. Conley  
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**OFFICE OF HISTORY AND ARCHAEOLOGY  
ALASKA DEPARTMENT OF NATURAL RESOURCES**

## INTRODUCTION

During October of 2015, Archaeologists and a Historian with the State Office of History and Archaeology's Archaeological Survey Unit conducted a reconnaissance level cultural resource pedestrian survey and testing project of the Old Skid Road Subdivision (ADL 108053), near Thorne Bay, Alaska for the Alaska Department of Natural Resources Division of Mining, Land and Water (DML&W) (Figure 1). The Community of Thorne Bay expressed concerns that archaeological and historic sites in the vicinity of the land sale offering might indicate it contained additional sites (Figure 1). The purpose of the survey was to identify any cultural resources within the boundaries of the proposed sale that would be removed from State protection by the action.

The National Historic Preservation Act (NHPA) of 1966 (as amended in 1976, 1980, 1992, and 2001) is the principal impetus for this cultural resource survey. Section 106 of the NHPA, and its implementing regulations contained in 36 CFR 800, establish a review process for projects or undertakings involving federal funds, lands, or permits. The review process, also known as the Section 106 process, requires the lead federal agency take into account the effects of their undertakings on historic properties, afford the Advisory Council on Historic Preservation a reasonable opportunity to comment, and encourages they consult with state and local groups prior to affecting historic properties. Historic properties are defined in Sec 800.16 as sites that are listed, or are determined eligible for listing to the National Register of Historic Places. Identification of historic properties is achieved through archival and field research following the Secretary of the Interior's guidelines for site identification and evaluation. Fieldwork was conducted by a principal investigator who met professional qualification standards required by the Secretary of the Interior under 48 FR 44717. In addition to federal laws, state policies govern the management and consideration of historic properties on state lands. The principle legislation for the State of Alaska was established by the Alaska Preservation Act of 1971 (Alaska Statute 41.35, as amended in 1974) and its implementing regulations (11 AAC 16).

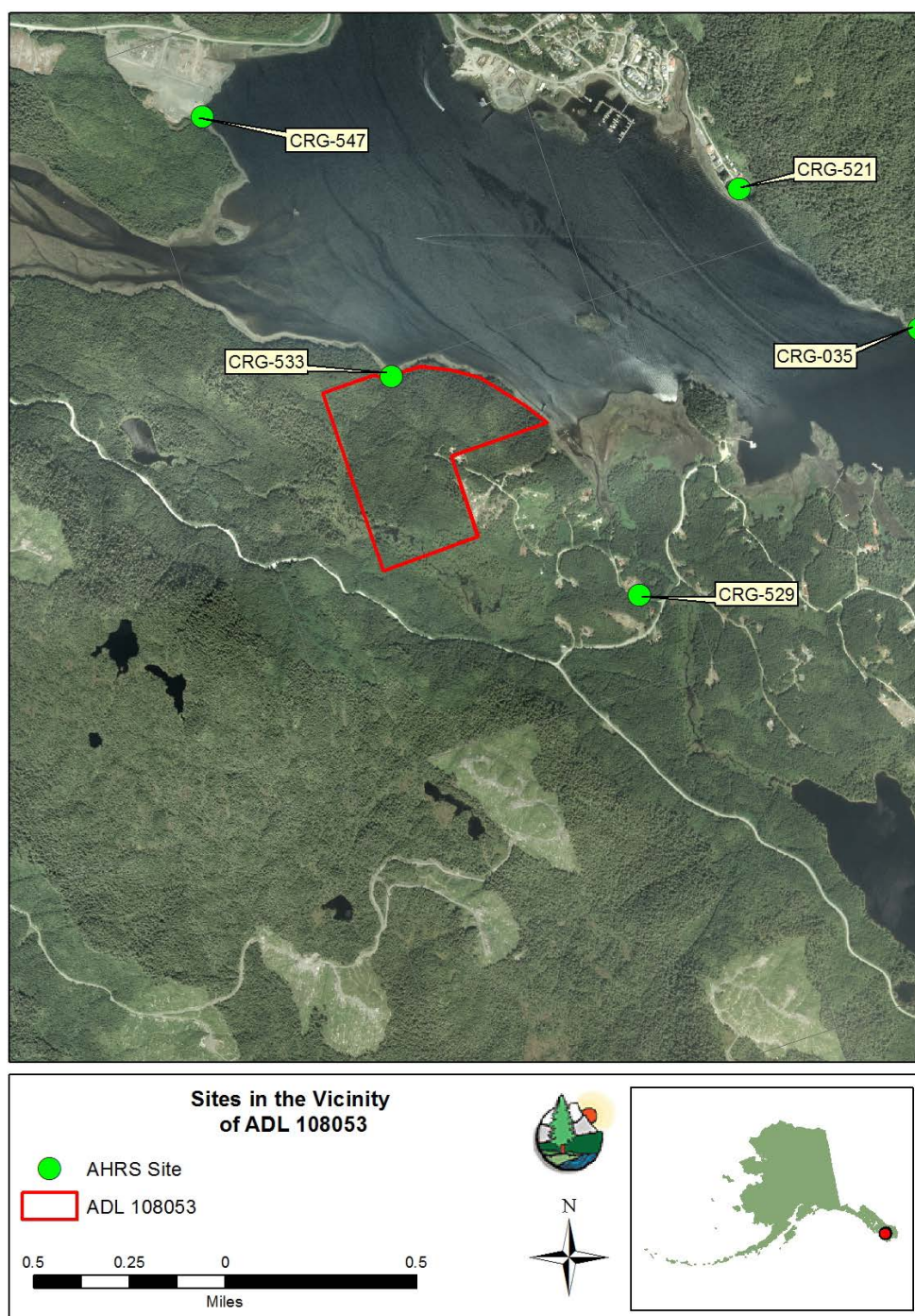


Figure 1. Location and AHRs sites in the vicinity of ADL 108053.

### AHRS SITES IN VICINITY

Five sites are identified in the AHRS as being located within one mile of the project area (Figure 1, Table 1). All but CRG-533, the location of an 1898 to early 1900s saltery, are located at least a half mile from the boundaries of the proposed sale area. It is reported that all of the buildings associated with CRG-533 were removed, but the site has never been formally investigated. The saltery was reportedly operated by Robert Bell, who with his sons was involved in many early Southeast Alaska salteries. All of the remaining sites are prehistoric in nature.

AHRS #	SITE NAME	DESCRIPTION
CRG-533	Saltery	Early 1900s saltery
CRG-529	South Thorne Bay Microblade Site	Obsidian microblades, flakes, charcoal
CRG-547	Thorne Bay Sort Yard	Midden site?
CRG-521	Thorne Bay Midden	Small shell midden
CRG-035	Thorne Bay Petroglyphs	Series of petroglyphs on rocks in the high intertidal zone

There are reports of additional sites similar to CRG-529 on private property in the adjacent subdivision. These sites are interpreted as from the early to mid-Holocene and represent the earliest known occupation of Southeast Alaska. Research in the area has shown they are often found at elevations of 16m -22m above sea level (Carlson and Baichtal 2014). The community of Thorne Bay expressed concern that similar sites might be located within the project area.

## **PROJECT SETTING**

Thorne Bay is located on northeast Prince of Wales Island in the Alexander Archipelago. It is the largest of approximately one thousand islands interspersed by marine channels. The maritime climate of Prince of Wales Island creates generally moderate temperatures, and generates 100-200 inches of precipitation a year in the form of fog, rain and snow.

Details about the glacial history of Southeast Alaska are still under debate. It is generally agreed that glaciers covering the Alexander Archipelago reached their maximum extent during the late Wisconsin glacial stage (Mann 1986:237). During this period, between 16,000 and 14,000 years ago, ice would have covered the continental shelf, reaching the adjacent interior mountains and coalescing with mountain glaciers. Geologic evidence suggests that the mainland ice flows covered much of the Archipelago to a depth of more than 1,000 meters during the late Pleistocene; precisely when the retreat of the late Wisconsin ice began in Southeast Alaska is unknown (Mann 1986; Swanston 1989). During times of maximum ice coverage, it is believed there would have been areas free of ice. These areas would have provided refugium for plants and animals allowing more rapid regrowth as ice free conditions developed. The landscape of Prince of Wales Island is derived activity, characterized by “steep, forested mountains deeply dissected by U-shaped valleys and fjords, and by short, swift streams, numerous lakes, saltwater straits and bays (Wahraftig 1965:39, 42).

The islands of the Archipelago are covered in forests of Sitka spruce, western hemlock and western red cedar with an understory of low-lying early blueberry and Alaska blueberry, copperbush, devil's club and salal (Viereck and Little 1972:14). Red alder grows along streams, beach fringes and recently disturbed areas. Black cottonwood is found within major flood plains. Animals found on Prince of Wales Island include black bear, wolf, Sitka black-tailed deer, mink, river otter, marten, beaver, short-tailed weasel, red squirrel, flying squirrel, voles, shrews, deer mouse and bats.

## **REGIONAL CULTURAL HISTORY**

The generally accepted cultural chronology for southeast Alaska as proposed by Stanley Davis (1990) is divided into several traditions. From oldest to most recent, they include the Paleomarine tradition, a Transitional Stage, and the Developmental Northwest Coast Stage which is divided into early, middle, and late phases. Occupation of Southeast Alaska for at least 11,000 years is likely but earlier sites may be hidden by changes in vegetation, inundated by rising sea levels, or have not yet been surveyed (Ames and Maschner 1999: 84).

The Paleomarine tradition (10,000-6500 years ago) is the earliest known cultural stage in southeast Alaska (Davis 1990: 197). Davis (1990:187-198) proposed this name of the tradition, recognizing the similarities of the wedge shaped core and microblade assemblages found in Southeast Alaska with the more northerly Paleoarctic tradition sites. Other labels have been applied, including the Northwest Coast Microblade tradition (Matson and Coupland 1995:82), the Early period (Moss 1998:92), and the Archaic Period (Ames and Maschner 1997:67). With Ackerman (1996:429) includes Southeast Alaska assemblages as a regional variant of the Paleoarctic tradition.

Ground Hog Bay II, overlooking Icy Strait from the southern Chilkat Peninsula, is the oldest Paleomarine site discovered to date with radiocarbon dates of 9000-7800 BC from Component III (Ames and Maschner 1999: 67; Davis 1990: 198). Other Southeastern Paleomarine sites have been investigated at Hidden Falls, Thorne River, and Chuck Lake. Assemblages include abundant microblades struck from wedge-shaped cores, graters, notched scrapers, burinized flakes, and split cobble and pebble tools (Davis 1990: 199). Faunal assemblages of fish bones and marine shell suggest a coastal marine subsistence strategy (Davis 1990: 198). Excavation at the nearby Thorne River site (CRG-177) yielded an assemblage including microblades, cores, unifacial flake tools, and a few bifacial tools, as well as radiocarbon samples that produced dates around 7,600 years ago (Holmes et al 1989:95).

Transitional stage (6500-4000 years ago) assemblages have been excavated at Lake Eva, Point Couverdon, and Irish Creek. Temperatures became cooler and wetter and sea levels rose to about their current position between 5000 and 3000 years ago, leading to “an expanded use of intertidal resources, such as marine mollusks, and a less mobile way of life” (Ames and

Maschner 1999: 88). During this time “the technological emphasis changed either by parallel invention or by diffusion to include a ground stone tool industry that became dominant over the microblade and unifacial flaked stone industry by 5,000 years ago” (Davis 1990: 198).

Transitional period assemblages include scrapers, choppers, bifacial fragments, unifacial flakes, core rejuvenation flakes, microblades, and bi-directional microblade cores (Davis 1990: 199).

The Developmental Northwest Coast Stage is divided into an early phase (3000-1000 BC), middle phase (1000 BC-1000 AD), and late phase (1000 AD-European contact) (Davis 1990: 197). According to Davis (1990: 199), “the Developmental Northwest Coast stage is distinguished from the Paleomarine tradition and the Transitional Stage by shell midden deposits, ground stone and bone technology, human burials, and the establishment of larger settlements (winter villages), specialized subsistence camps, and fortifications”.

Component II at Hidden Falls is an important early phase site that provides the “earliest evidence in southeastern Alaska of a ground stone and bone industry” (Davis 1990: 199). The assemblage includes ground single-edge tools and ground stone points, utilized flakes, ribbed stone, beads, labrets, and unilaterally barbed bone point fragments. Burns, bifaces, microblades, and flaked stone points were not present. The faunal assemblage included deer, dog, sea mammals, anadromous fish, marine fish, and shellfish. Other early phase sites in southeast Alaska include Coffman Cove (Prince of Wales Island), Rosie’s Rockshelter (Hecata Island), and Traders Island (Davis 1990: 199). Shell middens within these sites provide evidence of increased use of shellfish as a food source (Ames and Maschner 1999: 89; Davis 1990: 199).

Middle Phase sites include Sarkar Entrance (Prince of Wales Island), Young Bay, Green Creek, and Component III at Hidden Falls. Assemblages from this period are characterized by “a continuation of the ground stone and bone technology, with more emphasis placed on unilaterally barbed ground bone points, ground stone knives, and heavy hand mauls, with an increased use of nephrite in tool manufacturing” (Davis 1990: 200). Component III at Hidden Falls is exceptional for additional artifact types in its assemblages: small planing adzes, incised bone and stone, graters, abraders, bone tubes, labrets, ground stone point fragments, drilled mammal teeth, and unilaterally barbed bone points without lashing spurs or holes (Davis 1990: 200). Structural remains at Hidden Falls include post holes and a post. A bark mat and faunal

remains indicate the site was occupied in winter and spring (Davis 1990: 200). The faunal assemblage includes birds, dog, deer, harbor seal, sea otter, and a variety of fish and shellfish (Davis 1990: 200).

Late phase sites include Starrigavan (Baranof Island), Russian Cove, Bear Shell Midden (Chichagof Island), Old Town (Knight Island) and Component I at Ground Hog Bay. According to Davis,

The late phase is characterized by a move to larger structures, presumably associated with 'winter villages,' and by sites that were used for defensive purposes. Continuing within this period are sites used while procuring shellfish, sea mammals, fish, deer, and berries. The artifact assemblage reflects a continuing ground stone and bone technology, with labrets, chisels, splitting and planing adzes, and some chipped stone. New elements added to the assemblages include copper tools, stone bowls and lamps, harpoons with lashing holes, the increased use of obsidian for chipped stone tools and in protohistoric times, the introduction of drift iron for tool manufacturing (Davis 1990: 200).

Metal tools in late phase assemblages include knife blades, arrowheads, tiny nails, rings, bracelets, and beads of native copper and small adze blades, scrapers, knives, drills, and awls of drift iron (Davis 1990: 200).



## **METHODS**

A review of the AHRS for reported cultural resources in the area preceded field investigations. A literature review was conducted to gather baseline information about known sites in the area, the prehistoric record, and history of the area. Shapefiles for the project area were downloaded to a Garmin GPSMap 62 to guide field investigations.

The reconnaissance level was conducted by walking transects spaced roughly 10m or less through the project area. Soil probes (3/4") were conducted as frequent as ground conditions allowed to identify charcoal lenses or other evidence of cultural activity. Low probability areas such as steep hillsides and wetlands were only given cursory coverage. All exposures (tree throws, game trails, etc.) were carefully inspected for cultural materials. Several existing pioneer roads occurred in the area, and all cuts created during their construction were also inspected. The survey identified several locations where test units were felt warranted. Excavation was conducted using a combination of shovel and trowel, with sediments screened through 1/8" mesh hardware cloth. A representative profile for each test was drawn and digitally photographed.

## **RESULTS**

Most of the project area was surveyed, except steeper hillsides, wet areas, and log jams along the beach (Figure 2). The southeastern portion was only given a cursory investigation, but GPS coverage was extremely poor that day, and tracks did not register. The area was felt to have low probability due to distance from water, general topography and higher elevation. Much of the north central portion of the area had very steep hillsides.

The project area was heavily logged in the past, possibly multiple times (Figure 3, 4). Heavy equipment use was evident in some places (Figure 5, 6), particularly in the northern portion around the small drainage, and along the beach front areas. Several segments of dozer trails or cut were identified in the project area. The parcel is situated on the northwest side of a relatively high hill, extending into the low drainage area between another hill to the northwest and Thorne Bay to the north and northeast. The topography was generally uneven, with few level terraces. No significant streams ran through the area. An unnamed creek in the northern end may have had constant flow, but the area around it has been significantly disturbed during past logging. In general, the location was felt to have only moderate possibility for archaeological sites. The area was particularly wet during the survey, due to heavy rains, and the pioneer roads in the area appeared to have changed natural drainage by directing flow in many places.

Seventeen test pits were excavated in the project area (Figure 2, Table 2). Figures 7 through 10 are representative photos of the test pits. None of the test contained cultural resources. Some trace amounts of charcoal were encountered in the deposits, but no clear association with cultural resources could be verified. Several of the tests were terminated due to ground water filling the pit. One collapsed structure was identified below one the existing residences (Figure 11, 12). It appeared to be less than 20 years old, and may have been a hunting stand or a fort built by children. It may also have been something that had been disposed of from above. The materials were in such disarray its exact nature could not be determined

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The location for CRG-533 is just outside the boundaries of the proposed subdivision. A cursory investigation was made to verify its location. Little indication of the saltery remained other than scant intertidal debris and a few pilings. No intensive testing was conducted to determine if buried historic artifacts or foundation remains exist.

No sites were identified during our investigations within the boundaries of the proposed land sale that would be adversely affected by removal of State ownership. It is recommended that the land sale be allowed to move forward.

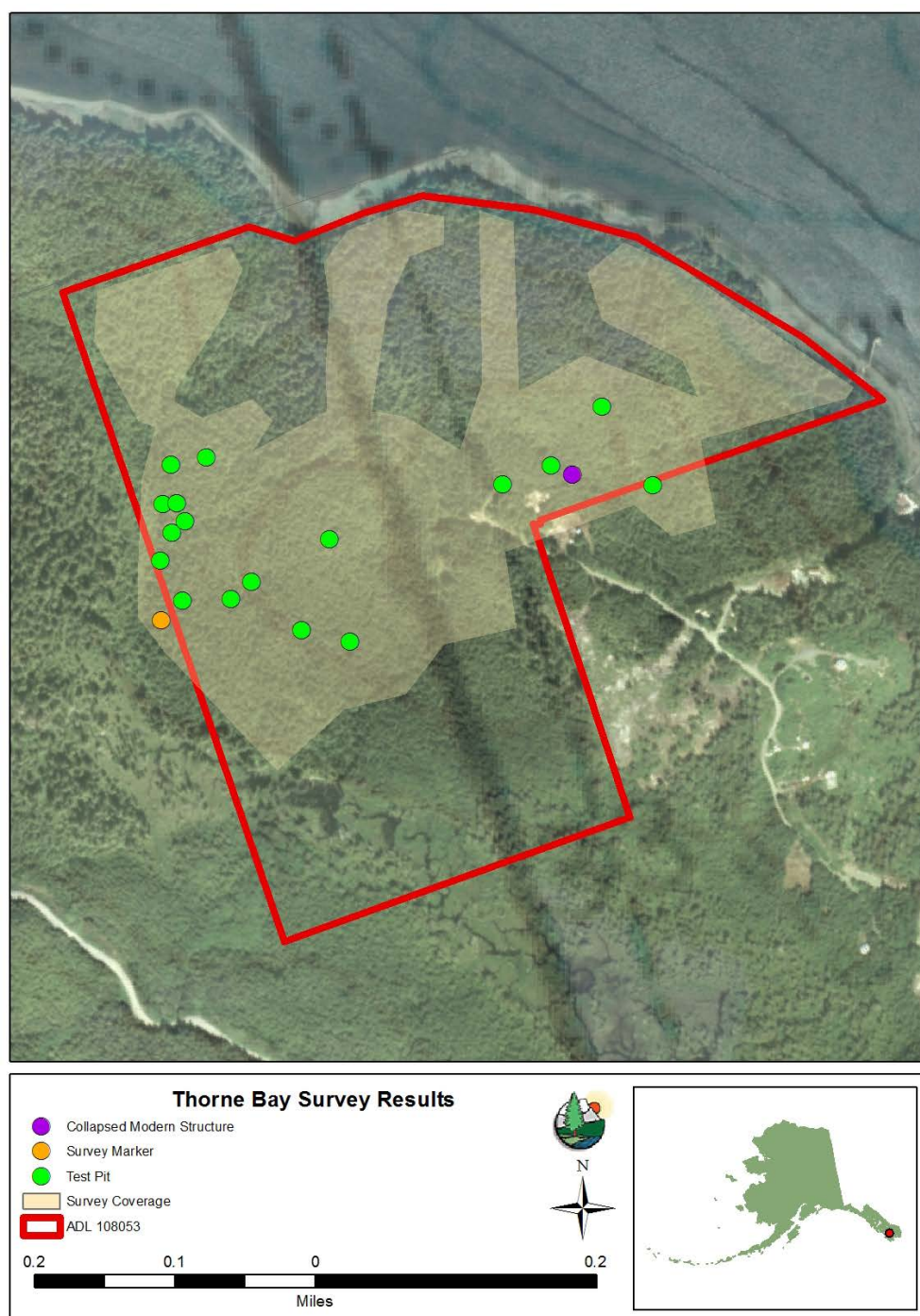


Figure 2. Overview of survey coverage and test pit locations in ADL 108053.

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Table 2. General summary of shovel test pits in ADL 018053.

Test Pit #	Description
1	0-13 cm Root mat, dark silty organic matter 13-16cm Darker, mottled brown silts 16-33cm Reddish brown silts
2	0-9cm Root mat, dark organic matter 9-23cm Darker brown silts and roots, occasional tephra inclusion 23-33cm Dark brown silts, decayed bedrock
3	0-12cm Root mat, dark silty organic matter 12-25cm Reddish brown silts, decayed wood and stone inclusions 25-30cm Decayed bedrock, standing water
4	0-5cm Root mat, dark organic matter 5-23cm Dark organic layer, many root and stone inclusions 23-32cm Dark, wet organics, standing water
5	0-7cm Root mat, dark organic matter 7-21cm Dark brown organic leached silts, stones 21-28cm Brown and red mottled silts, stone inclusions
6	0-5cm Root mat, dark organic matter 5-18 Grainy brown silts, root inclusions 18-27cm Darker brown silts and organics 27-38cm Reddish brown silts, stone and pebble inclusions
7	0-6cm Root mat, dark organic matter 6-19cm Dark brown organic rich silts
8	0-5cm Root mat, dark organic matter 5-11cm Continuing organic layer, many root inclusions 11-31cm Dark, organic mottled silts 31-45cm Coarse sandy matrix 45-53cm Lighter finer grained decayed sand
9	0-11cm Root mat, dark organic matter 11-24cm Damp, continuing heavily organic silts, root inclusions 24-35cm Dark brown, very wet silts
10	0-8cm Root mat, dark organic matter 8-18cm Continuing deep brown organic layer, large root inclusions 18-39cm Reddish brown silts, root inclusions 39-52cm Lighter brown decaying bedrock, large stone inclusions
11	0-12cm Root mat, dark organic matter 12-23cm Continuing deep brown organic layer 23-50cm Sandy brown silts, stone inclusions, very wet at terminus
12	0-7cm Root mat, dark organic matter 7-39cm Very wet brown silts, root inclusions 39-50cm Gravel, stones, followed by water
13	0-6cm Root mat, dark organic matter 6~20cm Additional organics, roots, shattered bedrock ~20cm Limestone
14	0-7cm Root mat, dark organic matter 7-13cm Continuing organic layer 13-48cm Forest brown silts, many stone inclusions
15	0-5cm Root mat, dark organic matter 5-18cm Dark brown silts with many organic inclusions 18-38cm Forest brown silts with limestone conclusions 38-53cm Mixed Reddish brown and sandy silts, decayed bedrock
16	0-6cm Root mat, dark organic matter 6-40cm Reddish brown silts, root inclusions ~34-40cm Limestone
17	0-3cm Moss mat, dark organics 3-28cm Dry Reddish brown silts with root inclusions 28-36cm Compacted Reddish brown and stones



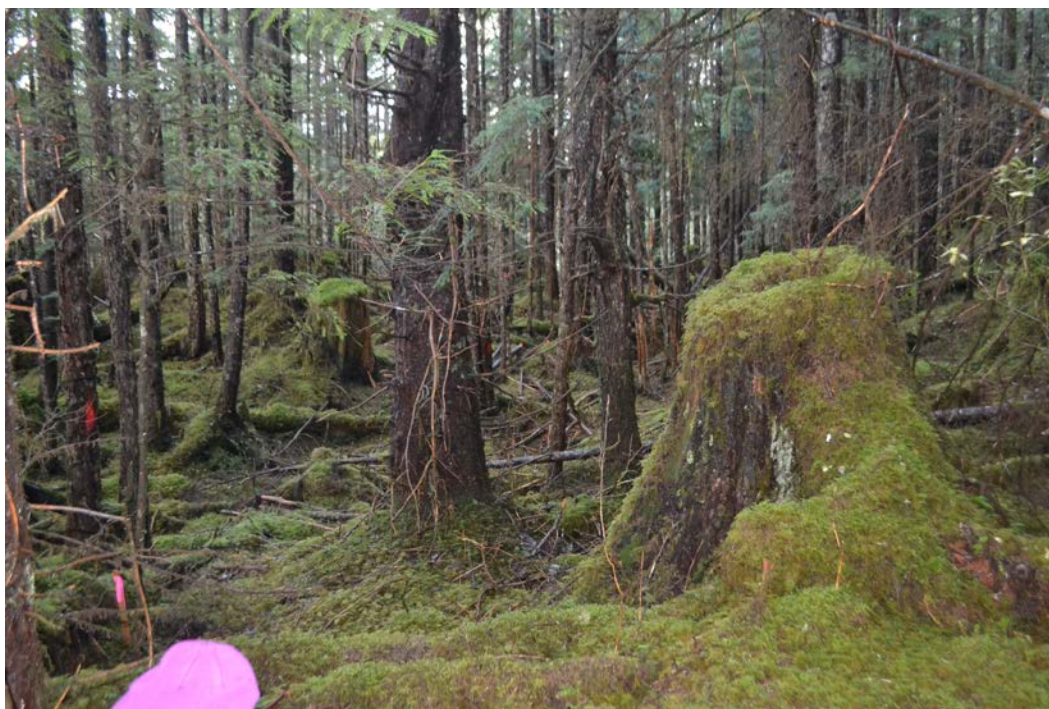


Figure 3. Overview of terrain in northern part of project area (view to northeast).



Figure 4. Overview of terrain in northern part of project area (view to east).





Figure 5. Heavy equipment scar in northern portion of project area (view to south).



Figure 6. Heavy equipment scar in northern portion of project area (view to southeast).





Figure 7. Shovel test profile in northwestern portion of project area.



Figure 8. Shovel test profile in northwestern portion of project area.





Figure 9. Shovel test profile in western portion of project area.



Figure 10. Shovel test profile in eastern portion of project area.





Figure 11. Overview of modern collapsed structure in project area.



Figure 12. Overview of modern collapsed structure in project area.

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